



# Psychosomatics during the Pandemic

**June, 3 - 4, 2021**

8<sup>th</sup> annual conference of EAPM

The European Association of Psychosomatic Medicine and CL Psychiatry

## PROGRAMME

## ABSTRACTS

## INTRODUCTION

### Conference Organisation Committee

Jordi Blanch (Conference President), Barcelona, Spain

Marta Lenart, Wroclaw, Poland

Christoph Pieh, Krems, Austria

Joanna Rymaszewska, Wroclaw, Poland

Michael Sharpe, Oxford, England

Meike Shedden Mora, Hamburg, Germany

Wolfgang Söllner, Nuremberg, Germany

Isabel Winter, Nuremberg, Germany

Angelika Weigel, Hamburg, Germany

### Conference Organisation & Virtual Platform

AUSTROPA, Vienna, Austria

Contact: Sandrina Sinko: [eapm2021@vb-mice.at](mailto:eapm2021@vb-mice.at)

### Layout

Technical Support, Layout and Design: Isabel Winter email: [contact@eapm.eu.com](mailto:contact@eapm.eu.com)

Webdesign, Layout, Technical Support & Hosting: The technical support and the website design is provided by 'Gebrüder Pixel'

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## PARTNERS



[As well as all our EAPM member associations](#)

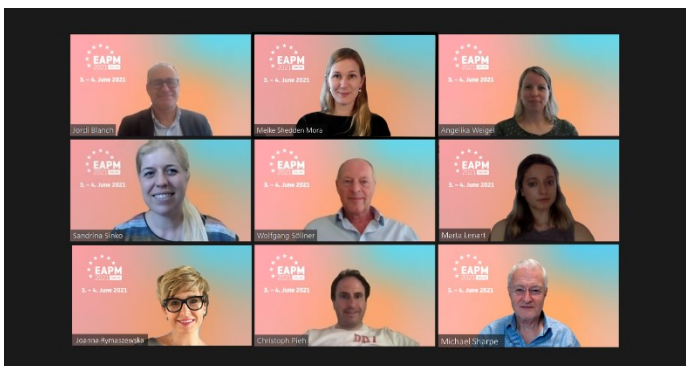
## REETING BY THE MAIN CONGRESS COMMITTEE

Dear Colleagues

The program committee of the virtual conference 2021 of the European Association of Psychosomatic Medicine is pleased to be able to offer a high-quality scientific program of the conference. It is a cross-section of the scientific initiatives in the field of Psychosomatic Medicine and C-L psychiatry in the various European countries. The COVID pandemic has on the one hand spurred research, on the other hand it has limited the exchange between researchers to virtual communication. Nevertheless, you will find a number of scientific articles on the subject of COVID and mental health in the program, as well as the latest research results on the "classic topics" of psychosomatic research.

Despite the virtual nature of the conference, we have tried to create enough space for personal exchange, be it in the sessions of the special interest groups, in the live sessions of the plenary lectures and parallel symposia and, above all, in the social program of the meeting. Let yourself be surprised who you can meet there. We hope to see you at our virtual conference on June 3rd and 4th.

The main congress committee



## WELCOME NOTE



*Prof. Jordi Blanch, President EAPM*

Dear colleagues

We are living very unusual times, socially and professionally. The COVID-19 pandemic has brought suffering, but also learning. We lost many things, but we also gained knowledge. We lost personal contact to friends and colleagues, but we improved in the technology for communication and networking. Learning, knowledge, and networking are the essence of any scientific meeting. Indeed, the pandemic could be seen as a big worldwide conference in which most of us improved our experience and knowledge, both personally and professionally. During this time, we faced new challenges and learnt new approaches, especially in the field of the Psychosomatic Medicine and Consultation – Liaison Psychiatry.

Now, when there seems to be a light at the end of the tunnel as a result of the vaccination programmes, most of us want to return to a new normality in our lives and our work. For this presidency and our executive council, coming back to normality means making sure that we have our EAPM annual meeting so we can all learn, gain knowledge and network in the same way as we did in the past.

Because there are still restrictions in most of the countries, we decided to organize a virtual meeting – and to postpone the meeting in Vienna until next year, 2022. That means, that for the first time, the annual meeting of the EAPM on June 3 and 4 will be hosted not by the local organization, but by the EAPM itself and organized by the members of the executive council.

The theme of the Conference will be “Psychosomatics during the pandemic”.

We have done our best to make this year’s EAPM annual meeting a leading conference, to attract physicians, mental health professionals, and researchers from all around the world. As with previous meetings presentations at the meeting will include eight high quality keynote lectures, 21 scientific symposia, and poster sessions. The program will cover a diverse range of subjects, including:

- Aspects of COVID-19 and ‘long COVID’
- Models of care in psychosomatic medicine
- Psychosomatic aspects of a number of clinical fields (e. g. Psycho-Oncology, Psycho-dermatology, Gastroenterology, Cardiology, Transplantation, Gynecology, Diabetology, Internal Medicine)

## Acknowledgement - -

- Doctor-patient communication
- Psycho-Neuro-Immunology
- Stress and trauma
- Teaching in Psychosomatics and Consultation-Liaison Psychiatry
- Chronic pain
- Psychosomatics in primary care
- Psychosomatic aspects in child and adolescent medicine
- Psychotherapy with the medically ill

We are also delighted to announce a social event evening to promote networking.

This website of the EAPM meeting will provide timely, comprehensive information about the conference. Please, look out for the deadlines for the [late poster submission](#), and for [early registration](#).

We will be very happy to meet all of you again – at least virtually. We are sure that it will be the best online conference of the EAPM in history. Do not miss it – you will really enjoy it.

Finally, I would very sincerely thank all the members of the executive council for their hard work and support, and especially to those most involved in the organization of the meeting. Their great teamwork will make this conference a very big success.

Many, many thanks!

Jordi Blanch  
President of the European Association of Psychosomatic Medicine

## ACKNOWLEDGEMENT

We want to thank all committees and all participants for making this conference happen!

## COMMITTEES 2021

### Main Congress Committee

Jordi Blanch - Barcelona, Spain  
 Marta Lenart - Wroclaw, Poland  
 Christoph Pieh - Krems, Austria  
 Joanna Rymaszewska - Wroclaw, Poland  
 Michael Sharpe - Oxford, England  
 Meike Shedden Mora - Hamburg, Germany  
 Wolfgang Söllner - Nuremberg, Germany  
 Isabel Winter - Nuremberg, Germany  
 Angelika Weigel - Hamburg, Germany

### Alison Creed Award Committee

Michael Sharpe - Oxford, UK  
 Per Fink - Aarhus, Denmark  
 Peter Henningsen - München, Germany

### Frits Huyse Award Committee

Ulrik Malt - Oslo, Norway  
 Carsten Leue - Maastricht, Netherlands  
 Silvia Ferrari - Modena, Italy  
 Gerhard SchüsslerInnsbruck, Austria

### Poster Award Committee

Meike Sheden Mora - Hamburg, Germany  
 Else Guthrie - Leeds, United Kingdom  
 Joanna Rymaszewska - Wroclaw, Poland  
 Franziska Geiser - Bonn, Germany

### Virtual travel Award Committee

Marta Novak - Toronto, Canada  
 Dan Dumitrascu - Cluj-Napoca, Romania  
 Adriana Baban - Cluj-Napoca, Romania  
 Franziska Geiser - Bonn, Germany

### EAPM Fellowship Committee

Angelika Weigl - Hamburg, Germany  
 Josef Jenewein - Graz, Austria

## SCIENTIFIC COMMITTEE

Martin Aigner (Tulln, Austria)  
 Anne-Francoise Allaz (Geneve, Switzerland)  
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 Katja Bertsch (Munich, Germany)  
 Manfred Beutel (Mainz, Germany)  
 Jordi Blanch (Barcelona, Spain)  
 Robert Boland (Harvard, USA)  
 Markus Böckle (Vienna, Austria)  
 Anna Buchheim (Innsbruck, Austria)  
 Chris Burton (Sheffield, UK)  
 Fiammetta Cosci (Florence, Italy)  
 Francis Creed (Manchester, UK)  
 Vladislav Chvála (Liberec, Czech Republic)  
 Martina de Zwaan (Hannover, Germany)  
 Hans-Christian Deter (Berlin, Germany)  
 Clemens Dejaco (Vienna, Austria)  
 Frank Doyle (Harvard, USA)  
 Christian Fazekas (Graz, Austria)  
 Silvia Ferrari (Modena, Italy)  
 Jess Fiedorowicz (Iowa, USA)  
 Per Fink (Aarhus, Denmark)  
 Steven Frankel (San Francisco, USA)  
 Franziska Geiser (Bonn, Germany)  
 Peter Geisler (Regensburg, Germany)  
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 Elspeth Guthrie (Leeds, UK)  
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 Christoph Herrmann-Lingen (Göttingen, Germany)  
 Stephan Herpertz (Bochum, Germany)  
 Elke Humer (Krems, Austria)  
 Nusrat Husain (Manchester, UK)  
 Josef Jenewein (Zugersee, Switzerland)  
 Roger Kathol (Burnsville, USA)  
 Roland von Känel (Zurich, Switzerland)  
 Monika Keller (Heidelberg, Germany)  
 Jan Philipp Klein (Lübeck, Germany)  
 Maria Kleinstäuber (Dunedin, New Zealand)  
 Martin Kuška (Krems, Austria)  
 Claas Lahmann (Freiburg, Germany)  
 Michael Lambert (Utah, USA)  
 Wolf Langewitz (Basel, Switzerland)  
 Anton-Rupert Laireiter (Salzburg, Austria)



## Committees 2021 - -

Albert Leentjens (Maastricht, Netherlands)  
 Cédric Lemogne (Paris, France)  
 Thomas Loew (Regensburg, Germany)  
 Bernd Löwe (Hamburg, Germany)  
 Ulrik Fredrik Malt (Oslo, Norway)  
 Carsten Leue (Maastricht, Netherlands) Jose Maldonado (Stanford, USA)  
 Krzysztof Małyszczak (Wrocław, Poland)  
 Johannes Michalek (Witten, Germany)  
 Gabriele Moser (Vienna, Austria)  
 Istvan Mucsi (Toronto, Canada)  
 Christian Müller (Vienna, Austria)  
 Marta Novak (Toronto, Canada)  
 Michael Noll-Hussong (Homburg, Germany)  
 Christoph Pieh (Krems, Austria)  
 Thomas Probst (Krems, Austria)  
 Sven Rabung (Klagenfurt, Austria)  
 Charlotte Rask (Aarhus, Denmark)  
 Winfried Rief (Marburg, Germany)  
 Matthias Rose (Berlin, Germany)  
 Judith Rosmalen (Groningen, Netherlands)  
 Joanna Rymaszewska (Wrocław, Poland)  
 Ulrich Schnyder (Zürich, Switzerland)  
 Andreas Schröder (Aarhus, Denmark)  
 Gerhard Schüssler (Innsbruck, Austria)  
 Michael Sharpe (Oxford, United Kingdom)  
 Meike Shedden Mora (Hamburg, Germany)  
 Wolfgang Söllner (Nürnberg, Germany) Barbara Sperner-Unterweger (Innsbruck, Austria)  
 Barbara Stein (Nuremberg, Germany)  
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 Ilaria Tarricone (Bologna, Italy)  
 Jonas Tesarz (Heidelberg, Germany)  
 Martin Teufel (Essen, Germany)  
 Christina Van Der Feltz-Cornelis (Hull York, UK)  
 Christiane Waller (Nürnberg, Germany)  
 Angelika Weigel (Hamburg, Germany)  
 Cornelia Weise (Marburg, Germany)  
 Ursula Werneke (Luleå, Sweden)  
 Frank Wilhelm (Salzburg, Austria)  
 Erim Yesim (Erlangen, Germany)  
 Almut Zeeck (Freiburg, Germany)  
 Paula Zimborean (Yale, USA)  
 Stephan Zipfel (Tübingen, Germany)

## AWARDS 2021-

### Frits Huyse Award 2020/2021

Prof. Roger G. Kathol, M.D., C.P.E., Minnesota, USA

[Interview Prof. Kathol about receiving the Frits Huyse Award](#)

### Alison Creed Award 2020/2021

Prof. Winfried Rief, MD, Marburg, Germany

[Interview Prof. Rief about receiving the Alison Creed Award](#)

### Elsevier/EAPM Young Investigator Award 2021

Robin Groen & Anne van Gils, Groningen, The Netherlands

About Dr. Groen's & Dr. van Gils' award winning work

### Virtual Travel Awards 2021

Aranka Ballering

Lukas Berezowski

Isolde Martina Busch

Susanne Fischer

Iryna Frankova

Amalie Munk Eefsen

Heather L. Rogers

Vishva Shah

Todd Stollenwerk

Julian Vöhringer

### Poster Awards 2021

To be announced

### EAPM Fellows 2021

Dr. Antonella Ciaramella (Pisa, Italy)

Prof. Mladenka Tkalčić (Rijeka, Croatia)

Prof. Meike Shedden Mora (Hamburg, Germany)

Dr. Dirk von Boetticher (Göttingen, Germany)

## ABOUT EAPM

Main goal of the European Association of Psychosomatic Medicine is to strengthen the collaboration between researchers, practitioners and teachers in the field. Our mission is to share, exchange and develop the insights of psychosomatic research and perspectives across national borders for the benefit of all patients.



Find out more about EAPM at the association's website: [www.eapm.eu.com](http://www.eapm.eu.com)

Do you want to support EAPM and participate at EAPM: Become a member of EAPM!

We welcome and encourage professionals and interns with an interest in psychosomatic medicine and consultative liaison psychiatry to join us in order to become active members of EAPM and take advantage of the opportunities offered to members.

About the EAPM Membership Application

## ABOUT JPR

**The Journal of Psychosomatic Research (JPR) is the official journal of the EAPM.**



JPR is a multidisciplinary research journal covering all aspects of the relationships between psychology and medicine. The scope is broad and ranges from basic biological and psychological research to evaluations of treatment and services.  
EAPM pages

### **EAPM pages**

A section of the journal is devoted to topics of particular relevance to EAPM. As part of the agreement with the Journal of Psychosomatic Research, EAPM has a quota of 48 pages per year for EAPM-related matters, including papers, letters, news, advertisements, publications of C-L activities in various European countries and much more.

EAPM members are invited to submit papers for the EAPM pages to ensure that we make full use of our pages. Instructions for authors can be found below.

[Click → here for the EAPM pages.](#)

Instructions for authors of EAPM pages

## CONFERENCE SCHEDULE

THURSDAY JUNE 3RD					
TIME	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5
12.00	<b>WELCOME SESSION</b> Opening Ceremony Jordi Blanch				
12.30	<b>PLENARY SESSION 1</b> Chairs: Francis Creed, Peter Henningsen  <b>KEYNOTE 1</b> Winfried Rief (Marburg): Placebo and nocebo research: The power of expectations – Alison Creed Award lecture				
13.15	<b>BREAK</b>				
13.30	<b>SYMPOSIUM 1</b> Diagnosis and treatment options for Somatic Symptom Disorders	<b>SYMPOSIUM 2</b> Irritable bowel syndrome and chronic inflammatory bowel diseases	<b>SYMPOSIUM 3</b> Psychotherapeutic approaches in psychosomatic medicine	<b>SYMPOSIUM 4</b> Depression and depressive symptoms	<b>SYMPOSIUM 5</b> Care provider health and experience
14.45	<b>BREAK</b>				
15.00	<b>PLENARY SESSION 2</b> Chairs: Joanna Rymaszewska, Michael Sharpe  <b>KEYNOTE 2</b> Judith Rosmalen (Groningen): Long-COVID in the general population: definitions, prevalence and risk factors				
15.45	<b>KEYNOTE 3</b> Paul Garner (Liverpool): Recovering from post COVID-19 syndrome: personal experience				
16.30	<b>BREAK</b>				
16.45	<b>SYMPOSIUM 6</b> Children and adolescents in psychosomatic medicine	<b>SYMPOSIUM 7</b> Psychosomatics in transplantation medicine	<b>SYMPOSIUM 8</b> Functional Disorders and medically unexplained symptoms	<b>SYMPOSIUM 9</b> Care provision and innovative care models	<b>SYMPOSIUM 10</b> Psychogynecology
18.00	<b>BREAK</b>				
18.15	<b>PLENARY SESSION 3</b> Chairs: Jordi Blanch, Wolfgang Söller  <b>KEYNOTE 4</b> Michael J. Bostwick (Rochester): „Not for Myself? The Ethics of Autonomy vs. Collaboration in End-of-Life Decision-Making”				
19.00	<b>BEST POSTER SESSION 1</b> Chairs: Melke Sheden-Mora, Marta Lenart Best posters 1-10				
19.30	<b>SOCIAL EVENT</b>				

# Conference Schedule - -

FRIDAY JUNE 4TH						
TIME	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	
10.00	SIG CHRONIC PAIN	SIG TRANS-PLANTATION MEDICINE	SIG INTEGRATIVE CARE AND MANAGEMENT OF COMPLEXITY	SIG YOUNG RESEARCHERS	SIG PRIMARY CARE	
11.00	BREAK					
12.00	<b>PLENARY SESSION 4</b> Chairs: Judith Rosmalen, Angelika Weigel  KEYNOTE 6 Christiane Waller (Nuremberg): The effects of the COVID pandemic on health care professionals					
12.45	POSTER SESSION					
13.30	BREAK					
13.45	<b>SYMPOSIUM 11</b> Current directions in Covid-19 associated research	<b>SYMPOSIUM 12</b> New developments in psychocardiology	<b>SYMPOSIUM 13</b> Psychotherapeutic interventions in somatoform and pain disorders	<b>SYMPOSIUM 14</b> Stress and trauma	<b>SYMPOSIUM 15</b> Doctor-patient-communication	
15.00	BREAK					
15.15	<b>PLENARY SESSION 5</b> Chairs: Ilaria Tarricone, Christoph Pieh  KEYNOTE 7 Ulrich Schnyder (Zurich): Culture-sensitive psycho-traumatology and refugee mental health					
16.00	Chairs: Frits Huyse, Ulrik Malt  KEYNOTE 8 Roger Kathol (Minneapolis): A Forty-Year Reflection: Fostering Integrated Medical and Psychiatric Care – Frits Huyse Award lecture					
16.45	BREAK					
17.00	<b>SYMPOSIUM 16</b> Young Researchers	<b>SYMPOSIUM 17</b> New developments in psychodiabetology	<b>SYMPOSIUM 18</b> Education and training of health professionals	<b>SYMPOSIUM 19</b> Mechanisms of pain persistence	<b>SYMPOSIUM 20</b> Psychophysiology, psychoneuro-endocrinology and –immunology	<b>SYMPOSIUM 21</b> Psychosomatics in internal medicine
18.15	<b>BEST POSTER SESSION 2</b> Chairs: Else Guthrie, Joanna Rymaszewska					
18.45	BREAK					
19.00	<b>PLENARY SESSION 6</b> Chair: Jess Fiederorowicz  KEYNOTE 9 Robin N. Groen & Anne van Gils (Groningen): Temporal relationships among worrying, anxiety, and somatic symptoms – a clinical and methodological perspective – Young Investigator Award lecture					
19.30	<b>CLOSING SESSION</b> best poster awards, outlook 2022, farewell					
20.00	<b>GENERAL ASSEMBLY OF THE EAPM:</b> Jordi Blanch, President EAPM; Gerhard Schüssler, Treasurer EAPM					

## KEYNOTES



**Jordi Blanch**

President of EAPM and Conference President 2021

### Welcome Session/ Closing Session

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Opening Thu, June 3rd, 12.00 - 12.30 CEST – Closing: Fri, June 4th, 19.30 – 20.00

### **Jordi Blanch**

Jordi Blanch, MD PhD, is Consultant in Psychiatry in the Department of Psychiatry of the Clinical Institute of Neurosciences in Hospital Clínic of Barcelona, Associate Professor of Psychiatry of the University of Barcelona, and Chief Operating Officer of the Program for Mental Health and Addictions of Catalonia.

He has been Chief of the Inpatient Psychiatry Clinic in Hospital Clínic of Barcelona; Medical Coordinator in Parc Sanitari Sant Joan de Déu; Chair for Educational Affairs of the Clinical Institute of Neurosciences in Hospital Clínic of Barcelona and president of the Catalan Society of Psychiatry

For more than twenty years he has conducted clinical, research and educational work in HIV Psychiatry. His areas of expertise in HIV Mental Health include depression, psychopharmacology, drug interactions, and psychotherapy in HIV.

He has also been done clinical work in psychiatric and psychological disorders in severely ill medical patients (oncology, bone marrow transplantation, solid organ transplantation, and others), as well as in personality disorders and anxiety disorders.

## KEYNOTES



Winfried Rief

Alison Creed Award lecture

Keynote 1: Placebo and nocebo research: The power of expectations.

Thu, June 3<sup>rd</sup>, 12.30 – 13.15 CEST

### Winfried Rief

Professor of Clinical Psychology and Psychotherapy, Philipps University of Marburg, Germany. Head of the Clinic for Psychological Interventions. License for psychotherapy and supervision. Dr. Rief worked for many years in hospital settings (e.g., Roseneck Hospital for Psychosomatic Medicine, Prien a. Ch.). He is specialized in placebo- and nocebo effects, classification of chronic pain conditions, perception and coping with somatic symptoms, optimization of clinical studies and interventions. He was guest professor at Harvard Medical School, Boston (2004/2005), University of Auckland Medical School (2002), and University of California San Diego (2009/2010). Additionally, he was nominated for the expert committee of WHO/APA for the revision of the classification of mental disorders according to DSM-5, and he is co-chairing the WHO working group on chronic pain diagnoses in ICD-11. This ICD-11 classification proposal for chronic pain was adopted by the World Health Assembly 2019. Dr. Rief is elected coordinator for grant applications to the German Research Foundation and he is spokesperson of the DFG-research unit on placebo and nocebo mechanisms. He received the Distinguished Researchers Award in Behavioral Medicine of ISBM in 2014.

## KEYNOTES



Prof. Judith Rosmalen

Keynote 2: Long-COVID in the general population: definitions, prevalence and risk factors

Thu, June 3<sup>rd</sup>, 15.00 – 15.45 CEST

### Judith Rosmalen

Judith Rosmalen is Professor of Psychosomatic Medicine at the University of Groningen. She studied medical biology (University of Utrecht 1995) and psychology (University of Leiden 1998, cum laude), and obtained her PhD on interactions between immune and endocrine system (Erasmus University Rotterdam 2000). Her multidisciplinary research focusses on the etiology and treatment of persistent physical symptoms. She is the chair of the Dutch national network on medically unexplained symptoms. Details on her publications and activities can be found at [www.rug.nl/staff/j.g.m.rosmalen](http://www.rug.nl/staff/j.g.m.rosmalen)



## KEYNOTES



Prof. Paul Garner

### Keynote 3: Recovering from post COVID-19 syndrome: personal experience

Thu, June 3<sup>rd</sup>, 15.45 – 15.00 CEST

#### **Paul Garner**

Paul Garner – is a medical epidemiologist and Professor of Evidence Synthesis. He worked in Papua New Guinea, helped set up Cochrane and co-ordinates the production of reviews in infectious diseases. In 2020 his personal account of COVID-19 was one of the first published narratives of a protracted illness and widely distributed.

## KEYNOTES



Michael J. Bostwick

Keynote 4: "Not for Myself? The Ethics of Autonomy vs. Collaboration in End-of-Life Decision-Making"

Thu, June 3<sup>rd</sup>, 18.15 – 19.00 CEST

### **Michael J. Bostwick**

Professor of Psychiatry at Mayo Medical School, Dept. of Psychiatry and Psychology, at Rochester, MN. Recipient of the Hackett Award 2020 and the Alan Stoudemire Award for Innovation and Excellence in Psychosomatic Medicine Education; research topics: suicidal behavior, transgender, medical education

## KEYNOTES



Christiane Waller

Keynote 6: The effects of the COVID pandemic on health care professionals

Fri, June 4<sup>th</sup>, 12.00 – 12.45 CEST

### Christiane Waller

Head of the Department of Psychosomatic Medicine and Psychotherapy at paraceleus medical private university Klinikum Nürnberg, specialist in psychosomatic medicine and psychotherapy, internist and cardiologist. Research interests are cardiovascular stress and trauma research, effects of the corona pandemic on psychosomatic health.

## KEYNOTES



Prof. Ulrich Schnyder

### Keynote 7: Culture-sensitive psycho-traumatology and refugee mental health

Fri, June 4<sup>th</sup>, 15.15 – 16.00 CEST

#### **Ulrich Schnyder**

Emeritus professor of psychiatry and psychotherapy, University of Zurich, Switzerland. Past President of the European Society for Traumatic Stress Studies (ESTSS), the International Society for Traumatic Stress Studies (ISTSS), and the International Federation for Psychotherapy (IFP). Recipient of the ESTSS Wolter de Loos Award for Distinguished Contribution to Psychotraumatology in Europe, and the ISTSS Lifetime Achievement Award.

## KEYNOTES



Roger Kathol

Frits Huyse Award lecture

Keynote 8: A Forty-Year Reflection: Fostering Integrated Medical and Psychiatric Care

Fri, June 4<sup>th</sup>, 16.00 – 16.45 CEST

### **Roger Kathol**

M.D., C.P.E., is Board certified in internal medicine and psychiatry and specializes in assistance to and the care of complex patients with concurrent general medical and psychiatric disorders. He has published over 200 peer reviewed articles and 5 books. For the past 21 years, he has provided integrated care consultations to hospital systems, insurance companies, and government agencies through his company, Cartesian Solutions, LLC.

## KEYNOTES



Robin N. Groen & Anne van Gils

Young Investigator Award lecture

**Keynote 9: Temporal relationships among worrying, anxiety, and somatic symptoms – a clinical and methodological perspective**

Fri, June 4<sup>th</sup>, 19.00 – 19.30 CEST

### **Robin N. Groen**

Robin Groen finished a Research Master in Clinical and Cognitive Neuroscience at the University of Maastricht; Anne van Gils is a psychiatrist and psychotherapist. They jointly performed research on somatic symptom disorder during their PhD-studies at the University Medical Center Groningen, Interdisciplinary Center Psychopathology and Emotion Regulation.

### **Anne van Gils**

MD PhD. Anne studied Medicine at the University of Groningen (Netherlands) and graduated cum laude. She performed her PhD research on medically unexplained symptoms and e-health next to a clinical traineeship in Psychiatry. Anne is currently a registered psychotherapist and recently started her own company, providing online self-help, coaching and therapy for patients with medically unexplained symptoms.

Social Event - Thu, June 3rd at 19.30 CEST

## SOCIAL EVENT

Thu, June 3<sup>rd</sup> at 19.30 CEST

Join us at the EAPM 2021 Virtual Social Event on Thursday evening 19.30 (MET)!

Meet and exchange with your colleagues and researchers around the globe in different virtual meeting rooms in our virtual meeting platform.

Make yourself your at-home mixed drink to hang out at the pool bar, meet the EAPM award winners and the executive board, and connect with other young researchers of the EAPM community.

There is a surprise waiting in the concert hall: Our EAPM member and musician Dr. Ronald Burian and his band Doc Horn and the Horn Babes will share their awesome music at the concert hall.

The virtual social event can be accessed via our conference platform.

We look forward meeting you there!

Thursday - Thu, June 3rd, 13.30 – 14.45 CEST

THURSDAY

Symposium 1: Diagnosis and treatment options for Somatic Symptom Disorders

Chairs: Bernd Löwe, Alexandra Martin

Thu, June 3<sup>rd</sup>, 13.30 – 14.45 CEST

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Ten years of DSM-5 Somatic Symptom Disorders: A scoping review on empirical evidence

Dr. Bernd Löwe<sup>1</sup>, Prof. MD James Levenson<sup>2</sup>, Dr. Miriam Depping<sup>1</sup>, Paul Hüsing<sup>1</sup>, Dr. Sebastian Kohlmann<sup>1</sup>, Dr. Marco Lehmann<sup>1</sup>, PD Dr. Meike Sehdden-Mora<sup>1</sup>, Dr. Anne Toussaint<sup>1</sup>, Natalie Uhlenbusch<sup>1</sup>, Dr. Angelika Weigel<sup>1</sup>

<sup>1</sup>University Medical Center Hamburg-Eppendorf, Hamburg, Germany, <sup>2</sup>Virginia Commonwealth University, Richmond, USA

Symposium 01 - Diagnosis and treatment options for Somatic Symptom Disorders, virtual, Juni 3, 2021, 13:30 - 14:45

Objective:

In 2013, the diagnosis of Somatic Symptom Disorders (SSD) was introduced into the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). This scoping review examines the current empirical evidence relating to SSD in anticipation of the upcoming DSM-5 text revision.

Methods:

A scoping review was conducted using PubMed, PsycINFO, and Cochrane Library. Main inclusion criterion was examination of ‘SSD diagnosis’, operationalized through structured interviews, questionnaire algorithms or clinical judgement, publication between 2010-2020 in English language. Terms of the systematic search comprised DSM-5 subheadings, e.g., prevalence, development and course, suicide risk, and comorbidity. An additional literature search applying the preceding DSM-IV and ICD-10 diagnoses of somatization or somatoform disorders, functional disorders and medically unexplained symptoms was conducted to identify further relevant studies.

Results:

A total of 882 articles for SSD was identified by the literature search, while 13146 articles were found when searching for preceding diagnostic terms. Preliminary results indicate a prevalence of SSD of 4-6% in the general adult population. SSD is characterized by high levels of psychosocial burden, an elevated suicide risk, and comorbid anxiety or depressive disorders in 30-60% of primary care patients. New evidence also indicates clinically relevant comorbidities between general medical disorders, SSD and somatization.

Discussion:

The vast majority of the available evidence relates to studies using the outdated diagnostic concepts of DSM-IV or ICD-10. Although some studies indicate good construct validity of the DSM-5 criteria, further evidence is needed to comprehensively evaluate the validity and utility of the SSD criteria.



Thursday - Thu, June 3rd, 13.30 – 14.45 CEST

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## Validation of the Somatic Symptom Disorder B-Criteria Scale (SSD-12) and of the diagnostic algorithm for Somatic Symptom Disorder

**Dr. Alexandra Martin<sup>1</sup>**, MSc Psychology Annika Piehler<sup>1</sup>

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Symposium 01 - Diagnosis and treatment options for Somatic Symptom Disorders, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Somatic Symptom Disorder (SSD) requires distressing somatic symptoms and associated psychological features. The SSD-12 allows assessment of the three DSM-5 B-criteria, and a diagnostic algorithm for SSD case identification has been suggested combining the Patient Health Questionnaire PHQ-15 with the SSD-12 (Toussaint et al. 2019). The aims were the validation of the SSD-12, specifically regarding the differentiability of the subscales on cognitions, affect, and behaviors, and of the diagnostic algorithm.

**Methods:** A total of 544 subjects of the German general population completed the cross-sectional online survey (77.6 % female, age M = 36 years) with the SSD-12, PHQ-15, CABA-1 (catastrophizing), mSHAI (health anxiety), SAIB (illness behaviors), mPDI. Analyses included ANOVAs for group differences between SSD+ (PHQ-15+  $\geq 9$  SSD-12+  $\geq 23$ ) and screening negative cases.

**Results:** CFA indices (3-factor-structure) were acceptable, though subscales' correlations were high ( $.70 < r < .83$ ). Convergent validity (SSD-12 total) was supported by strong associations with mSHAI, SAIB, mPDI in addition to divergent validity (OCI-R). The correlation pattern on the subscale level did not show differentiability except for the behavioral subscale ( $p$ 's  $< .05$ ). ANOVAs showed strong group effects ( $p$ 's  $< .001$ ), with SSD+ cases (N = 85) scoring higher on external criteria than screening negatives (N = 249) and cases with somatic symptoms only (N = 140).

**Conclusion:** The study provides additional support for the construct validity of the SSD-12, and of the screening for SSD. The lack of subscales' differentiability may also reflect the interdependence of the DSM-5 B-criteria.

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## Personality factors and cognitive functioning in patients with somatic symptom and related disorders.

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Symposium 01 - Diagnosis and treatment options for Somatic Symptom Disorders, virtual, Juni 3, 2021, 13:30 - 14:45

**Background:** Patients with somatic symptom and related disorders (SSRD) often report problems with cognitive functioning and perform poorly on standardized neuropsychological tests. The role of vulnerability factors for these

neurocognitive problems is insufficiently understood. This study examined the association between personality factors (i.e., neuroticism, extraversion, openness, agreeableness, and conscientiousness) with measures of cognitive functioning in SSRD.

**Methods:** Patients (N= 348, mean age = 42.1 years (standard deviation = 13.4), 59.6% female) with SSRD from a tertiary care center participated in this cross-sectional design. Data included a neuropsychological test battery measures and assessment of personality factors (NEO-FFI) and depression (PHQ-9) using self-report questionnaires.

**Results:** Regression analyses showed negative associations between neuroticism and visual memory ( $\beta = -0.14$ ,  $p = 0.019$ ), and planning ( $\beta = -0.23$ ,  $p < 0.001$ ), between extraversion and visual memory ( $\beta = -0.18$ ,  $p = 0.011$ ), and planning ( $\beta = -0.18$ ,  $p = 0.021$ ), and a positive association between openness and visual memory ( $\beta = 0.19$ ,  $p = 0.002$ ). Depressive symptoms were associated with lower scores in information processing speed ( $\beta = -0.22$ ,  $p < 0.001$ ), working memory ( $\beta = -0.14$ ,  $p = 0.005$ ), and divided attention ( $\beta = -0.14$ ,  $p = 0.023$ ). Associations between personality factors with neuropsychological test performance were attenuated when adjusting for depression scores.

**Conclusion:** Personality factors are associated with reduced cognitive function in selected neuropsychological domains, which was only partially explained by depressive symptoms. A patient-centered treatment approach using cognitive rehabilitation therapy may be helpful to patients with comorbid SSRD and neurocognitive problems.

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## Brief heart rate variability biofeedback treatment for somatic symptom disorder: Results from a pilot randomized controlled trial

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Symposium 01 - Diagnosis and treatment options for Somatic Symptom Disorders, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective.** Somatic symptom disorder (SSD) has been associated with autonomic imbalance. Preliminary evidence suggests lower heart rate variability (HRV) in chronic pain or functional somatic syndromes. HRV-biofeedback (HRV-BF) is a self-regulation method and showed beneficial effects, e. g. in anxiety disorders or depression. However, little is known about its outcome in the group of SSD. Therefore, the aim of the study is the evaluation of the efficacy of a brief HRV-BF intervention for SSD.

**Methods.** A total of 40 subjects with SSD gets recruited and randomly assigned to four sessions of HRV-BF or autogenic training (AT). The primary outcome is symptom severity (SOMS-7, NRS). Secondary outcomes are HRV, B-criteria of SSD, and further interesting variables. Intervention effects are tested by U-tests.

**Results.** In a preliminary analysis based on 26 current completers (84,6 % female, age 42 years) both groups show comparable symptom burden (SOMS-7) and associated symptoms (NRS, SSD-12) at baseline. HRV-BF has a significant somatic symptom reduction at post treatment ( $p < .01$ ) whereas AT has not. In associated symptoms both groups show significant improvements ( $p$ 's  $< .05$ ). There is a high acceptance of both interventions, with low drop-out ratio (7%) and a high number of completed sessions ( $M = 4$ ).

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Conclusion. Preliminary results suggest that both interventions reduce symptoms of SSD. With only four sessions, HRV biofeedback shows the potential for symptom improvements in SSD, characterized as a chronic condition. One perspective is to further study the relation of HRV changes with the interventions' effects.

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## Course of DSM-5 somatic symptom disorder in a psychosomatic outpatient sample: A 4-year follow-up

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Symposium 01 - Diagnosis and treatment options for Somatic Symptom Disorders, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** The diagnosis of somatic symptom and related disorders (SSD) was introduced by DSM-5 in 2013. To date there is little data on the long-term course of the diagnosis. The present study aimed to evaluate the course of SSD in a 4-year follow-up study.

**Methods:** In a psychosomatic outpatient clinic, a diagnostic interview on SSD, and numerous questionnaire data were collected from n=438 patients at baseline. 233 of these patients (53%) could be examined again, four years later. The point prevalence of the diagnosis at baseline and after 4 years was evaluated, and possible predictors for its persistence were investigated.

**Results:** The prevalence rate of SSD was 55.8% at baseline and 46.1% at 4-year follow-up. In 29.8% of patients with SSD at baseline the disorder persisted. In this group, the severity of symptoms decreased in 54.8%, was unchanged in 19.4% and 25.8% reported a worsening. The incidence rate was high (16.3%), whereas 26.0% did not fulfill the diagnostic criteria anymore. In a logistic regression, a higher age (OR: 1.06, CI: 1.03-1.09) and a higher baseline value in the SSD-12 (dysfunctional psycho-behavioral aspects; OR: 1.26, 95% CI: 1.19-1.33) proved to be significant predictors for the persistence of SSD, whereas gender, somatic symptom burden (PHQ-15) at baseline and psychotherapeutic treatment were not significant.

**Conclusion:** Our results indicate a high stability of SSD after four years. Dysfunctional psycho-behavioral features seem to be more important predictors for persistence than physical symptoms. The former should be addressed as a focus in psychotherapeutic interventions.

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**Symposium 2: Irritable bowel syndrome and chronic inflammatory bowel diseases**

**Chairs: Dan Dumitrascu, Hans-Christian Deter**

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**Understanding the predictors of Irritable Bowel Syndrome and Fibromyalgia in a population-based sample**

**Dr. Francis Creed<sup>1</sup>**

<sup>1</sup>*Emeritus Professor, University of Manchester, Manchester , United Kingdom*

Symposium 02 - Irritable bowel syndrome and chronic inflammatory bowel diseases, virtual, Juni 3, 2021, 13:30 - 14:45

**OBJECTIVE:** This study aimed to identify the risk factors for Irritable bowel syndrome (IBS) and Fibromyalgia (FM) and assess links to putative aetiologies.

**METHODS:** We used data from 135,862 participants in the Dutch Lifelines population-based study excluding those with pre-existing IBS, FM or marked key symptoms of these. Baseline sociodemographic, psychosocial and medical data were tested as predictors of new onsets of IBS and FM over 2 ½ years follow-up using regression analysis; a risk score included the strongest common predictors.

**RESULTS:** At follow-up there were 1,595 (1.2%), and 692 (0.5%) new onsets of IBS and FM respectively. Female sex, poor sleep, psychiatric disorder, migraine and somatic symptoms were predictors of both disorders. FM predicted IBS and vice versa. Taking PPIs or laxatives, history of gallstones or asthma and low BMI predicted IBS only. Rheumatoid and osteo-arthritis & high BMI were strong predictors of FM only. The presence of 3+ of the shared predictors discriminated FM onset from the remainder (60.2% v 22.7%) better than for IBS onset (41.9% v 22.5%). There was little difference on specific predictors.

**CONCLUSION:** This range of risk factors accords with the varied postulated mechanisms in IBS and FM; it does not account for their female predominance. The shared predictors accord with common aetiological pathways including enhanced pain perception, immune activation and neuroendocrine dysregulation; others are syndrome specific and may be related to PPI medication or preceding illnesses. Future research will be enhanced if specific mechanisms are studied in relation to the relevant risk factors.

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## Psychotherapeutic treatment in psychologically defined sub-groups of patients with physical disease - Results of the study group on Psychosocial Intervention in Crohn's Disease revisited\*

**Dr. Hans-Christian Deter<sup>1</sup>**, Prof, MD, PhD Kristina Orth-Gomer<sup>2</sup>, Dr. Wolfram Keller<sup>3</sup>, Prof. Dr. Hans-Henning Studt<sup>4</sup>

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Symposium 02 - Irritable bowel syndrome and chronic inflammatory bowel diseases, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Several studies could not demonstrate a benefit of psychotherapy on the course of physical disease (PD). Data of the Crohn's disease (CD)-RCT offered the opportunity to examine, whether treatment is more beneficial in subgroups with severe psychological symptoms. **Methods:** CD patients were included if they experienced at least one acute attack in the last 2 years. After clinical and psychological examination patients were randomized, control group (CG) had standardized medical treatment, intervention group (IG) in addition had at least 20 hours of psychotherapy. Follow up was 2 years. Patients were ranged in 4 group's according to there clinical course: from the worst, operation not controlled by medical therapy, to the best, no acute attack in 2 years. In addition, severity of the disease was subaranged by the Bestindex (CDAI). **Results:** Of 111 randomized patients 84 could be evaluated after 2 years. Shaped by cluster analysis we examined 3 subgroups related to psychological symptoms: C1 psychic disturbed (n=36), C2 psychic disturbed (expert rating), undisturbed (self rating) (n=24), C3 psychic-undisturbed (n=25). After 2 years 18.2% of C1, 40% of C2 and 11.1% of C3 had a relaps. Subranging of the 2 year courses by severity of the acute attacks revealed in CG compared to IG a rank sum of CDAI C1:21.5 vs.17.0, C2:14.8 vs.11.1, C3:14.6 vs.12.0 (n.s.). **Conclusion:** In the psychologically disturbed subgroups we found more severe symptom courses, but due to an lack of power no significant results. PD subgroup treatment can be a challenge for the coming years.

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## Psychiatric disorders and Irritable Bowel Syndrome

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Symposium 02 - Irritable bowel syndrome and chronic inflammatory bowel diseases, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** The current study was conducted to assess the prevalence of psychiatric disorders in patients with irritable bowel syndrome (IBS) in comparison to the general population.

**Methods:** Seventy consecutive patients with IBS (diagnosed according to Rome IV criteria) between 18 and 65 years of age were assessed for the presence of psychiatric pathology using Mini-International Neuropsychiatric Interview (MINI). For comparison with the general population, we used data from the European Study of the Epidemiology of Mental Disorders (ESEMeD).

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Results: 65.7 % of patients have satisfied the criteria for one or more mental disorders. In the analysis of the batch according to the presence of depressive disorders, it was found that 25.7 % met the diagnostic criteria for major depressive disorder and 28.6 % met the criteria for an anxiety disorder (15.8 % for panic disorder, 11.4 % for generalized anxiety disorder, and 1.4% met the criteria for obsessive-compulsive disorder). Fifty-two participants ( 74.3 % ) did not have the criteria needed for the diagnostic category of mood disorders. When compared, the frequency of mental disorders in the sample of patients with IBS and the frequency identified in the general population from ESEMeD study indicate:  $\chi^2$  (df=1)=61,886, ( $p<0,001$ ), for the anxiety  $\chi^2$  (df=1)=13.353, ( $p<0,001$ ), and for depression  $\chi^2$  (df=1)=7.978, ( $p<0,005$ ).

Conclusion: The frequency of mental disorders in IBS patients is higher in comparison with the general population. Our study provides evidence in favor of proper screening for psychiatric comorbidities in IBS patients.

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## Sub-groups of patients with physical disease in psycho social interventions – Psychological results of the Crohn´s Disease intervention study

Dr. Hans-Christian Deter<sup>1</sup>, Prof. MD, PhD. Kristina Orth-Gomér<sup>2</sup>

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Symposium 02 - Irritable bowel syndrome and chronic inflammatory bowel diseases, virtual, Juni 3, 2021, 13:30 - 14:45

Objective: The effectiveness of psychosocial interventions on the course of physical disease (PD) are examined in patients with only one PD or selected sub groups with high psychological risk factors. If there is no clear result, the question arises whether treatment is not or only in subgroups effective. Psychological symptoms i.e. depression can developed by patients history or triggered by the disease itselfes. To examine if psychological defined patients show a different outcome we used data of the German Crohn´s disease RCT. Methods: After clinical and psychological baseline examination patients were randomized, control group (CG) had standardized medical treatment, intervention group (IG) in addition had at least 20 hours of psychotherapy. Follow up was 2 years. Results: After 2 years 84 patients could be evaluated. Shaped by cluster analysis we examined 3 subgroups related to psychological factors: C1 psychic disturbed (n=36) , C2 psychic disturbed (expert rating), normal (self rating) (n=24), C3 psychic normal (n=25). The 3 groups showed different courses in the expert rating of psychosocial, communicative findings (PSCR). Within 2 years C1 and C3 depression (BDI) decreased ( $p=0.003$ ) and quality of live (HRQL) increased ( $p=0.0001$ ). In PSCR only C3 decreased ( $p=0.035$ ). C2 anxiety (STAI) increased in IG compared to CG after 1 year (group x time  $p=0.05$ ). Conclusion: We found in this re-evaluation, different psychological symptom courses in the subgroups. Patients in cluster 1 and 3, but not in cluster 2 had benefit from this intervention. Different treatments for psychologically defined groups in physical disease can be implemented.

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## Symposium 3: Psychotherapeutic approaches in psychosomatic medicine

**Chairs: Meike Shedden Mora, Ali-Akbar Nejatisafa**

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### “Joie de vivre” and “flying over the crisis”: multidisciplinary metaphors of resilience

**Ms. Milena Rabe<sup>1</sup>**, Dr. Nina Hiebel<sup>1</sup>, Prof. Dr. Franziska Geiser<sup>1</sup>

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Symposium 03 - Psychotherapeutic approaches in psychosomatic medicine, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Resilience involves the ability of individuals to cope with adversities. In humanities and life sciences different conceptions such as human trait, adaptive process or social resources are used to explain the phenomenon. Humans tend to use pictures and phrases to express themselves, so called metaphors. Metaphors are meaningful and structure experiences which help us to handle our life. A prevalent metaphor in resilience literature refers to an elastic spring with the ability to “bounce back”, leaving a notion of invincibility. Within an interdisciplinary research project, we are in search of a model of resilience which allows for the integration of crisis and vulnerability. Our objective in a first project period was to understand how experts from humanities and life sciences describe resilience and to evaluate the predominant notion of invincibility.

**Methods:** Qualitative data from nine guideline based interviews with experts from psychology, palliative medicine, spiritual care, theology and philosophy focusing on their understanding of resilience was analyzed using the qualitative content analysis with regard to the patterns of metaphors, their similarities and variations.

**Results and conclusion:** We found that even if different foci are set there is a surprisingly high range of consensus. Besides the prevalent narration of a resilient person as strong and invincible, experts from all disciplines used metaphors that expressed strong and vulnerable sides of persons within a crisis and gave the hint that for a more comprehensive understanding of resilience vulnerability should be seen as an integrative part.

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(Manualized) psychotherapy in open vs. closed groups:

### Which format is better?

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Symposium 03 - Psychotherapeutic approaches in psychosomatic medicine, virtual, Juni 3, 2021, 13:30 - 14:45

**Introduction:** Group psychotherapy has proved to be an effective treatment for depression. Controversy exists about the comparative efficacy of different group formats (e.g., [slow-] open, closed). Most of the findings come from outpatient, closed-group research. In practice, the open format is often more economical and widely used. Randomized studies comparing these group settings are lacking.

**Aim:** This study aims to compare the efficacy of open vs. closed format of inpatient group psychotherapy for depression.

**Methods:** Psychosomatic-rehabilitation clinic consecutively assigned 265 inpatients (mean age 55.7, SD = 11) to either open (n = 116) or closed (n = 149) cognitive-behavioral group (up to 7 weeks treatment). Changes over the course of the treatment were monitored (depression score, general group cohesion score). Multilevel models with repeated measures were conducted to examine the key predictors in relation to change over time with patients' random effects.

**Results:** Both group formats showed substantial reduction in symptomatology ( $d = 1.8$ ). A significant group format x time interaction in favor of the closed format was found regarding group cohesion (in patients with regular stay).

**Discussion:** Contrary to our expectations, we did not find any significant difference between the two group formats in terms of their efficacy. The closed format proved to be preferable for enhancing group cohesion, but overall, there is presently no decisive evidence to prefer one format over another.

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## Do patients' treatment expectations predict weight loss after bariatric surgery? A prospective mixed-methods study

**Dr. Meike Shedden Mora<sup>1</sup>**, Stephanie Assaker<sup>1</sup>, Dr. Sebastian Kohlmann<sup>1</sup>, Jannis Alberts<sup>1</sup>, Prof. Dr. Keith Petrie<sup>2</sup>, Prof. Dr. Bernd Löwe<sup>1</sup>

<sup>1</sup>University Medical Center Hamburg-Eppendorf, Hamburg, Germany, <sup>2</sup>University of Auckland, Auckland, New Zealand

Symposium 03 - Psychotherapeutic approaches in psychosomatic medicine, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Patients' expectations are an important predictor of outcome across medical treatments, however their role in bariatric surgery for obesity remains unclear. Our aim was to analyze patients' pre-treatment expectations of bariatric surgery and to determine whether expectations predict weight loss 6 months post-surgery.

**Methods:** This mixed-methods prospective study assessed patients with obesity scheduled for bariatric surgery before and 6 months after surgery. Expectations were evaluated with the Treatment Expectation Questionnaire (TEX-Q) and by asking for realistically expected and ideal weight at 6 months. Qualitatively, expectations, hopes and fears were explored. Outcomes were actual weight loss, obesity-specific quality of life (BQL), and eating pathology (EDE-Q).

**Results:** Of 77 patients (mean age  $43.0 \pm 11.4$  years, 58.4% female, mean BMI =  $50.8 \text{ kg/m}^2$ ) who were assessed pre-surgery, 56 patients assessed at 6 months reported a mean weight loss of  $35.1 \pm 17 \text{ kg}$ . The most relevant pre-surgery expectations and hopes revealed in qualitative thematic analysis were losing weight, increasing mobility, and improving



comorbidities. Weight gain and surgical complications were the most prominent concerns; many patients did not express specific fears.

Controlling for sociodemographic and obesity-specific variables, ideal weight expectations predicted actual weight loss at 6 months ( $\beta=.32$ ). Expectations did not predict obesity-specific quality of life, however, positive treatment expectations predicted lower eating pathology post-surgery ( $R^2=.08$ ).

Conclusions: Patients' pre-treatment expectations relate to central targets of bariatric surgery. Ideal weight expectations are a realistic estimate of actual weight loss. Whether modifying weight expectations can achieve a better actual weight loss needs further exploration.

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## Effect of Group Therapy on the Perception of Body Image and Quality of Life of Patients with Breast Cancer

Dr. Mina Bigdeli<sup>1</sup>, Dr. Ali-Akbar Nejatisafa<sup>1</sup>, Dr. Mohammad Arbabi<sup>1</sup>, Dr. Ahmad Ali Noorbala<sup>1</sup>

<sup>1</sup>Department of Psychiatry, Psychosomatic Research Center, Tehran University of Medical Sciences, Tehran, Iran

Symposium 03 - Psychotherapeutic approaches in psychosomatic medicine, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** The study aimed to evaluate the effect of group therapy on the perception of body image and quality of life of patients with breast cancer who had undergone a mastectomy.

**Methods:** Women with breast cancer who had undergone mastectomy for 3 years and with the age between 25 to 55 were included in the study. All the participants have completed the inform consent, demographic questionnaire, Beck Depression Inventory (BDI), Body Image Scale (BIS) and EORTC Quality of Life Questionnaire (QLQ-C30) as the baseline evaluation. Then they were randomized to enter into two different groups: the group therapy (GT) group and treatment as usual (TAU) group. Group therapy consisted of 8 weekly group sessions. In addition to education about breast cancer and its complications, the expression of emotion about breast disease, body image and intimate relationships were addressed in these sessions. Both GT and TAU groups were completed the BDI, BIS, and QLQ-C30 after 8 weeks as the second evaluation.

**Results:** Eighteen women were included in each group. One of the patients in the GT group was unable to complete the sessions. The perception of body image, depression and quality of life were significantly improved in the GT group according to the scores of BIS( $p<0.01$ ), BDI( $p<0.01$ ) and QLQ-C30( $p<0.05$ ) respectively.

**Conclusion:** Group therapy should be considered as an effective intervention for improvement of the perception of body image in women with breast cancer who had undergone a mastectomy.

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## Coping with Aging in Ourselves and Our Patients: Reflections of an Experienced and Aging Therapists

Dr. Ken Schwartz<sup>1</sup>

<sup>1</sup>*Baycrest, Toronto, Canada*

Symposium 03 - Psychotherapeutic approaches in psychosomatic medicine, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** We are all aging. When we age well, be it in our professional or personal lives, we remain connected and continue to live with purpose and meaning. Various approaches showing the importance of hope and taking action in facilitating successful coping with both aging and illness in ourselves and our patients are demonstrated.

**Methods:** A paradox of old age is that though we aspire to get there, we live in fear of what it will involve. A series of questions raising awareness of one's attitudes, feelings and behaviors with respect to issues of one's own aging, illness and working with aging and ill patients is presented to promote self-reflection on how it affects our clinical practice.

**Results:** With increased self-awareness regarding these issues, therapists better understand how we are impacted by our personal issues in our clinical work opening the path to continued personal and professional growth and remaining effective and resilient clinicians.

**Conclusion:** Discomfort with one's own challenges with aging and illness coupled both with working with a complex medically ill aging population and the health and aging of our friends and relatives raises fears and vulnerability associated with aging and mortality. Unfortunately, these feelings lead too often to avoidance contributing to the ever-increasing aging population remaining under-served. Conversely, the healthiest way to deal with such feelings is through talking with a supportive group of colleagues through the use of a small series of questions as employed in this presentation.

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## Symposium 4: Depression and depressive symptoms

**Chairs: Joane Matta, Silvia Ferrari**

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### Dietary restrictions and depressive symptoms: longitudinal results from the Constances cohort

**Dr. Joane Matta<sup>1</sup>**, Dr. Nicolas Hoertel<sup>2,3,4</sup>, Dr. Guillaume Airagnes<sup>5</sup>, Prof. Sebastien Czernichow<sup>2,6</sup>, Dr. Emmanuelle Kesse-Guyot<sup>7</sup>, Prof. Frederic Limosin<sup>2,3,4</sup>, Prof. Marie Zins<sup>1</sup>, Prof. Marcel Goldberg<sup>1</sup>, Prof. Cedric Lemogne<sup>2,3,4</sup>

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Symposium 04 - Depression and depressive symptoms, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Cross-sectional results have suggested a linear association between dietary exclusions and depressive symptoms. This prospective study aimed to examine the direction of their association. **Methods:** In the population-based Constances cohort, depressive symptoms were defined by a score  $\geq 19$  on the Centre of Epidemiologic Studies-Depression (CES-D) scale. Diet was measured with a 24-item qualitative food frequency questionnaire (FFQ). Both variables were available at inclusion (from 2012 to 2014) and on follow-up (2015 for the CES-D and 2017 for diet). Food exclusion was categorized into 5 different groups: no exclusion, exclusion of 1, 2, 3 or  $\geq 4$  food items. Logistic regressions were conducted, either taking depressive symptoms as the outcome on follow-up with dietary exclusions at baseline as predictor or with the opposite, adjusting for age, sex, education, income, alcohol intake, smoking, physical activity and anemia. Path analysis included outcomes and covariates in one model. **Results:** A total of 29,337 participants (53.4% women,  $48.15 \pm 12.99$  y.o.) had complete CES-D data and 25,336 (53.56% women,  $49.05 \pm 12.88$  y.o.) FFQ data. Dietary exclusion at inclusion predicted depressive symptoms at follow-up (Odds-Ratio [95% confidence interval]: 2.35 [1.62–3.40] for  $\geq 4$  excluded items). Depressive symptoms at inclusion predicted dietary exclusions at follow-up (3.45 [1.93–6.16] for  $\geq 4$  excluded items). In path analysis, the standardized estimate of the association between dietary exclusions at inclusion and depressive symptoms at follow-up was by far higher than the opposite (0.1863 and 0.00189, respectively, both  $p < 0.05$ ). **Conclusion:** The association of dietary exclusion with subsequent depression is stronger than the opposite association.

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## Interpersonal needs in social anxiety disorder patients with suicidal ideation

**Dr. Rupert Conrad<sup>1</sup>**, Prof. Dr. Johannes Schumacher<sup>2</sup>, Dr. Andreas J. Forstner<sup>2</sup>, Prof. Dr. Franziska Geiser<sup>1</sup>

<sup>1</sup>Department of Psychosomatic Medicine and Psychotherapy, Bonn University Hospital, Bonn, Germany, <sup>2</sup>Centre for Human Genetics, University of Marburg, Marburg, Germany

Symposium 04 - Depression and depressive symptoms, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Social anxiety disorder (SAD) is often associated with considerable suffering for those affected. The interpersonal theory of suicidality by Thomas Joiner (2005) postulates a close connection between the loss of social integration and the emergence of suicidal ideation. We examined the significance of perceived social affiliation for suicidal ideation.

**Methods:** 304 participants with SAD (178 women; 126 men) were recruited at Bonn University Hospital. All participants answered the questionnaires Social Phobia Inventory (SPIN), State Trait Anger Inventory, Beck Depression Inventory (BDI), and Interpersonal Needs Questionnaire (INQ). The prediction of suicidal ideation (BDI suicidality item) by sex, age, SPIN and INQ was investigated by linear regression analysis.

**Results:** 44% of participants showed suicidal ideation. 27.4 percent of variance of suicidal ideation could be elucidated by the predictors. Both INQ scales Perceived Burdensomeness (PB) ( $\beta=0.405$ ;  $p<0.001$ ) and Thwarted Belongingness (TB) ( $\beta=0.152$ ;  $p=0.011$ ) were significant predictors of suicidal ideation. Analysing men and women separately, merely in men both INQ scales were significant predictors (R-Squared=0.261; PB:  $\beta=0.248$ ;  $p=0.011$ ; TB:  $\beta=0.266$ ;  $p=0.004$ ), whereas in women TB was not significant (R-Squared=0.296; PB:  $\beta=0.505$ ;  $p<0.001$ ; TB:  $\beta=0.082$ ;  $p=0.306$ ). PB and TB were highly correlated with State-Anger, Trait-Anger, Anger-Out and Anger-In.

**Conclusions:** The high prevalence rate of 44% highlights the relevance of suicidal ideation in SAD. Our study confirms the significance of the interpersonal theory of suicidality for the prediction of suicidal ideation in SAD. We found evidence for a different relevance of the factor TB in men compared to women.

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## Biorhythms, Mood, and Pain in Real-time: Insights from the NIMH Family Study of Affective Spectrum Disorders

**Dr. Emma Stapp<sup>1</sup>**, Ms. Lihong Cui<sup>1</sup>, Dr. Joel Swendsen<sup>2</sup>, Dr. Kathleen Merikangas<sup>1</sup>

<sup>1</sup>NIMH, Bethesda, United States, <sup>2</sup>University of Bordeaux, Bordeaux, France

Symposium 04 - Depression and depressive symptoms, virtual, Juni 3, 2021, 13:30 - 14:45

**OBJECTIVE:** Our previous work using real-time monitoring has shown that motor activity (MA) is associated with a decrease in sad mood. We examined whether there is a dose effect of activity intensity with mood; whether this association is moderated by pain, or sleep quality; and whether these associations differ by mood disorder subtype.

**METHODS:** 80 adults subsetting from a community-based family study enriched for mood disorders. Mood, pain, and MA/exercise were reported via ecological momentary assessment 4 times per day for 2 weeks, and sleep quality once daily. Lifetime history of mood disorder subtypes (bipolar I, bipolar II, major depressive disorder) were determined by a semi-structured clinical interview and best estimate consensus. Generalized estimating equations with granger modeling of prior states were used to analyze the lagged associations among mood, pain, sleep quality, and MA.

**RESULTS:** Pain and intensity of MA were not associated with changes in mood. However, sleep quality predicted improved mood (Est -0.052,  $p=0.003$ ), while sad mood was associated with subsequent increase in pain (Est. 0.0553,  $p=0.0268$ ). Although mood ratings and sleep quality differed by lifetime history of mood disorder subtypes, subjectively-rated pain and MA/exercise did not.

**CONCLUSION:** Findings suggest that intensity of MA does not explain the unidirectional association between MA with sad mood, nor was this association moderated by pain or sleep quality that were not related to sad mood. Future analyses will exploit the multilevel intensive longitudinal data using dynamic structural equation modeling and cross replicate these findings in parallel samples using objectively-measured activity.

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## Psychological treatment for insomnia. The experience of the Sleep Disorder Centre of Niguarda Hospital.

Dr. Annalisa Sgoifo<sup>1,2</sup>, Dr Paola Proserpio<sup>1</sup>, Dr Umberto Mazza<sup>2</sup>, Dr Elio Clemente Agostoni<sup>1</sup>

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Symposium 04 - Depression and depressive symptoms, virtual, Juni 3, 2021, 13:30 - 14:45

### Objectives

Chronic insomnia may present with a variety of specific framework with comorbid medical and psychiatric disorders. Stress, psychological symptoms and mental attitudes are recognized as predisposing, precipitating and perpetuating factors of insomnia. The psychological interventions, added or not to drug, show efficacy for this disorder. We use a multidisciplinary approach including the Integrated Imaginative Distention (IID), a therapy combining psychoeducation with muscular and imaginative relaxation, with or without hypnotic drugs. Our primary aim is to evaluate the insomnia change after IID therapy up to six months in our cohort of patients.

### Methods

After neurological and psychological visit, IID is delivered by a skilled psychotherapist through eight weekly training group sessions, continuing with monthly sessions for at least 6 times. Patients fill self-administered questionnaires (0-3-6 months) to evaluate the symptoms as: insomnia by "Insomnia Severity Index" (ISI); anxiety by "State-Trait Anxiety Inventory"; depression by "Beck Depression Inventory"; Quality of Life by "Medical outcome survey Short Form 36".

## Results

A total of 79 patients (pts) were evaluated, 69 accepted both pharmacological and psychological treatment and 47 completed the questionnaires (17 men, mean age 51 yy, range 19-86). The significant change at six months of ISI severity class ( $p < 0.001$ ; Wilcoxon Z-value: -5.7397 (mean 517.5; SD 88.59) can be summarized as follow: absence of clinical insomnia 1pts versus 9pts; sub-threshold insomnia 15pts versus 32pts; moderated insomnia 18pts versus 6pts; severe insomnia 13pts versus 0pts.

## Conclusion

IID, prompting the active participation of the patient and the learning of specific techniques, can promote sleep quality.

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## Inflammatory biomarkers as a mean to implement diagnosis and treatment of depression in subjects with recent diagnosis of HIV-positivity

**Dr. Silvia Ferrari<sup>1</sup>**, Dr. Silvia Alboni<sup>1</sup>, Dr. Luca Pingani<sup>1</sup>, Prof. Maria Giulia Nanni<sup>2</sup>, Dr. Marianna Menozzi<sup>1</sup>, Dr. Simone Maffei<sup>3</sup>, Prof. Gian Maria Galeazzi<sup>1</sup>

<sup>1</sup>University of Modena & Reggio Emilia, Modena, Italy, <sup>2</sup>University of Ferrara, Ferrara, Italy, <sup>3</sup>Mental Health Department of Parma, Parma, Italy

Symposium 04 - Depression and depressive symptoms, virtual, Juni 3, 2021, 13:30 - 14:45

**Background** – Disorders in the depressive spectrum are highly prevalent among HIV-infected individuals, interfere significantly on disease-related disability and quality of life, and are poorly diagnosed and managed. HIV-related depression may function as a model for understanding causality of tout-court depression.

**Aim** – To identify specific profiles of inflammatory biomarkers subtending depression and predicting clinical outcome, among newly HIV-infected individuals.

**Methods** –Prospective, longitudinal, multicentric, 4-year long (2013-2016) cohort study. All adult newly HIV-diagnosed out-patients assessed at the HIV clinic of Modena General Hospital and consenting to be involved underwent a psychiatric assessment together with study of standard laboratory indicators and a specific set of immune biomarkers, consisting of: IL-1 $\alpha$  and  $\beta$ , IL-6, IL-23, IL-18, IFN- $\gamma$ , TNF $\alpha$ , MCP1, IL-8, BDNF, FGF-8, CNTF; IL1Ra, IL18R $\alpha$  type II, IL18R $\alpha$  short, IL18BP.

**Results** – 42 subjects were enrolled (males 88%), mean PHQ-9 score was  $7.50 \pm 4.93$  and 25% of subjects had a positive PHQ-9. Of these, MDD was diagnosed to only 4 of the whole sample. 60% of subjects were positive for the presence of neurocognitive symptoms. At the multivariate regression comparing depressed and not depressed patients, the risk of being depressed was found to be increased in case of: psychiatric comorbidities (OR 136.26,  $p = .008$ , IC 3.61-5148.86) and expression of components of the IL18 system (IL-18R $\beta$  full) (OR 25.12,  $p = .024$ , IC 1.53-412.78).

**Conclusions** – The recognition and treatment of depressive symptoms and disorders among HIV-infected persons are a major clinical goal and may be supported by specific monitoring of immune biomarkers

- Thu, June 3rd, 13.30 – 14.45 CEST

## Symposium 5: Care provider health and experience

**Chairs: Mark Oldham, Frank Vitinius**

Thu, June 3rd, 13.30 – 14.45 CEST

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### Impact of an Employee Behavioral Health Program on All-Cause Healthcare Utilization

**Dr. Daniel Maeng<sup>1</sup>**, Dr. George Nasra<sup>1</sup>, Dr. Benjamin Lee<sup>1</sup>

<sup>1</sup>University of Rochester Medical Center, Rochester, United States

Symposium 05 - Care provider health, training and skills, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** To examine the impact of an employer-sponsored behavioral health (BH) program on all-cause healthcare utilization.

**Methods:** A retrospective analysis of health insurance claims data obtained from a large employer in Rochester, NY, covering a 25-month period between 2016 and 2018. Those employees treated by the employer-sponsored BH program was compared against a contemporaneous comparison group of employees with eligible BH diagnoses for the program but were not treated by it. A difference-in-difference method was used to estimate the program impact on all-cause acute care utilization and provider office visits (primary care provider (PCP) as well as BH and non-BH specialist visits) to account for the differences in the baseline characteristics and other confounders between the two groups via a set of multiple regression models.

**Results:** The treatment group was associated with approximately 30% reductions in PCP visits ( $p < 0.001$ ) and non-BH specialist visits ( $p = 0.001$ ). Acute care utilization was also lower among the treatment group by 28%, albeit not statistical significance ( $p = 0.165$ ). Moreover, the rates of BH specialist visits were slightly higher among the treatment group by 11%, but the difference was not statistically significant ( $p = 0.724$ ).

**Conclusions:** The results suggest the employer-sponsored BH program implementation may have shifted treatments of certain BH conditions away from PCPs and non-BH specialists – who often have little to no BH expertise – without leading to offsetting changes in acute care utilizations. This implies the employees suffering with certain BH conditions were likely to have experienced more appropriate and efficient care for their conditions

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## Integration of a proactive, multidisciplinary mental health team on hospital medicine improves provider and nurse satisfaction

Dr. Mark Oldham<sup>1</sup>

<sup>1</sup>University of Rochester Medical Center, Rochester, United States

Symposium 05 - Care provider health, training and skills, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** Psychiatric comorbidity on hospital medicine is high, and it often complicates care delivery and compromises outcomes. Team-based, proactive consultation–liaison (CL) psychiatry has been shown to reduce hospital length of stay (LOS) and care costs, but staff satisfaction with this model has yet to be explored in detail. We aimed to improve medicine provider and nurse satisfaction. Secondly, we aimed to replicate LOS reduction and characterize the psychiatric morbidity in this population.

**Methods:** We implemented a proactive CL psychiatry service on 3 hospital medicine units as a quality improvement pilot. Before implementation and again 6 months into the pilot, medical providers completed 10-item surveys on psychiatric resource adequacy, personal and emotional safety, time for healthcare improvements, and burnout. Similarly, nurses completed pre-post surveys that included these 10 items plus 8 additional items on behavioral health assessment competency and 8 on intervention competency. Overall LOS reduction was calculated using difference-in-difference vs 2 medicine floors receiving CL care as usual.

**Results:** Providers rated 9 items as improved, including one burnout item. The pattern of nursing satisfaction improvement mirrored that of providers but with slightly lower effect sizes. LOS reduction was incremental: -0.07d ( $p = 0.8$ ) the first 3 months, -0.65d ( $p = 0.04$ ) the second 3 months. Psychiatric comorbidity was identified in 71% of the 1,590 patients admitted over the pilot period.

**Conclusions:** Staff satisfaction improved nearly unanimously with this enhanced model of care, and LOS was reduced relative to care-as-usual units. Strikingly, 2 of 3 patients had psychiatric morbidity.



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## Coping style and attendance in Balint groups - associations to physicians' job-related well-being, sense of meaning and subjective happiness

**Dr. Ovidiu Popa-Velea<sup>1</sup>**, Senior Lecturer Dr. Raluca Iuliana Gheorghe<sup>2</sup>, Senior Lecturer Dr. Veronica Calancea<sup>3</sup>

<sup>1</sup>Department of Medical Psychology, Faculty of Medicine, University of Medicine and Pharmacy Carol Davila, Bucharest, Romania,

<sup>2</sup>Department of Marketing and Medical Technology, Faculty of Medicine, University of Medicine and Pharmacy Carol Davila, Bucharest, Romania,

<sup>3</sup>Department of Psychology, Faculty of Psychology and Education Sciences, Sociology and Social Work, Moldova State University, Chisinau, Moldova

Symposium 05 - Care provider health, training and skills, virtual, Juni 3, 2021, 13:30 - 14:45

### Objective:

To assess the contribution brought by Balint affiliation and coping strategies to physicians' well-being, sense of meaning and subjective happiness.

### Methods:

Participants included 145 physicians from Romania and Moldova (mean age 46.37, SD=10.64, mean work experience=17.23 years), from which 55 (37.93%) systematically attended Balint groups. They completed the Job-related Affective Well-being Scale (JAWS), the Meaning of Life Scale, the Subjective Happiness Scale and the Brief COPE Scale. The statistical analysis comprised Mann-Whitney U tests – to assess inter-groups differences, and linear regression - to measure the predictive effect of the independent variables on the dependent ones.

### Results:

Balint group members performed better in well-being (77.22 vs. 60.44,  $p<0.001$ ), meaning in life (49.51 vs. 39.61,  $p<0.001$ ), and subjective happiness (20.89 vs. 15.54,  $p<0.001$ ). They used more substantially active coping, positive reframing, planning and acceptance, while non-Balintians scored higher in denial, substance use, and self-blame. Meaning of life was predicted in Balintians by active coping ( $R^2=.167$ ,  $t=3.264$ ,  $p<.002$ ) and acceptance ( $R^2=.146$ ,  $t=3.010$ ,  $p<.004$ ), while no coping style acted as a predictor in the control group. Subjective happiness was predicted in Balintians by instrumental support ( $R^2=0.079$ ,  $t=-2.137$ ,  $p=0.037$ ) and positive reframing ( $R^2= 0.184$ ,  $t=3.456$ ,  $p=0.001$ ) and in non-Balintians by religion ( $R^2=.051$ ,  $t=-2.173$ ,  $p<.03$ ). Job-related well-being did not correlate to coping style or Balint affiliation.

### Conclusion:

Balint groups attendance has an additional contribution to coping in improving physicians' subjective happiness and sense of meaning. This association is encouraging for a potential higher use of this intervention in providing psychological support to these professionals.

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Training guidelines on Psychodermatology: breaking the ice for specialist trainees.

**Ms. Ana Goñi Navarro<sup>1</sup>**, Ms. Lucía Tomás Aragonés<sup>2</sup>, Mr. Ricardo Campos Ródenas<sup>3</sup>

<sup>1</sup>1. Resident of Psychiatry Lozano Blesa Clinical University Hospital, Zaragoza, Spain, <sup>2</sup>2. Past President of European Association for Dermatology and Psychiatry., Zaragoza, Spain, <sup>3</sup>3. President of Spanish Psychosomatic Medicine Society. Depart. of Psychiatry. Lozano Blesa Clinical University Hospital, Zaragoza, Spain

Symposium 05 - Care provider health, training and skills, virtual, Juni 3, 2021, 13:30 - 14:45

## OBJECTIVE

The Spanish Psychosomatic Medicine Society (SPMS) and the Aragonese Workgroup of Psychodermatology commissioned the creation of a Task Force to study consensus-based summaries of core roles, scope of clinical practice and basic competences for medical trainees working in the field of Psychodermatology.

## METHODS:

The task force used a literature search on training in Psychodermatology combined with existing statements of competencies and feedback from SPMS and European Association for Dermatology and Psychiatry (ESDAP) to develop a draft document. This is compared to the existing European guidelines for training in CL and psychosomatic (Sollner & Creed, 2007) and the Consensus Statement of the European Association of Consultation-Liaison Psychiatry and the Academy of Psychosomatic Medicine (Leentjens et al, 2011).

## RESULTS:

The consensus statement is a summary of basis and advanced clinical skills and competencies, scope of clinical practice on Psychodermatology and roles considered to be fundamental to learning this subspecialty or special area of expertise.

## CONCLUSION:

The consensus statement on Psychodermatology training delineates a specific set of basic competencies and roles for a Dermatology/Psychiatrist trainee to serve at a national and international level to formulate their specific competencies within a guideline formulation in order to bridge the split between skin and psyche.

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## Effectiveness of a skills-oriented interprofessional communication training for ward units (KommRhein Interpro) at organ cancer centers - study report

**Dr. Frank Vitinius<sup>1</sup>**, Dr. Andrea Petermann-Meyer<sup>2</sup>, Prof. Dr. Dipl.-Psych. Franziska Geiser<sup>3</sup>, Daria Kraus<sup>4</sup>, Luisa Ersten<sup>5</sup>, Christian Heuser<sup>6</sup>, Kati Hiltrop<sup>6</sup>, Prof. Nicole Ernstmann<sup>6</sup>, Dr. André Karger<sup>5</sup>

<sup>1</sup>University Hospital of Cologne, Department of Psychosomatics and Psychotherapy, Köln (Cologne), Germany, <sup>2</sup>Department of Oncology, Hematology, Hemostaseology and Stem Cell Transplantation, Medical Faculty, University Hospital RWTH Aachen, Aachen, Germany, <sup>3</sup>Department for Psychosomatic Medicine and Psychotherapy, University Hospital Bonn, Bonn, Germany, <sup>4</sup>Center of Clinical Studies, Köln (Cologne), Germany, <sup>5</sup>Clinical Institute of Psychosomatic Medicine and Psychotherapy, Medical Faculty, University Düsseldorf, Düsseldorf, Germany, <sup>6</sup>Center for Health Communication and Health Services Research (CHSR), Department for Psychosomatic Medicine and Psychotherapy, University Hospital Bonn, Bonn, Germany

Symposium 05 - Care provider health, training and skills, virtual, Juni 3, 2021, 13:30 - 14:45

**Objective:** The psychosocial outcome of oncological treatment is significantly influenced by the communication between the practitioner and the patient. Communicative competence can be effectively improved through appropriate training. So far, there are only a few communication trainings that are conducted interprofessionally.

**Methods:** In the project funded by German Cancer Aid, an interprofessional skills-oriented communication training for wards at four cancer centers which are cooperating in a common structure (Center for Integrated Oncology Aachen, Bonn, Cologne, Düsseldorf) is being developed and implemented. Thirty wards were distributed randomly across three study arms: (a.) Written information on patient-centered communication, (b.) 10 h of skills-based communication training for doctors, and (c.) 10 h of interprofessional skills-based communication training for doctors and nurses. All participants complete questionnaires before and after the intervention. 1,500 patients are surveyed at admission, immediately and 3 months after discharge.

**Results/Conclusion:** The planning of the trainings is currently underway. The joint training of doctors and nurses of a team or ward (condition c) is expected to lead to the greatest reduction of patients' cancer-specific anxiety and greatest trust in the treatment team as well as to a greater improvement in experienced competence and patient-centered communication in doctors and nurses. The influence of organisation-related factors will be investigated. Twenty trainers were qualified for the manual-guided interventions. Due to the special circumstances of the SARS-CoV2-pandemic, an online version of the training was developed. It is planned to integrate the trainings into the daily routine of the wards.

- Thu, June 3rd, 16:45 - 18:00 CEST

## Symposium 6: Children and adolescents in psychosomatic medicine

**Chairs: Charlotte Ulrikka Rask, Dirk von Boetticher**

Thu, June 3<sup>rd</sup>, 16:45 - 18:00 CEST

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### Health anxiety symptoms in pediatric obsessive-compulsive disorder: patient characteristics and effect on treatment outcome

**Dr. Charlotte Ulrikka Rask<sup>1,2</sup>**, Medical student Charlotte Steen Duholm<sup>1,2</sup>, Psychologist, Phd David Højgaard<sup>1</sup>, Professor Gudmundur Skarphedinsson<sup>3</sup>, Professor Per Hove Thomsen<sup>1,2</sup>

<sup>1</sup>Aarhus Univeristy Hospital, Aarhus N, Denmark, <sup>2</sup>Aarhus University, Aarhus N, Denmark, <sup>3</sup>University of Iceland, Reykjavík, Island

Symposium 06 - Children and adolescents in psychosomatic medicine, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** To explore the potential clinical role of health anxiety (HA) symptoms in children and adolescents diagnosed with obsessive-compulsive disorder (OCD). The study investigated differences in demographic and various clinical variables between young people with OCD, with and without HA symptoms, and the effect of HA symptoms on overall OCD treatment outcome.

**Methods:** The study sample comprised 269 children and adolescents with OCD (aged 7-17 years) from the large Nordic Long-term OCD Treatment Study. OCD symptoms and severity were assessed with The Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS), which includes one item regarding HA-like obsessions and one item regarding HA-like compulsions that were used to define the HA group. Several other instruments were used to assess comorbidity and other clinical aspects. All participants were treated with 14 weekly protocolled sessions of exposure-based cognitive behavioral therapy (CBT).

**Results:** HA symptoms were present in 31% of participants. Other anxiety symptoms and comorbid anxiety disorders were more prevalent among those with HA symptoms. These patients also presented with significantly more types of OCD symptoms. HA symptoms were reduced during and following OCD treatment with CBT and having HA symptoms did not affect CBT outcome.

**Conclusion:** Results suggest that pediatric OCD with HA symptoms is characterized by more anxiety symptoms and a more heterogeneous OCD symptom profile. Standardized CBT seems equally effective in treating child and adolescent OCD with or without HA symptoms.

- Thu, June 3rd, 16:45 - 18:00 CEST

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## Emerging adults – a challenge for an integrated psychosomatic approach

Dr. Dirk von Boetticher<sup>1</sup>

<sup>1</sup>University Medical Center Göttingen, Psychosomatic Medicine and Psychotherapy, Göttingen, Germany

Symposium 06 - Children and adolescents in psychosomatic medicine, virtual, Juni 3, 2021, 16:45 - 18:00

### Objectives

Empirical findings indicate a significant prolongation of the transition period between adolescence and adulthood in industrialized societies. This period termed „emerging adulthood“ (Arnett) represents a particularly vulnerable developmental stage and goes along with an increased risk for the development and chronification of psychosomatic disorders. The specific needs of emerging adults require specific health care services.

### Methods

The presentation describes the development-specific characteristics of emerging adults and relates them to the development of various mental and somatic disorders. It discusses models of care to deal with these challenges in an integrative way.

### Results

During the last decades the empirical increase in the length of time allotted to the realization of key development tasks (such as leaving home, partnership, occupation, identity development) has led to the postulate of a new development phase called „emerging adulthood“ (18–30 years). The new challenges lead to a significant development pressure and fear of the future, which is manifested in an increased symptomatology, thus additionally disturbing necessary development tasks. About 50% of adulthood's mental disorders reach back to childhood. Emerging adults exhibit the highest twelve-month prevalence and lowest treatment rate of mental disorders. Negative consequences for the future life course and health prognosis are very common. Current institutionalized discontinuity between child-and-youth and adult health care forms neglect the special needs of the particularly vulnerable age-group “inbetween”.

### Conclusions

Emerging adults represent a remarkable challenge for the health care system which has to develop new models of care to deal with these challenges in an integrative way.

- Thu, June 3rd, 16:45 - 18:00 CEST

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## Functional somatic symptoms in young people in general practice: Prevalence, clinical management and GP-experienced burden

**Ms. Line Katrine Kjastrup<sup>1</sup>**, Dr. Marianne Rosendal<sup>2</sup>, Mette Trøllund Rask<sup>2</sup>, Dr. Kaj Sparle Christensen<sup>3</sup>, Dr. Charlotte Rask<sup>1</sup>

<sup>1</sup>Department of Child and Adolescent Psychiatry, Psychiatry, Aarhus University Hospital, Aarhus, Denmark, <sup>2</sup>Research Clinic for Functional Disorders and Psychosomatics, Aarhus University Hospital, Aarhus, Denmark, <sup>3</sup>Research Unit for General Practice, Aarhus University, Aarhus, Denmark

Symposium 06 - Children and adolescents in psychosomatic medicine, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** Functional somatic symptoms (FSS) are common in adults and difficult to manage in general practice. Studies on youth are scarce despite an increasing number reporting FSS. The present study aimed to describe the general practitioners' (GPs') clinical management, time consumption, experienced burden and estimated FSS prevalence in youth compared to adults. Next, to compare the same consultation-related aspects in youth with and without FSS, and in youth and adults with FSS.

**Methods:** The study was based on questionnaire data from a Danish cross-sectional study of primary care patients, conducted in 2008-2009. We included 3295 GP face-to-face consultations with patients aged 15-64 years. Youth (15-24 years) were compared to adults (25-64 years). Further, youth were divided in three subgroups classified by GP for comparison: 1) specific diagnosis, 2) resolving symptom and 3) FSS. Finally, youth and adults with FSS were compared. Logistic regression analysis was used for all comparisons.

**Preliminary results:** GP-management of youth and adults were comparable though GPs more often ensured continuity of care of adults and found youth less time-consuming and burdensome. FSS prevalence was 4.35 % in youth and 8.97 % in adults. GPs experienced youth with FSS as more burdensome and time-consuming than youth without FSS but both age groups with FSS equally burdensome and time-consuming.

**Conclusion:** These results highlight age-related dissimilarities in prevalence of FSS and show that GPs also find youth with FSS burdensome and time-consuming. This underlines the need for development of supportive management strategies for youth with FSS in general practice.

- Thu, June 3rd, 16:45 - 18:00 CEST

## Symposium 7: Psychosomatics in transplantation medicine

**Chairs: Britta S. Bürker, Adrienne Mishkin**

Thu, June 3<sup>rd</sup>, 16:45 - 18:00 CEST

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### Depressive symptomatology and its impact on mortality after heart transplantation

**Dr. Britta S. Bürker<sup>1</sup>**, MD, PhD Ulrik F. Malt<sup>2</sup>, MD, PhD Einar Gude<sup>3</sup>, RN Ingelin Grov<sup>3</sup>, RN Anne Relbo Authen<sup>3</sup>, MD, PhD Lars Gullestad<sup>4</sup>

<sup>1</sup>Department of Cardiology, Oslo University Hospital - Rikshospitalet; Department of Psychiatry, Nordlandssykehuset Bodø, , Norway, <sup>2</sup>Institute of Clinical Medicine, University of Oslo, , Norway, <sup>3</sup>Department of Cardiology, Oslo University Hospital - Rikshospitalet, , Norway, <sup>4</sup>Department of Cardiology, Oslo University Hospital - Rikshospitalet; Institute of Clinical Medicine, University of Oslo; KG Jebsen Cardiac Research Centre, Oslo University Hospital, , Norway

Symposium 07 - Psychosomatics in transplantation medicine, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** We have recently demonstrated that clinically significant depression measured by self-report with the Beck Depression Inventory – version 1A several years after heart transplantation (HTx) is associated with increased mortality during extended follow-up (doi: 10.1097/PSY.0000000000000702). In an additional analysis we examined whether depressive symptomatology, measured by means of the Symptom Checklist-90-Revised (SCL-90-R), is associated with increased mortality as well.

**Methods:** We performed uni- and multivariate Cox regression analyses in a sample of 142 HTx recipients in whom depressive symptomatology had been measured by means of the depression subscale of the SCL-90-R on average 5.7 years after HTx. The participants were followed for survival status for up to 18.6 years. The covariates in the multivariate analysis were the following: age and sex of recipient at time of inclusion, reason for HTx, age of donor, cold ischemic time, kidney dysfunction, cardiac allograft vasculopathy, smoking status and body mass index at time of inclusion, as well as time between HTx and inclusion.

**Results:** The depression subscale of the SCL-90-R was significantly associated with increased mortality in both uni- and multivariate Cox regression analyses (univariate analysis: hazard ratio (HR): 1.430, 95% confidence interval (95% CI): 1.072-1.908, p=.015; multivariate analysis: HR: 1.511, 95% CI: 1.052-2.171, p=.026).

**Conclusion:** Depressive symptomatology after HTx, assessed by means of the depression subscale of the SCL-90-R, is associated with increased mortality during extended follow-up. Further studies should examine whether effective therapeutic interventions can amend the association between depressive symptomatology and increased mortality.

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## Suicidality in Post-Stem Cell Transplant patients with Sickle Cell Disease

**Dr. Adrienne Mishkin<sup>1</sup>**, Dr. Elizabeth Leimbach<sup>1</sup>, Ms. Alison Hoffman<sup>1</sup>, Ms. Stephanie Cheung, MD<sup>1</sup>, Dr. Simon Dosovitz<sup>1</sup>, Dr. Markus Mapara<sup>1</sup>

<sup>1</sup>Columbia University, New York, United States

Symposium 07 - Psychosomatics in transplantation medicine, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** Sickle cell disease (SCD) affects 300,000 people. Hematopoietic cell transplantation (HCT) is potentially curative, but with this innovation comes post-transplant complications. SCD and HCT are each independent predictors of depression and suicidality. We characterized one-year suicidality in post-HCT SCD patients.

**Methods:** 14 patients with SCD had HCT at Columbia from 1/2014 to 7/2018. Two psychiatrists reviewed records from HCT until one year post-transplant, identifying levels of suicidality: ideation (SI), preparation, attempt (SA), or other injury.

**Results:** Ages ranged 22-44 years old. Seven men; seven women. Eight of African descent; six Latino. Six related donors; seven unrelated; one genetically-modified transplant. Nine had a history of depression. Length of stay (LOS) ranged 32-71 days. Successful engraftment and absence of vaso-occlusive crises were achieved in 100% of patients.

Six patients (43%) reported SI, and one had a SA. No patients died, had non-suicidal self-injury nor preparatory behaviors. There was no relationship between suicidality and gender, age, race, donor type, or LOS. There was a significant relationship between history of depression prior to transplant, and suicidality in the post-transplant year (PPV 66.7%,  $p=0.031$ ).

**Conclusions:** Both SCD and HCT are risk factors for depression and suicidality. This pilot study found a 43% rate of suicidal ideation in patients exposed to both, across age, race, gender, and donor type. History of depression significantly predicted these episodes. Based on this finding, we recommend larger, prospective studies of depression and suicidality in this population, and careful clinical follow-up with psychiatric support for these patients.



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## Prevalence of mental disorders in a German kidney transplant population – Results of a KTx360°-Substudy

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Symposium 07 - Psychosomatics in transplantation medicine, virtual, Juni 3, 2021, 16:45 - 18:00

### Objective:

Studies show that patients with chronic diseases are disproportionately affected by mental disorders. An increased rate of affective disorders and anxiety disorders has also been demonstrated in patients after kidney transplantation (KTx). Repeatedly, a relationship between mental comorbidity and nonadherence to immunosuppressive medication has been reported. An important limitation must be observed: In most studies the mental disorders were diagnosed based on questionnaires. However, structured interviews represent the gold standard for diagnosing mental disorders.

### Methods:

As part of the structured multimodal follow-up program (KTx360°), 726 patients after KTx were examined between May 2017 and July 2019. The structured diagnosis of mental disorders was performed in a diagnostic interview using the Mini-Dips.

### Results:

The mean age of the participants was 52.6 (SD 14.3) years and 58.5% were men. In this group, 27.5% had a mental illness at the time of the diagnostic interview and the lifetime prevalence was 49.2%. The most common mental disorders were affective disorder, anxiety disorder, and adjustment disorder. Current mental illness was associated with lower age, female gender, increased depression and anxiety scores, and lower perceived social support. No association was found with self-reported adherence to immunosuppressive medication. Of patients with current mental illness, only 14.5% were currently under treatment.

### Conclusion:

Patients after KTx showed a point and lifetime prevalence of mental disorders comparable to the German general population. There is a need to identify mental illness in patients after KTx, to be able to offer specialist treatment to a larger proportion of affected patients.

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## Material deprivation and readiness to pursue living donor kidney transplant

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Symposium 07 - Psychosomatics in transplantation medicine, virtual, Juni 3, 2021, 16:45 - 18:00

This study aims to assess if material deprivation is associated with readiness to pursue living donor kidney transplant (LDKT).

A cross-sectional sample of adults with end-stage kidney disease from dialysis units in Toronto completed validated questionnaires. Medical records provided sociodemographic and clinical data. LDKT readiness (outcome) was assessed using the question "How ready are you to get a living donor?". Responses were dichotomized into late (Taking actions) versus early (Not taking/considering/planning actions). The question "Do you have at least one potential living donor at this point?" (yes/no) was our secondary outcome. Material deprivation (exposure) was identified using the Ontario Marginalization Index (OMI). OMI quintile scores were calculated from population weighted average factor scores and ranked from Q1-Q5 (least-most marginalized).

551 participants were recruited (mean[SD]age:57[14]years, 63% male, 45% White, 23% Asian, 27% Black, 59% had >12 years of education, and 35% had >3 years of dialysis). In logistic regression, the Q5 group was significantly less likely to be in late stage of LDKT readiness (OR=0.3, CI=0.1-0.5, p<0.01) or have a potential donor (pLKD) identified (OR=0.2, CI=0.1-0.5, p<0.01) compared to Q1. After adjusting for demographic variables and comorbidity, LDKT readiness (OR=0.4, CI=0.2-0.8, p=0.01) and having a pLKD identified (OR=0.3, CI=0.1-0.7, p<0.01) remained significant. After adjusting for ethnicity, LDKT readiness (OR=0.5, CI=0.2-1.2, p=0.13) and having a pLKD identified (OR=0.5, CI=0.2-1.3, p=0.18) were no longer significantly associated.

Material deprivation was significantly associated with less readiness to pursue LDKT, but this association was largely confounded by ethnocultural background. In a Canadian setting, ethnocultural characteristics seem to be stronger predictors of access to LDKT compared to socioeconomic status.

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## Psychosocial pre-transplant screening with the Transplant Evaluation Rating Scale contributes to prediction of survival after hematopoietic stem cell transplantation

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Symposium 07 - Psychosomatics in transplantation medicine, virtual, Juni 3, 2021, 16:45 - 18:00

### Objective

Hematopoietic stem cell transplantations (HSCT) is a challenging treatment. Integrating assessment of psychosocial aspects is important because immunosuppressant adherence is essential for prevention of graft-versus-host disease (GvHD). The aim of this study is to explore the predictive value of the pretransplant psychosocial screening instrument Transplant Evaluation Rating Scale (TERS) for mortality in a three-year follow-up.

### Methods

A prospective study was performed between 2012 and 2017 including 61 patients classified by psychosocial risk factors as low (TERS = 26.5–29) and increased-risk group (TERS = 29.5–79.5). Both groups were compared regarding mortality until 36 months after transplantation and secondary outcomes (self-reported barriers of immunosuppressant intake: Medication Experience Scale for Immunosuppressants (MESI); incidence/grade of GvHD).

### Results

The increased-risk group (n=28) showed significantly worse cumulative survival in the outpatient setting (from three months to three years after HSCT) (Log Rank (Mantel Cox) p=0.029) compared to low-risk group (n=29) but there was no significant result for the interval immediately after HSCT until 3 years afterwards. There were no significant correlations between TERS and grade of GvHD or MESI.

### Conclusion

Pre-transplant screening with TERS contributes to prediction of survival after HSCT. The reason remains unclear, since TERS did not correlate with GvHD or MESI. The negative result regarding the interval immediately after HSCT until 3 years could be caused by the intensive in-patient setting with mortality which is explained rather by biological reasons than by nonadherence. Assessment with TERS adds to the detection of high risk patients for interventions to improve survival.

- Thu, June 3rd, 16:45 - 18:00 CEST

## Symposium 8: Functional Disorders and medically unexplained symptoms

**Chairs: Bernd Löwe, Lars De Vroege**

Thu, June 3<sup>rd</sup>, 16:45 - 18:00 CEST

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### Central sensitization in chronic pain and medically unexplained symptom research: a systematic review

**Mrs. Carine Den Boer<sup>1</sup>**, Mrs Linne Dries<sup>1</sup>, Dr Johannes van der Wouden<sup>1</sup>, Dr Nettie Blankenstein<sup>1</sup>, Prof. dr. Henriette van der Horst<sup>1</sup>, Dr Peter Lucassen<sup>2</sup>, Dr Paul van Wilgen<sup>3</sup>, Dr Berend Terluin<sup>1</sup>

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Symposium 08 - Functional Disorders and medically unexplained symptoms, virtual, Juni 3, 2021, 16:45 - 18:00

#### Objective

Central sensitization (CS), a mechanism explaining the persistence of symptoms, has been the focus of many research projects. Explanations given to patients with chronic pain are often based on this mechanism. It is hypothesized that CS also plays an important role in the persistence of medically unexplained symptoms (MUS). However, definitions and operationalizations of CS vary. We conducted a systematic review of definitions, operationalizations and measurement instruments of CS.

#### Methods

We searched in PubMed, EMBASE, PsycINFO, Cinahl and The Cochrane Library till September 2017 and included papers that addressed CS in relation to chronic pain and/or MUS. Two reviewers independently selected, analysed and classified information from the selected publications. We performed a thematic analysis of definitions and operationalizations. We listed the measurement instruments.

#### Results

We included 126 publications, 79 publications concerned chronic pain, 47 publications concerned MUS. Definitions of CS consistently encompass the theme hyperexcitability of the central nervous system (CNS). Additional themes are variably present: CNS locations, nature of sensory input, reduced inhibition and activation and modulation of the NMDA receptor. Hyperalgesia and allodynia are widely mentioned as operationalizations of CS. Quantitative sensory testing (QST) and (f)MRI are the most reported measurement instruments.

#### Conclusions

There is consensus that hyperexcitability is the central mechanism of CS. Operationalizations are based on this mechanism and additional components. There are many measurement instruments available, whose clinical value has still to be determined. There were no systematic differences in definitions and operationalizations between the publications addressing MUS and those addressing chronic pain.

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## Neurocognitive functioning in patients with conversion disorder/functional neurological symptom disorder

**Dr. Lars De Vroeghe<sup>1,2</sup>**, MSc Iris Koppenol<sup>1,2</sup>, PhD Madelon Hendricx-Riem<sup>3</sup>, professor Willem J. Kop<sup>1,3</sup>, professor Christina M. van der Feltz-Cornelis<sup>4</sup>

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Symposium 08 - Functional Disorders and medically unexplained symptoms, virtual, Juni 3, 2021, 16:45 - 18:00

**Background:** Neurocognitive symptoms are common in individuals with somatic symptom and related disorders (SSRD), but neurocognitive functioning in patients with functional neurological symptom disorder (FND: also referred to as conversion disorder (CD)) has not been explored yet.

**Methods:** The sample consisted of 318 patients. 29 patients were diagnosed with FND/CD (mean age 42.4, Standard Deviation (SD) = 13.8 years, 79.3% women), and 289 patients had other SSRD (mean age 42.1, SD = 13.3, 60.2% women). Patients completed a neuropsychological test battery that evaluated performances within a broad range of neurocognitive domains; information processing speed, divided attention, (working) memory, language, visuospatial processing, and executive functioning.

**Results:** Based on normative data comparison, deficits and disorders in patients with FND/CD were observed in all neurocognitive domains. Patients with FND/CD performed significantly worse on information processing speed (WAIS Digit Symbol Substitution Test;  $V = .115$ ,  $p = .035$ ); Stroop Color Word Test card 1:  $V = .190$ ,  $p = .006$ ; and Stroop Color Word Test card 2:  $V = .244$ ,  $p < .001$ ) than patients with other SSRD. No differences in FND/CD vs. other SSRD were observed in the neurocognitive domains of attention and executive functioning.

**Conclusion:** Patients with FND/CD perform worse on information processing speed tests compared to patients with other SSRD, whereas attention and executive functioning do not substantially differ between FND/CD versus other SSRD. These findings have potential implications for the neurobiological underpinnings of FND/CD and may be relevant to therapeutic approaches from a neurocognitive rehabilitation perspective.

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## Experience of changes after multicomponent treatment in patients with medically unexplained physical symptoms: a qualitative study

Ms. Lucia Polakovska<sup>1</sup>

<sup>1</sup>Masaryk University, Prague, Czech Republic

Symposium 08 - Functional Disorders and medically unexplained symptoms, virtual, Juni 3, 2021, 16:45 - 18:00

Lucia Polakovská, Michal Čevelíček, Jan Roubal, Tomáš Řiháček

Psychotherapy for patients suffering from medically unexplained physical symptoms (MUPS) has been shown to have only mild to moderate effect in lowering severity of the symptoms. In an effort to improve the offered healthcare for people with these difficulties it is possible to consider two options: We can look for mechanisms, which would have a major impact on severity of the somatic symptoms or we can at least offer the patients alleviation in other areas of their life. Objective: This study focuses on the second option, namely on changes that people with MUPS find beneficial. We will introduce the results of the research aimed at understanding the changes that patients experienced after engaging in day-care centers, which consisted primarily of multicomponent treatment at therapeutic clinics in Czech Republic. Methods: Thematic analysis of 30 interviews with the patients was conducted, which revealed a whole range of changes. Results: Patients were experiencing following changes: developing a different view of their somatic symptoms, learning how to fulfil their needs, modifying their lifestyle, and becoming open to and dealing with painful experiences. They also identified changes in their somatic symptoms. Conclusion: multicomponent treatment for patients with MUPS enables them to experience changes in many areas, not only those related to the symptom severity.

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## The Effect of Gender on Social Stigma Towards People with Medically Unexplained Symptoms

Dr. Melike Eger Aydogmus<sup>1</sup>

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Symposium 08 - Functional Disorders and medically unexplained symptoms, virtual, Juni 3, 2021, 16:45 - 18:00

Patients with medically unexplained symptoms (MUS) are overwhelmingly female, and women are less likely to endorse stigma than men. This research aimed to test whether the gender of the patient and/or the gender of the participant affect the level of social stigma towards MUS patients.

348 college students were presented by a vignette on a patient with Somatic Symptom Disorder with MUS and asked to respond the questions on their stigma related attitudes towards the person portrayed in the vignette with paper and pencil method. Vignettes had both male and female versions and participants were randomly assigned to either the male or female condition.

Results revealed that, for female version, participants rated the condition as a real disorder significantly more than they did for the male version. In addition, female participants were significantly more fearful of and more familiar with the condition than their counterparts. Importantly, we found a significant interaction between vignette's gender and participant's gender for dependency attributions. Specifically, for male participants, vignette's gender did not affect their dependency attributions. However, female participants rated the male vignette as significantly more dependent than they did for the female vignette.

Lastly, when we tested the effect of gender on causal attributions of MUS, we found that male participants attributed to social and traumatic factors as a source of MUS significantly more than their counterparts did. There was no gender difference for attributions of genetics, personality or poor childhood environment factors.

Results will be discussed depending on stigma and gender literature.

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## Symposium 9: Care provision and innovative care models

**Chairs: Victoria Lanvin, Patrick Triplett**

Thu, June 3<sup>rd</sup>, 16:45 - 18:00 CEST

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Psychiatric consultation-liaison in primary care group practices.

### A qualitative study on the experience of Swiss GPs participating in a pilot project

**Dr. Konstantinos Tzartzas<sup>1</sup>**, M. Pierre-Nicolas Oberhauser<sup>2</sup>, Dr MD Régis Marion-Veyron<sup>1</sup>, Dr MD Staphane Saillant<sup>3</sup>

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Symposium 09 - Care provision and innovative care models, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** Mental disorders (MDs) are frequently met in primary care settings (PCS), complicating somatic disorders' treatment and being challenging for general practitioners (GPs). The consultation-liaison (C-L) psychiatry intervention is part of the integrated mental healthcare models that have demonstrated their efficiency regarding the management of MDs in PCS. In Neuchâtel (Switzerland), a C-L psychiatrist has been working alongside GPs in primary care group practices (PCGPs), proposing both clinical interventions and supervisions/psychiatric training. This study describes how the GPs participating in this intervention perceive this collaboration, what it brings to them, and the way it affects their work regarding MDs.

**Methods:** This is a qualitative study. We organized focus groups (FGs) in each PCGPs involved in the project (N=3). We realized a thematic analysis.

**Results:** In total, 10 GPs participated in the FGs. Our analysis brought out three major themes: 1) perceived pervasiveness of MDs in general practice (emotional disturbances, personal difficulties, comorbidities); 2) feelings of helplessness and anxiety facing MDs (perceived lack of knowledge and experience, uncertainty, workload); 3) perceived benefits of close collaboration with psychiatrists (proximity, availability, relational bonds).

**Conclusions:** MDs are a major issue for participating GPs. They believe MDs to be highly prevalent among their patients and often have doubts regarding their capacity to handle them adequately. Direct collaboration with a C-L psychiatrist therefore comes as a great relief for participating GPs, even if it only entails a part-time presence in their practice (20%). Benefits for GPs as well as patients should be further investigated



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## Proactive and traditional psychiatric consultation services in a large urban academic medical center

Dr. O. Joseph Bienvenu<sup>1</sup>

<sup>1</sup>*Johns Hopkins University School Of Medicine, Baltimore, United States*

Symposium 09 - Care provision and innovative care models, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** To examine clinical characteristics of patients admitted to adult medical-surgical units covered by proactive versus traditional psychiatric consultation services in a large academic medical center.

**Methods:** From July 2017 to June 2018, we tracked all unique adult patient admissions to Johns Hopkins Hospital. Two proactive teams covered six medical units with historically high volumes of psychiatric consult requests, while the traditional consultation-liaison teaching service covered the remaining 23 adult medical-surgical units.

**Results:** The proactive team saw 1,216 (25%) of 4,795 patients admitted to their units, and the traditional team saw 786 (3.7%) of 20,983 patients admitted to the remaining units; as expected, patients were much more likely to have a mental health evaluation if admitted to the units covered by proactive services (OR=8.7; 95% CI 7.9-9.6). Hospital length of stay (LOS) was comparable, on the whole, for patients admitted to units covered by proactive versus traditional consultation services (mean 7 days, median 4 days). However, patients with consultations admitted to units covered by the traditional service had substantially longer LOS than those admitted units with proactive services (mean 19 versus 9 days, median 10 versus 6 days;  $p < 0.0005$ ).

**Conclusions:** As expected, psychiatric morbidity was associated with longer LOS on medical-surgical units. Getting a psychiatric consultation on a proactive unit was associated with a higher likelihood of mental health evaluation and a substantially shorter LOS. These preliminary results may justify expansion of proactive services throughout the hospital

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## Proactive Psychiatric Consultation at Johns Hopkins Hospital: Case-Detection and Racial Disparity Effects

Dr. Patrick Triplett<sup>1</sup>

<sup>1</sup>*Johns Hopkins University School of Medicine, Baltimore, United States*

Symposium 09 - Care provision and innovative care models, virtual, Juni 3, 2021, 16:45 - 18:00

**Aims:** Proactive psychiatric consultation has been shown to be an effective approach to the early detection of psychiatric need on general medical hospital floors, with improvements in length of stay and physician and nursing staff satisfaction with resources. Our aim is to perform a series of secondary analyses of data from a prior study of the effectiveness of proactive psychiatric consultation. We will examine the proactive model as a means of addressing the recognized phenomenon of health care disparities in accessing needed psychiatric care. We will also examine the downstream effects of increased case-finding of patients needing acute inpatient psychiatric care.

**Methods:** Data are a set of secondary analyses of an existing dataset, with new data from the electronic medical record and a statewide registry of readmissions.

**Results:** Preliminary data show a higher volume of patients seen by proactive teams and greater detection of patients requiring transfer to inpatient psychiatry. These transferred patients appear less likely to be readmitted within 30 days. The demographics of patients seen by the proactive service are similar to the overall demographics of the floor, suggesting a positive effect on racial disparities in getting needed consultation.

**Conclusion:** In addition to beneficial effects on length of stay and staff satisfaction, proactive psychiatric consultation may improve detection of patients needing acute inpatient care compared to a traditional reactive model, with some improvement in readmission rate for those patients. Proactive consultation may also provide some benefits in addressing racial disparities in access to needed psychiatric consultation.

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# Early consultation-liaison psychiatry interventions and general hospital readmission: a retrospective cohort study

**Dr. Victoria Lanvin**<sup>1,3</sup>, Dr. Hélène Vulser<sup>2</sup>, Dr. Victoire Vinant<sup>3</sup>, Pr. Gilles Chatellier<sup>4,5</sup>, Dr. Guillaume Araignes<sup>6,7</sup>, Dr. Nicolas Hoertel<sup>3,5,8</sup>, Pr. Frederic Limosin<sup>3,5,8</sup>, Pr. Cédric Lemogne<sup>3,5,8</sup>

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Symposium 09 - Care provision and innovative care models, virtual, Juni 3, 2021, 16:45 - 18:00

Readmission rate (RR) is not only an indicator of quality of care but also a potential source of cost savings. Patients with psychiatric comorbidities are more likely to be readmitted for somatic reasons. Consultation-liaison psychiatry (CLP) teams could play an important role in lowering RR.

Objective: To determine whether the timing of CLP interventions was associated with 30-day and 7-day RR.

**Methods:** A retrospective cohort study was conducted including all consecutive adult patients admitted in a general hospital and referred to CLP for the first time (2008-2016), excluding patients living abroad or with stays <2 days. The timing of CLP intervention was used as a log-transformed continuous or a binary (2-3 days versus >3 days) variable. The outcomes were 30-day and 7-day unplanned readmissions.

Results: 4,500 inpatients were included (mean age: 60 years). Earlier interventions were associated with lower 30-day RR for stays >21days only, adjusting for age, sex, place of residence, year of admission, type of ward, psychiatric diagnosis, disease severity (OR [IC95%]: 1.31 [1.22-1.53] and 0.55 [0.32-0.90] for the continuous and binary measure, respectively). An intervention at day 2-3 (versus afterwards) was associated with a 30-day RR of 8.6% versus 15.8%. Earlier interventions were associated with lower 7-day RR whatever the length of stay (1.28 [1.05-1.57] and 0.71 [0.50-0.99]). An intervention at day 2-3 (versus afterwards) was associated with a 7-day RR of 3.4% versus 4.6%.

**Conclusion:** Earlier CLP interventions are associated with lower 30-day and 7-day RR in general hospital.

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## Traumatic Passages Crossing the U.S. Border: Breaking the Wall for Consultation-Liaison (CL) Psychiatrists

Dr. Megan Lin<sup>1</sup>, Dr. Guitelle St. Victor<sup>1</sup>, Dr. Wendy Rocio Martinez Araujo<sup>1</sup>, Hesam Joshaghani<sup>2</sup>, Dr. Ateaya Lima<sup>3</sup>

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Symposium 09 - Care provision and innovative care models, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** We aim to elucidate the diverse challenges faced by CL psychiatrists when assessing patients who suffered traumatic passages while crossing the U.S. border. Challenges include lack of insurance, detainment and paucity of knowledgeable providers.

**Methods:** With an interactive session we will discuss 3 cases seen by our service.

**Case 1:** 47-year-old Hispanic female who was raped by kidnappers and contracted HIV.

**Case 2:** 45-year-old Hispanic male detained at the U.S.-Mexico border for two weeks in a dark rat-infested room, who witnessed a fellow detainee hang himself.

**Case 3:** 32-year-old Hispanic female attempted to hang herself due to owing 4,000 USD to her coyote while her husband was detained and deported.

**Results:** Through a literature review, we identified migration factors leading to depression, anxiety, and PTSD in this population, and strategies to improve treatment. Migration trajectory can be divided into three factors: A) premigration such as poverty (Case 1), torture in home country, and false promises, B) migration such as detainment (Case 2), and C) post-migration such as separation from family and financial debt (Case 3). Other significant post-migration factors include living in substandard housing, post-asylum procedures, unemployment, and the anxiety of deportation.

**Conclusion:** Consultation-Liaison psychiatrists face immense challenges when providing care for undocumented immigrants who have poor social support, are financially unstable, and often separated from their families. Additionally, these patients struggle with language barriers and acculturation. As such, this vulnerable population requires a team of mental health providers with appropriate trans-cultural knowledge, practices, and skills.

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## Symposium 10: Psychogynecology

**Chair: Susanne Fischer, Ulrike Ehlert**

Thu, June 3<sup>rd</sup>, 16:45 - 18:00 CEST

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### Open-label placebo treatment for women suffering from premenstrual syndrome: Study protocol and first results of a randomized controlled trial

**Mrs. Antje Frey Nascimento<sup>1</sup>**, Prof. Dr. Jens Gaab<sup>1</sup>, Dr. phil. Cosima Locher<sup>1,2</sup>

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Symposium 10 - Psychogynecology, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** Premenstrual syndrome (PMS) is highly prevalent among reproductive women worldwide and entails a considerable symptom burden. An array of treatments is described for PMS, indicating partly mixed-evidence and side-effects. Importantly, also a high placebo susceptibility is described for PMS. To date, there exists no study examining the efficacy of open-label placebos (OLPs) on PMS. This talk presents the study protocol and first results of a randomized controlled clinical trial (NCT03547661), investigating the effect of an OLP intervention on PMS.

**Methods:** The study started in spring 2018 and 150 women suffering from moderate to severe PMS will be included in a randomized controlled trial with three study groups: a treatment as usual group (TAU; n=50) and two intervention groups: an open-label placebo with treatment rationale (OLP+; n=50) and an open-label placebo without treatment rationale group (OLP-; n=50). I.e., one intervention group (OLP+) will obtain a treatment rationale, explaining why placebos may help with PMS complaints, whereas the other group (OLP-) will not obtain any further explanations. Both intervention groups obtain open-label placebo pills for 6 weeks twice a day. Primary endpoints are PMS symptom severity, intensity, and interference which are collected prospectively by means of a symptom diary.

**Results:** Until June 2020, 130 participants are expected to be enrolled. Preliminary findings will be reported and subjective reports of participants are conveyed.

**Conclusion:** This study aims to examine whether an OLP intervention is effective for PMS and investigates the importance of a plausible and comprehensive treatment rationale for OLP treatment.

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## Advances in premenstrual dysphoric disorder: Three within-person studies on the reliability and validity of the diagnosis

**Ms. Katja Maria Schmalenberger<sup>1</sup>**, PhD Tory Anne Eisenlohr-Moul<sup>2</sup>

<sup>1</sup>University Hospital Heidelberg, Heidelberg, Germany, <sup>2</sup>University of Illinois at Chicago, Chicago, USA

Symposium 10 - Psychogynecology, virtual, Juni 3, 2021, 16:45 - 18:00

**Objective:** Premenstrual dysphoric disorder (PMDD) is a new DSM-5 diagnosis characterized by the cyclical emergence of five or more symptoms in the luteal phase of the menstrual cycle, with symptom remission in the follicular phase. Diagnosis is based on daily symptom ratings across at least two cycles. We present three studies on the reliability and validity of these diagnostic criteria: Study 1 develops and initially validates a standardized scoring system for making DSM-5 PMDD diagnoses using daily ratings (i.e., Carolina Premenstrual Assessment Scoring System; C-PASS). Study 2 clarifies the type and number of symptoms best predicting premenstrual impairment and study 3 identifies temporal subtypes of PMDD symptoms.

**Methods:** In all studies, naturally-cycling females recruited for retrospectively reported premenstrual symptoms completed daily PMDD symptom and functional impairment reports for 1–4 cycles (N[study1]=200; N[study2]=267; N[study3]=74).

**Results:** Analyses revealed an excellent agreement of the C-PASS diagnosis with expert clinical diagnosis (study 1). The optimal number of symptoms for predicting clinically significant premenstrual impairment was four. Cognitive (and not emotional) symptoms were the most robust predictors of impairment (study 2). Also, three temporal PMDD subtypes with varying symptom onset and clearance were identified (study 3).

**Conclusion:** The C-PASS reliably and validly standardizes and streamlines the complex, multilevel PMDD diagnosis. Additional work is needed to determine whether cognitive symptoms in PMDD should receive greater attention, and to revisit the usefulness of the five-symptom diagnostic threshold. Finally, experimental work is needed to investigate possible pathophysiologic differences in temporal subtypes, and whether unique treatment approaches are needed

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## Stress Management during the Intracytoplasmic Sperm Injection Cycle May Slow Down First Embryo Cleavage and Accelerate Embryo Compaction: A Pilot Randomized Controlled Trial

Dr. Georges Raad<sup>1</sup>, Miss Judy Tanios<sup>2</sup>, Mrs Simone Kerbaj<sup>3</sup>, Mrs Fatima shamas<sup>1</sup>, Dr Fadi Fakih<sup>1</sup>, Dr Youmna Mourad<sup>1</sup>, Dr Chadi Fakih<sup>1</sup>

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Symposium 10 - Psychogynecology, virtual, Juni 3, 2021, 16:45 - 18:00

**Introduction:** A firm consensus on the effectiveness of psychological interventions during infertility treatment has not been reached yet in terms of mental health and pregnancy rates. Moreover, the influence of these interventions on embryo cleavage kinetics has not been investigated.

**Objective:** To study whether stress management in couples undergoing an intracytoplasmic sperm injection (ICSI) cycle influences stress levels, mitochondrial DNA (mtDNA) levels in granulosa cells, and cleavage-stage embryos.

**Methods:** Infertile couples were randomized into a treatment as usual (TAU) group (n = 30) and stress management program (SMP) group (n = 29) at the beginning of an ICSI cycle. Couples in the SMP group attended education and relaxation sessions at each visit to the clinic for folliculometry. The perceived stress scale (PSS) was used to assess stress levels at the beginning and end of the cycle. Moreover, mtDNA levels of granulosa cells and embryo morphokinetics were evaluated.

**Results:** Post-intervention, women in the SMP group had significantly lower PSS scores than the final PSS of the TAU group (p = 0.02). Additionally, mtDNA levels were significantly lower in luteal granulosa cells of the SMP group than the TAU group (p = 0.02). An earlier time of pronuclei appearance (p = 0.03) and time to 2 cells (p = 0.015) and a faster time to full compaction (p = 0.045) were detected in the embryos of the SMP group compared with the TAU group.

**Conclusion(s):** The implemented program may reduce stress levels, retard first embryo cleavage, and accelerate embryo compaction.

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## Are genes and hormones related to the hypothalamic-pituitary-gonadal (HPG) axis altered in premenstrual syndrome? A systematic review and meta-analysis

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<sup>1</sup>University of Zurich, Institute of Psychology, Clinical Psychology and Psychotherapy, Zurich, Switzerland

Symposium 10 - Psychogynecology, virtual, Juni 3, 2021, 16:45 - 18:00

### Objective

Premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) are typified by symptoms such as affective lability, difficulties in concentration, and muscle pain. Given that sex hormones are orchestrators of mood and cognition, one of the most glaring questions in PMS/PMDD research is whether altered fluctuations of oestradiol and progesterone across the menstrual cycle contribute to PMS/PMDD symptoms. To answer this question and to find out whether other markers of the hypothalamic-pituitary-gonadal (HPG) axis are abnormal in PMS/PMDD, a systematic review and meta-analysis was undertaken.

### Methods

PubMed and PsycINFO were searched until October 2018. Inclusionary criteria were: 1) case-control study including women with PMS/PMDD and 2) assessment of follicle-stimulating hormone (FSH), luteinising hormone (LH), oestradiol, progesterone, allopregnanolone, testosterone, or polymorphisms in related genes. Full-texts were reviewed and standardised mean differences extracted for meta-analysis.

### Results

Twenty studies were identified. No HPG axis abnormalities were detected in PMS/PMDD during the follicular phase. During ovulation, patients had comparably higher FSH and lower testosterone, and there was some indication for higher LH. In the luteal phase, FSH and allopregnanolone appeared diminished and testosterone elevated, but findings were equivocal. A number of polymorphisms within the oestrogen receptor alpha gene (ESR1) were linked with PMDD.

### Conclusion

While women with PMS/PMDD apparently are not characterised by altered fluctuations of oestradiol and progesterone across the menstrual cycle, subtle abnormalities in related HPG axis markers can be detected during ovulation and in the luteal phase. These may explain some of the affective and somatic symptoms pertaining to these conditions.



Friday - Fri, June 4th, 13:45 - 15:00 CEST

## FRIDAY

### Symposium 11: Current directions in Covid-19 associated research

**Chairs: Aranka Vivienne Ballering, Konstantinos Tzartzas**

Fri, June 4<sup>th</sup>, 13:45 - 15:00 CEST

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### Burnout and resilience among hospital staff during the COVID-19 pandemic: cross-sectional results from the international Cope-Corona study

**Dr. Markus Müller<sup>1</sup>**, Dr. Barbara Stein<sup>1</sup>, Eva Baillès<sup>3</sup>, Dr. Jordi Blanch<sup>4</sup>, Prof. Dr. Chiara Conti<sup>6</sup>, Dr. Pádraic J. Dunne<sup>7</sup>, Dr. Mihaela Fadgyas Stanculete<sup>8</sup>, Josep Maria Farré<sup>9</sup>, E Font<sup>4</sup>, Mireia Forner Puntonet<sup>10</sup>, Prof. Dr. Kurt Fritzsche<sup>11</sup>, Elena Gayán<sup>9</sup>, Prof. Dr. Maria Teresa Guagnano<sup>12</sup>, Sarah König<sup>2</sup>, Roberta Lanzara<sup>13</sup>, Prof. Dr. Antonio Lobo<sup>14</sup>, Dr. Ali-Akbar Nejatisafa<sup>17</sup>, Amadeu Obach<sup>4</sup>, Dr. Gozie Offiah<sup>18</sup>, Gemma Parramon<sup>10</sup>, Josep Maria Peri<sup>4</sup>, Ilenia Rosa, Araceli Rousaud<sup>4</sup>, Sara Katharina Schuster<sup>2</sup>, Dr. Xavier Torres<sup>4</sup>, Prof. Dr. Christiane Waller<sup>1</sup>

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Symposium 11 - Current directions in Covid-19 associated research, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** The COVID-19 pandemic has had an enormous impact on hospital staff. The aim of this study was to understand what individual and organizational factors are related to stress and burnout as a reaction to the pandemic.

**Methods:** An online survey was distributed to hospital staff in seven countries (Germany, Andorra, Ireland, Spain, Italy, Romania, Iran) in summer 2020. Burnout (exhaustion and depersonalization) was measured with two items. A set of variables was used to measure individual, coronavirus-related, and work-related factors, as well as demographics and occupational characteristics.

**Results:** In total, 2188 respondents answered more than 50 per cent of the survey (73.3 % women). Staff from a wide range of functions responded (MD, nurses, medical-technical personnel, psychologists, pastoral care, rescue service, administration, service, research, trainees, social work). Exhaustion ( $d = 0.33$ , 95% CI: 0.24 to 0.41) and depersonalization ( $d = 0.41$ , 95% CI: 0.32 to 0.50) were higher for staff working directly with infected patients. Among no-contact staff, rescue services and service personnel had highest levels of exhaustion. Multiple regression analyses

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revealed that support at the workplace, self-compassion and sense of coherence reduced the risk of exhaustion, while perceived stress and risk perception predicted exhaustion for all groups. Among staff with COVID-19 contact, workplace safety was additionally predicted exhaustion.

Conclusion: Burnout can be a problematic consequence of the COVID-19 pandemic. A supportive work environment, the availability of protective equipment, but also an organizational climate that promotes self-compassion and sense of coherence can help foster resilience against staff burnout

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## Persistent somatic symptoms after a SARS-CoV-2 infection: long COVID in the Dutch Lifelines Cohort study.

**Ms. Aranka Viviënne Ballering<sup>1</sup>**, Mr. Nord van den Bos<sup>1</sup>, Prof. Dr. Judith Rosmalen<sup>1</sup>

<sup>1</sup>University of Groningen, University Medical Center Groningen, Groningen, Netherlands

Symposium 11 - Current directions in Covid-19 associated research, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Many studies assess persistent somatic symptoms after SARS-CoV-2 infections in clinical populations. However, most COVID-19 patients are not hospitalized. Often studies cannot adjust for patients' pre-infection somatic symptom reporting. Therefore, we assess the prevalence of persistent somatic symptoms after a SARS-CoV-2 infection (i.e. long COVID) and we aim to identify predictors of long COVID, adjusted for patients' pre-infection somatic symptom reports.

**Methods:** We use data from 13 measurements of the Dutch Lifelines COVID-19 Cohort Study, collected from March to August 2020. Participants were considered infected with SARS-CoV-2, if they reported a positive SARS-CoV-2 test or positive physician's diagnosis. Long COVID was defined as experiencing one or more COVID-19-related somatic symptom, for example headaches, body aches and fatigue, at least 28 days post-infection. To assess predictors of long COVID, we will conduct multiple logistic regression analyses, including sex, age, education, smoking status, presence of chronic disease, pre-infection symptom reporting and sex-by-predictor interaction terms.

**Results:** In total 504,077 surveys were completed by 74,722 unique participants (60.8% female). A COVID-19 diagnosis was reported by 1,106 participants (67.9% females). 28 days post-infection, 36.9% of patients experienced at least one COVID-19-related symptom. The most prevalent symptoms 4 weeks post-infection are body aches, dyspnoea and headaches in 13.4%, 8.8% and 7.3% of patients, respectively. Currently, we are comparing symptom reports 4 weeks post-infection to pre-infection personal symptom reports.

**Conclusion:** We will further investigate whether patients' pre-infection symptom reports predict long COVID and how long it takes for COVID-19 patients' to return to pre-infection symptom levels.

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## The experience of healthcare workers facing COVID-19 crises: A qualitative study in a primary care university setting in Switzerland

**Dr. Konstantinos Tzartzas<sup>1</sup>**, Mrs Madison Graells<sup>1</sup>, Mrs Elodie Schmutz<sup>1</sup>, Prof Patrick Bodenmann<sup>1</sup>, Dr Jeremie Blaser<sup>1</sup>, Mrs Isabelle Petitgenet<sup>1</sup>, Dr MD Régis Marion-Veyron<sup>1</sup>, Dr MD Javier Sanchis Zozaya<sup>1</sup>, Mrs Brigitte Pahud Vermeulen<sup>1</sup>, Dr MD Ioannis Kokkinakis<sup>1</sup>, Prof Bernard Favrat<sup>1</sup>, Dr Véronique Grazioli<sup>1</sup>

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Symposium 11 - Current directions in Covid-19 associated research, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** The COVID-19 pandemic has pushed health systems to their limits. Healthcare Providers (HP) are facing extreme working conditions and major changes in their usual work context (WC), potentially leading to a risk of developing mental health problems. Their ability to cope with these stressing conditions could be supported by different workplace interventions. Before effective supporting approaches are proposed to HP, their lived experiences in their specific WC have to be investigated.

**Methods:** We explored qualitatively the experience of HP of a university center for primary care and public health in Switzerland. Individual semi-structured interviews were conducted. A thematic content analysis was realized.

**Results:** 20 interviews were conducted (85% female HP; mean age = 40.55; 35% physicians, 35% nurses, 30% pharmacists). Six major themes emerged regarding HP's experience when facing COVID-19 pandemic: i) professional complexity (risk of contamination, material shortage, communication difficulties, etc.); ii) new types of collaboration and work organization; iii) wide range of feelings (positive, negative, mixed, blurry feelings); iv) perceived benefits of the crisis (opportunities, new helping factors and resources); v) emerging needs and confrontation with basic needs; vi) private life complexity (family organization, caring for loved ones, relationships changing).

**Conclusions:** Participants reported numerous individual, relational and institutional difficulties (both private and professional) related to COVID-19 pandemic, leading to multiple and mixed feelings. Constant changes in the WC forced them to keep adapting to find new balances. Individual and structural approaches, tailored to the WC, need to be proposed, promoting specific helping factors and minimizing emerging difficulties.

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## Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak

Dr. Damir Huremovic<sup>1</sup>

<sup>1</sup>Northwell Health, Inc., Manhasset/Glen Oaks, United States

Symposium 11 - Current directions in Covid-19 associated research, virtual, Juni 4, 2021, 13:45 - 15:00

Catastrophic pandemics have been occurring at regular intervals throughout human history, with the last one (Spanish flu pandemic of 1918) taking place a century ago, around the time modern psychiatry was being established as a clinical specialty. As a consequence, both general psychiatry and C-L Psychiatry have given little consideration to such outbreaks. Recent events, including outbreaks of coronavirus, Zika, MERS, Ebola hemorrhagic fever, or SARS have intermittently drawn global attention to such pandemics, stirring up anxiety and uneasiness across continents. Mental health approach and psychiatric care in such events remain inadequately researched, understood, or covered by existing interests and literature within psychiatry.

Given its focus and history, C-L psychiatry should expand its focus and interest to study rapidly spreading outbreaks of infectious diseases with potentially devastating social impact, In doing so, it should take into account the unique features of pandemic outbreaks, such as:

- Predictable epidemiological models that allow crucial time for planning and preparation as the pandemic approaches.
- Mental health issues associated with quarantine and isolation.
- Psychiatric sequelae of surviving the illness, its complications, and complications associated with treatment
- Managing public concerns, fears, and misconceptions.
- Role of social media and modern technologies
- Proliferation of vaccine hesitancy
- Bioterrorism/biological warfare risk.

This workshop, based on eponymous manuscript and sprinkled with historical anecdotes and illustrations, examines the unique elements of pandemic outbreaks to be considered when formulating a mental health response and explores additional modalities of supplementing and strengthening that response.

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## Symposium 12: New developments in psychocardiology

**Chairs: Christoph Herrmann-Lingen, Roland von Känel**

Fri, June 4<sup>th</sup>, 13:45 - 15:00 CEST

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### Post Intensive Care Syndrome in out-of-hospital cardiac arrest patients: A prospective observational study

Ms. Katharina Beck<sup>1</sup>, **MSc Alessia Vincent<sup>1</sup>**, med. pract. Emanuel Thommen<sup>1</sup>, med. pract. Madlaina Widmer<sup>1</sup>, Dr. med. Christoph Becker<sup>1</sup>, BSc Sebastian Perrig<sup>1</sup>, med. pract. Annalena Keller<sup>1</sup>, Prof. Dr. med., MPH Sabina Hunziker<sup>1</sup>

<sup>1</sup>University Hospital Basel, Department of Medical Communication and Psychosomatic Medicine, Basel, Switzerland

Symposium 12 - New developments in psychocardiology, virtual, Juni 4, 2021, 13:45 - 15:00

#### Objective:

Many intensive care unit (ICU) patients suffer from long-term psychological, physical and/or cognitive symptoms, i.e. Post Intensive Care Syndrome (PICS). We evaluated prevalence and predictors of PICS in patients after out-of-hospital cardiac arrest (OHCA).

#### Methods:

In this prospective observational study, PICS was measured at 90 and 365 days after ICU admission within the following domains: a) Psychological burden (Hospital Anxiety and Depression Scale [HADS], Impact of Event Scale-Revised [IES-R]), b) physical symptoms (EuroQol [EQ-5D]), c) cognitive functioning (Cerebral Performance Category scale [CPC], Modified Rankin Scale [mRS]).

#### Results:

Of 102 patients, 49 patients (48%) reported PICS after 90 days. Fourteen patients (13.7%) showed psychological, 34 (33.3%) physiological, and 24 (23.5%) cognitive impairments. Univariate logistic analyses found length of ICU-stay (OR 1.1, 95%CI 1.01; 1.2, p=0.037), mRS at discharge (OR 2.93, 95%CI 1.01; 8.5, p=0.048) and work loss at 90 days (OR 11.83, 95%CI 1.43; 97.78, p=0.022) associated with PICS.

After one year, 48 patients (48%) displayed PICS. Twelve (12%) showed psychological, 36 (37%) physiological, 24 (25%) cognitive impairments. University degree (OR 0.28, 95%CI 0.08; 0.94, p=0.039), APACHE score (OR 1.08, 95%CI 1.02; 1.15, p=0.015), mRS (OR 3.58, 95%CI 1.26; 10.18, p=0.017) and CPC at discharge (OR 2.91, 95%CI 1.15; 7.35, p=0.024) were associated with PICS.

#### Conclusion:

A relevant number of OHCA patients showed PICS. Predictors were length of ICU-stay, cognitive status at discharge, work loss, severity of illness during ICU stay, and not having a University degree. Future studies should evaluate whether early identification of these patients enable preventive strategies.

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## Type D personality as a risk factor for adverse outcome in patients with cardiovascular disease: an individual patient data meta-analysis

Mr. Paul Lodder<sup>1</sup>, Dr. Nina Kupper, Dr. Jelte Wicherts

<sup>1</sup>Tilburg University, Tilburg, Netherlands

Symposium 12 - New developments in psychocardiology, virtual, Juni 4, 2021, 13:45 - 15:00

### Objective:

Type D personality, a joint tendency toward negative affectivity (NA) and social inhibition (SI), has been linked to adverse events in cardiovascular disease patients. However, several studies did not replicate earlier findings. Many earlier studies used a subgroup operationalisation of Type D personality, which risks falsely concluding a Type D effect when only NA or SI is related to the outcome. Here, we aim to shed light on these inconsistencies using an individual patient-data meta-analysis of 18 earlier published prospective cohort studies (N=10759).

### Method:

For each outcome (all-cause mortality, cardiac mortality, myocardial infarction, coronary artery bypass grafting (CABG), percutaneous coronary intervention (PCI), major adverse cardiac event (MACE), any adverse event), we estimated Type D effects using Bayesian Multilevel Logistic Regressions. We investigated the moderating influence of age and gender. Type D personality was operationalised according the continuous method.

### Results:

Evidence for a Type D effect in terms of the Bayes factor (BF) was strong for the outcomes MACE (BF=42.5) and any adverse event (BF=129.4), and substantial for CABG (BF=4.2) and PCI (BF=5.1). Strong evidence against a Type D effect was found for all-cause mortality (BF=45.9), cardiac mortality (BF=23.7) and myocardial infarction (BF=16.9). Positive NA effects were found on both cardiac mortality and all-cause mortality, the latter being more pronounced for males than females.

### Conclusion:

Across 18 published prospective cohort studies, Type D predicts CABG, PCI, MACE and any adverse event in cardiovascular disease patients. The mortality of such patients is not affected by Type D personality but by NA.

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## Psychological Factors and Cardiac Repolarization Instability During Anger in Implantable Cardioverter Defibrillator Patients

**Dr. Heather Rogers<sup>1</sup>**, Dr. David S. Krantz<sup>2</sup>, Dr. Kristie M. Harris<sup>3</sup>, Dr. Kerry S. Whittaker<sup>4</sup>, Dr. Mark C.P. Haigney<sup>2</sup>, Dr. Willem J. Kop<sup>5</sup>

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Symposium 12 - New developments in psychocardiology, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Given that emotions such as anger are associated with increased incidence of sudden cardiac death, we tested the hypothesis that, in patients with sudden death vulnerability, anger would be associated with arrhythmic vulnerability, indexed by cardiac repolarization instability.

**Methods:** Patients with coronary artery disease (CAD) and an implantable cardioverter defibrillator (ICD; n=41), and healthy controls (n=26) gave an anger-inducing speech (anger recall), rated their current (state) anger, and completed measures of trait (chronic) levels of Anger and Hostility. Repolarization instability was measured using QT Variability Index (QTVI) at resting baseline and during anger recall using continuous ECG.

**Results:** ICD patients had significantly higher QTVI at baseline and during anger recall compared to controls, indicating greater arrhythmic vulnerability overall. QTVI increased from baseline to anger recall to a similar extent in both groups. In ICD patients but not controls, during anger recall, self-rated anger was related to QTVI ( $r=0.44$ ,  $p=.007$ ). Trait (chronic) Anger Expression ( $r=0.26$ ,  $p=0.04$ ), Anger Control ( $r=-0.26$ ,  $p=0.04$ ), and Hostility ( $r=0.25$ ,  $p=0.05$ ) were each associated with the change in QTVI from baseline to anger recall ( $\Delta$ QTVI). Moderation analyses evaluated whether psychological trait associations with  $\Delta$ QTVI were specific to the ICD group. Results indicated that Hostility scores predicted  $\Delta$ QTVI from baseline to anger recall in ICD patients ( $\beta=0.07$ ,  $p=0.01$ ), but not in controls.

**Conclusions:** Anger increases repolarization lability, but in patients with CAD and arrhythmic vulnerability, chronic and acute anger interact to trigger cardiac repolarization lability associated with susceptibility to malignant arrhythmias.

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## Psychosocial interventions targeting biomarkers of cardiovascular disease risk in dementia caregivers: a randomized controlled trial

**Dr. Roland von Känel<sup>1,2</sup>**, Dr. Paul Mills<sup>2,3</sup>, Dr. Joel Dimsdale<sup>2</sup>, Dr. Michael Ziegler<sup>4</sup>, Dr. Matthew Allison<sup>3</sup>, Dr. Thomas Patterson<sup>2</sup>, Dr. Sonia Ancoli-Israel<sup>2</sup>, Christopher Pruitt<sup>3</sup>, Dr. Igor Grant<sup>2</sup>, Dr. Brent Mausbach<sup>2</sup>

<sup>1</sup>Department of Consultation-Liaison Psychiatry and Psychosomatic Medicine, University Hospital Zurich, and University of Zurich, Zurich, Switzerland, <sup>2</sup>Department of Psychiatry, University of California San Diego, La Jolla, USA, <sup>3</sup>Department of Family Medicine and Public Health, University of California San Diego, La Jolla, USA, <sup>4</sup>Department of Medicine, University of California San Diego, La Jolla, USA

Symposium 12 - New developments in psychocardiology, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** To examine whether biological mechanisms linking dementia caregiving with an increased risk of coronary heart disease can be modified by psychosocial interventions and which caregivers might benefit the most from an intervention.

**Methods:** Spousal dementia caregivers were randomized to 12-week treatment with either a behavioral activation intervention (i.e., Pleasant Events Program PEP; n=60), or an active control Information and Support (IS; n=63) condition. Indicators of caregiving stress were assessed pre-treatment and circulating cardiovascular biomarkers were measured pre- and post-treatment.

**Results:** There were no significant changes in biomarker levels from pre- to post-treatment both by treatment condition and across all caregivers. Regardless of the treatment condition, exploratory regression analysis revealed that caregivers were more likely to show significant decreases in C-reactive protein (CRP) and D-dimer when their spouse had severe functional impairment; in interleukin (IL)-6 and CRP when they had greater distress due to care recipient's problem behaviors; in tumor necrosis factor (TNF)- $\alpha$  when they had higher levels of negative affect; and in IL-6, CRP, TNF- $\alpha$  and D-dimer when they had higher personal mastery. Within the PEP group, caregivers with higher negative affect and those with higher positive affect were more likely to show a reduction in von Willebrand factor and D-dimer, respectively. Within the IS group, caregivers whose spouse had severe functional impairment were more likely to show a decrease in IL-6.

**Conclusions:** Unlike the average caregiver, caregivers high in burden/distress and resources might benefit from psychosocial interventions to improve cardiovascular risk, although these observations need confirmation.

ClinicalTrials.gov NCT02317523



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## Independent effects of depression history and vitality in predicting major adverse cardiovascular and cerebrovascular events (MACCE) in patients with cardiovascular risk factors

Dr. Christoph Herrmann-Lingen<sup>1,2</sup>, Dr. Kathleen Nolte<sup>3</sup>, Dr. Lutz Binder<sup>4</sup>, Dr. Frank Edelmann<sup>2,3,5</sup>, Dr. Rolf Wachter<sup>2,3,6</sup>

<sup>1</sup>Psychosomatic Medicine, Univ. of Göttingen Medical Centre, Göttingen, Germany, <sup>2</sup>German Centre for Cardiovascular Research (DZHK), Göttingen, Germany, <sup>3</sup>Dept. of Cardiology and Pneumology, University of Göttingen Medical Centre, Göttingen, Germany, <sup>4</sup>Dept. of Clinical Chemistry, Univ. of Göttingen Medical Centre, Göttingen, Germany, <sup>5</sup>Dept. of Internal Medicine and Cardiology, Charité University Medicine, Berlin, Germany, <sup>6</sup>Dept. of Cardiology, University of Leipzig Medical Center, Leipzig, Germany

Symposium 12 - New developments in psychocardiology, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Depression and several other psychological variables predict cardiovascular events. As psychological predictors are typically correlated it is unclear whether independent prognostic effects of psychological variables remain, once depression is accounted for. We tested prognostic effects of various psychological factors after controlling for depression history at baseline.

**Methods:** We used data of 1,549 patients (50.1% men; 66±8 y/o) with cardiovascular risk factors to predict MACCE (death, myocardial infarction, heart failure, stroke, cardiovascular hospitalization) over a mean of 8.2 years. Comprehensive medical and psychological baseline variables were used as predictors in Cox regression analyses.

**Results:** A baseline history of depression predicted MACCE (Model 1; Hazard Ratio [HR]= 1.64; 95%CI 1.25-2.16; p<0.0005), independently of somatic predictors. Several psychological variables improved Model 1 when added individually, with strongest effects for SF36 subscales physical function and vitality (both p<0.0005). When adding both scales simultaneously, only vitality remained significant. No other scale assessing symptoms, personality, coping, social support or other quality of life dimensions reached significance once vitality was included. Vitality scores above median had only an insignificant protective effect in patients with a history of depression, while vitality scores below the median independently predicted MACCE in patients without known depression (HR=1.47; CI=1.18-1.83).

**Conclusion:** A single question asking for depression history is a highly significant independent predictor of adverse events in patients with cardiovascular risk factors. Vitality emerged as the most potent additional predictor of MACCE. Among patients without known depression low vitality seems to be the strongest psychological predictor of cardiovascular events.

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## Symposium 13: Psychotherapeutic interventions in somatoform and pain disorders

**Chairs: Ronald Burian, Karen Kallesoe**

Fri, June 4<sup>th</sup>, 13:45 - 15:00 CEST

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### Causal illness beliefs (CIBs) in patients with multisomatoform disorder in the course of an RCT examining short-term psychodynamic psychotherapy

**Mrs. Marie Schneller<sup>1</sup>**, Prof. Dr. med. Peter Henningsen<sup>1</sup>, Dipl. Psych. Heribert Sattel<sup>1</sup>

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Symposium 13 - Psychotherapeutic interventions in somatoform and pain disorders, virtual, Juni 4, 2021, 13:45 - 15:00

#### Objective:

Patients may have many different beliefs regarding the causes of their symptoms, potentially influencing their illness- and health behavior. CIBs are of special interest considering functional somatic symptoms because they can serve as an important issue for treatment.

An RCT compared short-term psychodynamic psychotherapy with treatment according to evidence-based national guidelines in patients with multisomatoform disorder (Sattel et al., 2012). Our aim is to describe CIBs of the participating patients and to examine their influence on therapy outcome.

#### Methods:

The patients (N=146) reported the three most important causes of their illness, before randomization and 9-month after therapy. The answers were classified in five categories: organic, psychological, social causes (e.g. interpersonal relationships, work, school), causes related to previous health-care utilization and other causes. We investigated associations between those causes and the clinical presentation as well as therapy outcome.

#### Results:

Initially, about two third of the patients stated organic causes (100; 68.5%), followed by “social” (60; 41.1%) and “psychological” causes (47; 32.2%). Less frequently mentioned were causes related to health-care utilization (35; 24.0%) and the remainder category (34; 23.3%). Patients initially stating “psychological” causes had significantly lower mental quality of life (SF-36;  $p=0,001$ ), higher somatization (PHQ-15,  $p=0,01$ ) and higher depression (PHQ-15;  $p=0,02$ ) and did benefit more from psychotherapy (physical quality of life (SF-36); small effect size  $d=0.28$ ).

#### Conclusion:

Patients with functional somatic symptoms often name specific CIBs for their illness. These can be related to the bio-psycho-social model. Patients already considering psychological causes seem to benefit more from psychotherapy treatment.

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## Acceptance and Commitment Therapy (ACT) for Chronic Pain: Current evidence and process-outcome relations

Ms. Hannah Burian<sup>1</sup>, **Dr. Ronald Burian<sup>1</sup>**, Mr. Ludwig Ohse<sup>2</sup>, Dr. Eric Hahn<sup>3</sup>, Dr. Kerem Boege<sup>3</sup>, PD Dr. Thi Minh Tam Ta<sup>3</sup>, Prof. Dr. Albert Diefenbacher<sup>3</sup>

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Symposium 13 - Psychotherapeutic interventions in somatoform and pain disorders, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Chronic pain is a major health problem and often related to psychiatric disorders like depression, anxiety and substance misuse. ACT is a transdiagnostic and process-based third wave behavioral therapy. The aims of this presentation are twofold: to review the research evidence for ACT and to present findings of a study that focusses on relations between ACT-processes and clinical outcomes in patients with chronic pain and psychiatric comorbidities.

**Methods:** Prospective study with 109 patients of a tertiary care day hospital in Berlin, that were treated with a 6-8 weeks ACT-based multidisciplinary therapy. All patients suffered from chronic pain and comorbid psychiatric disorders. We measured the processes "Psychological Flexibility" (FAH-II), "Pain Acceptance" (CPAQ-21), and "Mindfulness" (FAF) and depression (PHQ-9), anxiety (GAD-7), pain severity (PI) and health-related quality of life (SF-12) as clinical outcomes. Pre- to post-treatment differences in processes and outcomes were examined with Wilcoxon signed-rank tests and effect size  $r$ . Associations between processes- and outcome-changes were analyzed with correlation and multiple regression analyses.

**Results:** Literature search revealed that ACT is effective in chronic pain and in a wide range of psychiatric disorders. Our clinical study found moderate to large effect sizes in all process and clinical measures as well as moderate to large correlations between processes and clinical outcomes.

**Conclusions:** For chronic pain and a wide range of psychiatric disorders, ACT is an evidence-based treatment with effect-sizes comparable to the "gold-standard" CBT. Further research is needed to reveal more about "what works for whom" in multidisciplinary therapies with comorbid patients.

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Mind-body therapies: clinical use and evidence in chronic pain

**Dr. Anne-Françoise Allaz<sup>1</sup>**, Pr Christine Cedraschi<sup>2</sup><sup>1</sup>Faculty of Medicine and University Hospitals, Geneva, Switzerland, <sup>2</sup>Division of General Medical Rehabilitation, Faculty of Medicine and University Hospitals, Geneva, Switzerland

Symposium 13 - Psychotherapeutic interventions in somatoform and pain disorders, virtual, Juni 4, 2021, 13:45 - 15:00

Aim:

To present the benefits, research evidence and psychosomatic relevance of Mind-Body therapies (MBTs) for pain relief, as they are supported by a growing number of guidelines. MBTs target the link between thoughts, behaviors and feelings. Through increased awareness of cognitions, emotions and bodily sensations they seek to improve pain experience and physical functioning.

Methods:

Due to the wide range of MBTs, this review is focused on rarely explored but frequently used MBT modalities for chronic pain. Hypnosis and Cognitive behavioral therapies are beyond our scope. Systematic reviews and guidelines retrieved from Medline (2010-2020) were used.

Results:

Given in mean strength of evidence for Pain/Functioning.

Yoga: Effects on Pain: Moderate/on Physical functioning: Moderate

Tai-chi: Low/Moderate

Relaxation: Low/Low

Mindfulness based stress reduction: Moderate/Moderate to low

Multidisciplinary rehabilitation: Moderate/Moderate

Important heterogeneity and strong overlap between MBT are observed.

Conclusion:

Taken together, controlled studies confirm the clinical impression that MBTs have benefits on pain intensity, physical functioning and quality of life. Although present evidence is moderate to low, due to the quality of available studies, MBTs are recommended today among first line chronic pain therapies in several Clinical Practice Guidelines.

Surveys, including our own, have shown that 40-70% of chronic pain patients are using MBTs, often at their own initiative, in addition to other approaches. MBTs might meet patients' expectations by increasing their sense of control and self-efficacy and facilitate access to improved body and emotional awareness without the feelings of stigmatization and delegitimization sometimes associated to standard psychotherapy by chronic pain patients.

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## Psychotherapeutic change mechanisms in patients with medically unexplained physical symptoms: Multi-site naturalistic study

**Mrs. Martina Pourová<sup>1</sup>**, Dr. Tomáš Řiháček<sup>1</sup>, Dr. Jan R. Boehnke<sup>2</sup>

<sup>1</sup>Masaryk University; Faculty of Social Studies; Department of Psychology, Brno, Czech Republic, <sup>2</sup>University of Dundee, Dundee, UK

Symposium 13 - Psychotherapeutic interventions in somatoform and pain disorders, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Medically unexplained physical symptoms (MUPS) are difficult to treat. Although psychotherapy represents a promising approach to treatment, its efficacy remains unsatisfactory. A better understanding of how psychotherapy works in patients with MUPS is necessary. The aim of this study is to test the role of several potential mechanisms of change (i.e., somatic awareness, emotional regulation, symptom acceptance, relational needs satisfaction, clarification of meaning, working alliance, and group cohesion) in producing change in somatic symptoms and psychological well-being. **Methods:** Patients (N = 499) were recruited from seven psychotherapeutic clinics in the Czech Republic. The data were analyzed using multilevel modeling approach to determine the mediating effect of mechanisms on outcomes. **Results:** Although somatic symptoms changed during group psychotherapy, the change could not be satisfactorily explained by any of the proposed change mechanisms. However, the hypothesized mechanisms statistically significantly predicted change in psychological well-being. **Conclusion:** Change in somatic symptoms probably depends on other mechanisms than change in well-being. These mechanisms were discussed.

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## Group-based Acceptance and Commitment Therapy (AHEAD) for functional somatic syndromes in adolescents: a randomised trial

**Dr. Karen Kallesoe**<sup>2</sup>, MD, PhD Andreas Schröder, Msc Jens Søndergaard Jensen, Msc, PhD Rikard K. Wicksell, MD, PhD Charlotte Ulrikka Rask

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Symposium 13 - Psychotherapeutic interventions in somatoform and pain disorders, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Evidence for treatment of adolescents with co-occurrence of multiple functional somatic syndromes (FSS) is sparse. This study examined the efficacy of 'Acceptance and Commitment Therapy for Health in Adolescents' (AHEAD), a group-based generic treatment approach for adolescents with multiple FSS.

**Methods:** A randomized trial was conducted at a specialized university hospital clinic. Participants were adolescents (15-19 years) with multiple FSS of at least 1 year's duration. Patients were assigned to enhanced usual care (EUC) or AHEAD. AHEAD consisted of 9 modules (i.e. 27 hrs.) and 1 follow-up meeting. Primary outcome was change in a SF-36 aggregate score measuring physical health from baseline to 12 months (i.e. 7 months after treatment).

**Results:** 91 patients were included. At 12 months, no significant difference in physical health was identified between groups (mean adjusted difference 1.2 [95% confidence interval (CI) -1.6-4.0],  $p=0.404$ ). However, different developments over time were seen with an interaction effect between intervention arm and time ( $\chi^2(5)=14.1$ ,  $p=0.0148$ ). AHEAD patients ( $n=44$ ) reported a clinically relevant improvement at all measurement points after treatment, while EUC patients ( $n=47$ ) displayed a clinically relevant improvement at 12 months. EUC patients received more psychological treatment outside the trial ( $p\leq 0.001$ ) than AHEAD patients.

**Conclusion:** Compared with EUC, AHEAD had no additional advantage on the improvement of physical health at the primary endpoint of 12 months. However, different developments were seen over time with a faster improvement in AHEAD and considerably more psychological treatment outside the trial in EUC leading to clinically meaningful improvements in both groups.

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## Symposium 14: Stress and trauma

**Chairs: Silvia Ferrari, Anna Buchheim**

Fri, June 4<sup>th</sup>, 13:45 - 15:00 CEST

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### Self-harm and suicide attempts among migrants in jail: the role of trauma and substance abuse

**Dr. Silvia Ferrari<sup>1</sup>**, Dr. Cecilia Artoni<sup>1</sup>, Dr. Mattia Marchi<sup>1</sup>, Dr. Fedora Longo<sup>1</sup>, Dr. Federica Maria Magarini<sup>1</sup>, Dr. Corinna Reggianini<sup>1</sup>, Prof. Gian Maria Galeazzi<sup>1</sup>

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Symposium 14 - Stress and trauma, virtual, Juni 4, 2021, 13:45 - 15:00

**Introduction:** Self-harm behaviours (SHB) are about 10-times more common in jail populations than in the general population; similarly, the status of migrant is also a relevant risk factor for suicidal ideation/behaviours.

**Aims:** To investigate the role of migration trauma, substance abuse and psychopathology on SHB of detained migrant subjects.

**Methods:** Prospective cohort study (1.3.2019-31.8.2019). Socio-demographic, psychiatric features and history of previous SHB were collected, and traumas assessed with the LiMEs (List of Migration Experiences) checklist in a sample of migrants detained at the local prison in Modena, north of Italy, consenting to be involved. Subjects were followed-up until the eventual occurrence of SHB, or, in case of no SHB, until the end of the study. Survival analysis was performed. Cox's Hazard Ratios were used as a measure of association for the comparison between groups.

**Results:** A sample of 113 subjects was collected (96% male, median age 33). Prevalence of mental disorders was 26%, of substance abuse 59%. History of SHB was present in 36% of the sample. Median follow-up time was 80 days. During follow-up, 11 SHB were recorded; cumulative survival probability was 85%. Having experienced trauma "related to wars" was significantly associated with SHB, HR: 5.168. No subject without substance abuse presented the outcome.

**Conclusions:** The experience of trauma in the post-migration period increases the risk of SHB among jailed migrants of 5 times. War-related trauma has the strongest association, also after controlling for psychiatric diagnosis, ongoing psychopharmacological therapy and substance abuse.

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## Risk and resilience factors in the transgenerational transmission of attachment trauma focusing on synchrony

**Dr. Anna Buchheim<sup>1</sup>**, Prof. Dr. Stefan Pfänder<sup>2</sup>, Prof. Dr. Carl Scheidt<sup>2</sup>, Dipl.Psych Franziska Köhler-Dauner<sup>3</sup>, Prof. Dr. Christiane Waller<sup>4</sup>, Prof. Dr. Harald Gündel<sup>3</sup>, Prof. Dr. Jörg Fegert<sup>3</sup>, Dr. Alexander Karabatsiakos<sup>1</sup>, Prof. Dr. Ute Ziegenhain<sup>3</sup>

<sup>1</sup>University Innsbruck, Innsbruck, Austria, <sup>2</sup>Albert-Ludwigs University Freiburg, Freiburg, Germany, <sup>3</sup>University Hospital of Ulm, Ulm, Germany, <sup>4</sup>Klinik für Psychosomatische Medizin und Psychotherapie Universitätsklinik Paracelsus Medizinischen Privatuniversität, Nürnberg, Germany

Symposium 14 - Stress and trauma, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective.** Mothers with experiences of Childhood Maltreatment (CM) are a risk group in terms parenting behavior and their children's development. Maternal attachment representation, especially unresolved trauma, is suggested as one candidate for predicting disorganized attachment. Recently, the role of "synchrony" in mother-infant interactions has been considered as a major factor in the transgenerational transmission of attachment.

**Methods:** In a sub-project of an interdisciplinary BMBF-consortium "Trans-Gen" at the University of Ulm 158 mother-infant-dyads were analyzed. Maternal attachment was assessed with the Adult Attachment Projective Picture System (AAP), history of CM with the CTQ, mother-infant interaction using the Ambiance Scale and Strange Situation Procedure (SST). Verbal and behavioral Synchrony was analyzed in AAP stories and the SST using Interactional Linguistics Measures (IL)

**Results:** Mothers with insecure attachment had a higher amount of CM compared to secure mothers ( $p=.022$ ), and all unresolved mothers had a history of CM. The significant association between maternal unresolved attachment and infants' attachment disorganization was mediated by psychological distress and maternal disruptive behavior  $\chi^2(13)=111.61$ ;  $p<.001$ . Unresolved Mothers with disorganized children showed significantly lower verbal and behavioral Synchrony compared to unresolved mothers with organized children. IL data on AAP narratives had predictive quality for behavioral synchrony in the interaction with their children and infants' attachment development ( $R^2=.03$ . Modell  $F(1,143)=5.24$ ,  $p=.023^*$ ).

**Conclusion:** These results indicate that maternal attachment and interactive behavior complemented with aspects of synchrony at various levels further contributes to the understanding of the transgenerational transmission of maltreatment by identifying risk and resilience factors relevant for attachment trauma.



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## Neurocognitive correlates of probable posttraumatic stress disorder following traumatic brain injury

Mrs. Dominique Van Praag<sup>1,2</sup>, Dr. Kristien Wouters<sup>1</sup>, Prof. Dr. Filip Van Den Eede<sup>1,2</sup>, Prof. Dr. Lindsay Wilson<sup>3</sup>, Prof. Dr. Andrew Maas<sup>1</sup>

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Symposium 14 - Stress and trauma, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Neurocognitive problems associated with posttraumatic stress disorder (PTSD) can interact with impairment resulting from traumatic brain injury (TBI). We aimed to identify neurocognitive correlates associated with probable PTSD following TBI, and to explore these correlates for the intrusion, avoidance, cognition and mood, and arousal symptoms.

**Method:** The study is part of the CENTER-TBI project (Collaborative European Neurotrauma Effectiveness Research) that aims to better characterize TBI. For this cross-sectional study, we included patients of all severities aged over 15, and a Glasgow Outcome Score Extended above 3. Participants were assessed at six months post-injury on the PTSD Checklist-5 (PCL-5), the Trail Making Test (TMT), the Rey Auditory Verbal Learning Test (RAVLT) and the Cambridge Neuropsychological Test Automated Battery (CANTAB). Primary analysis was a complete case analysis. Sensitivity analysis was conducted on a larger sample with imputed outcome data. Regression analyses were performed to investigate the association between PTSD and cognition.

**Results:** A total of 1134 participants were included in the primary analysis. 13.5% screened positive for PTSD. Higher TMT B and lower RAVLT Delayed scores were significantly associated with probable PTSD, controlling for age, gender, psychiatric history, GCS and educational level. TMT B and CANTAB RTI were associated to each of the four clusters of the PCL-5. Sensitivity analysis on the imputed dataset of 2863 participants showed consistent results.

**Conclusions:** Cognitive tests assessing attention, cognitive flexibility and verbal long-term memory can aid in differentiating for probable PTSD following TBI. Low performance on these tests is associated with probable PTSD.

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## Symptoms of ICD-11 adjustment disorder – reduction of psychological strain throughout psychosomatic rehabilitation.

Ms. Alexa Kupferschmitt<sup>1</sup>, Dr. Rahel Bachem, Prof. Dr. Volker Köllner

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Symposium 14 - Stress and trauma, virtual, Juni 4, 2021, 13:45 - 15:00

**Background:** Occupational burdens such as bullying, work overload or job loss can be understood as critical, potentially serious life events.

**Methods:** On admission (t1) and discharge (t2) patients of a German psychosomatic rehab clinic were examined regarding ICD-11 adjustment disorder symptoms (ADNM-20), as measurement for psychological strain. The change in symptom load (t1 to t2) was tested. In addition, the provoking stressful life event were explored.

**Results:** Of N = 1739 patients 70.6% (n = 1228) had a clinically relevant ADNM-20 score at t1 and 35.3% attribute symptoms to occupational stress. During treatment, the psychological strain due to the symptoms decreased significantly, with predominantly large to medium effects: ADMN-20 total value d = -0.719, core symptom preoccupation d = -0.913, core symptom failure to adapt d = -1.01; additional symptom depressive mood d = -0.913, additional symptom anxiety d = -0.681, additional symptom disturbance of impulse control d = -0.671. On the additional symptom avoidance (d = -0.436) the rehab seemed to have small effects.

**Conclusion:** Psychosomatic rehabilitation contributes to a significant and clinically relevant symptom reduction of core and additional symptoms of ICD-11 adjustment disorder.

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## Are second victims real victims? Evidence and reflections on the traumatic impact of adverse events in the medical setting

**Dr. Isolde Martina Busch<sup>1</sup>**, Dr Francesca Moretti<sup>2</sup>, Dr Marianna Purgato<sup>3,4</sup>, Prof Corrado Barbui<sup>3,4</sup>, Prof Albert Wu<sup>5</sup>, Prof Michela Rimondini<sup>1</sup>

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Symposium 14 - Stress and trauma, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** The term "second victim" (SV) has recently been criticized as downplaying patient harm and reinforcing passive role-taking by the involved healthcare provider. However, the literature suggests a strong psychological burden of this experience, which in some cases might be even considered a trauma. Aim of this study is to identify symptoms and behaviors that emphasize the traumatic character of the adverse event and might reflect the presence of posttraumatic stress disorder (PTSD).

**Methods:** Drawing from the results of two meta-analyses conducted by our group, focusing on SVs' psychological responses and resources, two researchers with expertise in clinical psychology independently identified the meta-analyzed symptoms and coping strategies linked to PTSD, using ICD-10 and DSM-V as reference tools. Cases of dissent were solved by involving a third reviewer.

**Results:** Six out of the 21 pooled psychological/psychosomatic symptoms among SV [i.e., troubling memories (81%,95%CI=46–95;I<sup>2</sup>=27.8%), anxiety/concern (76%,95%CI=33–95;I<sup>2</sup>=46.1%), distress (70%,95%CI=60–79;I<sup>2</sup>=0%), symptoms of depression (36%,95%CI=20–56;I<sup>2</sup>=48.6%), sleeping difficulties (35%,95%CI=22–51;I<sup>2</sup>=5.0%), loss of confidence (27%,95%CI=18–38;I<sup>2</sup>=6.5%)] are commonly associated with PTSD symptomatology. Five out of the 26 pooled coping strategies [i.e., Wishing the situation away (55%,95%CI=29–78;I<sup>2</sup>=11.6%), Distancing (28%, 95%CI=19–40;I<sup>2</sup>=18%), Trying to hide error/Refusing to talk about it (18%,95%CI=12–26;I<sup>2</sup>=48%), Avoidance of patients, procedures, situations (15%,95%CI=8–28;I<sup>2</sup>=36.2%), Turnover intentions (14%,95%CI=9–22;I<sup>2</sup>=21.6%)] were identified as potential efforts to avoid stimuli reminiscent of the traumatic event.

**Conclusion:** Our data confirm that adverse events can be of traumatic nature which may lead to avoidance behaviors, thus negatively affecting SVs' personal and professional well-being, the therapeutic alliance, and the quality of care delivered by the healthcare system.

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## Symposium 15: Doctor-patient-communication

**Chairs: Henriette Löffler-Stastka, Heather Rogers**

Fri, June 4<sup>th</sup>, 13:45 - 15:00 CEST

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The impact of bedside vs. non-bedside patient case presentation during ward rounds on patients' knowledge and perceived quality of care

### Results from a randomized, multicenter trial

Ms. Katharina Beck<sup>1</sup>, **MSc Katharina Beck<sup>1</sup>**, MSc Alessia Vincent<sup>1</sup>, med. pract. Annalena Keller<sup>1</sup>, Prof. Dr. med., MPH Philipp Schütz<sup>2</sup>, Prof. Dr. med. Beat Müller<sup>2</sup>, Prof. Dr. med. Jörg Leuppi<sup>3</sup>, Prof. Dr. med. Stefano Bassetti<sup>4</sup>, Prof. Dr. med., MPH Sabina Hunziker<sup>1</sup>

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Symposium 15 - Doctor-patient-communication, virtual, Juni 4, 2021, 13:45 - 15:00

#### Objective

Clinical ward rounds are a cornerstone of clinical practice. Bedside and outside the room case presentation are equally prevalent, however, their respective impact on patients' knowledge and perception of clinical care is unknown.

#### Methods

Consecutive hospitalized patients were randomized to either bedside (n=476) or outside the room (n=443) case presentation. The primary endpoint is patients' perceived knowledge regarding their illness including (I) their disease, (II) the therapeutic concept and (III) the next steps.

#### Results

Patients of bedside case presentation did not show worse knowledge compared to the outside group (79.4 [19.8] vs. 79.5 [SD±21.6], adjusted difference 0.09 [95%CI -2.58 to 2.76], p=0.95). Ward rounds with bedside case presentation were significantly shorter (11.9 [SD±4.9] vs. 14.1 [5.7] minutes, adjusted difference -2.3 [95%CI -3.0 to -1.6], p<0.001). Interestingly, patients in this group estimated their physicians spending more time with their care on average per day (78.4 [SD±88.6] vs. 64.1 [SD±73.0] minutes, adjusted difference, 14.6 [95%CI 2.6 to 26.6], p=0.02). Patients in the bedside group reported higher levels of confusion (mean 21.3 [SD±31.6] vs. 13.7 [SD±26.4], adjusted difference 7.55 [95%CI 3.63 to 11.46], p<0.001) and more frequently mentioned not understanding medical terms (n=68 [14.6%] vs. n=35 [8.0%], adjusted OR 1.98 [95%CI 1.28 to 3.06], p<0.01).

#### Conclusion

Bedside ward rounds did not worsen patient knowledge but were more time efficient compared to the outside group. However, bedside ward rounds caused more confusion. Better patient-centered communication during bedside case presentation may reduce these drawbacks.

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Moderators for efficacy: affective microexpressions at the encounter's beginning predict working alliance -

## Methods to Better Measure and Interpret Non-Verbal Communication in Patient-Therapist Interactions

Dr. Henriette Löffler-Stastka<sup>1</sup>

<sup>1</sup>Medical University Vienna, Vienna, Austria

Symposium 15 - Doctor-patient-communication, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective(s):** To develop a method of examining facial affects in psychotherapeutic settings and interpreting the underlying emotions they represent, with a perspective on future exploitation in the form of computer-based treatment / monitoring tools.

**Methods:** Therapy sessions are videotaped, and verbal content is evaluated with computer assistance from ATLAS.ti. Visual content is screened for facial action units/micro-expressions using the Emotional Facial Action Coding System and reevaluated utilizing Convolutional Neural Networks (CNNs) for feature extraction and inference. Working Alliance Inventory scores are compiled to assess their impact on the quality of the therapeutic relationship.

**Results:** Reliability of facial action unit coding was ensured by a training course and an independently-evaluated, standardized test. Interrater reliability was excellent (Cohen's  $\kappa > 0.80$ ). Recognizing such expressions under naturalistic conditions is, however, more challenging. In order to highlight the methodological differences between these works, we break down each method into the three components (i) preprocessing, (ii) CNN architecture, and (iii) CNN training and inference. Besides others, a major finding is that confrontations are linked to the display of contempt in both, therapist and patient. Interestingly, the display of contempt also correlated with a high WAI - Score. We propose that these seemingly contradicted results can be a consequence of the complexity of affects and the interplay of primary/subliminal and secondary emotions.

**Conclusion:** The paper describes the circumstances in the routine evaluation and feedback elements to the treating psychiatrist via a computer based feedback slope as we are developing this system for regular evaluation purposes.

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## Physiological linkage during doctor-patient interactions in oncology

**Ms. Marta Vigier<sup>1,2</sup>**, PhD. Katherine Thorson<sup>3</sup>, MSc. Elisabeth Andritsch<sup>1</sup>, MSc. Clemens Farkas<sup>1</sup>, PhD. Andreas Schwerdtfeger<sup>2</sup>

<sup>1</sup>Medical University of Graz, Graz, Austria, <sup>2</sup>University of Graz, Graz, Austria, <sup>3</sup>Barnard College Columbia University, , USA

Symposium 15 - Doctor-patient-communication, virtual, Juni 4, 2021, 13:45 - 15:00

### Physiological linkage during doctor-patient interactions in oncology

#### Objective:

Doctors and patients influence each other when interacting and can become similar to each other in affect and behavior. We investigated whether their physiological responses could also become similar. Precisely, we examined whether physiological linkage occurred and whether it varied by role (doctor vs. patient), by relationship length, and by interactions between role and length.

#### Methods:

We focused on the autonomic nervous system activity (ANS) of oncologists and their patients during a follow-up consultation. We predicted doctors' and patients' physiological responses during one minute from their partner responses during the prior minute to yield an estimate of physiological linkage. We also adjusted for participants' own prior physiological responses. We obtained complete data from consultations between 102 unique doctor-patient dyads.

#### Results:

We found that, physiological linkage between doctors and patients varied by an interaction between role and relationship length (in a non-linear, quadratic fashion):  $b = -0.01$ ,  $p = .005$ ,  $R^2 = .07$ . Patients were significantly linked to their doctors if they had medium-length relationships:  $p_s < .05$ . Patients were not linked to their doctors in shorter or longer relationships. Doctors were never significantly linked to their patients:  $p_s > .13$ .

#### Conclusion:

Physiological responses of doctors predicted patients' responses differently depending on relationship length. Importantly by influencing patients' physiological responses on a moment-to-moment basis, doctors may have even more influence over patients' physiology and health than previously known.

Friday - Fri, June 4th, 13:45 - 15:00 CEST

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## Might physician-patient gender concordance influence clinical outcomes in primary care? Findings from a large unannounced standardized patient study

Dr. Heather Rogers<sup>1</sup>, Dr. Levent Dumenci<sup>2</sup>, Dr. Laura A. Siminoff<sup>2</sup>

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Symposium 15 - Doctor-patient-communication, virtual, Juni 4, 2021, 13:45 - 15:00

**Objective:** Given that disparities in incidence and mortality in colorectal cancer (CRC) continue to persist, despite provision of widespread screening and improved treatments for CRC, we examined the relationship between patient and physician characteristics and appropriate clinical outcome of a primary care consultation for colorectal cancer (CRC) symptoms.

**Methods:** Unannounced standardized patients (USPs) consulted 207 general practitioners (GPs) in two US states (Virginia and Ohio). The USPs of both genders were Caucasian or African American and presented as new patients with symptoms of CRC. GPs were blinded to the diagnosis and consented to audiotaping the encounter. Medical records were obtained and the audiotapes were coded by trained observers.

**Results:** 141 of the 367 consultations (38%) resulted in an appropriate clinical outcome [recommendation for colonoscopy/sigmoidoscopy/FOBT or gastroenterologist referral]. Appropriate clinical outcome was associated with male USP gender, longer visits, thorough examination of medical history, thorough exploration of patient symptoms, positive USP evaluation of GP performance, and GP-USP gender concordance ( $p's < 0.05$ ). No physician or clinic factors were significant. A logistic regression model with the USP, visit, and physician-patient factors showed that gender concordance was the sole significant independent predictor of appropriate clinical outcome ( $OR=1.63$ ,  $p=0.04$ ).

**Conclusions:** Physician-patient gender concordant primary care consultations (e.g., man-to-man and woman-to-woman) were more likely to result in appropriate visit outcomes, regardless of other significant factors associated with these outcomes. Further research to determine generalizability of the findings beyond CRC symptoms and to examine potential mediators of the gender concordance - appropriate clinical outcome relationship is warranted

Friday - Fri, June 4th, 17:00 - 18:15 CEST

## Symposium 16: Young Researchers

**Chairs: Paul Hüsing, Angélica Acevedo-Mesa**

Fri, June 4<sup>th</sup>, 17:00 - 18:15 CEST

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## Improving the Measurement of Functional Somatic Symptoms with Item Response Theory

**Ms. Angélica Acevedo-Mesa<sup>1</sup>**, Dr. Jorge N. Tendeiro<sup>2</sup>, Dr. Annelieke Roest<sup>1</sup>, Professor Dr. Judith G.M. Rosmalen<sup>1</sup>, Dr. Rei Monden<sup>1</sup>

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Symposium 16 - Young Researchers, virtual, Juni 4, 2021, 17:00 - 18:15

**Background:** More than 40 questionnaires are currently available to assess Functional Somatic Symptoms (FSS). Differences among them, as well as other methodological issues hamper the comparison of results between studies and the measurement of FSS. Sophisticated measurement techniques such as Item Response Theory (IRT) could help to deal with such issues.

**Objective:** To determine which items of the somatization subscale of the SCL-90 are more informative and more able to discriminate between persons at different levels of severity of FSS.

**Methods:** A sample of 82,740 adult participants, without somatic conditions, from the Lifelines Cohort Study was selected for analysis. The Graded Response Model (GRM) was applied to the twelve items of the somatization subscale of the SCL-90. Sensitivity analyses were performed using the data from all the participants who completed the somatization subscale in order to assess generalizability.

**Results:** Mean threshold parameters were large ( $\beta=2.28-5.10$ ) given that high levels of severity of FSS were necessary to report the highest answer options on the items. The items with the best ability to discriminate between levels of severity of FSS were item 11 “feeling weak physically” and 12 “heavy feelings in arms or legs”. These also provided the most information. Sensitivity analyses provided similar results.

**Conclusion:** The items “Feeling weak physically”, and “Heavy feelings in arms or legs” are highly discriminative and informative symptoms to measure severity levels of FSS. Clinicians and researches may pay extra attention to these symptoms to augment the assessment of FSS.



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## Inefficient movement planning in functional dizziness – Toward a better understanding of functional disorders

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**Objective:** This study investigates the brain mechanisms underlying functional dizziness by looking at movement variability. Reducing variability has been found to be a physiologically highly relevant, evolutionary beneficial brain strategy for movement optimization, which is impaired in dizzy patients with structural lesions (bilateral vestibulopathy and cerebellar ataxia).

**Methods:** Eight functional dizziness patients and eleven age-matched healthy controls performed a motor control task (large gaze shifts towards visual targets) in the natural condition and in an experimental condition with 3.3-fold increased head moment of inertia. Variance of final gaze position over all gaze shifts (between-trial variability) as a marker for movement planning as well as variance of final gaze position within one gaze shift (fluctuation) reflecting sensory vestibular control were assessed.

**Results:** Patients with functional dizziness displayed higher gaze variability than healthy subjects ( $F=5.46$ ,  $p=.030$ , partial eta squared  $=.247$ ). There was no difference in gaze fluctuation ( $F=.29$ ,  $p=.59$ ) and no significant main effect of increasing the head moment of inertia for both parameters (variability:  $F=1.9$ ,  $p=.18$ ; fluctuation:  $F=.82$ ,  $p=.38$ ).

**Conclusions:** Functional dizziness patients show high between-trial variability demonstrating inefficient motor planning. In contrast, gaze fluctuations are not increased reflecting the intact organic peripheral vestibular system. Together with prior findings (Lehnen et al., 2019), this points towards central nervous motor planning deficits being a diagnostic hallmark in these patients and reflecting patients' suffering.

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## Early psychological interventions for somatic symptom disorders and functional somatic syndromes: A systematic review and meta-analysis.

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Symposium 16 - Young Researchers, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Treating somatic symptom disorders and functional somatic syndromes (SSD/FSS) remains challenging. The best available treatment approaches achieve moderate effects only, possibly due to a high chronicity in these patients. Therefore, targeting symptoms as early as possible might be promising. Our aim was to assess the efficacy of early psychological interventions in preventing and treating SSD/FSS in adults compared to inactive control conditions or standard care.

**Methods:** We conducted a systematic review and meta-analysis of (cluster)-randomized controlled trials. Subjects at risk for SSD/FSS, suffering from sub-threshold symptoms or new onsets of SSD/FSS, or presenting with SSD/FSS for the first time were included. We searched PubMed, PsycInfo and Web of Science. Primary outcomes were somatic symptom severity and health-related quality of life (HrQoL). Outcome data were extracted for post-treatment and longest follow-up.

**Results:** Twenty-five eligible studies were identified. Most studies examined pain conditions, especially low back pain. Interventions were diverse, ranging from bibliotherapy to CBT. Seventeen studies provided data for meta-analyses. We found positive effects on symptom severity ( $g = 0.27$ , 95%-CI: [0.11; 0.44],  $k = 11$ ) and HrQoL ( $g = 0.18$  [0.05; 0.32],  $k = 7$ ) at follow up, but not post-treatment. Effects were sensitive to corrections for meta-bias.

**Conclusion:** This is the first review of early psychological interventions aiming at integrating the whole spectrum of SSD/FSS. In the face of heterogeneous interventions, a limited focus on pain, and poor reporting practices, more systematic and extensive research is needed to determine the potential benefits of early psychological interventions for SSD/FSS.

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## Sex differences in the medical trajectories of patients presenting with common somatic symptoms in primary care.

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**Objective:** To quantify sex differences in diagnostic and therapeutic interventions, as well as in final diagnoses of patients presenting with common somatic symptoms in primary care.

**Methods:** We analyzed GP-registration data obtained from 2014 to 2018 derived from the Dutch TransHIS database. Participating GPs (n=26) routinely code each encounter according to the International Classification of Primary Care in an episode-of-care (EoC) structure. All EoC starting with reasons for encounter that corresponded with any of the 12 symptoms of the SCL-90 Somatization subscale were included. By means of multivariable logistic regression analyses we assessed whether sex differences, adjusted for relevant confounders, are present in diagnostic procedures, treatment strategies, and final diagnosis for patients presenting common somatic symptoms.

**Results:** In total, 7,914 men presented 13,236 (38.6%) new EoC starting with a common somatic symptom, compared to 10,542 women with 21,032 (61.4%) new EoC. Women presenting with common somatic symptoms in primary care were found to receive less physical examinations (OR=0.77; 95% CI=0.72-0.82), diagnostic imaging (OR=0.84; 95% CI=0.78-0.92) and referrals to secondary hospital care (OR=0.82; 95% CI=0.77-0.88), but underwent more laboratory diagnostics (OR=1.36; 95% CI=1.29-1.44) than men. Overall, women presenting common somatic symptoms in primary care more often receive symptom diagnoses (instead of somatic disease diagnoses), than men (OR=1.08; 95% CI=1.03-1.13).

**Conclusion:** The results show inequalities between men and women in care trajectories for common somatic symptoms presented in primary care. GPs have to be aware of these inequalities in order to ensure equal high-quality care for all patients presenting with these symptoms.

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## Qualitative evaluation of an explanatory model for somatoform symptoms (HERMES study): Acceptance and feasibility of a video-animated intervention

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**OBJECTIVE:** The objective of the HERMES experimental study was to evaluate explanatory models for somatoform symptoms, based on a current etiological model. Methods of active visualization and patient-centered communication were employed in order to develop digital interventions useable on tablet computers. Three video-animated interventions were developed (explanatory model vs. personalized explanatory model vs. information according to guidelines). The present study sought to investigate acceptance and feasibility of the interventions.

**METHODS:** Patients from a psychosomatic outpatient clinic (N=75) were randomized to one of the three intervention arms. Semi-structured interviews were conducted after presentation of the respective digital intervention. Questions concerning acceptance and feasibility of the interventions included ratings on visual analogue scales (each scale with ratings from 1-10) and open questions.

**RESULTS:** Patients gave mostly positive feedback to the digital intervention and rated the digital interventions as highly credible (M=9.0, SD=1.33), though personal fit of the explanations given differed widely between patients (M=5.34, SD=3.13). Among others, issues addressed by the patients were their presumed somatic origin of given complaints and the lack of their individual symptoms being addressed.

**CONCLUSIONS:** Employment of digital interventions to provide explanatory models of somatoform symptoms was generally feasible. Acceptance of the digital intervention was high. Digital explanatory models might thus prove a useful tool in the early treatment of patients suffering from somatoform symptoms, though addressing personal needs within a highly heterogeneous patient group remains an issue.

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## Symposium 17: New developments in psychodiabetology

**Chairs: Seryan Atasoy, Hanna Kampling**

Fri, June 4<sup>th</sup>, 17:00 - 18:15 CEST

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### Depression mediates the longitudinal link between childhood emotional abuse and type 2 diabetes - Findings from the GESA Multi-cohort Consortium

Dr. Seryan Atasoy<sup>1,2,3</sup>, Dr. Hamimatunnisa Johar<sup>1,3</sup>, Toni Fleischer<sup>5</sup>, Prof. Dr. Manfred Beutel<sup>4</sup>, Prof. Dr. Harald Binder<sup>6</sup>, Elmar Braehler<sup>4</sup>, Danielle Otten<sup>4</sup>, Prof. Dr. Georg Schomerus<sup>5</sup>, Daniela Zöller<sup>6</sup>, Prof. Dr. Johannes Kruse<sup>1</sup>, Prof. Dr. Karl-Heinz Ladwig on behalf of GESA Consortium Investigators<sup>2,7</sup>

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**Background:** Emotional abuse in childhood increases the incidence of type 2 diabetes in adulthood, however, the potential mediating role of depression in this association remains unknown.

**Methods:** Data were derived from the from two large-scale German cohorts (KORA-F4 and SHIP-3). Multivariable logistic regression analyses were used to investigate the association between childhood emotional abuse, assessed by the Childhood Trauma Screener, and incident type 2 diabetes cases, confirmed using a standard oral glucose tolerance test. The mediating role of depression, assessed by the Patient Health Questionnaire-9, was calculated by using the Sobel test for mediation.

**Results** A total of 2,973 (53.2% women, 46.8% men) participants with a mean age of 49.7 were included in the analyses, of whom 7.1% women and 4.5% men experienced emotional abuse in childhood. At baseline, women had higher psychological impairment than men, but men had higher lifestyle and clinical risk factors. Nevertheless, during the follow-up period, 104 (3.5%) of participants developed type 2 diabetes without significant sex differences. Emotional abuse in childhood was associated with 2.56 (1.31-4.98,  $p=.005$ ) times higher odds of type 2 diabetes, despite adjustment for lifestyle, somatic and psychological risk factors. Mediation analyses confirmed that the causal link between emotional abuse and type 2 diabetes incidence was partially attributable to depression (Sobel Test; 1.84,  $p=.06$ ; Goodman Test (1.91,  $p=.05$ ). The current results indicate that depression in adulthood is a significant pathway linking childhood emotional abuse during to incidence of type 2 diabetes in men and women.

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## Sex-specific association of melatonin levels and type 2 diabetes mellitus. Findings from the population-based KORA Age study.

Dr. Hamimatunnisa Johar<sup>1,2,3</sup>, Dr. Seryan Atasoy<sup>1,2,3</sup>, Dr. Martin Bidlingmaier<sup>4</sup>, Prof. Dr. Johannes Kruse<sup>3</sup>, Prof. Dr. Karl-Heinz Ladwig<sup>1,2,5</sup>

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Symposium 17 - New developments in psychodiabetology, virtual, Juni 4, 2021, 17:00 - 18:15

**Background:** Melatonin, a pineal hormone under the control of biological clock, is an important regulator of sleep and circadian rhythms. Animal and human genetic studies suggest that reduced melatonin signaling can impair insulin sensitivity and lead to type 2 diabetes mellitus (T2DM). However, the effect of diurnal melatonin secretion patterns on glucose metabolism is unknown.

**Methods:** The association between melatonin levels and T2DM were examined in a total sample of 271 men and 191 women (mean age 74.8±6.3 years, 65-90 years) of the population-based KORA (Cooperative Health Research in the Region of Augsburg)-Age study. Multivariable linear regression analyses were employed to examine the association between melatonin levels (pg/mL) (salivary sample after awakening, 30 minutes after and late night before bedtime) and T2DM with adjustments for potential confounders.

**Results:** Driven by a significant interaction between sex and T2DM on melatonin levels, we further employed sex-specific regression analyses and found that men with T2DM (n=54) showed significantly reduced late night melatonin levels and flattened diurnal patterns (ratio of night to morning) than their non-T2DM counterparts (n=217) (age-adjusted mean, 95%CI: night melatonin: T2DM=6.69,5.39-7.98 vs. non-T2DM=7.71,7.07-8.35; diurnal pattern: T2DM=1.01,0.85-1.17 vs. non-T2DM=1.21,1.13-1.30). This association was stronger in individuals with sleeping problems. However, in women, no statistical discernable difference between T2DM and melatonin levels was observed.

**Conclusion:** In this aged population, T2DM is associated with lower late night melatonin levels, particularly in men. This suggest the link between sleep and metabolic health could be explained as a fault in the circadian system.

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## A multidisciplinary psychosocial treatment approach for patients with diabetes (psy-PAD) – evaluation of a psychodynamic short-term treatment for patients with poor glycaemic control as well as diabetes-related and psychosocial distress

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**Objective:** Both, diabetes-related and psychosocial distress often interfere with treatment approaches intending to improve poor glycaemic control in patients with diabetes. Considering this, the psy-PAD study used a multidisciplinary treatment approach (psychotherapists and diabetologists) based on psychodynamic principles. The objective was the implementation and evaluation of the psy-PAD intervention.

**Method:** We randomised patients from 11 outpatient practices specialised in diabetes, and compared psy-PAD (IG) with optimized usual care (CG) at baseline (t0) as well as at 6- and 12-months follow-up (t1;t2). Inclusion criteria were type 1 or type 2 diabetes, age 18-70 years, HbA1c $\geq$ 7.5%, persistent emotional strain (PAID $>$ 35), and a completed diabetes training. Primary outcome: changes in HbA1c. Secondary outcomes: changes in triglycerides, BMI, PAID, psychological distress (PHQ-D; HADS-D; HADS-A) and health-related quality of life (SF-36). Statistical analyses were done descriptively or by mixed linear models adjusted for re-peated measuring and baseline scores.

**Results:** Of the initially N=213 screened patients N=178 were randomised (IG=87; CG=91, of these n=1 withdraw participation). In comparison to optimized usual care, psy-PAD showed a significant reduction of the HbA1c value at t1 (-0.48%, 95%-CI [-0.85;-0.12]), the BMI at t1 (-0.71, 95%-CI [-1.36;-0.06]), the PAID at t1 (-5.25, 95%-CI [-9.74;-0.77]) and t2 (-5.35, 95%-CI [-10.26;-0.45]), and the HADS-D at t2 (-1.25, 95%-CI [-2.48;-0.02]).

**Conclusion:** An integrated and interdisciplinary treatment can help patients with psychosocial distress who already receive intensive diabetes treatment in specialized outpatient settings to improve glycaemic control and weight in the short-term as well as diabetes-related distress and symptoms of depression in the long-term.

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## Health economic evaluation of “A multidisciplinary psychosocial treatment approach for patients with diabetes (psy-PAD)”

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**Objective:** Based on a RCT, we assessed the cost-effectiveness of psy-PAD compared to optimized usual care. Psy-PAD is a multidisciplinary psychodynamic treatment approach to improve poor glycaemic control in patients with diabetes and related psychosocial distress. As shown, the psy-PAD intervention can improve glycaemic control in the short-term.

**Method:** The analysis was performed taking the perspective of a German payer. An incremental cost effectiveness ratio (costs per additional patient with 1% HbA1c decrease) was calculated at 6-month follow-up ( $t_1$ ). Uncertainty was presented by means of cost-effectiveness acceptability curves and sensitivity analyses. Mixed linear models adjusted for repeated measurement were fitted to adjust for missings in the per-protocol analysis.

**Results:** Of N=213 screened patients N=178 were randomised. For the evaluation we only included patients who participated in the first follow-up examination at  $t_1$  (N=143); of these 69 patients were in the intervention group (62.3% female, mean age  $49.4 \pm 11.6$ ) and 74 in the control group (66.2% female, mean age  $46.7 \pm 11.8$ ). Psy-PAD showed a significant reduction of the HbA1c (%) at  $t_1$  (-0.49%, 95%-BCA CI [-0.86;-0.12]) in comparison to optimized usual care. This leads to a chance of greater than 99.3% for psy-PAD to be cost-effective considering a willingness to pay threshold of 5.000 EURO per 1% reduction of the HbA1c in the short term.

**Conclusion:** So far, no threshold values have been defined for cost-effectiveness when considering HbA1c. However, there is a high probability that psy-PAD can cost-effectively improve glycaemic control in the short-term, taking into account the individual willingness to pay.



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## Symposium 18: Education and training of health professionals

**Chair: Frank Vitinius**

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### Video group supervision of general practitioners residents by CL psychiatrists: A qualitative study

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Symposium 18 - Education and training of health professionals, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Meetings among general practitioners (GPs) to discuss difficult clinical situations, usually following the Balint groups tradition, are nowadays common. It has been demonstrated that they give an opportunity to highlight central professional topics – as loneliness, doctor-patient relationship, and incertitude – and thus help reduce burnout risks and improve the quality of care. But little is known about how these effects are achieved. At the University Center for Primary Care and Public Health (Unisanté), consultation-liaison (C-L) psychiatrists organize Balint-like discussion groups for GP residents that include watching and discussing audio-visual recordings of consultations. We investigated what takes place during these discussion groups.

**Method:** A sociologist conducted an observational study. Discussion groups were recorded and transcribed. We realized a thematic analysis.

**Results:** Discussion groups encourage participating GPs to share their emotions, perceptions and values, and help them see their clinical work in a different way. Supervisors express their (psychiatric) understanding of emotionally challenging and distressful situations, and try to highlight meaningful aspects of the doctor-patient relationship. GPs are confronted with multiple ways of conducting medical interviews and (re)acting towards patients.

**Conclusions:** Discussion groups enact various forms of reflexivity and critical insights on the participants' clinical work and experience. By this way, useful clinical training is proposed to GP residents, enhancing communication skills and proposing practical "psychiatric tools", in the same time that emerges an opportunity of performing dynamic exchanges between colleagues, mobilizing their professional engagement. Finally, they bring about a collaborative, interdisciplinary perspective, gaining from both psychiatry and GP.

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## Joint consultation-liaison interventions in primary care as a psychiatric clinical training for general practitioners

Dr. Konstantinos Tzartzas<sup>1</sup>, Dr MD Régis Marion-Veyron<sup>1</sup>, Dr Tania Sofia Goncalves Alvane<sup>1</sup>

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Symposium 18 - Education and training of health professionals, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** General practitioners (GPs) treat more than half of the patients with mental health disorders. Nevertheless, GP's psychiatric training is challenging. In the Center for Primary Care and Public Health (Unisanté), consultation-liaison (CL) psychiatrists are part of the general practice outpatient unit and propose practice-related training through joint CL interventions (JCLIs).

**Referrals** are firstly discussed with the GP. When needed, a JCLI is proposed with the patient, the GP and the psychiatrist. In the end of the session, the psychiatrist comes up with a first diagnosis, reflects on an actual crisis hypothesis and proposes a treatment plan. Feedback takes place with the GP after the session, introducing a biopsychosocial approach. Feasibility of JCLIs in a university primary care setting and their potential educational benefit were investigated.

**Methods:** An observational study was carried out in the Unisanté. A focus group with GP residents was performed, investigating their lived experiences during CL interventions.

**Results:** 100 inquiries were collected and analysed. 64 JCLIs were proposed and 58 of them were conducted (91%). Revealed barriers of JCLI were the emergency of the situation and GPs' workload. GPs reported that JCLIs improved collaboration and treatment planning, in the same time that increased their diagnostic skills, helped them in decision-making and improved doctor-patient relationship. Participating in the psychiatrist - patient interaction was seen as a powerful training experience.

**Conclusions:** Conducting JCLI in primary care settings is a precious intervention tool that gives an opportunity of a valuable continuous psychiatric training, well adapted to GPs' clinical needs.

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## Fostering communicative competence and performance of physicians (KPAP study protocol) – Multimodal assessment of long term effects of a communication trainings programme (funded by German Cancer Aid)

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**Objective:** Communication trainings improve communication skills of health care professionals in oncology. Only sparse data exists regarding long-term effects of communication trainings for physicians. The aim of this project is to investigate in a multimodal approach self-assessment of the physicians and external assessment of these physicians by experts and trained patient raters three years after a communication skills training (CST).

**Methods:** Until now, nearly 170 physicians have participated in the training program “Kommunikative Kompetenz” of the University Hospital of Cologne based on the KoMPASS project. Self-reported questionnaires (empathy, burnout, self-confidence etc) are filled in at baseline and at the end of the 2.5 days CST (t0 and t1), at the 6 hours refresher session at least three months later (t2) and, as part of the funded study, at least three years later (t3).

Delivering bad news with standardized simulation patients and participants were videotaped at t0 and t2 and in a subsample (n=60) at t3. Patient raters and expert raters will assess the videos using the AGBS as primary outcome (breaking bad news) and the ComOnRating Scale (communication skills in oncology). Experts will assess these videos regarding RIAS, patients by using the perceived empathy scale CARE.

**Results:** The study protocol will be presented.

**Conclusions:** This multimodal assessment may allow to proof the sustainability of the CST program and to detect differences and similarities of the three assessment perspectives.

**Reference:** Vitinius F .....Keller M. [KoMPASS--design, implementation and experiences concerning a structured communication skills training for physicians dealing with oncology]. PPmP 2013

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## “Even though he might not be able to tell me what’s wrong, he shows me that he cares!”: Perceived physician-patient communication and its impact, as identified by health system users in Basque Country, Spain

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Symposium 18 - Education and training of health professionals, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** To examine physician-patient communication-related barriers and facilitators and their perceived impact as expressed by health system users in Basque Country, Spain

**Methods:** Six focus groups were carried out with 47 health system users of six neighborhood primary health care centers involved in the “Prescribe Vida Saludable” (Prescribing Healthy Life) program. Sessions were audio-recorded and transcribed. To capture the role of the health system and primary care specifically in health and health promotion, inductive coding using grounded theory was employed by two coders.

**Results:** Health systems users identified some physician communication behaviors as facilitators (e.g., active listening, empathy), but discussed many barriers (e.g., poor non-verbal and verbal communication). The physician-patient relationship was generally positively described (e.g., closeness, connectedness, trust, emotional support). The negative impacts of a poor physician-patient relationship included not wanting to schedule an appointment with the physician and going to the ER instead and the need for prescription medication instead of lifestyle change to manage risk factors for chronic disease. In contrast, strong physician-patient relationships led to increased satisfaction with care, achievement of lifestyle-related behavior change, and decreased use of medications.

**Conclusions:** Health system users perceived positive and negative aspects of physician-patient communication in primary care and offer specific examples that could be incorporated into physician continuing education to maintain and/or improve care. Furthermore, they described perceived impacts beyond patient satisfaction with care. Specifically impacts related to decreased health system costs included fewer ER visits, less use of prescription medications, and achieving sustained lifestyle behavior change

Friday - Fri, June 4th, 17:00 - 18:15 CEST

## Symposium 19: Mechanisms of pain persistence

**Chairs: Antonella Ciaramella, Fiammetta Cosci**

Fri, June 4<sup>th</sup>, 17:00 - 18:15 CEST

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### Picturing disturbed body experience: A comparison of body drawings in somatoform disorder and a general population sample

**Dr. Hanneke Kalisvaart<sup>1</sup>**, Dr. Saskia van Broeckhuysen-Kloth<sup>1</sup>, Dr. Jooske van Busschbach<sup>2,3</sup>, Prof. dr. Rinie Geenen<sup>4</sup>

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Symposium 19 - Mechanisms of pain persistence, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Patients with somatic symptom disorder or somatoform disorder are considered to have a troubled relationship to their body that is hard to assess with self-report questionnaires alone. Aim of this study was to examine the value of body drawings as an assessment tool by comparing patients with a general population sample.

**Methods:** Compared were objective features of own body drawings from 179 patients referred to treatment for somatoform disorder from an original study and 173 age-and-sex matched persons from the general population.

**Results:** Only one of the two original factors was replicated in the general population sample. Groups did not score differently on this factor that reflected details in drawings. Contrary to expectation, the association of observation scores of drawings and self-reported body attitude was not stronger for the general population sample. Analysis in the general population sample tentatively indicated that the degree of identity drawn in the body potentially influences observation scores.

**Conclusion:** This comparative study indicates that the two groups picture a similar mean number of details in drawings of their own body. Because both the factor structure and association with self-report measures differed between the groups, scorings of body drawings appear to reflect a different meaning for patients with somatoform disorder and people from the general population.

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## The role of the placebo effect in hypnotic analgesia in the clinical setting

**Dr. Antonella Ciaramella<sup>1,2</sup>**

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Symposium 19 - Mechanisms of pain persistence, virtual, Juni 4, 2021, 17:00 - 18:15

### Background

Although several studies confirm the efficacy of hypnosis therapy, even self-administered, in several forms of chronic pain (Tan et al., 2015), the roles played by induction, susceptibility, beliefs and expectations are still unclear (Milling et al., 2007). Several mechanisms of action are involved, included cognitive factors, which may be influenced by the placebo effect (Huber et al., 2013). The doctor-patient relationship is one of the main contextual factors giving rise to placebo cofactors (Benedetti, 2013).

### Method

The Structured Phenomenological Hypnotic Protocol (SPHP) (Ciaramella, 2014) was administered for 2 months to 48 chronic pain subjects, 17 of which were treated by a doctor and 31 via self-hypnosis. The Stanford scale form A for hypnotic susceptibility, Italian Pain Questionnaire (IPQ) and numerical rating scale (NRS) for intensity of pain were administered.

### Results

Pain was greatly reduced in both groups, with no differences except for lower affective dimension scores in the doctor-treated group ( $F=4.67$ ,  $p=0.01$ ;  $\eta^2=.17$ ). Increased hypnotic susceptibility correlated only with reduced NRS ( $F=4.57$ ;  $p=0.03$ ;  $\eta^2=.43$  for doctor group and  $F=4.20$ ;  $p=0.02$ ;  $\eta^2=.21$  for self-hypnosis), with no differences between groups.

### Conclusions

The power of suggestion in analgesia, regardless of the presence of a doctor, is confirmed. The only exception is the motivational-affective dimension of pain, which is more greatly influenced by the treatment context. The degree of hypnotic suggestibility affects solely the intensity of pain relief.

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## Mental pain and euthymia as transdiagnostic clinimetric indices in migraine patients assessed via the Diagnostic Criteria for Psychosomatic Research-Revised

Dr. Fiammetta Cosci<sup>1</sup>

<sup>1</sup>University of Florence, Florence, Italy

Symposium 19 - Mechanisms of pain persistence, virtual, Juni 4, 2021, 17:00 - 18:15

### Background

Euthymia and mental pain have been recently demonstrated to be useful transdiagnostic indices in primary care patients who were assessed both via the DSM-5 and the Diagnostic criteria for psychosomatic research revised (DCPR-R). The present study aimed at verifying whether the clinical utility of euthymia scale, assessing euthymia, and mental pain questionnaire, assessing mental pain, can be extended to migraine care facilities.

### Methods

256 consecutive outpatients (131 with episodic migraine and 125 with chronic migraine) attending a third-level Italian university hospital facility for migraine were enrolled. The following instruments were proposed: Structural Clinical interview for DSM-5 (SCID-5), Semi-Structured Interview for Diagnostic Criteria for Psychosomatic Research-Revised (SSI-DCPR-R), Clinical Interview for Depression, Euthymia Scale, Mental Pain Questionnaire, Psychosocial Index.

### Results

Subjects with at least one DSM-5 diagnosis or one DCPR-R diagnosis had lower euthymia score than those with no diagnosis ( $p = 0.007$ ;  $p = 0.000$ , respectively). Subjects with at least one DCPR-R diagnosis had higher mental pain score than those with no diagnosis ( $p = 0.004$ ). The MPQ was significantly negatively correlated with the ES score ( $\rho = -0.494$ ;  $p = 0.01$ ). Further, there were significant correlations between ES/MPQ and CID depression and PSI subscales.

### Conclusions

ES significantly discriminated between patients with at least one DSM-5 or DCPR-R diagnosis and those with no diagnoses while MPQ discriminated between patients with at least one DCPR-R diagnosis and those with no diagnoses. The correlations between MPQ and ES further confirmed the differences that were detected using diagnostic criteria.

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## Measurement instruments for central sensitization in general practice: a Delphi procedure

**Mrs. Carine Den Boer<sup>1</sup>**, Dr Johannes van der Wouden<sup>1</sup>, Dr Berend Terluin<sup>1</sup>, Dr Nettie Blankenstein<sup>1</sup>, Prof. dr Henriette van der Horst<sup>1</sup>

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Symposium 19 - Mechanisms of pain persistence, virtual, Juni 4, 2021, 17:00 - 18:15

### Introduction

Central sensitization (CS) has been studied in relation to medically unexplained symptoms (MUS) and chronic pain. There is no gold standard for assessing CS. In a recently published systematic review, we made an inventory of published tests measuring CS. Until now, these tests are not being used in general practice. We aimed to assess which measurement instruments might be useful to be tested for feasibility in general practice.

### Methods

We conducted a Delphi procedure consisting of two e-mail rounds to obtain consensus among experts. We invited 40 national and international experts, 27 agreed to participate. The panellists, both clinicians and researchers, had to rate the tests on technical feasibility for use in general practice and added value and had to provide an overall judgement. The threshold for in- or exclusion was set at an agreement of 70%.

### Results

In two rounds we reached consensus on 13 of the 15 measurement instruments: two were included, eleven excluded. Included were the Central Sensitization Inventory (CSI) and pressure point thresholds (PPTs). For two instruments no consensus was reached, but because one of these (monofilaments) scored 69% 'yes' we decided to add this as the third instrument to be tested for feasibility in general practice.

### Conclusion

After a consensus procedure among an international panel of experts, three instruments for measuring CS were selected to be tested for feasibility in general practice: the Central Sensitization Inventory (CSI), pressure point thresholds (PPTs) and monofilaments.



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## Mental pain and pain proneness in migraine

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Symposium 19 - Mechanisms of pain persistence, virtual, Juni 4, 2021, 17:00 - 18:15

### Background

Chronic pain is the result of ongoing sub-conscious changes in brain function modulated by internal processes, external processes, psychological factors, and environmental factors. A connection between physical pain and mental pain exists. This has to do with what Engel described as the “pain-prone” patients.

### Methods

The PAINMIG study involved 200 outpatients attending a third-level Italian university hospital facility for migraine (100 with episodic migraine - EM, 100 with chronic migraine - CM) and 100 healthy subjects (HS). The following instruments were proposed: Migraine Disability Assessment Score Questionnaire, Brief Pain Inventory, Diagnostic Criteria for Psychosomatic Research-Revised, Clinical Interview for Depression, euthymia scale, Mental Pain Questionnaire, Psychosocial Index, a checklist based on Blumer e Heilbronn criteria for pain-proneness.

### Results

300 subjects were enrolled ( $42.72 \pm 11.72$  years, 80% female). Based on multiple logistic regression analyses, the occurrence of pain proneness history was more likely among EM and CM subjects than HS. EM patients had more than 2-fold increased risk to report pain proneness solid citizen and pain proneness depression than HS ( $p < 0.0001$ ). CM patients were more likely than HS to report pain proneness solid citizen and pain proneness depression ( $p < 0.0001$ ). CM patients were more likely than EM to report higher levels of mental pain ( $p = 0.05$ ).

### Conclusions

Pain proneness differentiates migraine patients from HS while mental pain differentiates CM patients from EM patients. Future studies might confirm these data using a longitudinal design.

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## Symposium 20: Psychophysiology, psychoneuro- endocrinology and –immunology

**Chairs: Eva Peters, Filip Van Den Eede**

Fri, June 4<sup>th</sup>, 17:00 - 18:15 CEST

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### Perceived stress and morning serum cortisol drop after psychosomatic inpatient therapy in a German university hospital

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Symposium 20 - Psychophysiology, psychoneuroendocrinology and –immunology, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Severe distress is associated with a disturbed cortisol homeostasis. The effects of psychodynamically oriented multimodal psychosomatic therapy (mPT) of patients in clinical care within the German healthcare system are unknown and of interest.

**Methods:** Perceived Stress Questionnaire (PSQ) scores and morning cortisol were determined in a consecutive sample of patients (N=378) admitted for mPT (T1), at end of intervention (7-8 weeks after admission, T2) and post treatment (10-12 weeks after demission, T3), as well as in age, sex and BMI matched healthy comparison controls (N=48).

**Results:** Patient PSQ 'summary' score dropped from severe to moderate distress (T1 MW: 64.56 +/- 25.87 SD; T2 47.48 +/- 20.30; T3 50.54 +/- 21.46) while controls maintained low levels (T1 MW: 27.88 +/- 16.50 SD; T2 24.65 +/- 15.42; T3 23.78 +/- 15.09). The PSQ subscales 'tension', 'demands', 'worries' and 'joy' changed correspondingly. Likewise, morning cortisol levels were high in patients at T1 and decreased significantly towards T2 (T1 MW: 18.52 +/- 7.62 SD; T2 16.51 +/- 6.88; T3 17.02 +/- 7.06), while levels in control were significantly lower at T1 and did not fluctuate significantly throughout the observation period (T1 MW: 14.13 +/- 7.74 SD; T2 14.82 +/- 7.79; T3 14.23 +/- 7.63). Effects post-treatment were mostly moderate (Cohen's d: PSQ 'summary' 0.66, 'tension' 0.71, 'demands' 0.65, 'worries' 0.63) with a large effect for PSQ 'joy' (1.43), and a small effect for cortisol (0.26).

**Conclusion:** Our study proves efficacy of mPT with respect to stress-reduction and cortisol levels in psychosomatic patients.

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## Comparison of hair cortisol concentrations between depressed patients, suicide completers and control subjects: a predictive biochemical indicator for suicide risk in depression?

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Symposium 20 - Psychophysiology, psychoneuroendocrinology and –immunology, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Major Depressive Disorder (MDD) and suicidal behavior are two interrelated, stress-associated mental health conditions. While alterations in the stress hormone cortisol were found in the hair of depressed patients, data on hair cortisol concentrations (HCC) for suicide completers (SC) are missing. Compared to a group of non-depressed control subjects (n=12) we expected to find elevated HCC in depressed patients (n=20), with an additional cortisol increase in the group of SC (n=45, post mortem).

**Methods:** HCC was measured in extracts of pulverized hair strains (1 cm and 3 cm strain length) using enzyme-linked immunosorbent assays.

**Results:** We found an average increase in HCC for the group of depressed patients (x 1.66↑) and the SC (x 5.46↑) compared to the control group (3 cm hair segments). Furthermore, average HCC in SC was significantly increased compared to the MDD group (x 3.28↑). A significant correlation between HCC from the 1 cm and the 3 cm hair segment, as well as a significant association between HCC (3 cm hair segments) and the severity of depressive symptoms, were also found, highlighting a dose-dependent effect of depression symptom severity on HCC.

**Conclusion:** We replicate findings of increased HCC in MDD compared to controls. Additionally, we provide the first data on HCC in SC, showing an additional increase in HCC compared to the controls and depressed patients. The usage of HCC as a predictive tool to possibly indicate and monitor suicidal risk in MDD is an important question which needs to be addressed in future studies.

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## Differential effect of panic on the methylation of the glucocorticoid receptor gene promoter 1F region in chronic subjective tinnitus

Dr. Filip Van Den Eede<sup>1</sup>, Dr. Laura L.M. Cassiers<sup>2</sup>, Ms. Viktoriia Chubar<sup>3</sup>, Prof. Annick Gilles<sup>4</sup>, Prof. dr. Vedat Topsakal<sup>4</sup>, Prof. dr. Vincent Van Rompaey<sup>4</sup>, Prof. dr. Paul Van de Heyning<sup>4</sup>, Prof. dr. Stephan Claes<sup>5</sup>, Prof. dr. Bernard Sabbe<sup>2</sup>, Prof. dr. Frank Kooy<sup>1</sup>, **Prof. dr. Filip Van Den Eede<sup>6</sup>**

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Symposium 20 - Psychophysiology, psychoneuroendocrinology and –immunology, virtual, Juni 4, 2021, 17:00 - 18:15

### Objective:

Tinnitus can be regarded as a chronic stressor, leading to dysregulation of the hypothalamo-hypopituitary-adrenal (HPA) axis. There is an important comorbidity with anxiety in general and panic attacks in particular, potentially associated with differences in HPA-axis functioning and methylation patterns of HPA-axis-related candidate genes. The objective is to examine the differential effect of panic attacks on the methylation of the glucocorticoid receptor gene (NR3C1) promoter 1F region in adults suffering from chronic subjective tinnitus.

### Methods:

Methylation patterns of the CpG islands and mRNA expression of NR3C1 were assessed in well-characterized tinnitus patients with panic attacks (n=9), tinnitus patients without panic attacks (n=10) and unaffected controls (n=27). A linear mixed model was fitted to model the relation between the disease status and the methylation pattern.

### Results:

When considering all CpG islands together, the tinnitus group with panic attacks showed a systematically higher methylation value (across all CpGs) compared to both the tinnitus-only and the control group (linear mixed model + Tukey post hoc). Separate testing of the CpG islands revealed that the differences were significant for CpG7 only, with a trend towards significance for CpG5 and CpG6. Negative correlations were observed between methylation and mRNA expression, which were significant for CpG2 and CpG6.

### Conclusion:

Panic is associated with higher methylation of the NR3C1 promoter 1F region and with lower mRNA expression in patients with chronic subjective tinnitus. This is in accordance with the reduced negative feedback of the HPA axis and HPA axis hyperfunction observed in patients with anxiety.

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## Testing the reversibility of impaired mitochondrial bioenergetic functioning in peripheral blood mononuclear cells from depressed patients by clinical-routine antidepressant treatment

**Dr. Alexander Karabatsiak<sup>1</sup>**, Kathrin Woike<sup>2</sup>, Alexander Behnke<sup>3</sup>, Prof. Dr. Iris-Tatjana Kolassa<sup>3</sup>, Prof. Dr. Carlos Schoenfeldt-Lecuona<sup>4</sup>, Prof. Dr. Markus Kiefer<sup>4</sup>, Dr. Eun-Jin Sim<sup>3</sup>

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Symposium 20 - Psychophysiology, psychoneuroendocrinology and –immunology, virtual, Juni 4, 2021, 17:00 - 18:15

**Background:** Major depressive disorder (MDD) might affect somatic functioning, causing also relevant changes in the immune system (IS). One new conceptual approach links MDD to impaired bioenergetic functioning, mainly related to changes in adenosine triphosphate (ATP) production inside the mitochondria, the powerhouses of mostly all body cells. We previously demonstrated reduced mitochondrial functioning in peripheral blood mononuclear cells (PBMC) from depressed patients, which correlated negatively with the clinical severity of MDD.

**Objective:** To replicate the finding of impaired mitochondrial functioning in MDD in a different cohort and to investigate the effects of a clinical-routine antidepressant treatment on mitochondrial functioning in PBMC of patients with MDD.

**Methods:** Patients suffering MDD (n=25) and control subjects (n=35) provided blood samples twice to isolate and cryopreserve PBMC. Patients with MDD received antidepressant treatment (antidepressants and add-on cognitive-behavioral therapy (CBT)). Thawed PBMC were used for bioenergetic profiling using high-resolution respirometry. After respirometry, Citrate Synthase activity (CSA) was measured in PBMC to normalize respiration for the intracellular density of mitochondria.

**Results:** We found significantly lower oxygen consumption rates in PBMC of MDD patients before treatment, which correlated significantly with the depression severity. Normalization of respiration with mitochondrial density led to non-significant group differences. Leak respiration, a marker for membrane integrity, significantly improved in the MDD group with treatment, independently from mitochondrial density.

**Conclusions:** Considering our results, mitochondria in PBMC might not be dysfunctional, but functionally impaired due to their lower density. Leak respiration improved with clinical treatment. Future studies should test the robustness of our results.

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## Symposium 21: Psychosomatics in internal medicine

**Chairs: Csanád Szabó, Adriana Baban**

Fri, June 4<sup>th</sup>, 17:00 - 18:15 CEST

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### Perceived stress of Hungarian dermatological outpatients based on the 2nd ESDaP Study

**Dr. Csanád Szabó<sup>1</sup>**, Professor Lajos Kemény<sup>2</sup>, Dr. Florence Dalgard<sup>3</sup>, Dr. Joerg Kupfer<sup>4</sup>, The ESDaP study group

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Symposium 21 - Psychosomatics in internal medicine, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** our aim was to describe perceived stress levels of outpatients with chronic skin diseases.

**Methods:** we conducted an investigator-initiated trial between 2017-2019 within the framework of a multicenter study of the ESDaP (European Society of Dermatology and Psychiatry) involving 16 European countries. 252 adult outpatients and 126 healthy volunteer participants were assessed at the Clinical Department of Dermatology and Allergology at the University of Szeged in Hungary. The participants completed seven questionnaires. Patients were diagnosed by a dermatologist. We examined psychological attributes with the Perceived Stress Scale, Dysmorphic Concern Questionnaire, Perceived Stigmatisation Questionnaire, EQ5D-VAS, GAD-2, PHQ-2.

**Results:** patients' average age was 49,66±15,62 years vs 38,94±12,31 in the control group, percentage of females among patients was 52% vs 82% in the control group. The patients' most frequent skin diseases were: psoriasis (67%), atopic dermatitis (10%), lymphoedema (8%), venous ulcer (3%). Patients' perceived stress scores (18,5±6,22) were significantly higher ( $p<0.05$ ,  $t=2.448$ ) than the Hungarian average test score (17,5±6,0), whereas controls' scores (17,76±5,39) did not significantly differ from it. Patients' perceived stress scores showed significant positive correlations with anxiety ( $r=0.678$ ,  $p<0.01$ ), depression ( $r=-0.600$ ,  $p<0.01$ ), level of dysmorphic concern ( $r=0.492$ ,  $p<0.01$ ), degree of perceived stigmatization ( $r=0.437$ ,  $p<0.01$ ), level of dissatisfaction with appearance ( $r=0.396$ ,  $p<0.01$ ), and health status was negatively correlated ( $r=-0.484$ ,  $p<0.01$ ) with stress scores of patients.

**Conclusion:** our results showed that several psychological attributes were related to how unpredictable, uncontrollable, and overloaded skin patients found their lives, which may be useful in designing programmes that help dermatological patients in coping with stress.

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## Relationship of anxiety and depression with surgical resection of meningiomas: a systematic review

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Symposium 21 - Psychosomatics in internal medicine, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Despite its benign nature, meningiomas are associated with several mental disorders. The incidence and nature of psychiatric symptoms depend on the location, volume and the surrounding oedema of the tumour. Neuropsychological comorbidities are common and meningiomas, over other types of brain tumours, may cause high levels of anxiety and depression. Current standard of care consists of neurosurgical resection of the tumour, and psychological state is known to impinge surgical recovery and clinical outcomes. With this systematic review, we aim to better understand the variance of anxiety and depression before and after surgical resection of meningiomas, in order to inform future clinical and research approaches.

**Methods:** A Systematic research of literature was performed, in three different databases, MEDLINE, Web of Science and SCOPU, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Articles had to include presurgical and postsurgical evaluation of anxiety and depression in meningioma patients. Case reports, reviews, meta-analyses and editorial letters were excluded.

**Results:** The search strategy retrieved 611 articles. Thirteen articles were selected for qualitative analysis. Assessment of anxiety revealed declining values during the entire follow-up period. Results also showed lower depression scores in the first postsurgical evaluation. However, depressive symptoms increased in at the second postsurgical assessment.

**Conclusion:** Anxiety and depression seem to decrease after meningioma resection. Although the strength of this review lays on the quality of the selected studies, several methodological discrepancies in the studies analysed may reduce generalization of results. More accurate investigational methods are needed in this field.

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## Perceived barriers and benefits of colorectal cancer screening in Romanian adults over 50

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Symposium 21 - Psychosomatics in internal medicine, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Colorectal cancer is the second most frequent form of cancer in Romania for men and women as well. This could be strongly connected with the absence of a national screening program for colorectal cancer, which has led to the highest proportion in EU of individuals aged 50 to 74 years never been screened (95%). Present study aims at identifying the health beliefs with the best discriminative values between positive and negative decision for colonoscopy screening.

**Method:** The sample included 98 individuals aged over 50 years (males: 44%, females: 55%; mean age: 63.67, SD: 8.28). Besides socio-demographic variables, health literacy (accessing, understanding, appraising and applying health information), dimensions of health beliefs model (benefits, barriers, self-efficacy and optimism), the number of past colonoscopies, the experience of interaction with healthcare providers, family history of cancer were assessed. The study has cross-sectional design. Data were analysed using ROC curve analysis.

Results show that previous attendance to colonoscopy screening was best discriminated by perceived benefits of screening ( $p=0.001$ ), health care providers recommendations for screening ( $p=0.007$ ), previous disease prevention recommendations ( $p=0.011$ ), confidence in conversations with doctor ( $p=0.012$ ) self-efficacy on screening uptake ( $p=0.019$ ) and health literacy regarding disease prevention information ( $p=0.011$ ). Fear of screening result, discomfort and pain, embarrassment and unpleasantness induced by tests, lack of time were the most commonly reported barriers related to reluctance to attend the colorectal screening.

**Conclusion:** A better knowledge on factors associated with screening compliance support the design of efficient campaigns to achieve higher rates of colorectal screening uptake.



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## BODY DYSMORPHIC DISORDER IN DERMATOLOGY SETTINGS

**Dr. Alberto Miranda Sivelo<sup>1</sup>**, Dr. Servando E Marron<sup>2</sup>, Dr. Lucia Tomas Aragones<sup>3</sup>

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Symposium 21 - Psychosomatics in internal medicine, virtual, Juni 4, 2021, 17:00 - 18:15

### Introduction

Body dysmorphic disorder (BDD) is a chronic mental disorder that is difficult to diagnose and causes much suffering. The prevalence of BDD in the general population is around 2 % but reaches nearly 10% in dermatology patients. Body image is largely shaped by the skin, of which facial acne is the area of most frequent concern in dermatological populations with BDD.

### Objective

Through this presentation we are going to explore the links between BDD and dermatologic patients and report the results of our research in patients diagnosed with acne.

### Methods

406 consecutive patients diagnosed with acne in 11 dermatological centers in Spain were included in the study. We used the Body Dysmorphic Disorder Questionnaire (BDDQ) as a screening tool, transculturalized into Spanish and adapted to DSM-5 criteria.

### Results

Our study found a high prevalence of BDD in acne patients (10, 6 %) and these patients often had received previous dermatologic treatment ( 86% ). Our findings point out that women with excessive grooming behaviours could have more probabilities to meet criteria for BDD. We found high levels of distress, avoidance and interference in social life in patients with BDD.

### Conclusion

Because non-psychiatric treatment rarely improves the general symptoms of BDD, physicians treating these patients should be aware of BDD and its clinical presentations. Brief self-reporting tools such as the BDDQ can be used to detect potential patients with BDD, such as those with acne, but further research is needed on new DSM - 5 criteria and its appropriated assessment.

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## Bipolar disorder in patients with Wilson Disease

**Dr. Paula Zimbrea<sup>1</sup>**, Susan Rubman<sup>1</sup>, Kaitlin Maciejewski<sup>1</sup>, Ayse Coskun<sup>1</sup>, Keerthana Nalamada<sup>2</sup>, Michelle Camarata<sup>1</sup>, Ricarda Tomlin<sup>1</sup>, Amar Patel<sup>1</sup>, Uyen To<sup>1</sup>, Aftab Ala<sup>4</sup>, Regino Gonzalez-Peralta<sup>3</sup>, Yanhong Deng<sup>1</sup>, Michael Schilsky<sup>1</sup>

<sup>1</sup>*Yale University, New Haven, United States*, <sup>2</sup>*University of Connecticut, Hartford, United States*, <sup>3</sup>*Advent Health Medical Group, Orlando, United States*, <sup>4</sup>*University of Surrey, Guildford, United Kingdom*

Symposium 21 - Psychosomatics in internal medicine, virtual, Juni 4, 2021, 17:00 - 18:15

**Objective:** Wilson disease (WD) is a rare genetic disorder of copper metabolism with a high prevalence of psychiatric symptoms (1). The WD registry (WDR) developed at Yale University includes prospective psychiatric assessments for all enrolled patients.

**Aim 1:** to evaluate the prevalence of Bipolar disorder (BD) in patients with WD

**Aim 2:** to describe clinical factors associated with BD in patients with WD

**Methods:** Patients with confirmed diagnosis of WD were enrolled in the WDR beginning December 2017. Adult patients were evaluated using the Mini International Neuropsychiatric Interview (MINI), Perceived Stress Scale (PSS), Big 5 personality test and Short Form 12 (SF12). We analyzed the data collected during the initial assessment using t-tests, Wilcoxon rank sum test, and chi-squared tests.

**Results:** Of 58 patients enrolled, 6 (10.3%) met criteria for a lifetime history of BD, all male. Compared with WD patients without BD, patients with BD had lower median scores in physical, role and social functioning subdomains of SF12, mental health SF12 score and on consciousness personality trait. There were no significant differences or associations between patients with WD with BD and those without BD in terms of age at WD diagnosis, suicidality, PSS score, MELD score, Child Pugh score, UWDRS score, serum or urine copper levels or ceruloplasmin.

**Conclusion:** BD is highly prevalent in patients with WD. BD in WD patients is not associated with more severe neurological or liver disease, nor with differences in ceruloplasmin or serum/ urine copper values.

**Reference(s):**

1. Zimbrea PC et al PMID: 24120023

## POSTER

### Anxiety and obsessive-compulsive disorders

Poster Session: Fri, June 4<sup>th</sup>, 12.45 – 13.30

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#### Dimensions of anxiety symptoms and the relation with hospitalization, mortality and Quality of Life in dialysis patients.

Ms. Els Nadort<sup>1</sup>, Ms. Els Nadort<sup>2</sup>, Mr. Victor Harmse<sup>2</sup>, Prof. Adriaan Honig<sup>2,3</sup>, Dr. Wouter van Ballegooijen<sup>3</sup>, Dr. Birit F.P. Broekman<sup>2,3</sup>, Dr. Carl E.H. Siegert<sup>1</sup>

<sup>1</sup>OLVG Nephrology, Amsterdam, Netherlands, <sup>2</sup>OLVG Psychiatry, Amsterdam, Netherlands, <sup>3</sup>AUMC Psychiatry and GGZ inGeest, Amsterdam, Netherlands

##### Objective

Symptoms of anxiety are highly prevalent in dialysis patients and are associated with adverse clinical outcomes. Identifying symptom dimensions may help to understand the pathophysiology, improve screening and guide treatment. Currently, there are no data on symptom dimensions of anxiety in dialysis patients. This study aimed to identify the best fitting dimensional model for anxiety in dialysis patients and assess the association between symptom dimensions of anxiety and adverse clinical outcomes.

##### Methods

This study is a prospective observational cohort study including patients from 10 urban dialysis centers between 2012 and 2017. Anxiety symptoms were measured using the self-reported questionnaire Beck Anxiety Inventory. Confirmatory factor analysis was used to identify symptom dimensions. The association between dimensions and mortality, hospitalization and quality of life was investigated using stepwise cox, poisson and linear regression models. Multivariable models included demographic, social, laboratory and clinical variables to adjust for possible confounding.

##### Results

In total 687 chronic dialysis patients were included. A Somatic and Subjective anxiety dimension were identified. Only Somatic anxiety symptoms showed an association with increased risk of hospitalization and mortality (Rate Ratio 1.73 (1.45-2.06) p=0.007 and Hazard Ratio 1.65 (1.15-2.37) p=0.007 respectively). These associations were independent from somatic comorbidity. All symptom dimensions of anxiety showed an association with Quality of Life.

##### Conclusion

This study shows that anxiety is common in chronic dialysis patients and comprises of a somatic, subjective, and a total score. The discrimination between anxiety dimensions can be useful for clinical practice, as they are related to different clinical outcomes.

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## Acute anxiety and comorbid diagnoses in children and adolescents referred for psychiatric evaluation in two university hospitals.

Dr. Peter Dineen<sup>1</sup>, Dr. Klaus Hoffmann<sup>1</sup>

<sup>1</sup>Cork University Hospital & Mercy University Hospital, Cork, Ireland

### Title:

Acute anxiety and comorbid diagnoses in children and adolescents referred for psychiatric evaluation in two university hospitals.

### Objectives:

To review the reasons for referral, age range and outcome diagnosis for children and adolescents who are referred to a consultation-liaison psychiatric service in two university hospitals, both to acute hospital wards and emergency departments. The goal is to ascertain the types of difficulty these patients have in a developmental biopsychosocial manner, looking at psychiatric comorbidity and also psychosocial comorbidity. .

### Aims:

Review the reasons for referral, calculate whole number age and review the outcome multiaxial diagnoses.

### Methods:

101 patients were referred in total over the three month period and the data relating to patients referred for anxiety is examined. Evaluation of the reasons for referral, age ranges and outcome multiaxial diagnosis was conducted. Aggregated numbers for the individual diagnostic codes are collated into a final report.

### Results:

Some of the most common reasons for referral were suicidal behaviour, anxiety and depressed mood. Anxiety was a common problem for patients with autism spectrum disorder and depressive disorder.

### Conclusion:

Patients experienced a higher level of emotional distress and and anxiety during the coronavirus lockdown. This occurred with and without primary psychiatric illness. Tailoring services to the patient including enhanced crisis services may improve patient outcomes.

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## One-Day Acceptance and Commitment Therapy (ACT) Workshop Improves Anxiety but not Vascular Function of Inflammation in Adults with Moderate to High Anxiety Levels in a Randomized Controlled Trial

**Dr. Jess Fiedorowicz<sup>1</sup>**, Lilian Dindo<sup>2</sup>, Tiwaloluwa Ajibewa<sup>4</sup>, Jane Persons<sup>3</sup>, James Marchman<sup>3</sup>, Seth Holwerda<sup>5</sup>, Oluchi Abosi<sup>3</sup>, Lyndsey Dubose<sup>6</sup>, Nealy Wooldridge<sup>3</sup>, Janie Myers<sup>3</sup>, Amy Stroud<sup>3</sup>, Kaitlyn Dubishar<sup>3</sup>, Zhuangzhuang Liu<sup>3</sup>, Gary Pierce<sup>3</sup>

<sup>1</sup>The Ottawa Hospital and University of Ottawa, Ottawa, Canada, <sup>2</sup>Baylor College of Medicine, Houston, United States, <sup>3</sup>University of Iowa, Iowa City, United States, <sup>4</sup>University of Michigan, Ann Arbor, United States, <sup>5</sup>University of Kansas, Kansas City, United States, <sup>6</sup>University of Colorado, Aurora, United States

**Objective:** Acceptance and Commitment Therapy (ACT) is a behavioral intervention demonstrating sustained improvements in anxiety in individuals with chronic anxiety and psychological distress. Because anxiety disorders are associated with the development of cardiovascular disease (CVD), we hypothesized that a novel 1-day ACT workshop would both lower anxiety and improve vascular function in persons with moderate/high anxiety. **Methods:** In a randomized controlled study, 72 adults (age  $33.9 \pm 8.6$  (SD) years) with baseline moderate/high anxiety completed a one-day ACT intervention (n=44, age  $33.9 \pm 8.7$  years) or control (n=28, age  $37.1 \pm 10.1$  years). Pre-specified secondary outcomes were measured over 12 weeks: aortic stiffness (carotid-femoral pulse wave velocity [cfPWV]), forearm vascular endothelial function (post-ischemic peak forearm blood flow [FBF] via plethysmography), and brachial artery flow-mediated dilation (FMD). Carotid artery stiffness ( $\beta$ -stiffness index), and inflammatory markers (c-reactive protein and tumor necrosis factor-alpha) were also explored. **Results:** The 1-day ACT workshop was not associated with improvement in vascular or inflammatory endpoints. The intervention was unexpectedly associated with increases in  $\beta$ -stiffness index that were also associated with changing trait anxiety. **Conclusion:** While ACT was effective at reducing anxiety scores on previously reported primary outcome (BAI), this did not translate into improvements in any of the vascular function outcomes. This may reflect a less-than-robust effect of the intervention on anxiety, failure in design to select those with vascular dysfunction, or not intervening on a relevant causal pathway. (Trial registration NCT02915874 at [www.clinicaltrials.gov](http://www.clinicaltrials.gov)).

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## The Health Anxiety by Proxy Scale (HAPYS) – a preliminary validation

**Ms. Katrine Ingeman Beck<sup>1,2</sup>**, Lisbeth Frostholt<sup>2</sup>, Ditte Hoffmann<sup>2</sup>, Kristi Wright<sup>3</sup>, Jens Søndergaard Jensen<sup>2</sup>, Dr. Charlotte Rask<sup>1</sup>

<sup>1</sup>Department of Child and Adolescent Psychiatry, Aarhus University Hospital, Aarhus N, Denmark, <sup>2</sup>The Research Clinic for Functional Disorders and Psychosomatics, Aarhus University Hospital, Aarhus, Denmark, <sup>3</sup>Department of Psychology, Faculty of Arts, University of Regina, Regina, Canada

### Objective

Health anxiety by proxy is a newly introduced term to describe parents' experience of excessive, intrusive and unpleasant worries about their child's health which may cause increased health care contacts and unnecessary physical examinations of the child. This study is a preliminary validation of a new measure, the Health Anxiety by Proxy scale (HAPYS), for systematic assessment of this important clinical phenomenon.

### Methods

Questionnaire responses from four groups of parents with children under 18 years are currently being collected: health anxiety, other anxiety disorders, bodily distress syndrome (BDS) and healthy parents. Convergent validity will be investigated by examining a positive correlation between the HAPYS and scores on measures of parental catastrophizing and parental responses towards the child during illness. Discriminative validity will be investigated by comparing scores on the HAPYS between parents with health anxiety (highest score), parents with other anxiety disorders, parents with bodily distress syndrome (BDS) and healthy parents (lowest score). Test-retest reliability will be investigated by comparing scores on the HAPYS over a time period of two weeks.

### Results

The data collection will be closed at April 1st and analyses will be conducted before the conference. Thus validation-results presented at the conference will be completely fresh.

### Conclusion

The HAPYS holds the potential to assist clinicians across health care settings to assess parents suffering from health anxiety by proxy and differentiate between this clinical entity versus anxiety located in the child or fabricated illness.

## Biopsychosocial approaches

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### An ecological momentary assessment study on tiredness, fatigue and sexual experience in daily life

Ms. Hanna Mües<sup>1</sup>, Dr. Charlotte Markert<sup>2</sup>, Ms. Anja C. Feneberg<sup>1</sup>, Dr. Urs M. Nater<sup>1</sup>

<sup>1</sup>University of Vienna, Vienna, Austria, <sup>2</sup>Justus-Liebig-University Gießen, Gießen, Germany

**Objective:** Both tiredness and fatigue have been negatively associated with sexual experience. Additionally, however, tiredness was positively associated with sexual experience. The aim of this study was to examine the bidirectional link between tiredness, fatigue and sexual desire and arousal in daily life using ecological momentary assessment.

**Methods:** The sample consisted of sixty heterosexual healthy men and women in a relationship who were between eighteen and thirty years old ( $M=23.78$ ,  $SD=2.93$ ). Participants were asked to complete data entries six times a day for fourteen consecutive days regarding current tiredness, fatigue and intensity of sexual desire and arousal using a pre-programmed iPod. Nested data were analyzed separately for men and women using multilevel modelling.

**Results:** Significant differences were found in tiredness, fatigue and intensity of sexual desire and arousal between men and women. In men, higher general fatigue was significantly associated with a lower intensity of sexual desire at the following measurement point ( $UC=-0.12$ ,  $p=.005$ , Pseudo  $R^2=0.034$ ), while in women, a higher intensity of sexual arousal was significantly associated with higher physical fatigue at the following measurement point ( $UC=0.15$ ,  $p=.037$ , Pseudo  $R^2=0.007$ ).

**Conclusion:** Tiredness and sexual experience were not significantly associated in this study. While general fatigue seems to have a reducing effect on sexual desire in men, sexual arousal seems to have an enhancing effect on physical fatigue in women. These results show different associations for men and women, which might contribute to explaining enhanced or reduced sexual experience in both genders.

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### Psychosocial aspects of epidermolysis bullosa and quality of life. A systematic review

Dr. Gudrun Salamon<sup>1</sup>, Alexander Ruberl<sup>1</sup>

<sup>1</sup>Sigmund Freud University, Vienna, Austria

Epidermolysis bullosa (EB) is a group of rare diseases characterized by skin fragility. EB has an enormous impact on all aspects of psychosocial life. Hence, quality of life is an important measure in psychological as well as in clinical research. In EB, stress is caused by chronic pain, the need of intensive wound management and restrictions in everyday life. Additionally, these restrictions lead to social and emotional challenges.

In order to address all psychosocial aspects of EB and corresponding coping strategies thoroughly, we conducted a systematic review of literature. A set of exclusion and inclusion criteria led to a final selection of 38 papers presenting original work, comprising quantitative, qualitative, mixed methods and single case studies with the focus on EB patients or their families.

The following psychological aspects were described as helpful on an individual coping level:

- Control of life (autonomy, active EB management, external support)
- Containing the impact of EB (dealing with pain, emotion regulation)
- Interaction with others (exchange with health care professionals, with healthy people, with people in a similar/comparable condition, and with people with EB)
- The attitude to live a close-to-normal life or at least close-to-normal moments (physical or social activities)

Quality of life and wellbeing are highly individual and vary widely within people living with EB. Our systematic review identifies and explores psychosocial aspects of EB and their corresponding coping strategies.

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## Social body and relational organ. A biopsychosocial approach.

Dr. Dirk von Boetticher<sup>1</sup>

<sup>1</sup>University Medical Center Göttingen, Psychosomatic Medicine and Psychotherapy, Göttingen, Germany

### Aims

Psychosomatic medicine has been termed “a medicine of human relationship” (Weiner). Since the pioneering work of Engel, Weiner and Hofer psychosomatic research has produced a plenty of findings regarding somatic correlates of different relational experiences (mourning, bereavement, trauma, empathy, social pain, social support) and their clinical significance. Recently the human brain has been conceived of as a social/relational organ (Fuchs), because many findings show that due to its plasticity its physiological (re)actions are directly and profoundly shaped by social interaction. Yet other parts of the body might be conceived of as intersubjectively shaped and the human body understood as social body.

### Method

The presentation outlines the concept of relational organ (Fuchs) and gives an overview of current empirical findings that underpin a biopsychosocial approach stressing on the relational nature of our lived body.

### Results



Especially stress- and trauma-related empirical research has generated a wealth of findings that allow to conceive of various human organs as of social organs: in addition to the human brain the heart, vessels, lung, skin, kidney or intestine might be regarded as morphological relational organs that are inextricably intertwined with the stress-system, immune-system, (epi)genetic-system or microbiome as physiological relational organs.

### Conclusions

In opposition to tendencies in cognitive neuroscience a genuine biopsychosocial perspective allows to conceive of the human body as a whole as of a social body and of its organs as of relational physiological and functional organs. This relational perspective might be helpful for developing a more integrative clinical understanding especially of psychosomatic comorbidities

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## Investigating the Psychobiological Impact of Chronic Ethnic Discrimination in Turkish Immigrants Living in Austria

**Mr. Andreas Goreis<sup>1</sup>**, Dr. Urs Markus Nater<sup>1</sup>, Dr. Dr. Ricarda Mewes<sup>1</sup>

<sup>1</sup>*Faculty of Psychology, University of Vienna, Vienna, Austria*

**Objective:** Chronic ethnic discrimination may impact the health of ethnic minorities and refugee populations via biological dysregulation of stress-reactive systems due to ongoing psychosocial stress. We investigated the impact of chronic ethnic discrimination on Turkish immigrants living in Austria in two studies: 1) in daily life via ambulatory assessment (AA) and 2) in response to ethnic discrimination in the laboratory.

**Methods:** For the 30-days AA study, N=10 Turkish immigrants were equipped with iPods to report discriminatory situations. Perceived stress and discrimination, and affect were assessed each evening. For the laboratory study, we recruited N=70 Turkish immigrants, 35 participants who experienced chronic discrimination and 35 who experienced no discrimination. They underwent an ethnic discrimination task for 10m. Over 2h, perceived stress and discrimination were assessed, and saliva samples were obtained. Heart rate (HR) and skin conductance level (SCL) were measured continuously. Hair samples were collected to determine long-term cortisol concentrations.

**Results:** Results of the AA study revealed that perceived discrimination and negative affect were higher ( $p < .05$ ) on days when discrimination occurred compared to days without discrimination. Preliminary analyses (N=55) of the laboratory study indicated that the chronic discrimination group reported higher levels of perceived stress and discrimination ( $p < .001$ ). HR and SCL increased in both groups ( $p < .001$ ). Analyses of salivary cortisol and alpha-amylase, and hair cortisol will be reported upon completion.

**Conclusion:** Both in daily life and the laboratory, chronic ethnic discrimination was associated with negative psychobiological responses to discriminatory situations, which may result in chronic dysregulation of stress-reactive systems.

## Chronic pain

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### The impact of pain on severity and treatment outcome of psychiatric inpatients

**Ms. Martina Brunnmayr<sup>1</sup>**, MSc Katharina Berger<sup>1</sup>, OÄ Dr. Belma Dugandzic<sup>1</sup>, Prim. Dr., MSc MBA Wolfgang Brandmayr<sup>1</sup>, Prof. Priv. Doz. Dr. Michael Bach<sup>1</sup>

<sup>1</sup>Therapiezentrum Justuspark (BVAEB), Bad Hall, Austria

**Background:** Previous studies have shown that pain syndromes may have a negative value on the severity and treatment outcome of mental disorders. However, the impact of pain has only been demonstrated in highly selected psychiatric study samples. The aim of this study is, therefore, to use a naturalistic design to assess the impact of comorbid pain conditions in psychiatric inpatients.

**Methods:** We included a consecutive sample of 923 psychiatric inpatients (52% females, 48% males) with a mean age of 52.46ys (range 19-89ys) who participated in a 6-weeks multimodal rehabilitation program. A final sample of 895 subjects was analysed. ICD-10 diagnoses were established clinically. In addition, the Chronic Pain Grade Questionnaire (CPGQ), the SCL-90-R, as well as the WHO-DAS 2.0 for assessing quality of life were administered.

**Results:** According to the CPGQ, 26.9% of the patients were pain-free over the last three months, 36.9% exhibited functional pain conditions, 36.2% dysfunctional pain conditions (pain disability). Regarding ICD-10 main diagnoses, depressive disorder was associated with higher ratings of chronic pain. As expected, subjects with dysfunctional pain showed significantly higher SCL-90-R global scores ( $p < 0,001$ ) and significantly reduced quality of life ( $p < 0,001$ ). Regarding treatment outcome, subjects with dysfunctional pain conditions showed significantly less improvement in quality of life over time as compared to subjects with functional pain conditions as well as those without pain ( $p < 0.001$ ).

**Conclusion:** These data underline the importance of pain as a negative prognostic indicator in mental illness. Therefore, we emphasize to include the assessment of pain into psychiatric assessments.

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## Psychosomatic profile of chronic pain patients measured by the Diagnostic Criteria for Psychosomatic Research-Revised Semi Structured Interview (DCPR-R SSI)

Dr. Ajandek Eory<sup>3</sup>, Dr. Dora Bekesi<sup>1</sup>, Dr. Zoltan Kekecs<sup>4</sup>, Dr. Sandor Rozsa<sup>2</sup>

<sup>1</sup>Semmelweis University, Budapest, Hungary, <sup>2</sup>Department of Psychiatry, Washington University, St Louis, USA, <sup>3</sup>Division of Integrative Medicine, Department of Family Medicine, Semmelweis University, Budapest, Hungary, <sup>4</sup>Department of Affective Psychology, Eotvos Lorand University, Budapest, Hungary, <sup>5</sup>Department of Psychology, Lund University, Lund, Sweden

**Objective:** Chronic pain is an intrinsically dynamic human experience involving the cognitive, affective and sensorimotor aspects of it. The aim of our research was to explore the psychosocial characteristics of chronic pain patients to contribute to a more patient-centered treatment.

**Methods:** Adult patients from GP surgeries of Semmelweis University, living with pain for more than three months were collected. Trained interviewers applied the DCPR-R SSI alongside with the self-rating Depression Anxiety and Stress Scale (DASS), Pain Detect (PD), Short form of McGill (SF-MPQ) questionnaire and Fava's Well-being Check. Health-related information were collected from patients' medical records.

**Results:** Altogether 65 patients (17 males) participated in our study. Mean pain duration was 15 years (SD:16). Most patients had pain with musculoskeletal origin (n=35, 56.5%). 16 patients had DSM-5 psychiatric comorbidity. Although they were younger than those without (mean age 48 vs 62 years), there was no difference in the duration of pain. The intensity of pain was similar across the groups, however, patients with psychiatric comorbidity scored significantly higher on the sensory (U=253, p=0.034) and affective (U=222, p=0.014) domains of pain and had significantly more DCPR syndromes (Mdn=5 [IQR: 3.25, 7] vs Mdn: 1[IQR: 0, 2]). Demoralisation (81% vs 24.5%), allostatic overload (69% vs 22%), persistent somatization (56% vs 10%), irritable mood (50% vs 12%) and disease phobia (25% vs 2%) were significantly more prevalent than in pain patients without psychiatric comorbidity.

**Conclusion:** Chronic pain arise at an earlier age in patients with psychiatric comorbidities and is associated with more psychosomatic syndromes.

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## The role of music listening style in acute responses to cold pressor pain

**Ms. Rosa Maria Maidhof<sup>1</sup>**, Dr. Alexandra Wuttke-Linnemann<sup>2,3</sup>, Mr. Mattes Bastian Kappert<sup>4</sup>, Dr. Andreas Schwerdtfeger<sup>5</sup>, Dr. Gunter Kreutz<sup>6</sup>, Dr. Urs Markus Nater<sup>1</sup>

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**Objective:** Music listening is a novel non-pharmacological tool in pain and stress management. Since the music listening style is largely unexplored in how music may exert beneficial effects on pain and stress, this study aimed to investigate whether pain and stress responses to acute pain differ in music empathizers (ME) and music systemizers (MS). Since male and female ME/MS might respond differently, the role of gender was also investigated.

**Methods:** ME and MS listened to auditory stimuli during a cold pressor test (CPT) on three days (day 1: researcher-selected music, day 2: participant-selected music, day 3: lapping water; randomized order). Pain intensity, pain tolerance, subjective acute stress, heart rate (HR), heart rate variability parameter RMSSD, salivary alpha-amylase (sAA) and salivary cortisol were repeatedly measured. Data were analysed applying multilevel modelling.

**Results:** Preliminary analyses (n=56; age: M=24.2, SD=3.89) showed no differences between ME and MS in pain intensity, pain tolerance, sAA after CPT, HR and RMSSD during and after CPT. ME and MS differed in subjective stress (ME>MS; p=0.044) and cortisol levels after CPT (MS>ME; p=0.005). Male MS and female ME showed higher cortisol levels after CPT than female MS and male ME (p<.001). Final analysis is subject to completion of the data set.

**Conclusion:** Our preliminary findings suggest that music listening styles did not affect pain processing. However, they might modulate individual pain-related stress responses (subjective stress and endocrine, but not autonomic reactivity) and thus provide novel information on individual differences in coping with pain and stress.

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## INTEGRATION OF TRAUMA THERAPY CONCEPTS INTO PSYCHOSOMATIC PAIN TREATMENT. A case report.

Dr. Ina Knoop<sup>1</sup>, Dr. Doris Hinkel<sup>1</sup>, Dr. Lorenz Pollak<sup>1</sup>, Prim. Dr. Angelika Rießland - Seifert<sup>1</sup>

<sup>1</sup>*Psychiatric Department With Centre For Psychotherapy And Psychosomatics, Social-medical-centre Baumgartner Höhe, Otto, Vienna, Austria*

### Objective:

The psychobiology of the interaction between trauma and pain has led to the development of joined vulnerability and mutual maintenance models for chronic pain. Unfortunately pain treatment centers often lack time and resources to screen for traumatic events. We report about a male patient with severe chronic pain (NRS 7-10) and major depression with suicidal crisis, who was treated for four months in an inpatient ward for Psychotherapy and Psychosomatics.

### Methods:

The interdisciplinary treatment is based on a relationship-oriented approach and a method-integrative concept with elements of DBT. Pain patients are offered a specific pain coping group therapy, which includes psychoeducational and physiotherapeutic sessions.

### Results:

Prior to the psychosomatic treatment the patient had been seen by numerous medical specialists through whom he underwent medical regimens with highly dosed opioids, pregabalin, antipsychotics and antidepressants. Because of suicidal crisis and pain related immobility, he had been in acute psychiatric treatment for several months. Complex PTSD was diagnosed only during psychosomatic therapy. Having completed psychosomatic treatment he reported clinically significant changes in functional disability, depression, anxiety and pain catastrophizing.

### Conclusion:

The comorbidity of chronic pain and PTSD is still underestimated. The remarkable increase of the patient's quality of life demonstrates the importance of integrating trauma therapy concepts into an interdisciplinary psychosomatic pain treatment. Despite the severity and chronicity of his disorders, the patient improved significantly by learning new evaluation processes in pain associated cognitions, negative emotions and maladaptive body perception linked to his trauma.

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## Hypnosis in chronic pain: clinical information and literature review

Dr. Antonella Ciaramella<sup>1</sup>

<sup>1</sup>*Psychosomatic Center, Gift Institute of Integrative Medicine, Pisa, Italy*

### Background

Brown and Fromm (2013) proposed that hypnosis comprises three principal aspects: altered states of consciousness, expectation and suggestibility, and the hypnotic relationship.

The use of hypnosis in chronic pain seems to be increasingly supported as being effective in several forms of chronic pain, as confirmed by controlled experimental trials (Thompson et al., 2019)

### Aim

To explore the clinical value of principal aspects of Brown and Fromm hypnosis treatment (2013) in chronic pain subjects (CPS).

### Method

A 4-month course of hypnosis treatment was explored in two group of CPS. The first (F, 29 subjects) was given 8 individual hypnosis sessions and investigated using Stanford A for susceptibility (HS), placebo paradigm (for expectation) and NRS for pain outcome. The second group (S, 28 subjects) was asked to perform 4 months of self-hypnosis, and investigated using the Phenomenological Consciousness Inventory (PCI), Harvard Group Scale of hypnotic susceptibility (HGSHS) and NRS.

### Results

NRS was reduced by over 30% at 4 months in both groups, irrespective of HS score. In the F group a correlation was found between higher values of placebo paradigm and greater differences in NRS outcome ( $r=.67$ ;  $p=.03$ ) at 2 months. In the S group, according to the PCI, subjects with Nondialoging Medium type trance displayed better pain outcome others.

### Discussion

In a clinical setting, we found that the effectiveness of hypnosis is not only HS-based when using the Ericksonian approach. Expectation affects pain outcome improvements. In addition, the subjective phenomenology of consciousness seems to influence pain outcome.

## CL-Psychiatry and Integrated Care

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### COMPLEXITIES OF CARE IN PATIENTS TRANSFERS FROM ACUTE PSYCHIATRY UNIT TO MEDICAL-SURGICAL UNITS IN THE GENERAL HOSPITAL

Dr. Ricardo Campos Ródenas<sup>2</sup>, Dr. Ana Goñi-Navarro<sup>2</sup>, Medical student Blanca Tomás-Soldevilla<sup>3</sup>, Dr. Oscar Bueno<sup>2</sup>, Dr. Eva Gracia-Peligero<sup>5</sup>, Dr Juan Ignacio Pérez-Calvo<sup>4</sup>, Dr Ricardo Campos Ródenas<sup>1</sup>

<sup>1</sup>1. President of Spanish Psychosomatic Medicine Society, Zaragoza, Spain, <sup>2</sup>2. Resident of Psychiatry Lozano Blesa University Hospital, Zaragoza, Spain, <sup>3</sup>3. Medical Student. University of Zaragoza, Zaragoza, Spain, <sup>4</sup>4. Internal Medicine Physician. Lozano Blesa University Hospital, Zaragoza, Spain, <sup>5</sup>5. CL Psychiatrist. Lozano Blesa University Hospital, Zaragoza, Spain

#### OBJECTIVE:

Our goal is to present a case-register profile of the patients transferred from a General Hospital Adult Acute Psychiatric Unit (AAPU) to another medical or surgical ward.

#### METHODS:

A case-register database was completed to study and collect clinical characteristics of a five year (2015-2019) cohort of 1950 inpatients who were transferred to medical or surgical units because medical destabilization. This cohort is a part of a large register on types of discharges in Acute psychiatric Unit.

#### RESULTS:

Thirty eight patients were transferred from the Adult Acute Psychiatric Unit to other General Hospital wards in a five year period (between 2015 and 2019). It represents 1.94% of the 1953 AAPU discharges during this period. 24 (63.1%) inpatients are transferred to Internal/Medical wards, 8 (21.%) inpatients to Surgical wards and 6 of them (15.7%) to the ICU. There is a great variety of reasons for the medical and surgical desestabilization. Collaborative consensus-based 5 item program between acute care psychiatry team and CL Service has been recently implemented. These patients have a special complexity and this area is being scarcely researched.

#### CONCLUSIONS:

1. Nearly 2% of Adult Acute Psychiatric inpatient have been transferred to other General Hospital wards.
2. Medical wards transfers are most represented (60%) compared to Surgical (15.7%) and ICU (15.7) transfers.
3. This cohort of patients pose a great challenge to preserve life and continuity of both psychiatric and medical-surgical continuity of care. Such complexity merits specific collaborative program with the CL teams and Internal Medicine Shared Management.

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## Polypharmacy and Potentially Inappropriate Medications (PIMs) in older adults referred to a Liaison Psychiatry Service

Dr. Anietie Akpan<sup>1</sup>, Dr Omolade Longe<sup>2</sup>

<sup>1</sup>Hertfordshire Partnership Foundation NHS Trust, Uk, , United Kingdom, <sup>2</sup>West London NHS Trust, , United Kingdom

### Objectives:

The older adult is more likely to be prescribed a lot of medications (polypharmacy) on account of multi-morbidity and being under the care of several specialists. Medications are not routinely reviewed or rationalised in the elderly, often contributing to preventable harm. Adverse drug events and reactions account for a significant number of acute hospital presentations in this population group with increased risks of delirium, lasting cognitive impairment, falls and death. We sought to estimate the prevalence of polypharmacy and potentially inappropriate medications, anticholinergics in particular, in patients (65 years and older) referred to the St Mary's Hospital Liaison Psychiatry Department over a 3-month period.

### Methods:

Between 01/06/2019 and 31/08/2019 all referral forms (from in-patient wards and A&E) for patients aged 65+ were screened for medications currently prescribed and administered. The medications were confirmed via the St. Mary's Hospital electronic records, pharmacists' completed Medicines Reconciliation and GP Summary Care Records. Polypharmacy was defined as patients prescribed 5 or more medications. Drugs with anticholinergic properties were considered as an example of Potentially Inappropriate Medication (PIMs) using the Anticholinergic Burden Scale. 77 patients were referred in the time period. 9 were excluded due to incomplete/unreconciled medication information.

### Results:

77.94% were prescribed 5 or more medications

38.24% prescribed over 10 medications.

10.29% prescribed over 15 medications.

69% prescribed an anticholinergic.

42.65% prescribed more than 1 anticholinergic.

### Conclusions:

Polypharmacy and potentially inappropriate prescribing remain widespread within the older adult population.

On-going training and pharmacovigilance are needed across services providing care to the elderly.



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## Psychological crisis in general population: patients' profile and treatment effectiveness of partial hospitalization intervention program

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**Background.** Psychological crisis is a disadaptive emotional and cognitive response to a precipitating event, which may lead to change in behavior and interpersonal functioning. Even though crisis happens daily, as the recent spread of the CoVID-19 pandemic, there is a lack of published data on this concept in mental health and addressing interventions programs, which limits its comprehension.

**Objective.** To highlight the sociodemographic and preadmission clinical features of patients referred to the Crisis Intervention Program (CIP) of our Day Hospital, and to look over its efficacy assessing their psychopathological outcome.

**Methods:** A naturalistic retrospective longitudinal study was performed on 168 patients, assessing baseline and discharge affective symptoms, suicidal ideation and social adaptation. All patients completed the treatment, which consisted in 8 to 10 weeks of group and individual daily interventions, psychodynamic and biological oriented.

**Results:** Patients were middle ages ( $47.0 \pm 11.8$ ), and two-third were females. More than half were unemployed and perceived insufficient social and familiar support. Suicide attempt, suicidal thoughts, major depressive disorder and adjustment disorders were the main causes of derivation, only 15 patients reported no stressful events in the past 6 months. Clinical outcomes significantly improve during the treatment, demonstrating CIP benefit on affective symptoms and suicidal tendencies, but not on social adaptation.

**Conclusions:** This study highlight the sociodemographic and psychopathological profile of patients referred to the CIP and suggest a global clinical efficacy of this kind of structured therapeutic intervention. These preliminary findings add new data on the field and may impulse new more rigorous studies.

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## FIFTEEN-YEAR MORTALITY REGISTER IN A GENERAL HOSPITAL ACUTE PSYCHIATRIC UNIT. LESSONS TO BE LEARNED.

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### OBJECTIVE:

Our goal is to present a fifteen-year case register in a General Hospital Adult Acute Psychiatric Unit, as psychiatric patients are at increased risk of death from both natural and unnatural causes of death, including cardiovascular disease and suicide.

### METHODS:

A retrospective study through case-file was made to study and collect demographic characteristics of a fifteen year (2005-2020) cohort of 6000 inpatients as part of a large register on critical events in Acute psychiatric Units. A literature search on sudden unexplained death in acute psychiatric units was conducted.

### RESULTS:

Five middle aged inpatients (two women and three men) died at the acute psychiatric unit between 2005 and 2020. Circulatory conditions were the most frequent causes of death in three of our inpatients. It may be caused by antipsychotic drugs, which are known to produce cardiac arrhythmias, specially the prolongation of the QT interval. Some patients on the contrary can present acquired cardiac disease. Although it is such a rare event (five in our Unit since 1975), inpatient suicide occurred through self-suffocation with a plastic bag.

### CONCLUSIONS:

1. It is well known that exists a controversy when we talk about sudden unexplained death in psychiatric in-patients.
2. Mortality studies are necessary to create and improve preventive measures in order to decrease mortality in a population that are at risk of death.
3. Every of this five cases had been presented in our Unit current seminar on critical incident analysis, so we are able to learn and prevent future fatalities.

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## Evaluation of a Pilot Psychodermatology Service: 4 Years On

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### Objective:

Dermatology outpatients have a higher prevalence of mental illness compared to the general population. In 2012, the British Association of Dermatologists recommended that all UK regions have psychodermatology provision. In 2017, a trainee-led pilot service was proposed in Edinburgh and four years later, we evaluate its progress.

### Methods:

Specialist trainees from psychiatry and dermatology held a joint clinic monthly with consultant supervision. Referrals from consultant dermatologists were triaged, before potentially being offered initial assessment. Data were collected on demographics, reason for referral, diagnoses, waiting time for first appointment, number of appointments given, follow-up and re-referrals. Patients were asked to complete Hospital Anxiety and Depression Scale (HADS) and the Dermatology Life Quality Index (DLQI); patient experience was measured using the CARE questionnaire.

### Results:

Between January 2017–2021, 103 patients were referred for assessment. 33% of referrals were for low mood, 18% for compulsive skin picking and 11% for concerns regarding delusional infestation. The median HADS score at assessment was 19.5 (IQR 14-28) and median DLQI score of 13.5 (IQR 8.5-20.75). After follow-up these fell to 17.5 (IQR 11.75-26) and 9 (IQR 5-15.5) with an average score of 44/50 in the CARE questionnaire. The most common diagnoses made were major depressive disorder and anxiety disorder. 71% received medication, onward referral to another service or habit reversal therapy.

### Conclusion:

The psychodermatology service has been well-received and provides patients with a combined approach to their care; leading to measurable improvements in quality of life and reduction in symptoms of depression and anxiety.

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## Nineteen years of experience at the Consultation-Liaison Psychiatry (CLP) Modena's Service: Focus on urgent and non-urgent referral.

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**Objectives:** To describe synthetically 19 years of activity of the Modena CLP-Service (CLPS), with specific focus on urgent vs. non-urgent psychiatric referrals.

**Methods:** Retrospective study. All first psychiatric referral performed between 1st January 2000 and 31st December 2018 at the Modena CLPS were assessed. Variables regarding socio-demographic status, details of referral, medical and psychiatric history, outcome of psychiatric assessment, back-referral, were collected and described. Subsequently included in multivariate logistic regression with stepwise backward model. The outcome for analysis was the urgency of the requests.

**Results:** 18329 patients were referred to the CLPS; male 45%; median age 57 years old; retired in 43%. Referrals mostly came from medical wards (72%). Urgent vs. non-urgent referrals were 25% and 62%, respectively. The following were found to be variables impacting on the risk for urgent referrals: living alone (OR: 1.32; p: .001), referrals requested for suicide attempts (OR: 12.32; p: .000). When an urgent referral is requested, a psychiatric diagnosis is more likely to be formalized (OR: 1.53; p: .000), with Schizophrenia/Acute Psychosis (OR: 1.75), Personality Disorders (OR: 1.52), Delirium/Dementia (OR: 1.66) as more frequent. In case of urgent referral, prescription of rapid-effect medications, such as benzodiazepines (OR: 1.38) or First Generation Antipsychotics (OR: 1.44), or psychiatric admission (OR: 7.57) is more likely.

**Conclusions:** Schizophrenia and Personality Disorders as more likely to be associated with psychiatric emergencies. Our data outline also a sensitive issue: the aging of population. May CLPS, following its psychosomatic tradition, be the appropriate service for handling the aging-related disorders?

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Presentation of an innovative outpatient mental health service in Athens which offers holistic approach to families hit by cancer.

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<sup>1</sup>*Galen Institute of Mental Health, Cholargos, Greece*

Cancer is a disease with multiple physical and emotional effects on patients and their families alike. Although the medical follow-up is well organized once the hospitalization is completed, the outpatient psychological support in Greece is lacking. “Galen Institute of Mental Health and Personal Development”, operating as an outpatient mental health service, aspires to cover part of this gap in Athens, Greece.

Gallen’s, PNOE program aims to accommodate children, adolescents and adults who suffer from cancer as well as their family members. Employees in Galen Institute are professionals well educated to face adult and childhood psychological disorders resulting from cancer’s trajectory.

Data will be presented for the operating period, March 2018 to December 2019. In general, almost 30% of the total users present a history of cancer in their family. 132 adults and 26 children and adolescents had contacted the call center and had the first assessment appointment with a professional. 83 adults and 22 younger users currently receive regular psychiatric follow-up and/or psychotherapeutic sessions. The already completed brief psychotherapeutic interventions and the drop-outs explain the difference between intakes and present. Among youth, 4 are cancer survivors, 3 are siblings and 15 are cancer patients’ offspring. Further quantitative and qualitative data analyses and exploration of the different types of psychotherapy that are applied, seem necessary to be conducted, in terms of Institute’s presentation.

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## Consultation-liaison intervention promoting socio-professional integration of welfare assistance recipients

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**Objective:** Socio-professional integration is a central issue in developed countries, with multiple financial and socio-political implications. In the Canton of Vaud in Switzerland, multiple social and medical measures are proposed for welfare assistance recipients, to promote their socio-professional integration. These measures demonstrate their effectiveness, but the presence of mental disorders (MD) complicates their implementation, putting both recipients and social workers (SW) in difficulty.

**Method:** To address this issue, a psychiatrist advisor integrated the team of medical advisors (MA) for the SW. A consultation-liaison psychiatry model is proposed with different types of interventions regarding multiple clinical situations: 1) psychiatric evaluations based on file study without patient consultation; 2) psychiatric evaluations based on clinical exchange with the MA, who evaluated the recipient, or with the recipient's SW; 3) direct solo psychiatric consultation with the recipient; 4) Mixed consultation (somatic and psychiatric); 5) Joint consultations, between SW, psychiatrist and recipient.

**Results:** This model was efficiently implemented with an amelioration of promotion of recipients' socio-professional integration. In parallel, we noted: a) a better accessibility to MDs and their early detection; b) an optimal psychiatrist-MA collaboration; c) facilitation of SW's proposed social accompaniment, by providing advice regarding their relationship with the recipients, reducing burnout risks; d) destigmatization and prevention of chronicization of MDs. e) proposition of psychiatric training to SW.

**Conclusions:** Consultation-Liaison psychiatrist intervention for welfare assistance recipients is an effective interdisciplinary intervention, promoting mental health through the adjustment of the social proposition for the socio-professional integration of a vulnerable population suffering from MD.

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## Establishing an interdisciplinary delir-management program for multiprofessional teams in a general hospital

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## Objective:

Delirium, not caused by alcohol or other psychotropic substances (ICD-F05.-), is a common, acute, neuropsychiatric syndrome that occurs particularly in older patients with physical illnesses. There are typical risk factors and triggers that end in the common final route, a global brain dysfunction. Delirium is often not recognized in everyday clinical routine and adequate management is only initiated in 30-70% of the identified cases. Due to the often difficult therapy of a delirium and the possible far-reaching consequences for the patient, the clinical approach should focus on prevention.

## Methods:

Interventions are based on regular risk assessment, screening for early symptoms and establishing early diagnosis. Well established instruments (Delirium Observation Screening Scale, Confusion Assessment Method) are used for these procedures and additional assessment instruments were developed (risk checklist and interprofessional delirium record, “pocket card delirium” providing specific information for professionals, information brochure for relatives). An interprofessional workflow for a standardized treatment procedure was initiated.

## Results and Conclusion:

In three interprofessional training phases (“Delir 1.0 / 2.0 / 3.0”) between 2016 and 2019, ten wards have now been trained. The delirium rate at the “project units” is now below 10%. Collaborations with the team focusing on strategies for a dementia-sensitive hospital were established, a multiprofessional “delirium- training program” and specific strategies to avoid polypharmacy were developed. Awareness-raising methods (hospital TV in the outpatient clinics, delirium information in the intranet), networking activities and training courses on delirium for caregivers were initiated.

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## Specialized Psychosomatic Care in Somatic Medicine Inpatient Units

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The "Nuremberg Integrated Psychosomatic Acute Unit" (NIPA) was developed to take care of patients with complex physical diseases, for whom treatment in a standardized psychosomatic group setting is often inappropriate due to severe somatic comorbidity. Since 2018, we established NIPA on internal wards in gastroenterology, oncology and pulmonology where 1-2 patients are admitted to the NIPA concept after completion of the somatic acute care while remaining in the same inpatient bed. NIPA treatment is individualized and focused on resource activation and teaching psychosomatic disease models by a multiprofessional team, supported by the specialized medical and nursing care of the internal wards.

So far we have treated 34 patients (age range: 18-87 years, 73.5% female). 67% suffered from at least moderate depression, 51% from panic disorder. COPD, cancer, hypertension, type 2 diabetes, and coronary heart disease were the most common somatic comorbidities. Evaluation of NIPA treatment revealed significant reduction of depressive mood (PHQ) (start: M=10.59, SD=6.48, end: M=7.14, SD=5.13, p=0.02) and anxiety mood (GAD-7) (start: M=10.72, SD=5.23, end: M=7.28, SD=4.42, p=0.01). Quality of care (ZUF 8) showed that 87% of patients reported that treatment was helpful somewhat or very much in dealing with their problems and 94% of patients reported that the therapy met most or almost all of their needs.

NIPA care enables to close the gap in care for patients in need of psychosomatic treatment with complex somatic comorbidity. Evaluation and follow-up data on the effectiveness as well as economic aspects will be presented at the conference.



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## Shared decision making with Routine Outcome Monitoring using the Intermed Self-Assessment (IM-SA) at the outpatient clinic psychiatry of the Amsterdam University Medical Centres, location VUmc: a qualitative research project using focus groups.

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**Objectives** At the outpatient clinic psychiatry of the Amsterdam University Medical Centres, all members of the treatment team will be trained in the use of a model for shared decision making (SDM) with Routine Outcome Monitoring (ROM). Furthermore, they will be trained to use the Intermed Self-Assessment (IM-SA) during the SDM process to assess bio-psychosocial complexity of the patients. The IM-SA identifies constraints and obstructing or promoting factors for therapy and care.

The accompanying study aims to examine how patients with medically unexplained symptoms experience shared decision making with ROM. In addition the expectations and experiences towards the IM-SA are explored.

This project is part of a broader collaborative project organized by SynQuest, an initiative of eight mental health care institutions in the Netherlands. The whole project is subsidized by the National Health Care Institute.

**Methods** A series of three focus group discussions (FGDs) will be held. The first takes place before the intervention of SDM with ROM is implemented. 8 participants are included. The FGD is recorded and transcribed. The transcripts will be analyzed through deductive thematic analysis on the base of a thematic list, the concept decisional conflict and the theoretical domains framework. The treatment team will be asked about their experiences with the training.

**Results** The results of the first patient focus group along with experiences of the treatment team with the training and the subsequent application of this SDM model in patients with medically unexplained symptoms, will be presented.

**Conclusion** Will be presented during the conference.

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## Use of Proactive Psychiatric Consultation to Remove Barriers to the Initiation of Buprenorphine in Medical Inpatients with Opiate Use Disorder: Early Results from Dartmouth-Hitchcock Medical Center, NH, USA

Dr. Devendra Thakur<sup>1</sup>

<sup>1</sup>*Dartmouth-Hitchcock Medical Center, Lebanon, United States*

**Objective:** Opiate use disorder is a public health crisis; however, patients face barriers to treatment including stigma and prescribing regulations. At Dartmouth-Hitchcock, we sought to remove barriers to buprenorphine initiation, through our proactive psychiatry consultation service.

**Methods:** Multiple systemic changes were implemented in order to reduce barriers to buprenorphine initiation. Therapists provided initial screening, diagnosis, counseling, and motivational interviewing. Prescribers gave recommendations for the use of buprenorphine (or methadone) to treat withdrawal and also for maintenance in the inpatient setting. Providers supported patients in establishing outpatient care, to allow smooth transition to maintenance treatment. Order sets were created/modified in order to best allow for safe and appropriate prescribing, and the psychiatry service provided education to other services both formally (grand rounds, accredited training for buprenorphine prescribers) and informally (during the course of consultation).

**Results:** Throughout the implementation of this project, we have seen a steady increase in the number of providers trained to prescribe buprenorphine. Several patients have been initiated on buprenorphine maintenance (in the emergency room and on inpatient services), which is an improvement over the prior practice of not initiating buprenorphine at all outside of the outpatient setting. There has been slow, but steady, improvement in non-psychiatric providers' comfort with initiating buprenorphine.

**Conclusion:** Efforts to remove barriers to buprenorphine initiation in medical inpatients with opiate use disorder, through the use of the proactive psychiatry consultation service, have shown promising results in the form of institutional support, increased provider engagement, and positive workflow changes (i.e., e.g. in order sets).

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## Why is integrated Gynaecological Psychosomatics an successful model for women clinics?

Dr. Sophia Holthausen-Markou<sup>1</sup>

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**Objective:** This lecture aims to present our innovative concept as a model for other women clinics and to show how they could benefit from integrating gynaecological psychosomatics into their respective service ranges

**Methods:** Different gynaecological-psychosomatic treatment processes in changing settings - in the out- and inpatient clinic - will be used to illustrate the involved communication strings (including regular supervisions and interventions), i.e. their way of functioning and their influence on our patients. and relatives. Departments concerned with the treatment of perinatal and delivery, cancer and endometriosis as well as the fertility centre and the department of gynaecological psychosomatics are linked in these processes through low-threshold communication.

**Results:** Our innovative integrated concept evidently results in improved communication, reflection and resilience in the team and therefore more satisfaction, confidence and security of patients. It even can lead to prevention of chronic psychological and psychosomatic illnesses. These constructive developments appear to be of essential qualitative importance at a time of increasing specialisation and anonymisation and, in consequence, increased psychological and psychosomatic illnesses.

**Conclusions:** In keeping with the motto of the EAPM conference, "New challenges New approaches", we have shown that, for a women clinic, it is not only important to provide appropriate specialists and specialised departments, but to create networks on a daily basis in a way so that resonant relationships are maintained. If this is achieved, the results are a high level of satisfaction among patients, prevention of chronic mental and psychosomatic illnesses, and a strengthening of resilience within the team.

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## Impact of Behavioral Health Primary Care Integration on All-Cause Healthcare Utilization in Rochester, New York.

Dr. Daniel Maeng<sup>1</sup>, Dr. George Nasra<sup>1</sup>, Dr. Benjamin Lee<sup>1</sup>

<sup>1</sup>University of Rochester Medical Center, Rochester, United States

**Objective:** Seven primary care clinics located in Rochester, NY have integrated behavioral health (BH) via embedded primary care behavioral health (PCBH) model. This study seeks to assess its impact on all-cause healthcare utilization among patients with BH conditions.

**Methods:** Multi-payer health insurance claims data were obtained, covering an 18-month period from October 2015 through March 2017. Healthcare utilization were captured on a per-member-per-month (PMPM) basis, defined as all-cause outpatient emergency department (ED) visits, acute inpatient admissions, and physician office visits. The sample included patients who were 18 or older and had at least one ICD10 BH diagnosis code (Fxx.xx) and at least one visit in two or more different calendar months to the same primary care provider (PCP) during the study period (for accurate patient attribution to the PCPs), excluding those who never visited any of the BH-integrated PCPs. Multivariate regression models (negative binomial) were used to compare the PMPM observations of the patients treated by the PCPs after their respective PCBH model implementation dates against the PMPM observations of those patients treated by the PCPs that had not yet implemented the PCBH model at a given month during the study period (a stepped wedge design).

**Results:** PCBH implementation was associated with 21.6% reduction in ED visit rates ( $p < 0.001$ ); 17.7% reduction in acute inpatient admission rates ( $p = 0.007$ ); and 12.0% reduction in PCP visit rates ( $p < 0.001$ ).

**Conclusion:** BH Integration in primary care can potentially reduce all-cause healthcare utilization and therefore the total cost of care if adopted in large scale.

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## Report of the first national survey of consultation-liaison psychiatry in France

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CLP practices in France are diverse. There has never been any inventory of CLP services on a national level.

**Objective:** To have a general picture of CLP services in France.

**Method:** The methodology was inspired by England's Survey of Liaison Psychiatry. CLP teams were contacted using the French Liaison Psychiatry Network (FLPN) mailing list (n=50) and by researching additional teams' contacts online. The teams that were not prior members of the FLPN were contacted by phone (n=34). An online questionnaire was sent to one representative of each CLP team (n=84).

**Results:** 27 CLP teams answered the online questionnaire between November 2019-January 2020. 56% of them were part of emergency psychiatry units. The regular intervention delay was <12h (23%), <24h (31%), <48h (23%), <72h (19%) and 3-7 days (4%). 70% were opened 5 days/week. The mean FTE of mental health professionals was 3.8 (sd=4), and 1.5 (sd=1.8) for psychiatrists. 11% of participating teams had no psychiatrist, 78% had either at least one part-time nurse (59%) or psychologist (26%) and 7% had both. 44% had at least one resident. In the comments, 5 participants mentioned that having a nurse member helped communication with referring teams. All the participants that mentioned struggling with inappropriate referrals (n=5) did not have a psychologist on the team. Larger teams were associated with lower intervention delays ( $r=-0.43$ , IC95%[-0.05;-0.70]).

**Conclusion:** This first national survey gives an overall view of the strengths and limitations of CLP services in France. Developing FLPN may raise CLP teams interest and lead to better nationwide participation in future studies.

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## Multimodal psychosomatic care in a medical care center

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**Objective:** The development of morbidity with increasingly frequent functional physical diseases, somatoform disorders and various other mental illnesses makes it necessary to improve access to the medical system for those affected. The controlled staged care is an idea that has been realized for many years in the Medical Care Center for Physical and Mental Illnesses in Cuxhaven (Germany).

**Methods:** The data collection and evaluation for the years 2008 to 2014 was carried out with Cibait, a test and documentation system for psychotherapeutic practices with regular tests or patient surveys. The test instruments used were the ICD-10-Symptom-Rating (ISR) for clinical syndromes and the Hamburg Moduls (HEALTH-49) for psychosocial variables. In addition, the progression outcomes of patients with different treatment approaches were compared and factors influencing the course of treatment were examined.

**Results:** The Medical Care Center reached significantly more patients with low social status than the average guideline psychotherapy. The therapies conducted consisted of 26% guideline therapies and 73% other forms of therapy (movement-oriented creative therapies 23%, low-threshold psychiatric contacts 18%, relaxation techniques 18%, nutrition consultancies/therapies 14%). Participants of a guideline treatment did not differ significantly in their test psychological course from participants of the primarily non-linguistic treatment offers. The outpatient multimodal care concept is considered an interesting addition to the german health care system.

**Conclusion:** According to current research results, the concept of multi-professional psychosomatic care practice across generations is effective, more socially just and represents an interesting alternative to current care.

## Depressive disorders

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### The opportunity of electroconvulsive therapy in bipolar affective disorder

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#### Objective:

For the management of a bipolar affective disorder difficult case, the literature demonstrates that ECT reduce the risk of relapse and recurrence, prolong the duration between hospitalizations, maintain well-being, increase quality of life for TAB with rapid cycling, catatonia, major pathological depression.

- Demonstration of ECT efficacy performed with sedation under Propofol 1.5 mg / kgc on a group of 30 psychiatric patients with TAB, whose evolution improved significantly even after the second ECT session.
- Minimization of ECT risks performed under sedation.

Results: The preparation is done by administering atropine for drying salivary and bronchial secretions, preventing bradycardia; a short-acting anesthetic and a muscle relaxant; oxygen ventilation to reduce subsequent amnesia. The confusing post-therapy syndrome is a link in the mechanism of action and disappears 30 minutes after the intervention.

Less obvious memory disorders persisted for up to four weeks. In 38% of cases there was retrograde amnesia of the events that preceded the electroshock therapy, but also anterograde, after TEC.

The literature postulates a mortality of 1 / 20,000.

The mechanisms of action of electroconvulsive therapy are:

- Increases the response of postsynaptic serotonergic receptors;
- Strengthens dopamine mediated connections;
- Influences norepinephrine activity;
- Regulates the activity of postsynaptic  $\beta$ -adrenergic receptors.

Conclusion: Following the study performed in our clinic, after four weeks of ECT treatment, the remission of symptoms was observed in 70% of patients treated with 8 electroshock sessions performed with pulsating current (1 msec), 800 mA, current frequency 30 Hz, pulse duration 8 sec.

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## Drug-Induced Brugada Syndrome In a Middle-Aged Female Patient Suffering From Depression and Chronic Pain Syndrome

Dr. Frank Meissner MD<sup>1</sup>, Dr. Cynthia Garza JD MD<sup>1</sup>

<sup>1</sup>*Project Vida Community Health Center, El Paso, United States*

**Objective:** To enhance awareness in psychiatrists for the potential for psychotherapeutic drugs' to induce a highly lethal cardiac electrophysiological syndrome - Brugada Syndrome (BrS) by reporting a patient's development of the EKG features of BrS, i.e., RBBB pattern with  $\geq 2$ -mm coved ST-segment elevation in the right precordial leads (V1-V3).

**Methods:** Case report and literature review.

**Results:** There were 74 identified and reported non-cardiac drug-induced BrS patients in the cumulative world literature. Drug exposure duration prior to detection of cases was weeks - years. The most frequently reported oral agents were lithium and amitriptyline accounting for 20% and 16% of cases respectively. Our patient had a normal EKG at the start of therapy five years previously. After five years of successful psychopharmacological therapy, she presented to an Emergency Department (ED) complaining of transient dizziness, and the ED EKG obtained during workup showed Type I BrS.

**Conclusion:** 1. Drug-Induced Brugada Syndrome (DIBrS) while rare, has a high risk of SCD, i.e., 13% of patients included in the referenced review sustained cardiac electrical death by sudden ventricular fibrillatory arrest. 2. Baseline EKG analysis is insensitive to the detection of a patient at risk for developing DIBrS. 3. Additionally, there remains an inability to define pre-exposure predictive markers on baseline EKGs necessitating serial EKG surveillance. 4. We recommend serial EKG evaluation at 1 month, 3 months, 6 months and annually thereafter when the patient is on a drug known to result in DIBrS as a reasonable and defensible follow-up plan.



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Treatment of depressive symptoms in dialysis patients:

## A systematic review and meta-analysis

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### Background

Symptoms of depression are highly prevalent and undertreated in dialysis patients. To aid clinicians in offering treatment to their patients, we conducted a systematic review and meta-analysis on the treatment of depressive symptoms in dialysis patients.

### Design

Multiple databases were searched on January 9th 2019 for RCT's on the treatment of depressive symptoms in dialysis patients. After abstract selection and full text screening, articles were included when 1) dialysis patients scored above a cut-off for depressive symptoms, 2) patients were randomized, and 3) the study included a care as usual or inactive comparison. All interventions aimed to treat depressive symptoms were accepted for inclusion. Study quality was assessed using the Cochrane risk of bias tool.

### Results

Fifteen studies were included in the systematic review (n=1537). Twelve studies could be included in the meta-analysis. A pooled analysis of 7 studies on psychotherapy showed a standardized mean difference of -0.48 [-0.87 ; -0.08], with a moderate heterogeneity (I<sup>2</sup> of 52%). A pooled analysis of two studies on SSRI's without psychotherapy showed no statistically significant improvement of depressive symptoms (-0.57 [-6.17; 5.02], I<sup>2</sup>=71%).

### Conclusions

Psychotherapy is a promising treatment for depressive symptoms in dialysis patients, although quality of evidence is low. Very low quality evidence suggests a lower effect size of SSRI's on depressive symptoms in dialysis patients compared to the general population. Given the large burden of depressive symptoms in dialysis patients and its proven effectivity in other populations, it is advisable to offer psychotherapy to dialysis patients with depressive symptoms.

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## Gender differences in food intake in patients with depressive disorders

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### Background

There is few published information about the food intake of patients with psychiatric disorders in Austria. Even in Europe, only single studies in Turkey and Poland are available (Kaner et al 2015, Stefanska et al 2017). Due to the lack of data from patients with depression about their eating habits we performed a study in individuals with affective disorder in a depressive episode concerning their food and drink consumption.

### Method

The data was collected from inpatients at the Department of Psychiatry and Psychotherapeutic Medicine at the Medical University of Graz from July 2017 until August 2018. The validated “Food Frequency Questionnaire” (FFQ) was used to assess eating habits. Various clinical variables were available for the analysis; furthermore, gender differences were calculated.

### Results

In this study, 82 patients with a current depressive episode were included. Out of them, 60 patients (45 women and 15 men) filled out the FFQ completely and got part of the statistical analysis (mean age= 41 years (SD+/-12,92)). The mean body-mass-index was 25,6 kg/m<sup>2</sup> (SD+/-5,98) in women and 27 kg/m<sup>2</sup> (SD+/-6,26) in men. There was a significant difference between women and men in the consumption of meat and sausages (U=187,500; p=0,010).

### Conclusion

This is one of the first studies to analyze eating habits of patients with depressive disorders in Austria. This results should be a start for further surveys about the food intake in patients with psychiatric disorders.

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## The clinical effectiveness of patient-oriented depression feedback in primary care – the empirical method of the GET.FEEDBACK.GP multicenter randomized controlled trial

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GET.FEEDBACK.GP is a multicenter randomized controlled trial testing the effectiveness of patient-oriented depression feedback in primary care. Depression severity six month after feedback is the primary outcome and we manipulate who will be the target of the feedback: patient and general practitioner, general practitioner only, or no feedback. The procedure includes a baseline assessment in primary care practices and three telephone follow-up interviews after one, six, and twelve months.

Patients in general practice were randomly selected and invited to participate. They completed the baseline assessment, which determined depression severity. Patients with at least moderate depression (PHQ-9  $\geq 10$ ) were then allocated to the three groups and either did or did not obtain written feedback about depression severity. The patients responded to primary and secondary outcomes at follow-up.

The extensive planning of GET.FEEDBACK.GP, involving diverse medical specialties and external corporations, realized highest methodological and data-safety standards. These were (a) blinding of study inclusion and random assignment with a data capture software, (b) a representative and un-biased patient selection in the practice waiting rooms, (c) data management and safety plan supplied by a specialized company, and (d) use of participant pseudonyms supplied by a specialized service (Mainzliste). This methodological contribution focuses on method details – their strengths and limitations. Data collection for GET.FEEDBACK.GP started in July 2019 and continues until June 2021. Data will be collected by five university study centers in Germany.

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## Music interventions for dementia and depression in elderly care (MIDDEL): Multinational trial of effectiveness and predictive biomarkers

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**Objective:** In older adults, comorbid dementia and depression are associated with individual distress and high societal costs. Music interventions such as group music therapy (GMT) and recreational choir singing (RCS) have shown promising effects, but their comparative effectiveness across clinical subgroups is unknown. This trial aims to determine effectiveness of GMT, RCS and their combination for care home residents and to examine heterogeneity of treatment effects.

**Methods:** This large, pragmatic, multinational cluster-randomised controlled trial with a 2x2 factorial design will compare the effects of GMT, RCS, both or neither, for care home residents aged 65 years or older with dementia and depressive symptoms. We will randomise 100 care home units with  $\geq 1000$  residents in total across eight countries. Each intervention will be offered for 6 months. The primary outcome will be the change in the Montgomery-Åsberg Depression Rating Scale score at 6 months. Secondary outcomes will include depressive symptoms, cognitive functioning, neuropsychiatric symptoms, psychotropic drug use, caregiver burden, quality of life, mortality and costs over at least 12 months. The study has 90% power to detect main effects and is also powered to determine interaction effects with gender, severity and socioeconomic status. Biological stress markers will be analysed as potential predictors of change.

**Results:** Baseline results from one country obtained so far (>300 residents) suggest that the study procedures are feasible. GMT and RCS are feasible even with late-stage dementia (CDR>2).

**Conclusions:** Results from MIDDEL will enable more evidence-based provision of music interventions in care homes for older adults.

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## Mother's Mind Matters: Early Detection and Effective Treatment of Perinatal Mood Disorders in Community Settings with Low Resources.

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Women are twice as likely to be depressed during their reproductive years as men of the same age, and are especially vulnerable to depression during pregnancy and the postpartum period. It is estimated that 12.7% of women screen positive for depression during pregnancy, increasing to 21.9% during the 12 month postpartum period. Undetected or untreated depression can threaten the outcome of pregnancy, may lead to chronic psychiatric difficulties and even having life long emotional impact on offspring. Providers often feels unprepared to properly screen and triage depressed women and to provide safe and effective care for pregnant and lactating women.

During this workshop we will share the dilemmas of lack of screening and treatment we faced in our community like most non-urban US communities. The Mother's Mind Matters project, funded by the Blue Cross Blue Shield of Michigan Foundation, was a County wide educational project that advocated for early and frequent screening for PMD and referral of women during prenatal through postpartum care. An educational campaign was devised and implemented successfully to reach out to primary care providers, OB/GYN providers, pediatricians, psychiatrist, residents (FM, Peds, psychiatry), psychologist, social workers, nurses and other providers in the community. Our educational initiative reached closed to 1000 health care providers and enhanced screening practices and treatment significantly. By sharing pre and post statistics of our project which utilized existing infrastructure and manpower we would help energize the participants to think of ideas to do the same in their own ways in their own communities.

## New media and E-Therapy

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### Telepsychiatry --Past , present and future

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Objective : 1:To demonstrate the need for Telepsychiatry as a unique and necessary modality of treatment .

2:To review evidence based approach on utility of Telepsychiatry in Psychosomatic Medicine .

3:To identify innovative ways in which Telepsychiatry can be used in the future to address the deficit in resources

#### Methods:

Literature review - A search was conducted on the MEDLINE, PsycINFO, and Telemedicine Information Exchange (TIE) databases for literature published from April 2000 to April 2019 on telepsychiatry applications, using the following terms: telepsychiatry, population health , innovation , collaborative care , integrated medicine.

Results :Studies describing existing programs and novel clinical applications support the belief that the use of telepsychiatry is expanding. Overall, studies continued to support the notion that telepsychiatry assessments can produce reliable results and can lead to improved clinical status.Studies support efficacy and utility of Telepsychiatry in collaborative care models as a way to effectively bridge the gap to access to care.Evidence supported the notion that telepsychiatry is a cost-effective means of delivering mental health services .

Conclusion: Telepsychiatry serves an important modality of delivery of care to communities with shortages in psychiatry care resources . Several collaborative models have been implemented using Telepsychiatry to address population health and preventive care .With ongoing innovation of Tehcnology the field sets to dynamically change the way psychiatry will be practiced in the future .

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## Social Media and Its Benefits To Build Psychosomatic Medicine Awareness in Indonesia

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**Introduction:** Social media has become one of the fastest-growing communication media in Indonesia. Its use for various purposes has been found to be very useful.

**Objectives:** To know the usefulness of my social media contents in delivering mental health information

**Methods:** We gather information from the public using surveymonkeycom started on May 1st, 2017 until

September 30th, 2017. We asked them to fill the survey form about their activity in social media and their opinion about our psychosomatic and mental health awareness information.

**Results:** 395 respondents conducted the survey. 94.9% ( respondents) checked their social media accounts every day. Half of respondents are 18-29 years old range. 47.09% of respondents using social media every day to access health content on the internet. Most of the respondents (47.8%) accessed my Facebook account and 47.55% accessed my Twitter. Our survey used a self-assessment that used point (mentioned as a star from range 1 to 10, 1: least benefit, 10: very strong benefit ). My Facebook account seemed to be the most popular social media that attracted people to get information about psychosomatic and mental health. followed by my blog in Kompasiana Citizen Journalism and my Youtube channel. Respondents found my contents in social media to be useful with the points of 8.3 and add some knowledge to them with the 8.5 points.

**Conclusions:** Facebook, Twitter, and YouTube channel were still to be the most social media that respondents thought to be informative to spread the awareness of psychosomatic issues and mental health.

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## Understanding of graphical presentation of eROM results in psychosomatic patients and health-care professionals

**Dr. Timo Kachel<sup>2</sup>**, Mag. Jonas Egeter<sup>1</sup>, Linda Rau<sup>1</sup>, Fanny L. C. Loth<sup>1</sup>, Prof. Dr. Katharina Hübner<sup>1</sup>, Prof. Dr. Bernhard Holzner<sup>3</sup>, Prof. Dr. Barbara Sperner-Unterwieser<sup>1</sup>

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### Background:

An important goal of modern health care is the involvement of patients in the respective treatment, which can improve treatment. The importance of knowing the patient's perspective is a major step towards successful treatment. One way to support and improve patient involvement is to collect outcome data via an electronic routine outcome monitoring (eROM) and discuss it with patients. However, for patients to benefit, it is important to ensure that both, patients and health-care professionals (HCPs) understand the data collected.

### Objective:

The overall aim of this project was to investigate the understanding of presented graphs in psychosomatic patients and HCPs.

### Methods:

Four exemplary scales embedded in semi-structured interviews were presented to patients and HCPs. In addition, the general attitude towards a regular participation in eROM was recorded, as well as the preferences regarding feedback on the respective routine monitoring results.

### Results:

First results (N=40) show that 92.5% of patients rated the graphs as 'very easy' to 'rather easy' understandable and 55 to 67.5% reported that the graphs matched their personal perception of symptoms 'very much'. The majority of patients (85%) rated weekly assessments as the ideal time interval. Regarding the HCPs (N=13) we could show that 100% rated the graphs as 'very easy' to 'rather easy'.

### Conclusion:

The graphical understanding of eROM results in psychosomatic patients and HCPs is high. The access to routine monitoring results allows a better integration of the patients in decisions relevant to treatment and contributes significantly to patient empowerment.



## Prevention and early treatment

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### Psychiatry's Role in Prevention of Post-Intensive Mental Health Impairment: A Stakeholder Survey

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<sup>1</sup>Mayo Clinic, Rochester, United States

**Objective:** Many critical illness survivors develop new or worsening mental health impairments. No reliable preventative interventions have been identified to date. We sought to gather opinions regarding the role of psychiatry in potential interventions.

**Methods:** An anonymous, web-based survey was sent to critical care and psychiatry physicians and advanced practice providers; bedside nurses; physical and occupational therapists; and pharmacists who work in ICUs at a large, tertiary center in Minnesota, United States.

**Results:** 360 unique responses were obtained. 70% considered integration of psychiatry into the ICU team as having the most potential to improve patients' mental health outcomes through early psychological support, pharmacologic management, empowerment, improvement of patients' communication with the primary team, and identification of psychiatric impediments to recovery. 84% thought psychiatry could help families better understand patients' emotional needs and/or delirium. 71% felt psychiatric integration could reduce ICU provider burnout. 90% believed that sedated patients can hear speech, remember some of what is said around them, and sense the emotional atmosphere of the room. 60% wished a psychiatrist at bedside if they or their loved one were a patient; 25% would like a psychiatrist available. 86% would like greater psychiatric involvement in the ICU, including a permanent position on the ICU team; 40% acknowledged family distress at the presence of psychiatry as a possible barrier.

**Conclusions:** A more consistent psychiatry presence in the ICU was identified as a potentially beneficial intervention by those who currently work closely with ICU patients. Psychiatric interventions in the ICU warrant further study.

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## Executive and Memory Support System Training for Cognitively Unimpaired Older Adults at Risk for Dementia

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**Objective:** Our presentation will detail the content and preliminary results of a novel compensatory training program that intervenes to benefit both everyday memory and executive function in individuals at risk for cognitive decline, namely those unimpaired older adults with subjective cognitive complaints (SC).

**Methods:** Participants age 50 or older with SC and largely referred from a primary care clinic were randomized to either 1) get the information via patient education materials or 2) get the information via patient education materials and participate in an in-person class intervention administered over 10 weeks in 2-hour weekly sessions provided in a group format. Components of the program include: 1) Everyday compensatory and support training; 2) Goal Planning; 3) Organization Systems for the Environment; 3) Healthy lifestyle training engagement (Physical exercise, Cognitive stimulation, and Stress management). Data is collected by a research assistant blind to participant status (experimental or control). Hypothesized primary outcomes include significant improvement in compensation strategy use, physical activity, cognitive activity, and use of stress management techniques. Secondary outcomes expected are improvement in everyday function, cognition, and measures of emotional health.

**Results:** 21 participants (average age 68 years, 14 female) enrolled. The in-person classes will be completed March, 2020.

**Conclusion:** This training is innovative in: 1) directly targeting the support of functional capacities; 2) utilizing compensatory training to also bolster engagement in other healthy lifestyle activities that support brain health and better function, and 3) targeting an at-risk population who is motivated and capable of learning new behaviors to forestall decline.

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## Health behavior predicts life satisfaction and vice versa in a follow-up of 9 years

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**Objective:** The cross-sectional association between life satisfaction and various health behaviors is well-established. The aim of the present study was to explore the longitudinal association of health behavior and life satisfaction, i.e. which precedes the other one more strongly, over nine years (2003 – 2012).

**Methods:** Health behavior was given as a sum score (range 0–4, dietary habits, physical activity, alcohol consumption and smoking) and life satisfaction as a composite measure (range 4–20, interest and happiness in life, ease of living and loneliness). Data (n = 10,000) originated in postal survey responses of a population-based random sample of working-age Finns in the prospective Health and Social Support study (HeSSup).

**Results:** Linear regression modelling analysis showed that better life satisfaction predicted higher number of beneficial health behavior after 9 years even after adjusting for age, gender, education, baseline self-reported diseases, baseline health behavior and interaction between life satisfaction and education. Compared to results of a preceding study with linear regression analysis of the same data in an opposite direction, life satisfaction was a more precise predictor on health behavior than vice versa.

**Conclusion:** Our study suggests that psychological constructs such as life satisfaction has long-term positive effect on health behavior and vice versa. Our results widen the perspective of factors influencing health behavior and suggests inclusion of positive psychological constructs in health behavior interventions.

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## Personalised self-management support programme for diabetes and coronary heart disease (Personalisiertes Selbstmanagement Unterstützungsprogramm): P-SUP study protocol

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## Objective

Disease management programmes successfully help patients in dealing with their disease. Nonetheless, patients could benefit from these programmes even more by enhanced self-management. This project aims to support patients with type 2 diabetes and coronary heart disease in a multimodal stepped care programme funded by the German Innovation Fund (8.5 million Euro). The Innovation Fund is administrated by the Federal Joint Committee (G-BA), which is in charge for deciding which healthcare services are covered by the German statutory health insurance funds.

## Methods

The programme comprises peer support groups (PSG) with weekly meetings for joint physical activity and monthly sessions focussing on subjects including nutrition and motivational support. The PSG leaders are patients with one or both of the above-mentioned diseases trained by the project group. In the PSG meetings, they will support health behaviour changes together with experts. Additionally, an online platform will be established, personalised for PSG attendees and PSG leaders. It will provide evidence-based information on physical activity, nutrition and motivational support. Furthermore, patients will receive personalised feedback reports by their general practitioners. Patients with decreased health literacy and low activation level additionally receive (bi-)monthly telephone coaching by trained mentors. Elements of the coaching are: Motivational Interviewing, Shared Decision Making, Collaborative Goal Setting, development and implementation of intention.

## Results

The study protocol for a multicentre randomised controlled trial with 1664 patients will be presented. Primary endpoint is the number of hospitalisations.

## Conclusion

If the programme is successful, the G-BA will consider its implementation into routine care.

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## Psychological variables associated with HPV vaccination intent in Romanian academic settings

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### Objective:

HPV vaccination, despite its health benefits, is not frequent in many countries, including Romania. This study aimed to establish the contribution of knowledge about HPV infection, health locus of control (HLOC), coping strategies, and sense of coherence (SOC), to the intention of HPV vaccination in a nationwide academic sample.

### Methods:

Participants included 1420 women (mean age = 21.42, SD = 2.05 from 12 academic settings). They were administered The Multidimensional Health Locus of Control (MHLC)-Form A, Brief COPE Scale, Sense of Coherence Scale (SOC-13), Waller's questionnaire of knowledge about HPV, and Stein's measure to assess the stage of change. Hierarchical linear regressions and t tests were performed to assess the effect of the independent variables on the intention to get vaccinated.

### Results:

249 (17.53%) of the participants refused the idea of vaccination, 209 (14.71%) were in the precontemplation phase, 609 (42.88%) in contemplation, 326 (22.95%) in preparation, and 27 (1.90%) in the action phase. HPV vaccination intent correlated to the study field ( $F=13.246$ ,  $p<.001$ ), with Medicine students displaying higher scores than the others ( $t=5.909$ ,  $p<.001$ ). Positive reinterpretation ( $p<.03$ ) acted as a predictor to the vaccination intention only in medical students, while health locus of control played such a role in both medical and non-medical students ( $p<.001$ ). Knowledge about HPV and coherence were not significantly related to the HPV vaccination intent.

### Conclusion:

Counselling strategies focused on coping strategies and health locus of control could be potentially useful, among other educational tools, in improving the HPV vaccination intent in academic settings.

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## Thought suppression against Food Craving? First results regarding the impact of Inhibitory Spillover on eating behavior

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**Objective:** Inhibition deficit is part of many different psychological disorders. Linked to a reduced inhibition ability is the phenomenon of Food Craving which has a high impact on eating behavior. With the paradigm of Inhibitory Spillover there is the possibility to improve inhibition ability in simultaneous tasks. The present study experimentally investigates the use of Inhibitory Spillover to enhance inhibitory control in the form of eating behavior.

**Methods:** In a between subject design 92 participants are allocated to one of two different experimental conditions: During writing down their thoughts, one half of the participants performs a thought suppression task, while the other half does not perform thought suppression and may write down all their thoughts. Participants follow their respective instruction until the end of the experiment. To measure the effect of the manipulation applied, the eating behavior is measured by eaten calories in a bogus taste test.

**Results:** First results of the efficacy of Inhibitory Spillover on the eating behavior of persons with normal weight are presented. Covariates such as a preload through a standardized breakfast or level of restraint eating will be taken into account.

**Conclusion:** The improvement of the inhibition ability represents a very interesting starting point for eating behavior change. The results are discussed in the context of cognitive theories on eating disorders and inhibition in general. Further steps may be the use of the Inhibitory Spillover paradigm for changes in the eating behavior of persons with overweight.

## Psychometry and psychodiagnostics

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### Take a licking and keep on ticking – Scoping conceptual difficulties of resilience instruments

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**Objective:** Despite a proliferation of resilience research in mental health science, some concerns regarding the clarity and utility of the term resilience are still unresolved. The aim of this scoping process was to evaluate how the concept of resilience is assessed in adult health research.

**Methods:** A health related database (PubMed) and reviews on instruments measuring resilience were screened. Additionally, relevant articles were hand-searched. All resilience instruments that met the inclusion/exclusion criteria were included regardless of psychometric rigor. The final number of considered resilience instruments was 24. Definitions, theoretical background and resilience factors were extracted from each article and a thematic analysis was conducted.

**Preliminary results:** Though all scales drew on original definitions of resilience, very few articles provided their own definition. Several scales described multiple definitions without discussing which definition was taken into account. Overall, only a few articles described a comprehensive resilience concept as a theoretical background. The most commonly assessed themes related to personal variables with factors of (emotional) coping, adaptability, persistence, social competences, positive outlook and a sense of agency being predominant. In the relational category, two themes were identified: social support and positive relationships.

**Conclusion:** Inconsistencies associated with the definition, theoretical background and operationalization need further conceptual development. Thus, resilience scales can only provide a selective estimation of contributing resilience factors rather than a valid assessment of a global construct. Study outcomes between different resilience instruments should not be compared easily.

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## The Baycrest Quick-Response Caregiver Tool: A Novel Non-Pharmacologic Intervention for Caregivers of Family Members with Responsive Behaviors

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<sup>1</sup>Baycrest, Toronto, Canada

### Objective:

The emotional state and stress level of caregivers are significant contributing factors to the development and worsening of responsive behaviours which may lead to burnout. Caregivers require training in effective easy-to-use techniques to help lessen these problems. This study aims to determine the feasibility and effectiveness of the Baycrest Quick-Response Caregiver Tool (BQRCT) through videos, a pocket guide and an instruction manual to assist caregivers of family members with responsive behaviours. A secondary goal was to obtain feedback from healthcare providers regarding the usefulness and scalability of the tool.

### Methods:

Family caregivers completed an online pre-survey collecting baseline measures before viewing BQRCT. Within two weeks of viewing the online tool, a research assistant conducted a feasibility survey with the caregiver over the phone. Four weeks later, caregivers completed an online post-survey collecting their feedback. Healthcare providers completed only one online feedback survey after viewing the tool.

### Results:

Caregivers learned effective approaches and were able to implement the strategies presented. Healthcare providers reported that the tool would be helpful in their practice. Both caregivers and healthcare providers would recommend the tool to other caregivers.

### Conclusion:

Although other tools exist, BQRCT focuses on the emotional and cognitive responses of caregivers to generate improved empathic interactions and lessened caregiver burden. Through an intuitive online platform, BQRCT serves as a feasible self-management tool that caregivers can use from home to help manage responsive behaviours. For healthcare providers, it is an important tool to educate and assist family members.



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## Validation of PROMIS Computer Adaptive Testing Depression Item Bank in Patients with End Stage Kidney Disease

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### Objectives:

To evaluate the reliability and validity of the Patient Reported Outcomes Measurement Information System Depression computerized adaptive test (PROMIS-D CAT) item bank in adult patients with End Stage Kidney Disease (ESKD).

### Methods:

Adults with ESKD completed the PROMIS-D CAT and Patient Health Questionnaire (PHQ-9) on an electronic data capture platform. Socio-demographic and clinical data was collected from the medical records. Construct validity was assessed using Spearman's Rho and known groups comparisons; test-retest reliability using intra-class correlation (ICC). Receiver operating characteristics (ROC) analysis was used to assess discrimination of PROMIS-D CAT for moderate/severe depression, defined as PHQ-9  $\geq 10$ .

### Results:

Mean(SD) age of the 192 participants was 53(17) years, 67% male, 57% Caucasian, 19% on dialysis. Based on the PHQ-9, 18% reported moderate/severe depression. The PROMIS-D CAT and the PHQ-9 were moderately correlated ( $r=0.67$ ). Test-retest reliability was good (ICC=0.73). Patients with Charlson Comorbidity Index  $\geq 4$ , compared to  $<3$  tended to have higher mean(SD) PROMIS-D CAT scores (50(7) vs 48(8);  $p=0.08$ ). Similarly PROMIS-D CAT scores were higher for patients with an Edmonton Symptom Assessment System score  $\geq 30$  compared to  $<30$  (56(7) vs 47(8),  $p<0.01$ ). Discrimination for PROMIS-D CAT was excellent (area under the curve 0.88 [95%CI: 0.81, 0.95]). The cut-off for moderate/severe depression for PROMIS-D CAT was 54 (Sensitivity:88%, specificity:82%, positive predictive value:0.5, negative predictive value:0.97).

### Conclusion:

These results provide new evidence about the validity and reliability of PROMIS-D CAT in ESKD patients and support its use in research and care.

Psycho-oncology

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"Patient's little helper": haemato-oncological patients' strategies for managing their disease- and treatment-related symptoms

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**Objective:** With recent improvements in early detection, diagnosis and treatment of cancer, new challenges in cancer survival have emerged, such as long-term care and symptom management. These developments are placing new demands on patients who are expected to assume a greater role in managing their own health as well as disease- and treatment-related symptoms. Supporting self-management can be incorporated into clinical care, thereby enhancing the efficiency and effectiveness of patient care. This study aims to explore strategies haemato-oncological patients and survivors employ for self-managing their disease- and treatment-related symptoms, including the use of online patient portals.

**Methods:** Individuals from one designated cancer centre in Austria (Innsbruck) were selected via purposeful critical case sampling method and interviewed about self-management strategies based on a semi-structured interview guideline. Interviews were audio-recorded, transcribed verbatim and analysed using directed content analysis (via NVivo 12.1 Qualitative Analysis Software).

**Results:** Data from eighteen individuals (44% female, mean age 67 years, SD 13) was included into analysis. Various self-management strategy types (encompassing multiple specific strategies) were identified in preliminary analysis. The most frequently used specific strategies were adaptive approaches to ongoing physical as well as psychological consequences of oncological treatment and maintaining a positive outlook. The necessity of patient engagement in the development and application of online self-management tools became apparent.

**Conclusion:** The study identifies strategies supporting haemato-oncological patients and survivors to self-manage treatment-related challenges. This information will inform the design and development of self-management interventions tailored towards this vulnerable patient population.

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## Patient-Reported Outcomes in Hemato-Oncology: Use of an Electronic Psycho-Oncological Screening in Clinical Routine

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Approximately one-third of oncological patients are reported to suffer from psychosocial distress, constituting a relevant problem both clinically and economically. Treatment guidelines suggest the use of routine screening tools to identify patients in need of psycho-oncological treatment. This study aims to evaluate the results of the electronic psycho-oncology screening and its usage for clinical action by health-care professionals (HCPs) at the outpatient unit of the Department of Hemato-Oncology Innsbruck.

Since July 2019, the Hornheider Screening Inventory (HSI) is used to complement the electronic patient-reported outcome (ePRO) assessments for the Austrian Myeloma Registry at the hemato-oncology outpatient unit. Patients complete the HSI in three-month intervals during routine ePRO assessments on quality of life.

Out of 652 ePRO assessment time points since July 2019, N=221 assessments included an HSI. Of those, n=73 (33%) resulted in a score above the cut-off for clinical relevance. In n=9 (4%) assessments, patients expressed the wish to talk to a psycho-oncologist. Resulting actions by HCPs were either low-threshold information about the possibility of psycho-oncological treatment n=53 (72%), referral to psycho-oncology n=10 (14%) or other n=10 (14%). Men and women did not differ in reported distress. Average time for HSI completion was 2.2 min. (of 9.2 min. total assessment time).

The electronic psycho-oncology screening is feasible for the outpatient setting. The portion of distressed patients as measured by the cut-off conforms with current literature. Psycho-oncological screening and patients' individual wish for psycho-oncology as assessed with ePRO can initiate clinical action and triage. Further clinical implications will be discussed.

## Psychopathology

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### Prevalence of depression and suicidal ideation in patients with schizophrenia from a LMIC

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#### Objectives:

Depression has long been considered a significant feature of schizophrenia and is associated with more frequent psychotic episodes, increased duration of illness, substance misuse, poor quality of life and completed suicide. People with schizophrenia have a shorter life expectancy than the general population by approximately 14.5 years, a proportion of this excess premature mortality being attributed to suicide and unnatural deaths. However, there is a significant lack of literature from low and middle income countries or non-western cultural backgrounds.

#### Methods:

This is a cross-sectional analysis of baseline data from a large randomized controlled trial to examine the prevalence of depression and suicidal ideation in patients with schizophrenia spectrum disorder. A total of 298 participants were recruited from inpatient and outpatient departments of psychiatric units in Karachi, Pakistan. Participants completed Calgary Depression Rating Scale (CDRS).

#### Results:

The data suggested that 36% (n=107) of all patients in the study were depressed and 18% (n=53) had reported suicidal thoughts.

#### Conclusions:

Depression in schizophrenia is frequent has a strong association with suicidal ideation in a Pakistan population. Focusing on the evaluation of depressive symptoms in schizophrenia as a means of risk assessment may help identify patients at higher risk of completed suicide, opening the door for targeted interventions to improve outcomes in this patient group.

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## Valproate-Induced HyperAmmonemia Delirium: A Case of Refractory Agitation

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**Aims:** To raise awareness of Valproate-Induced Hyperammonemia Delirium (VIHD) and prepare clinicians to better recognize and treat this condition.

**Methods:** A 57-year-old female with Bipolar disorder Type 1, Alcohol Use disorder, Neuroleptic Malignant Syndrome and Posterior Reversible Encephalopathy Syndrome (PRES), admitted to in-patient psychiatry, who developed sudden onset of hyperactive delirium.

**Results:** A full medical workup including infectious, metabolic, autoimmune, neurologic and endocrine was inconclusive. Delirium continued to escalate despite multiple interventions, including empiric treatment with antibiotics, discontinuation of neuroleptics, correction of metabolic deficiencies and others. Patient became autonomically unstable and required transfer to ICU. Patient required dexmedetomidine drip to stabilize severe aggression and agitation. Chart review suggested serum ammonia as borderline elevated (57 $\mu$ /dL-61 $\mu$ /dL) and literature search suggested VIHD as a possibility. As a result, valproate was tapered and then discontinued over 3 days. Gradual improvement in mental status was noted and agitation resolved within 7 days.

**Conclusion:** Valproate is a commonly used drug with a therapeutic range which if exceeded can cause toxicity. However, in rare cases, patients can develop delirium related to valproate, in the setting of normal serum levels with the only abnormality being elevated ammonia. It can mimic mood and psychotic illnesses which can often derail appropriate diagnosis and treatment. Risk factors for VIHD include: high initial dose, chronic therapy and concomitant medicines such as antipsychotics or anticonvulsants. Discontinuation of valproate usually coincides with improvement of delirium, suggesting causality in this case.

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## Dissociative and depersonalization-derealization symptoms in Obstructive Sleep Apnea and Sleep Bruxism – preliminary results

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### Objective:

To estimate prevalence of depersonalization-derealization and dissociative symptoms in two common sleep disorders (often comorbid): OSA and SB.

### Methods:

Adult participants with clinical suspicion of OSA or SB underwent video-polysomnography. Sleep and respiratory events assessment was performed using standard criteria of AASM. Presence, frequency and severity of depersonalization-derealization and dissociative symptoms was assessed with Cambridge Depersonalization Scale (CDS) and Dissociative Experiences Scale-II (DES-II). Mental state was assessed with Brief Psychiatric Rating Scale (BPRS), expanded version.

### Results:

So far n=15 participants were enrolled (mean age=38.2±11.3). They were divided in three subgroups: OSA (n=5), SB (n=6) and controls without any of these two disorders (n=4). As groups were too small to perform full statistical analysis, it was done only on a basic descriptive level. CDS results: OSA group: 7.2 positive answers, symptoms often, up to few minutes; SB group: 4.17 positive answers, short, rare; Control group: 4.3 positive answers, short, rare. DES-II total scores: OSA=11, SB=14.33, controls=13, high SD in all groups. REM sleep was shorter in OSA group. No significant changes of sleep structure in SB group. BPRS showed higher levels of anxiety symptoms in SB group.

### Conclusions:

Pilot findings were inconsistent with only 15 participants examined. OSA patients tend to have higher CDS score, what might be related to REM loss. Higher score of DES-II in SB group might be related to higher levels of anxiety. Results are preliminary, further recruitment is performed and during EAPM congress in Vienna detailed results of larger study group will be presented.

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## Extrapyramidal Symptoms vs Recurrent Catatonia vs Baseline Negativism in a Patient with Schizophrenia: A Case Report

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**Objective:** to highlight the challenges in differential diagnosis of a patient with schizophrenia and a history of catatonia, negative symptoms, and extrapyramidal side effects, through discussion of a case report.

**Methods:** Chart review and selection of relevant details of patient presentation at our emergency department, and subsequent admission to our inpatient psychiatry unit.

**Results:** Through review of the salient details of the case, the difficulty in making an accurate diagnosis/discerning between an episode of catatonia vs. negative symptoms, vs. medication side effects, became clear and continues to present a challenge with this patient as well as other patients we have encountered with complicated histories.

**Conclusion:** Clinicians must gather comprehensive histories of patients with schizophrenia, including any history of catatonia and medication histories, to arrive at an accurate diagnosis of complex presentations which may include combinations of negative affective and motor symptoms. The treatment of such patients can also be complex, with a combination of antipsychotics and anxiolytics required for optimal response.

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## STRANGERS IN THE NIGHT: Neural Associations of Visual Hallucinations in Lewy Body Dementia

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### Objective:

Lewy Body Dementia (LBD) is the second most common progressive dementia after Alzheimer's dementia. Visual Hallucinations (VHs) are present in 54%-70% of the patients. In this poster we aim to review the neural associations of VHs in LBD.

### Methods:

We used a thorough literature review and a case managed by our Consultation-Liaison Psychiatry (CL) service. The patient, a 72 year old African American male with a history of hypertension and dementia, was admitted twice in the past year for agitation and VHs. At first, he was seeing insects and strangers in his room at night and was treated with Risperidone 0.5mg twice daily. The second admission was due to him grabbing a knife to attack the nighttime bandits. This frightened his wife and she called 911.

### Results:

Three areas of the brain showed profound hypoperfusion in LBD patients with VHs:

- Left anterior cingulate cortex (ACC)
- Left orbitofrontal cortex
- Left cuneus within the occipital cortex

Supplementary investigation was performed and the patients on neuroleptics were excluded. The results remained unchanged. In our case study, due to poor response, Risperidone was replaced by Olanzapine 2.5mg at bedtime. The patient improved and was discharged with an aftercare appointment.

### Conclusion:

CL psychiatrists should be aware that in LBD, the VHs seem to be associated with dysfunction of secondary visual areas as well as impairment of ACC and orbitofrontal cortex leading to complex scenes. Also, these patients have higher sensitivity to neuroleptics which could increase their risk for falls.



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## Posterior reversible encephalopathy syndrome (PRES) in a patient with long-time lithium intake and non-toxic lithium-serum-levels: Case Report.

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**Objective:** We report one case of posterior reversible encephalopathy syndrome (PRES), in which lithium may played a role in the development and the maintaining of the above mentioned syndrome.

**Methods:** Case report.

**Results:** A patient with stable schizoaffective disorder under long-time prescription of lithium was admitted to a medical hospital after falling in her home. For two weeks prior to the admission, she has had a short history of minor infections. Two days after the admission, she developed an encephalopathy, which was diagnosed as PRES radiographically. Lithium was identified as a possible contributor to the development of PRES and consequently discontinued, even though when tested, lithium-serum-levels never exceeded the predefined norm. After discontinuation of lithium, the patient recovered under further treatment.

**Conclusion:** The course of the case and research of the current literature suggest, that lithium may be seen as a risk factor in the development of PRES.

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## CLINICAL CHARACTERISTICS OF A SAMPLE OF PATIENTS VICTIMS OF FACTITIOUS DISORDER IMPOSED ON ANOTHER IN A NATIONAL PEDIATRICS INSTITUTE

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In Factitious disorder by proxy, caregivers fabricate illnesses to elicit health care for their offspring, even when obvious rewards are absent. Real prevalence is unknown because of diagnostic complexity.

**Objective:** To describe the characteristics of a sample of patients, victims Factitious disorder by proxy (FDBP) at the National Institute of Pediatrics (INP)

**Methods:** Descriptive, retrospective study of 7 patients victims of FDBP, hospitalized at the INP between 2017 and 2019.

**Results:** There were 6 females and 1 male, with a mean age of 13.8+3.2. The length of hospital stay was 58.7+35.4 days, with a mean of 12.2 +4.5 diagnosis per patient. With a mean record of 36.5 laboratory studies, in addition to 20.1+ 6.3 imaging studies and 2.57+3.3 surgeries per patient. Patients also had a background of 9.7+11.5 visits to emergency services and 43% needed ICU interventions. Most of them detected in Gastroenterology Service. Except for one mentally disabled patient, the rest confirmed the symptoms referred by caregivers. All cases were diagnosed by Psychiatry.

Perpetrators were the patient's mothers, with mean age of 40.7+7. None of them worked, 71% had no couple relationship. Almost 50% reported history of some kind of childhood abuse and 86% suffered chronic illnesses.

**Conclusions:** Malingering agents were mothers, who experienced loneliness and economic difficulties. Unlike literature reports malingerers were older, 85% had not healthcare knowledge and victims were predominantly teenagers.

Clinicians must be aware of patients with history of multiple discrepant symptoms with no evident causes, to avoid unnecessary medical iatrogenic procedures.

**Psychophysiology, psychoneuroendocrinology and –immunology**

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**Gender differences of morality in the brain - a fMRI pilot study****Dr. Michael Noll-Hussong<sup>1</sup>**, Marlene Riedl<sup>2</sup>, Christine Wagner<sup>3</sup>, Prof. Wolfgang Reith<sup>2</sup>, Dr. Christoph Krick<sup>2</sup>

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Moral judgment is a cognitively and emotionally demanding process that is subject of research in both imaging and psychological studies. This study using functional Magnetic Resonance Imaging (fMRI) examined brain activity in moral decision-making and focused especially on identifying gender differences in 44 healthy individuals (22 males/females, 25, 6 +/- 5,5 years) while answering 36 moral-emotional questions. The results confirm the relevance of frontal and temporal areas as well as of cingulate cortex for moral judgment. Gender-specific differences were found in medial prefrontal cortex (mPFC), temporoparietal junction (TPJ) and superior temporal sulcus (STS). Men showed an increased activation of mPFC during moral decision-making, whereas in women left TPJ and left STS were found to be more active. The results suggest that in males moral judgment is primarily a cognitive process. In females, in addition to the cognitive component, a more pronounced influence through emotional computing on moral decision making can be suspected. Against this background, our results suggest that males tend to more 'utilitarian processing' in moral decision making, whereas women tend to have a 'deontological' processing that is supported by cognition.

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## Sex-dependent effects of adolescent THC exposure on cognitive performance in a mouse maternal immune activation model of schizophrenia

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**Objectives:** We investigated the role of adolescent THC exposure in a mouse maternal immune activation model of schizophrenia to determine if there are synergistic effects on cognitive impairment.

**Methods:** Pregnant mice were injected with Poly(I:C) or saline on gestational day 12. The offspring were fed cereal containing either 3 mg/kg THC or vehicle on five consecutive days during adolescence. Behavioral assays were performed in adulthood. In the Morris water maze (MWM), mice were trained to locate a submerged platform, followed by a probe trial where the platform was removed and a spatial reversal trial where the platform was moved. In the fear conditioning assay, freezing time was measured as mice were trained with tones paired with foot shocks, followed by extinction trials with tones but no foot shocks. Data were analyzed by 3-way ANOVA.

**Results:** In the MWM, female but not male mice treated with THC spent decreased time in the correct quadrant in the probe trial and found the new platform more quickly during spatial reversal. In the fear conditioning assay, females but not males treated with prenatal Poly(I:C) learned the cue-conditioned freezing response more rapidly and had delayed extinction learning. There were no effects of adolescent THC in the fear conditioning assay.

**Conclusions:** Female but not male mice were sensitive to cognitive impairment induced by prenatal Poly(I:C) or adolescent THC. While there were differential effects of the two interventions on cognitive performance, there was no interaction of prenatal Poly(I:C) with adolescent THC exposure in either assay.

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## Effects of music on stress and skin barrier recovery – preliminary results

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### OBJECTIVE

In our study, we aimed to assess whether music listening accelerates skin barrier recovery (SBR), and whether this effect is mediated by reductions in stress.

### METHODS

We assessed the effects of a 30-minute music listening intervention on psychological and physiological indices of stress and on the speed of SBR after impairment - an established index of immune function. Participants were subjected to either a music listening intervention or one of two control conditions (audiobook, silence). During the session, subjective, physiological (heart rate, EDA), and salivary (alpha-amylase, cortisol), markers of stress were collected at multiple time points. A tape stripping paradigm was used to impair the skin barrier, followed by transepidermal water loss (TEWL) measurements at fixed time intervals to assess SBR.

### RESULTS

Preliminary results from the first consecutive participants (n = 12) provide some initial indication that music reduces subjective stress, and is more effective than the audiobook and silence conditions. On the other hand, positive affect measures do not seem sensitive to the music manipulation. Skin barrier recovery does not show an effect of music listening.

### CONCLUSION

Our preliminary data provide some first evidence that a lab-based music intervention is effective in reducing stress in the absence of a stressor. Although the hypothesis that music accelerates skin barrier recovery is not supported in the current small sample, our novel paradigm is a promising tool for studying the effects of brief experimental manipulations on bodily health. Analyses for the complete data set will be presented at the conference.

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## A case of Co-occurring Subacute Combined Degeneration (SCD) and Guillain Barre Syndrome (GBS) Resulting From Nitrous Oxide (N2O) Abuse

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Nitrous oxide(N2O) is a colorless, odorless gas at room temperature and atmospheric pressure. It produces a state of analgesia, depersonalization, derealization, dizziness, euphoria, and sound distortion. N2O is growing in popularity as a recreational drug of abuse. One proposed reason for N2O rising prevalence is its easy accessibility to young people. The gas is commonly inhaled from a steel bulb known as a “whippet” with the use of a commercial grade whip cream dispenser colloquially referred to as the “cracker.” Most users dispense the gas into a balloon and inhale from the balloon versus inhaling directly from the dispenser. N2O can also be extracted from prepackaged aerosolized whipped cream canisters commonly found in grocery and convenience stores. The most common serious side effect documented is that of vitamin B12 deficiency presenting as subacute combined degeneration syndrome (SCD). We present a rare case of both SCD and Guillain-Barre Syndrome (GBS), which is caused by overactive immune system damaging peripheral nervous system, co-occurring in a 23-years-old female with history of N2O abuse. She presented with 3 weeks history of progressive bilateral lower extremity weakness, burning sensation and tingling, difficulty walking and falls. MRI of C-spine showed abnormal cervical cord signal intensity pattern typical for vitamin B12 deficiency. Lumbar puncture showed albuminocytologic dissociation which confirmed diagnosis of GBS. Patient was successfully treated with weekly B12 injections and five treatments of plasmapheresis. This case highlights the easy accessibility, addiction potential and adverse consequences related to N2O abuse.

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New Frontiers: Psychoneuroimmunology of Stress

## and Psychodermatologic Disorders

Dr. Ruqiya Shama Tareen<sup>1</sup>, Dr. Kinza Tareen<sup>2</sup>

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Psychoneuroimmunology is an emerging subspecialty of immunology that has major significance for any physician including psychiatrists and dermatologists. As nowhere the finer imprints of neuroimmunology become visibly apparent then in form of a primary skin disease caused by stress or a secondary skin lesion caused also by stress but mediated through a psychiatric disease. Dermatologist know that a significant number of their patients wanting a cure for their dermatologic issues comes to then with heavy burden of stress

and psychological issues perpetuating their dermatologic condition making it impossible to make much progress in treating these chronic and debilitating conditions like eczema, psoriasis, urticaria and many more. We are still at the beginning of our understanding of the sophisticated interactions between skin, body, and psyche and how they play a role in our

day to day practice but psychoneuroimmunology helps us understand these multidirectional processes which are interdependent on each other and unless we pay attention to some very basic issues like the role of stress in our patient's lives and how it impact their disease process, compliance with treatment, response to treatment and improvement in their quality of life we may not be fully able to help our patients. This presentation provides an overview of psychoneuroimmunology especially in context of psychodermatologic conditions. It reviews psychological perspectives of skin disease while examining interconnections between skin and mind, and different components of psychoneuroimmunology, including neuroendocrine system, central and peripheral nervous systems, and immunology.context of case vignette.

## Psychosomatic rehabilitation and social medicine

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### Using machine learning to predict work ability in patients undergoing psychosomatic rehabilitation

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**Objective:** Psychosomatic in-patients are a heterogeneous group presenting with a varying number and complexity of physical and psychological comorbidities. Preserving and restoring work ability in psychosomatic rehabilitation is therefore subject to a complex interplay of biological, psychological, and work-related factors. We here describe the use of machine learning algorithms as a hypothesis-free approach to predict work ability based on routine clinical data.

**Methods:** The data set (N=1291) was comprised of routine questionnaire diagnostics at admission and discharge, demographics, social medicine, and ICD 10 diagnoses. Statistical analyses were run using the Classification and Regression Training (caret) package (Kuhn, 2008) in R (Version 4.0.2) and R Studio (Version 1.3.959). Data were cleaned, kNN imputed, split into a training and test set, upSampled, and predictive performance of ML models compared with respect to AUC.

**Results:** Several models showed similar predictive performance. The bagged CART (treebag) algorithm resulted in an AUC of 0.9 (Sensitivity: 0.87, Specificity: 0.68) and identified self-efficacy (HEALTH-49) at discharge, employment status, psychosomatic symptoms (HEALTH-49) at admission, and adjustment disorder symptoms (ADNM-20) at discharge as most important variables in the prediction of full-time work ability following psychosomatic rehabilitation. Feature selection was similar across models.

**Conclusion:** A hypothesis-free approach to identify important factors in preserving and restoring full-time work ability may provide clinical practitioners with objective data on where to set the focus of therapeutic interventions to improve rehabilitation outcomes. Results moreover fall in line with and expand on previous research on workplace phobia and avoidance as risk factors of early retirement.



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## Who is at risk? – Type D personality in patients in psychosomatic rehab as a risk factor for work-related impairments

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**Background:** An individual's personality is reflected in their emotions, thoughts, and behavior, which influences the health of the person. Negative affectivity and social inhibition are components of Type-D personality, which is considered a cardiovascular risk factor. Severe emotional distress has significant consequences for the ability to cope with private or professional tasks, with significant consequences in the professional context, especially with regard to occupational and social medicine parameters (work ability, performance/capacity limitations e.g., not being able to work six hours a day).

**Methods:** On admission (t1) and discharge (t2), psychocardiological patients were examined regarding Type D (DS-14) and social-medical parameters (sick leave, ability to work, productivity).

**Results:** Of N = 208 patients, 66% fulfilled the criteria of a Type-D. Contrary to expectations, Type-D patients were significantly more likely to be able to work than none-Type-D. In terms of the length of incapacity for work before t1, however, Type-D was associated with long-term sickness. If none-Type-D patients were on sick leave before t1, the length of the sick leave was shorter than in Type-D patients who were on sick leave. Type-D patients were more likely to be unable to work than patients without Type-D personality traits. In addition, Type-D patients needed more frequently a gradual reintegration program for return to work. With regards to Capacity limitations none-Type-D patients were less impacted.

**Conclusion:** In this study Type-D personality was associated with more problems in terms of occupational aspects (longer sick leave, more Capacity limitations). Type-D can be seen as a risk factor.

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## The effect of inpatient cancer rehabilitation on quality of life and psychological distress: results of a naturalistic longitudinal observational study

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### Objective

With the growing number of cancer survivors worldwide the need for high quality cancer rehabilitation after primary treatment is steadily increasing. The aim of the present study was to investigate the effect of multidisciplinary inpatient cancer rehabilitation on psychological distress and quality of life (QoL) in a large sample of cancer survivors with different cancer entities.

### Methods

Data from routine QoL and distress monitoring collected at an oncological inpatient rehabilitation center between 2014 and 2019 was analyzed. Patients completed the EORTC QLQ-C30 and the HADS before and after rehabilitation. Since spring 2017, follow-up data was collected 3, 6 and 12-month after discharge. Changes of patients' functioning and symptom scores were analyzed using repeated measures ANOVA and effect sizes. Patient data was compared to norm data and thresholds for clinically relevant impairment.

### Results

A total of 6081 patients (mean age 60.0 years, SD 11.9 years; 62.1% women) were included in the analysis. At admission, patients showed clinically relevant impairment in most of the functioning and symptoms scales and a significant level of psychological distress. During rehabilitation, clinically meaningful improvements in almost all QoL domains as well as psychological distress with medium to large effect sizes could be observed. These effects remained stable up to 12 months after discharge for most domains, apart from emotional functioning and dyspnea.

### Conclusions

We found clinically meaningful improvements of patients' QoL, anxiety and depression during the oncological inpatient rehabilitation treatment and the 12 months follow-up period. Psychological aftercare might help to stabilize therapy effectiveness.

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## Viewing an alpine environment positively affects emotional analytics in patients with psychosomatic disorders and healthy controls

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**Objective:** Urbanicity is associated with an increased risk for mental disorders while green and blue environments show a dose-dependent beneficial impact on mental and physical health. Here we investigate the effect of viewing stimuli depicting individuals performing physical activity in an alpine environment on emotional analytics.

**Methods:** 183 patients with psychosomatic disorders and 315 healthy controls were included in this web-based cross-sectional study. Patients rated five International Affective Picture System images mixed with five stimuli depicting individuals performing physical activity in an alpine environment using emotional analytics (valence: unhappy vs happy, arousal: calm vs excited, dominance: controlled vs in control) of the Self-Assessment Manikin. Resilience, self-perceived stress and physical activity were also assessed.

**Results:** Patients showed significantly lower levels of resilience ( $p < 0.001$ ) and significantly higher scores of self-perceived stress ( $p < 0.001$ ) compared to healthy controls. Emotional analytics of patients indicated that they feel less happy (valence), less in control (dominance) and had higher levels of arousal than HC when viewing neutral stimuli. The comparison alpine > neutral stimuli showed a significant positive effect of alpine stimuli on emotional analytics in both groups (all  $ps < 0.01$ ). Patients and HC both felt attracted to the scenes displayed in the alpine stimuli. Emotional analytics correlated positively with resilience and inversely with perceived stress.

**Conclusion:** Preventive and therapeutic programs for patients with psychosomatic disorders should take additional benefits of outdoor natural environments into account. Possibilities of overcoming the organizational barriers which are preventing the implementation of such programs in clinical practice need to be identified and addressed.

## Psychosomatics in children and adolescents

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### CLINICAL CHARACTERISTICS OF PEDIATRIC DELIRIUM IN A NATIONAL PEDIATRIC HOSPITAL

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Delirium is an acute disorder characterized by awareness and attention disturbances and changes of cognition functioning, as a result of medical conditions.

**Objective.** To identify the most common causes of delirium in our pediatric patients and to describe the association of C-reactive protein (CRP) as an indirect inflammatory marker of the severity of delirium.

**Methods.** Descriptive retrospective clinical study during 2019 of a sample of 49 pediatric patients with Delirium diagnosed by child psychiatrists in a Pediatric Hospital. Non parametric statistics were performed (X2 and Kruskal-Wallis test)

**Results.** Boys were 61% of the sample, 39% girls. Mean age was 13.3±3.01. In 77.3% concurrent infections were detected and 49% patients underwent surgery.

Medical conditions were; cancer in 33%, CNS tumors in 25%, autoimmune diseases in 12%, viral encephalitis and antiNMDA with 6% each. Mental disability was found in 9.1%, and opioids administration in 43%.

Mixed-type delirium was found in 47%, hypoactive in 39% and hyperactive in 14%.

Death occurred in 20% patients. Mean CPR value was 12.5, with a value greater than 5 in 41%. Higher values of CPR showed association with hypoactive type ( $p=0.001$ ). ICU was required in 41%, although only 6.8% started delirium symptoms at ICU. Hypoactive type was associated with mortality ( $p=0.01$ ). Death was more frequent in girls ( $p=0.02$ )

**Conclusions.** Delirium was diagnosed predominantly in male adolescents, but higher mortality was shown in girls. Preliminary results suggest that as in adults, hypoactive was the most severe type and that CRP could be useful to identify delirium severity outcome.

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## The role of loneliness and narcissism in the preclinical form of Anorexia nervosa.

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### Objective

Nowadays, anorexia is one of the most common mental disorders that adolescent girls suffer from. Its etiopathogenesis is multifactorial, and determinants can be both a source and a result of anorectic behaviour. Existing research indicates the role of personality on the development of AN, but little is known about the contribution of narcissistic personality trait and loneliness in expressing preclinical form of anorexia.

The aim of the study was to examine/investigate the relationship between Anorexia Readiness Syndrome (ARS) and narcissistic tendencies as well as sense of loneliness.

### Methods

The study included 120 adolescent girls (mean age, 16.84±0.74 years) from Polish high schools, who anonymously filled three questionnaires: Eating Attitudes Questionnaire, Loneliness Scale (R-UCLA) and Narcissism Questionnaire (NARPI).

### Results

The obtained results indicate a positive relationship of Anorexia Readiness Syndrome with an increased sense of loneliness and a negative correlation with the NARPI vanity scale. There was a statistically significant difference between subjects with ARS (20%) and those without the syndrome in terms of severe loneliness, lower vanity and negative perception of own attractiveness.

### Conclusion

These results are consistent with previous reports of intense loneliness and body dissatisfaction in anorexic girls and complement existing knowledge, pointing to their importance as risk factors for the disorder. The study highlights the role of social ties in adolescence, when young people verify and build their own identity as well as identifies potential areas of AN prevention.

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## Pediatrics Emergency Department Safety Assessment and Follow-up Evaluation (PED-SAFE) Study-An Innovative Brief Intervention for Suicidal Youth

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**Objective:** In the emergency departments (ED), at-risk youth are admitted to a psychiatric hospital, and the individuals with low or medium suicide risk are referred for outpatient mental health services. The latter group is sometimes lost to follow-up or may have a recurrent visit to the ED. A youth suicide-prevention intervention in the ED is likely to improve outpatient follow-up adherence and decrease subsequent suicide attempts.

**Methods:** PED-SAFE intervention is a pilot study with suicide risk youth while awaiting in the EDs. The first phase of the intervention has two 20-min components, one for the youth and the other for the parents or caregivers. The focus is on safety planning, provision of crisis management resources, linking, and assurance of a follow-up with a mental health professional after discharge. Post-discharge, the investigators place four, 10-20 min each, weekly phone calls focusing on providing support related to suicide risk factors, safety plans, follow-up encouragement, and addressing barriers to treatment adherence.

**Results:** We present brief intervention data in the ED and the impact of post-discharge follow-up calls in the overall reduction of suicide attempts and ED visits in the participating youth. Further, the results show a significant improvement in the post-discharge follow-up of mental health services.

**Conclusion:** A brief suicide-prevention intervention in the ED can play a significant role in addressing the alarming rise of youth suicide. It highlights the need to engage parents to have a meaningful improvement in adherence to mental health services.

## Psychosomatics in the somatically ill

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### Psychosocial variables associated to adherence in end-stage renal disease

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#### Objective:

End-stage renal disease (ESRD), and especially hemodialysis (HD) treatment, represents a severe global health problem, with significant medical, psychosocial and economic costs. This study aimed to assess the comparative contribution to ESRD adherence brought by socio-demographic factors, psychiatric comorbidity, perceived stress and perceived social support.

#### Methods:

34 ESRD patients undergoing HD (17 men, 17 women, mean age 57.64, SD=18.25) participated in the study. They were administered Depression, Anxiety and Stress Scale-21 (DASS-21), Duke-UNC Functional Social Support Questionnaire (FSSQ) and End-Stage Renal Disease Adherence Questionnaire (ESRD-AQ), while socio-demographic data were collected through clinical interview. Hierarchical linear regressions were performed to assess the statistical significance of the associations between adherence and the measured variables.

#### Results:

Distinct adherence subdimensions were associated to diverse variables. Importance paid to timely treatment was predicted by depression ( $R^2=.364$ ,  $p<.03$ ) and by gender ( $R^2=.138$ ,  $p<.03$ ), with women scoring higher than men ( $t=2.227$ ,  $p<.03$ ). Age was the main contributor to the frequency of consultations ( $R^2=.158$ ,  $p<.02$ ), while comorbidity was associated to the motivation for maintaining adherence ( $R^2=.250$ ,  $p<.02$ ). Self-perceived adherence scores were predicted by depression only ( $R^2=.229$ ,  $p<.03$ ). No individual predictor was associated to the perceived difficulties about the treatment and to the perception of side effects.

#### Conclusions:

While depression represents an important variable associated to the importance paid to timely treatment and to adherence itself, one should consider also gender, age and comorbidity to explain part of the variance of adherence. This finding could be important for a better multidisciplinary handling of ESRD patients.

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## Mood improvement after effectively DAA treatment among patients with chronic HCV infection

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**OBJECTIVE:** Estimates have shown that approximately 70% of patients with chronic HCV infection suffered from psychiatric illness after Peg IFN/RBV treatment. The aim of this study was to explore of psychological condition before and after revolutionized direct-acting antiviral (DAA) therapy.

**METHOD:** A cross-sectional study included outcomes of double measurements of depression (BDI-II) and anxiety symptoms (STAI-X1) among 50 HCV-infected patients before and after DAA treatment, in Hospital for Infectious Diseases in Warsaw. At the beginning, all patients had been diagnosed stage of liver fibrosis in Metavir scale: F0/1(40%); F2(18%); F3(16%), and F4(26%), as well as personality traits. High neuroticism was found in 8%.

**RESULTS:** Before DAA treatment, mean BDI-II score was  $8.2 \pm 6.6$  and mean STAI-X1 was  $32.9 \pm 7.7$ . Low mood was found among 28% of participants, mild depression– 14%, moderate– 4%, and severe– 2%. After cure, average BDI-II score was  $5.7 \pm 5.9$  and average STAI-X1 was  $32.5 \pm 9.4$ . Low mood had 12% of participants, mild depression– 10%, and severe– 2%. Only BDI-II mean scores decreased significantly ( $p < .001$ ) between time points, not anxiety. Mood improvement was observed in 70% of patients. Participants' outcomes didn't differ in terms of gender and other sociodemographic variables.

**CONCLUSION:** This study has demonstrated that mood was improved post-treatment, however, the level of anxiety hasn't changed. Such findings suggest that patients who have completed newly DAA therapy do not develop depressed mood or mental disorders, as in the Peg IFN/RBV regimen. The above results might be used in further research about mental health and advantage of antiviral drugs.



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## Biopsychosocial complexity among patients of nephrology department

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**Objective:** Systemic Lupus Erythematosus (SLE) and Vasculitis (VASC) are chronic, systemic diseases, which are very often treated in nephrology department due to kidney impairment. Purpose of this study is to analyze clinical complexity of those patients. Both diagnoses are connected with frequent hospitalizations and complicated course.

**Methods:** 36 patients with SLE or V were included in this study. Demographic and clinical data were collected by researchers. Biopsychosocial complexity was measured by INTERMED self-assessment (IMSA).

**Results:** Total mean score of IMSA of both clinical groups is 14.03 (SD=5.21) (with cut-off point = 19), mean score of biological domain is 6.98 (SD=2.33), of psychological domain - 2.64 (SD=1.97), social domain - 2.39 (SD=1.87) and of health care system domain - 2.11 (SD=1.60). VASC participants have significantly higher scores of health care system domain than SLE participants (p=0.045)

**Conclusions:** Use of IMSA among patients of nephrology department indicated the greatest needs in biological domain. Patients in Poland do not connect their physical health with psychological and social issues. They do not think that general hospital is a good place for psychological and social complains. Vasculitis patients have bigger need of coordinated health care than SLE ones. Further studies about clinical complexity in SLE and VASC should be developed.

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## Observational study on psychological and psychosomatic characteristics of outpatients affected by systemic sclerosis

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**Objective.** Systemic sclerosis (SSc) is a rare, chronic, and potentially life-threatening autoimmune disorder with a significant impact on health and quality of life. The aim of the present study was to evaluate the psychological status of the SSc patients with specific attention to well-being, suffering, and mental pain.

**Methods.** Ninety patients were enrolled at the Scleroderma Unit of Rheumatology of the University Hospital Careggi (Florence, Italy): 40 subjects had a diagnosis of limited cutaneous sclerosis (lcSSc) and 50 had a diagnosis of diffuse cutaneous sclerosis (dcSSc). Participants completed a clinical assessment including: the Mini-International Neuropsychiatric Interview (M.I.N.I.), the Diagnostic Criteria for Psychosomatic Research-Revised Semi-Structured Interview (DCPR-R SSI), self-report questionnaires assessing psychological well-being, euthymia, psychological distress, suffering, and mental pain.

**Results.** No statistically significant differences were found between the two groups for sociodemographic or anamnestic variables, neither for diagnoses as assessed via the MINI and the DCPR-R SSI. The levels of mental pain, assessed via the Mental Pain Questionnaire, euthymia, assessed via the Euthymia Scale, and subjective well-being, assessed via the 5-item World Health Organization Well-Being Index, were not statistically different. On the contrary, the level of impact of illness on life, as measured via the Pictorial Representation of Illness and Self Measure (dcSSc:  $7.91 \pm 5.74$ ; lcSSc:  $10.84 \pm 6.17$ ;  $p = 0.018$ ), was statistically different.

**Conclusion.** Illness-related burden of suffering differentiates lcSSc from dcSSc.

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## Prevalence of diagnosed combined mental disorders and long-term physical conditions

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**Objective:** Patients suffering from both mental disorders and long-term physical conditions (cMPs) require increased medical and psychological care compared to patients with only one of these diseases. Studies suggest a reduced quality of life, higher mortality and morbidity rates as well as an increased economic burden for these patients. Regarding treatment, the segmentation in physical and psychological care demands interdisciplinary cooperation, and holds barriers to adequate access options. The purpose of this study was to investigate the prevalence of diagnosed cMPs.

**Method:** The analyses are based on data of the German statutory health insurance BARMER, which holds pseudonymized data for scientific use of about eight million people. Population-adjusted prevalences will be calculated for cMPs. Subgroup analyses for specific mental disorders and long-term physical conditions will be conducted.

**Results:** Patients with a mental disease show an average comorbidity rate of long-term physical conditions of nearly 50 %. This percentage rises with increasing age – about 15 % in 18 to 27-year-olds and approximately 60 % in 58 to 67-year-olds. The scientific poster will present the analyses in detail.

**Conclusion:** The prevalences of cMPs are very high. This depends substantially on age and emphasizes the need for adaption of the German health care structure to this patient group, considering the aging population. The subgroup analyses provide further information on prevalence rates of long-term physical conditions in different mental disorders and should be considered in further health care research as well as the planning of future care structures.

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## What is medical futility regarding cardiopulmonary resuscitation and how is it applied in clinical practice? Results of a systematic review and meta-analysis

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### Objective

For some patients, survival of cardiopulmonary resuscitation (CPR) is highly unlikely, i.e., CPR would be medically futile. Yet in clinical practice, there are no established criteria, guidelines or measures to determine futility. Therefore, we aimed to investigate definitions and measures, the rates of DNR code status in futile patients as well as the ability of clinical risk scores to predict non-survival to discharge.

### Methods

We conducted a systematic review and meta-analyses. Embase, PubMed, CINAHL and PsycINFO were systematically searched for peer-reviewed studies evaluating medical futility regarding CPR in adult patients from the inception of each database to October 10, 2019. Additionally, all references and citing studies of included records were assessed for eligibility.

### Results

Twenty-nine eligible studies were included in the qualitative review and nine of these in the meta-analyses. Futility for CPR was either defined in very general terms or was only applied to specific subgroups. The rate of DNR orders in futile patients varied considerably between 27%, 44% and 71%. Futility was usually assessed with clinical risk scores, e.g. the Good Outcome Following Resuscitation (GO-FAR) score, the pre-arrest morbidity (PAM) index, and the prognosis after resuscitation (PAR) score. In the meta-analyses, these scores were associated with a significantly higher risk of poor neurologic outcome/death until discharge.

### Conclusion

The concept of medical futility regarding CPR shows a lack of specific definitions. Clinical risk scores show promising predictive value; however, futures studies need to evaluate the implementation of these scores in clinical practice including code status discussions.

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## Psychological adjustment in young adults newly diagnosed with Multiple Sclerosis: preliminary results and clinical considerations

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**Objective:** Multiple sclerosis (MS) ranks among the most common chronic neurological diseases in young adults and represents, particularly in the first years after the diagnosis, a major stress factor with a negative impact on psychological wellbeing, social functioning, and quality of life. As part of the multidisciplinary project BPS-ARMS, which follows a biopsychosocial approach, we aimed to describe the psychological characteristics resilience and illness perception, crucial for assessing the psychological adjustment after the diagnosis, in a sample of young adults recently diagnosed with MS.

**Methods:** Since the recruitment process of BPS-ARMS is still ongoing, we report only preliminary data on resilience and illness perception of the first 16 participants, which were assessed applying the Italian versions of the Connor-Davison Resilience Scale (CD-RISC) and the Brief Illness Perception Questionnaire (Brief IPQ), respectively. Descriptive statistics were generated using Excel.

**Results:** Fifteen out of the 16 patients (10 women, 6 men, mean age: 33.13 years) were diagnosed with relapsing-remitting MS and one with primary progressive MS. The mean total score for resilience was 58.9 (SD=15.9; range=22-81; Mdn=56) and for illness perception 40.6 (SD=12; range=12-61; Mdn=39).

**Conclusions:** Given that the patients showed lower levels of resilience than those reported for the general population and, surprisingly, even for patients with MS, and high levels of illness perception, reflecting a more threatening view of MS, it might be suggested that especially young patients recently diagnosed with MS may benefit from psychological interventions tailored to their specific needs and focused particularly on fostering psychological adjustment.

Psychosomatics in transplantation medicine

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Anonymity: What Does it Mean and Why is it Important to Anonymous Living Liver Donors?

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Objective:

Anonymous living organ donation has recently become more common in select transplant programs, with donors coming forward voluntarily to give their organs to those in need. These donors may be directed or non-directed, and anonymity may be one-way or reciprocal. Given the unique situation of these donors, we interviewed a sample of 26 anonymous live liver donors and explored their opinions surrounding the idea of anonymity and its implications in living liver donation.

Methods:

Anonymous donors completed a semi-structured qualitative interview consisting of questions regarding their experiences as a donor. The interviews were audio-recorded and transcribed, and then analyzed for common themes, specifically those pertaining to the donor’s perceptions and experiences with anonymity.

Results:

A total of 26 anonymous donors were interviewed. Five main themes related to anonymity were identified as follows: (1) ethical issues related to recipient indebtedness, (2) wanting internal satisfaction rather than seeking accolades, (3) unwillingness to be emotionally attached to the outcome in the recipient, (4) concerns about negative perceptions amongst their own friends and family, and (5) feelings of ambivalence towards meeting the recipient.

Conclusions:

These findings provide unique insight into living donor opinions on several aspects related to anonymity in the donation process. We identified five key drivers related to decisions surrounding anonymity. Knowledge of the range of donors’ mindsets and attitudes toward anonymity will help improve awareness and provide the best possible mental and physical care for the anonymous donor.

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## Personality assessment in a long-term follow-up of patients undergoing heart transplantation: Are there long-term changes?

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### Objectives:

Some personal resources such as sense of coherence, optimism, sense of self-efficacy and self-esteem facilitates patients' adjustment to life with a transplanted heart.

The main objective of this study is to describe if there are changes regarding personality traits and psychiatric conditions in a sample of HT recipients through a 5-10 years follow-up.

### Methods:

Prospective observational study. 5-10 years follow-up of patients submitted to HT from January 2006 to December 2012 in Hospital Clinic of Barcelona that agreed to their inclusion in the follow-up study protocol. Clinical, epidemiological and psychosocial variables were assessed at the moment of the inclusion. Five Factors Inventory Revised (NEO-FFI-R) for the measurement of the five main personality factors (Neuroticism, Extraversion, Openness to experience, Agreeableness and Conscientiousness) was administered at pretransplant evaluation and after 5-10 years of follow-up.

### Results:

Our sample included 30 patients from a group of 78 who underwent the surgical HT intervention and complete the follow-up study protocol. There were no statistically significant clinical or psychosocial differences at base-line between the patients who finally completed the long term study and those who didn't. Of the 5 personality factors, the only significant change is extroversion that subsides over the years.

### Conclusions:

It is well known that extroversion is a personality variable with an important neurobiological substrate. These changes may be due to multiple factors that can impact at this level, such as age, chronic illness with strict habits and medical controls, and the chronic exposure to immunosupresor treatments.

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## Neuropsychiatric Sequelae of Tacrolimus: A Case Series and Literature Review

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Calcineurin is a calcium and calmodulin dependent protein phosphatase responsible for activating the immune system. The target for many immunosuppressant agents, calcineurin and calmodulin receptors appear to have neuropsychiatric effects. Following solid organ transplant, calcineurin inhibitors are first line in preventing organ rejection. Since tacrolimus was FDA approved in 1994 for multiple solid organ transplants, numerous case reports have been published identifying tacrolimus as precipitating decompensation of mania, psychosis, and depression in patients with premorbid psychiatric illness as well as in patients with no known psychiatric history. Most cases require therapy change in order to completely resolve psychiatric symptoms. To this date, no significant review, meta-analysis, or prospective study on neuropsychiatric sequelae of tacrolimus have been published. This poster highlights cases encountered by the UVA psychiatry consult service and the UVA pulmonary and nephrology transplant services. Distinguishing characteristics and common psychiatric symptoms were identified across three individual cases over the last year. Tacrolimus levels were recorded in all cases. Outcomes and medication management decisions including psychiatric and non-psychiatric interventions were identified. We reviewed literature from 2000 to present. Our cases were compared to literature to elucidate possible trends in diagnosis and management of neuropsychiatric complications of tacrolimus. A variety of psychiatric symptoms have been identified in both patients with known psychiatric illness and in patients without significant psychiatric history. Tacrolimus may elicit new onset psychiatric syndromes or worsen stable psychiatric disease in solid organ transplant patients. Further research is needed to quantify prevalence of psychiatric illness in this patient population.



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## Longitudinal assessment of coping in a cohort of heart transplantation patients: follow-up after 5-10 years post-transplant

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### Objectives:

In the last decades, researchers of heart transplantation (HT) programs have attempted to identify the existence of psychosocial factors that might influence the clinical outcomes. According to the literature, psychological and behavioral variables, such as coping strategies, affect patients' adjustment to life with a transplanted heart, as well as the quality of their lives.

The main objective of this study is the prospective description of changes in coping in a sample of HT recipients through a 5-10 years follow-up.

### Methods:

Prospective observational study. 5-10 years follow-up of patients submitted to HT from January 2006 to December 2012 in Hospital Clinic of Barcelona. Clinical, epidemiological and psychosocial variables were assessed at the moment of the inclusion. Coping scales and dimensions were measured with the COPE questionnaire at baseline, at 12-month and at 5-10 follow-up after HT.

### Results:

Our sample included 30 patients from a group of 78 who underwent the surgical HT intervention and completed the follow-up study protocol. There were no statistically significant clinical or psychosocial differences at base-line between the patients who completed the long term study and those who didn't. Only COPE items for "seeking emotional and instrumental support" were significantly lower at the follow-up. Concerning COPE dimensions, engagement and disengagement showed significant decrease.

### Conclusions:

We believe that these results may be due to the fact that successful HT involved some positive changes in psychological factors, probably mediated by the need of frequent medical checks and for the well-known clinical and functional improvement of transplanted patients.

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## Organ integration in Kidney Transplant Patients – Results of a KTx360° Substudy

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**Objective:** Organ transplantation is the treatment of choice for patients with end-stage organ disease. Since the beginning of transplant medicine, the psychological perspective on integrating the transplanted organ has been of interest. However, quantitative studies on organ integration are scarce. Therefore, we aimed at evaluating this aspect in a large sample of kidney transplant (KTx) recipients.

**Methods:** For this cross-sectional study, 684 patients after KTx were recruited within the structured post-transplant care program KTx360°. A previously developed and published questionnaire (FOSP), generated explicitly for this purpose, was used to measure organ integration and donor relationship. Associations with sociodemographic, medical, donation-specific, and psychological variables were evaluated.

**Results:** Overall, more than 90% of the patients perceived the transplant as part of themselves. Yet, a small minority reported to perceive it as a foreign object. Recurring thoughts about the donor and the belief of having adopted some of the donor's traits were common (52% and 14%, respectively), in particular in living donor recipients. Higher anxiety and depression scores, as well as reduced kidney functioning were associated with less ideal organ integration, while a longer period since KTx and more perceived social support correlated with better organ integration.

**Conclusion:** Organ integration and donor relationship were unproblematic in most KTx patients. However, offering psychosocial support to those struggling with organ integration and donor relationship is crucial from a clinical perspective.

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## The impact of pre-transplant substance abuse, other than alcohol, on the outcome of liver transplantation: a systematic review

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**Objectives:** The aim of this study was to evaluate the effect of pre-transplant substance abuse, other than alcohol, on the prognosis of the liver transplantation.

**Methods:** We retrieved English published studies in several databases including Pubmed, Web of Science and Scopus between January 2000 to 2017. The case series, case-control and cohort studies which report the effect of pre-transplantation substance abuse, other than alcohol, on outcome of liver transplantation were selected. The wide range of substance including nicotine, opioid, cannabis, cocaine, amphetamine, methamphetamine and hallucinogen were included in the search strategies. Outcome measures which was used in this study including graft survival and patients survival. Quality assessment and data extraction was performed by two independent reviewers.

**Results:** We analyzed 19 studies. The number of articles pertain to each substance were as following: cannabis:1; Methadone:2; IV-drug use: 2; Multiple substance:1; and Nicotine:13. For all types of substance, except nicotine, the graft and patients survival were not different in comparison to control groups or general population. In pre-transplant nicotine users, short term outcomes was not different from non-users, but for different reasons including development of de novo malignancies the long-term outcome was poorer.

**Conclusions:** A history of substance abuse did not significantly affect the prognosis of liver transplantation, therefore, it is crucial for these patients to have an equal chance with others while are on waiting list. Smoking may lead to poor long-term outcomes, which could be minimized by smoking cessation programs before performing liver transplantation.

## Psychotherapy

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### Well-Being Therapy in chronic migraine: two case description

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**Objective:** Chronic migraine is associated with resistance to pharmacological treatment. These clinical cases described the potential usefulness of Well-Being Therapy (WBT) in chronic migraine patients.

**Methods:** Two patients with a diagnosis of chronic migraine according to the International Classification of Headache Disorders received 8 sessions of WBT. The assessment included the headache diary evaluating the number of migraine attacks in the previous 15 days, the Migraine Disability Assessment Score (MIDAS) and the Psychosocial Index (PSI).

**Results:** The first patient was a 65-year old woman. At baseline she reported 7 migraine attacks, moderate MIDAS migraine disability (4) and PSI psychological distress (11). At the end of session 4 she reported a decrease of migraine attacks (5), MIDAS migraine disability (0), and a PSI psychological distress (8). At the end of session 8 the patient maintained a status migraine attacks free and had a decrease of PSI psychological distress (6). The second patient was a 54-year old woman. At baseline she reported 13 migraine attacks, severe MIDAS disability (47), and moderate PSI psychological distress (9). At the end of session 4 she did not report significant changes of migraine attacks and PSI psychological distress but had a decreased MIDAS migraine disability (32). At the end of session 8, migraine attacks were decreased to 9, MIDAS migraine disability was mild (17), and PSI psychological distress low (7).

**Conclusions:** In chronic migraine patients, WBT might lead to a decrease of migraine attacks, migraine disability, and psychological distress.

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## The impact of the DSM-5 dimensional model of personality disorders on psychopathology and treatment outcome in a psychiatric inpatient rehabilitation program: first results

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**Background:** The previous categorical model of personality disorders in DSM-IV and ICD-10 has been criticized for insufficient validity and discriminatory power of particular diagnostic categories. Furthermore, also mild levels of personality pathology may have an impact on the severity of mental illness as well as on treatment outcome; however, till now, these subjects did not meet diagnostic criteria of personality disorders. Consequently, the new dimensional model of personality disorders in DSM-5 was developed to overcome these shortcomings.

**Methods:** In a consecutive sample of a 6-weeks inpatient rehabilitation program, personality diagnoses according to DSM-5 were established using the General Assessment of Personality Disorders (GAPD, Hentschel & Livesley 2013) and the Personality Inventory for DSM-5 (PID-5-BF, Krueger et al. 2012). In addition, the SCL-90-R was administered twice for assessing the severity of psychiatric symptoms at admission and at discharge, as well.

**Results:** At present, data from 124 patients (56 men, 68 women; mean age 51 years) have been analysed. As expected, there is a significant positive correlation between psychiatric symptom severity and the level of personality pathology ( $p < 0.001$ ,  $r = 0.51$ ). Furthermore, patients with moderate to severe levels of general personality pathology showed significantly lower treatment efficacy rates ( $p < 0.001$ ). However, a significant impact of particular personality domains according to DSM-5 on treatment outcome was not established yet.

**Conclusion:** These pilot results confirm the association between personality pathology and clinical severity of mental disorders. In addition, as demonstrated, higher levels of general personality pathology may serve as a negative indicator of treatment outcome.

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## 10 Years of Psychotherapy Care for Medically Unexplained Symptoms (MUS)

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Medically Unexplained Symptoms (MUS) are common and drive high attendance rates across the UK health system (i.e., 45% of GP appointments, 50% of new visits to hospital clinics) . They affect the physical and emotional well-being of patients, but also the morale of the professionals that try to help them. MUS are particularly costly to the economy, accounting for approximately 10% of the total NHS expenditure on the working age population in England only . At the same time, there is generally inadequate service provision across the NHS to cater for the needs of patients with MUS. Here we present an innovative primary care service model, provided by one of the specialised mental health trusts in the UK, the Tavistock and Portman NHS Trust. The Primary Care Psychotherapy Consultation Service (PCPCS) works closely with GPs from one of the most diverse London boroughs to support them in managing patients with MUS, complex mental health and other needs that result in frequent use of health services. It is a multidisciplinary team of experienced clinicians skilled in psychodynamic thinking, with an interest in complex psychological and clinical presentations. Due to its innovative nature and flexible approach, PCPCS has been successful in engaging with and effectively catering for the needs of an otherwise particularly challenging population.

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## Effect of psychotherapy on quality of life and recurrence of events in patients with recurrent vasovagal syncope: a randomised study

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**Objectives:** To evaluate the effect of psychotherapy on quality of life (QoL) and also on the number of syncope and pre-syncope events during one year of follow-up among patients with recurrent vasovagal syncope.

**Methods:** A randomised controlled trial was conducted including 10 patients with recurrent vasovagal syncope and positive tilt test. Cardiac disease and ongoing psychiatric / psychotherapeutic interventions were the main exclusion criteria. After randomisation, half of the patients underwent regular sessions of psychotherapy, while the control group was followed without psychotherapy. The sessions occurred on average every 10 days. QoL by SF-36 and recurrence of syncope and pre-syncope were assessed before randomisation and during the first 12 months after inclusion.

**Results:** In the assessment of QoL by SF-36, comparing before and one year after randomisation, there was no statistically significant difference in the control group but there was a significant improvement in the intervention group ( $44.9 \pm 11.9$  vs.  $68.8 \pm 7.8$ ,  $P < 0.01$ ). Regarding the recurrence of syncope events, there was no significant change in the control group; however, in the intervention group there was a significant reduction in the rate of presyncope episodes per month ( $5.6 \pm 2.1$  x  $1.7 \pm 0.9$ ;  $P = 0.02$ ) and also a significant reduction in the rate of syncope per year ( $4.6 \pm 3.3$  x  $1.0 \pm 0.7$ ;  $P = 0.04$ ).

**Conclusions:** In a randomised clinical trial, patients with recurrent vasovagal syncope undergoing regular psychotherapeutic intervention had less recurrence of events and improved quality of life in one year.

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## Frequency and characteristics of premature termination and dropouts among inpatient psychosomatic patients

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**Objective:** Relevant clinical and health economic consequences are related to incomplete treatment.

**Methods:** In a consecutive sample of a university psychosomatic clinic frequency and reasons of an incomplete inpatient stay as well as the possible determinants therefore were analyzed. In particular stays with a length of less than 5 weeks were analyzed with regard to attachment anxiety and avoidance as well as to mental functioning and psychic structure.

**Results:** We identified 76 patients (of 533) with incomplete treatments (in 2015-2019). Premature terminations were more frequent among patients with significantly lower scales of depression, higher structural abilities and dysfunctional attachment styles: patients with higher levels of attachment anxiety and avoidance were more likely to quit prematurely, as well as patients with pending pension right procedures. The characteristics for termination were diverse: short stays without explicit reason for dropout (21,1%), family and social context (13,2%), dissatisfaction with the therapeutic setting (11,8%), diverging explanatory models for illness (9,2%) and others. Premature termination (mutual agreement, necessary transfer, N=30) could be discriminated from dropouts (therapist's decision or patient's request, no mutual agreement, N=46) with the latter group having significantly more often stays of less than two weeks.

**Conclusion:** Treatments of a short duration can be part of a necessary and adaptive part of inpatient psychosomatic treatments. The definition of "dropouts" is difficult because it is a multifactorial phenomenon. The identification of possible dropouts points toward the influence of psychic structure, dysfunctional attachment styles and somatic explanatory models in those patients.



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## On the Notion of Trust in Psychotherapy

Dr. Dirk von Boetticher<sup>1</sup>

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### Objective:

One of the most consistent findings in the psychotherapy research literature is that the quality of the patient-therapist-relationship is a major determinant of psychotherapeutic effectiveness. Yet so far a consistent definition of a helping alliance doesn't exist. Recently, Fonagy and his research group have introduced the notion of "epistemic trust" to open up a new understanding of the effectiveness of the therapeutic relationship. At the same time, trust is an important research topic in the humanities and social sciences.

### Methods:

The presentation outlines Fonagy's et al. notion of "epistemic trust" and combines it with notions of trust devised in the humanities and social sciences from a clinical perspective.

### Results:

Fonagy et al characterize epistemic trust as "trust in the authenticity and personal relevance of interpersonally transmitted information". Thus it enables an individual to consider new knowledge from another person as trustworthy, generalizable, and relevant to the self. It makes sure that the individual can safely learn from others and orient himself within a primarily unknown world. Fonagy postulates that mentalizing in therapy is a generic way of establishing epistemic trust. The humanities and social sciences offer a more comprehensive perspective insofar as trust is described as both an affective, cognitive and evaluative phenomenon.

### Conclusions:

Fonagy's et al concept of "epistemic trust" might help to better focus on an important constituent of effective psychotherapy. Yet, taking trust's multidimensionality into account results in a slightly different clinical understanding postulating a primacy of recognition over cognition in clinical encounter as well.

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## Behavioral activation for depression in inpatient groups: a randomised-controlled study

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### Objective:

Decades of research on behavioral activation (BA) have proven its efficacy either as group or as individual psychotherapy. Due to its easier applicability and lower requirements on cognitive abilities, BA constitutes an attractive alternative to other group psychotherapy forms. The aim of the present study was to compare the efficacy of group treatment delivered as BA vs. treatment-as-usual, in this case cognitive-behavioral therapy (CBT-TAU), in an inpatient psychosomatic clinic in Germany.

**Methods:** 315 inpatients were randomly assigned to either BA (N= 145) or CBT-TAU (N=180). Changes over the course of the treatment were monitored (depression score, general group cohesion score). Multilevel models with repeated measures were conducted to examine the key predictors in relation to change over time with patients' random effects.

**Results:** Both group formats showed substantial reduction in depressive symptoms towards the end of the treatment ES (d=1.5). Also, social (d=0.78) and occupational (d=0.67) impairment decreased significantly in both formats. Reported activation levels increased substantially throughout the course of the treatment in both formats (d=1.12). The time factor of the avoidance scale showed a quadratic trend (d=1.8); it decreased during the treatment only to increase again towards the end of the treatment.

**Discussion:** In accordance with previous research, but demonstrating the practicability of the BA approach in rehabilitation clinics in Germany for the first time, both BA as well as TAU led to significant improvement of symptomatology. Considering the lower requirements of cognitive abilities and easier implementation, BA is a good alternative to other therapeutic techniques.

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## Dynamic Psychotherapy: the therapeutic process in the treatment of Somatic Symptom Disorder

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Psychoanalysis is part of the history of the development of studies on somatic symptom disorder (SSD), especially when symptoms seem to be a consequence of the impossibility of dealing with traumatic experiences. However, viewed as a long-term approach, therapies derived from psychoanalysis, such as Dynamic Psychotherapy (DP), are not in the first line of treatments for these conditions, which may be a reflection of a scarcity of publications on its effectiveness.

**OBJECTIVE:** Recognizing the literature gap in this field, and the improvements reported by dynamic therapists, a study on the treatment of SSD was conducted in order to discuss the effects of this technique. **METHODS:** A narrative literature review and the analysis of two clinical cases were carried out in order to discuss therapeutic processes, highlighting the main interventions adopted in the treatment through DP. **RESULTS:** The therapist's active stance seemed to be essential to encourage the patient to face feared memories and identify the core conflict. Through emotional exploration, confrontation of defensive functioning and interpretative interventions, the treatments obtained positive outcomes, with the reduction of symptoms and an increase in patients' quality of life. **CONCLUSION:** DP, despite being similar to other therapeutic approaches during the treatment, has led to long-term results, providing evidence that DP may produce favorable outcomes in the treatment of SSD, mainly when involve traumatic experiences.

## Psychosomatics during the COVID pandemic

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A mechanic tactile oscillation of the upper abdomen for 15 minutes reduces respiratory and emotional stress and stimulates nasal nitric oxide much more effective than humming in COVID patients

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Nitric oxide is more and more known as an important molecule in the human body. It seems to protect vessel's endothel, lowers blood pressure and has antiviral and antibacterial potential. It is produced in the nasal cavity's mucous membranes and can be induced by humming. This may be helpful as a first line defense mechanism. In a randomized controlled trial (n=26) in COVID patients (n= 5), healthy controls (n=11) and psychosomatic patients we tested the nasal nitric oxide changes, the capillar saturation with oxygen and the stress levels (HRV) before and after calm sitting, humming, slow paced breathing (SPB) and a oscillatory stimulation with 45 Hz of the upper abdomen (each 15 min). There was a significant increase of nitric oxide in COVID patients, but not by SPB or humming and no relevant increase in the psychosomatic patients group. No deterioration in oxygen levels were observed. The relaxation effects were similar in SPB and the application of tactile oscillation, but not in humming. The application of tactile oscillation (frequency similar to a purring cat) for 15 minutes improves the body's own production of nitric oxide which will reach the lung by inspiration and may have some antiviral effect beside the relaxing impact. It could be a complementary treatment for COVID patients, especially in post- or long covid cases. Physiotherapy is expensive and not everywhere easily available. This approach could be an alternative and can be applied by the patients themselves without help. Further research is needed.

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## DIMMI COME STAI. A web survey on psychological reaction of persons with Multiple Sclerosis during the Covid-19 emergency. Resilience from disease?

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### Objective

We conducted the study during the COVID-19 pandemic to observe the PwMS psychological reaction to this emergency that represents a major threat to health and an unexpected psychological stress, worsened by the restrictions. In Persons with (pw) Multiple Sclerosis (MS), considered at major risk of an harmful infection, behavior and mood could also have been influenced by the greater caution suggested by clinicians.

### Methods

The study design is observational, retrospective, focused on good clinical practice and conducted at the Niguarda Hospital. The subjects received the invitation to voluntarily join the study by filling out a form online containing anamnestic data, daily habits, "The 7-items Generalized Anxiety Disorder Scale" (GAD-7), the "Patient Health Questionnaire-9" (PHQ-9). The principal outcome is the PHQ-9 and GAD-7 score in pwMS.

### Results

On April 10th 2020, 88/165 invited pwMS and 187 controls joined the study. The mean PHQ-9/GAD-7 scores didn't differ from no-MS-subj. The pwMS referred more fear for health ( $p=0.003$ ) and for MS ( $p<0.0001$ ) considering themselves at higher risk ( $p<0.0001$ ). Respect to no-MS-subj, pwMS were more used to think about health ( $p=0.0002$ ) and to listen to the news ( $p=0.0002$ ), evaluating it more useful ( $p=0.003$ ) and reliable ( $p=0.017$ ). They were more motivated to respect the restrictions ( $p=0.002$ ), feeling to be protected ( $p=0.0092$ ). Stay at home, keep busy and tolerate the family relations resulted in less stressful behaviors in PwMs than in controls.

### Conclusion

The results could suggest that pwMS showed a proper resilience with specific coping strategies during the acute phase of the pandemic.

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## Psychological impact of COVID-19 in a refugee camp in Iraq

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The worldwide spread of COVID-19 is especially causing a humanitarian catastrophe in refugee camps in crisis regions.<sup>1</sup> For example, currently over 350 000 survivors of Islamic State of Iraq and Syria (ISIS) terrorism in the Kurdistan region of Iraq live in more than 20 refugee camps. These communities, which had already been traumatized, are now confronted with further adversities that exacerbate the ongoing psychological suffering and lead to increased suicide rates<sup>2</sup>; however, medical and psychological care is limited,<sup>3</sup> and the work of humanitarian actors is restricted.<sup>4</sup> Moreover, social distancing is almost impossible in high-density camps, and hygiene practices are often simply not applicable.<sup>5</sup> The objective of our pilot study was to briefly examine for the very first time the development of mental health of a cohort of Yazidis in a refugee camp in Iraq using selective psychometric measures before and shortly after the COVID-19 outbreak.

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## Mental health status of health care workers during COVID-19 epidemic in Ukraine

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The coronavirus disease 2019 (COVID-19) crisis places additional pressure on healthcare system and brings a greater risk of psychological distress for doctors

### Methods

An online questionnaire was distributed via social media and professional networks in Ukraine between July and December 2020. Demographic, health and mental health data, current anxiety (STAI-Y1 state), depression (CES-D) and suicidality (RASS), were registered. Data from 1452 persons were anonymously collected (78.% females; aged  $39.1 \pm 13.15$  and 21.1% males; aged  $38.46 \pm 15.44$ ). 55.2% were health care workers (41.8% doctors, 2.7% nurses, 10.7% other staff).

### Statistical Analysis

A post-stratification method was used; descriptive statistics were calculated. T-tests for independent samples and Factorial Analysis of Variance (ANOVA) tested relations among variables.

### Results

40.2% of doctors reported their emotional state due to the COVID-19 epidemic become worse. 31.7% of health care workers reported they ate more than they used to, 28.4% reported the quality of sleep decreased. Employment affected mean scores of STAI-S, CES-D and RASS scales. The mean scores differ and were significantly higher in doctors, compared to non health workers and other medical staff: STAI-S  $t(1256) = -5.14$ ,  $p=0.000$ ; CES-D  $t(1256) = -2.27$ ,  $p=0.006$ , due to CES-D depressed affect and somatic complains  $t(1256) = -2.18$ ,  $p=0.02$ ; RASS intention scale  $t(1256) = -3.8$ ,  $p=0.000$ , RASS self harm scale  $t(1256) = -3.49$ ,  $p=0.000$ , RASS history of suicide scale  $t(1256) = -2.62$ ,  $p=0.009$ , RASS total score  $t(1256) = -7.66$ ,  $p=0.000$ ,

### Conclusions

Doctors were the most vulnerable population. COVID-19 epidemic caused distress and led to increased levels of anxiety, depressed mood and somatic complaints, as well as suicidality.

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## Mental Distress in Healthcare Professionals Working During COVID-19

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**OBJECTIVE:** Explore the impact of working during the COVID-19 pandemic affects the psychological response of clinical and non-clinical healthcare professionals (HCPs).

**METHODS:** This study was a cross-sectional, multi-centered hospital online survey of HCWs. Mental health outcomes of HCWs were assessed using Impact of Events - Revised scale (IES-R), Generalized Anxiety Disorder scale (GAD-7), and Patient Health Questionnaire (PHQ-9).

**RESULTS:** Among 3852 participants, moderate and severe scores for symptoms of post-traumatic stress (PTSD) (50.2%), anxiety (24.6%), and depression (31.5%) were observed among HCPs. Multivariable logistic regression analysis showed non-clinical HCPs working only during this pandemic were at higher risk of anxiety (OR, 1.68; 95% CI, 1.19-2.15,  $P = .01$ ) and depressive symptoms (OR, 2.03; 95% CI, 1.34-3.07,  $P < .001$ ). HCWs using sedatives (OR, 2.55; 95% CI, 1.61-4.03,  $P < .001$ ), those who cared for only 2-5 patients with COVID-19 (OR, 1.59; 95% CI, 1.06-2.38,  $P = .01$ ), and those who had been in isolation for COVID-19 (OR, 1.36; 95% CI, 0.96-1.93,  $P = .05$ ), were at higher risk of moderate/severe symptoms of PTSD. In addition, deterioration in sleep was associated with symptoms of PTSD (OR, 4.68, 95% CI, 3.74-6.30,  $P < .001$ ), anxiety (OR, 3.09, 95% CI, 2.11-4.53,  $P < .001$ ), and depression (OR 5.07, 95% CI, 3.48 – 7.39,  $P < .001$ ).

**CONCLUSION:** Psychological distress was observed in both clinical and non-clinical HCP. As the COVID-19 pandemic continues, increasing psychological and team support may decrease the mental health impacts and promote a healthier workforce.



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## Symptom variability in long covid: preliminary data from an intensive longitudinal study.

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### Objective

Long covid is an emerging problem comprising fatigue and multiple symptoms following acute infection with SARS-CoV-2. Severity of long covid has little relationship to acute illness severity. We aimed to examine the within-person variation of symptoms in long covid and their association with physical activity.

### Methods

We carried out an intensive longitudinal study of 24 adults with self-reported long covid using data entry on a smartphone app. Participants were recruited from a peer group. Most had become unwell in the first wave of Covid19, had not been admitted to hospital and had not had PCR testing.

Data entry was prompted by reminders on the phone 5 x daily for 7 days. Self-report data used visual analog scales to record 6 symptoms plus general wellbeing. 18 participants used a wrist-worn accelerometer for 7 days. Participants completed a baseline survey and follow up 4 months later.

### Results

Participants completed a median of 31 entries (IQR 29-33). There was substantial within and between person variation in symptoms. Correlations between fatigue and overall severity were consistently strong but other associations were more heterogeneous. Symptom variation showed little apparent relationship with physical activity. At follow-up, impact on social roles and activities was inversely correlated with interoceptive accuracy (Interoceptive Accuracy Scale)

### Conclusion

Long covid is a heterogeneous multi-symptom disorder with substantial within person variation. These preliminary findings are in keeping with a disorder of interoception.

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## UHN CARES: Individual and Team Mental Health Supports for Hospital Workers During the COVID19 Pandemic

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**Objective:** There has been growing concern of the impact of the COVID19 pandemic on healthcare worker (HCW) mental health. However, there is limited evidence to guide the provision of mental health support to workers during these times. Led primarily by our consultation-liaison psychiatry team, we rapidly developed and implemented a program to deliver both individual and team-level support for HCW. **Methods:** To support individuals, we developed a modified stepped care model. This included online self-management resources, virtual group care, as well as individual counselling and psychiatric care. To support teams, we implemented a mix of proactive and reactive outreach, conducting drop-in visits and requested in-services to other teams as needed. We have been using a mixed methods approach for program evaluation. **Results:** Our online resources have had over 6800 page views. We have had 128 referrals for individual care, with approximately two-thirds having moderate to severe anxiety and depressive symptoms at the time of referral and 17% present with safety concerns. Mean time from referral to first appointment is four days and people receive an average of four sessions. Post-care surveys have shown a high level of satisfaction with services and improvement in symptoms. Our team supports have provided over 400 engagements on different units, with the majority (n=298) being proactive outreach. **Conclusion:** Wellness promotion programs do not fully meet the increased mental health needs of HCW during the pandemic. We have developed a high quality support program which is feasible, sustainable, and valued by teams and individuals.

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## Changes in suicide attempts in rural China under Covid-19 era: a pilot survey based on Electronic Medical Record

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**Background:** The pandemic of coronavirus disease 2019 (COVID-19) resulted in a unique set of behavior and psychological changes among the population. However, it is still unclear whether the event is associated with the suicide attempts and the pattern of vulnerable factors.

**Objective:** To investigate the alterations of suicide attempts, as well as the risk factors in rural China before and after the pandemic.

**Material and Method:** We investigated the hospital information system (HIS) of the biggest medical center in a rural county with more than 400, 000 population in Guangxi. All the admitted intoxication cases from January 2016 to December 2020 were divided into suicidal or accidental poisoning according to medical history and diagnosis. Interrupted time-series analysis was performed to demonstrate the temporal change of frequency, and logistic regression was used for further adjustment of demographic covariates.

**Result:** A total of 393 suicidal and 296 accidental poisoning cases were included. The predicted average line of suicidal was horizontal before January 2020, while there was a drop in frequencies after the pandemic ( $p < 0.05$ ). However, the incidence of accidental poisoning was not significantly changed over time. Being females, originated from rural area and unemployment were independent risk factors for suicide attempts after adjustment, regardless of the occurrence of Covid-19 ( $p < 0.05$ ).

**Conclusion:** We initially found the decreased suicidal attempts under the pandemic in our sample, but not with the altered pattern of vulnerable factors in these patients. Longitudinal studies are warranted to verify the current finding.

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## Experience in the functioning of the primary healthcare clinic during the COVID-19 pandemic, the scope of possibilities to maintain the psychosomatic standard of care during an epidemic.

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This study tries to answer the question to what extent the COVID-19 pandemic disrupted the functioning of the Primary Healthcare Clinic focused on psychosomatic aspects, based on the example of the outpatients Primary Healthcare Clinic of the Psychosomatic Institute in Warsaw (POZ IPS).

The functioning of POZ IPS during the first wave of the COVID-19 pandemic in the spring of 2020, was analysed, both in terms of organization and staff motivation to maintain the existing requirements of an extended psychological contact with the patient. The clinic was distinguished by the extended scope of psychosomatic care due to additional training of the staff and employment of a psychiatrist, psychologist, and immunologist.

The author analyses the individual phases of the adaptation of POZ IPS to work during a pandemic, the motivation and behaviour of its staff in the subsequent stages of the epidemic development and the factors that determine them. The effectiveness of corrective actions taken in the period between pandemic recurrences in terms of improving the quality of care is also analysed, including the results of an external telephone audit regarding the quality of contact with the reception of POZ IPS.

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## PSYCHOLOGICAL DISTRESS IN ITALIAN HEALTHCARE PROFESSIONALS DURING THE COVID-19 PANDEMIC

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### BACKGROUND:

During the COVID-19 pandemic, health professionals are faced with specific stressors endangering their physical and mental health and their functioning.

### OBJECTIVE:

To explore the psychological health of a sample of healthcare workers, and related influencing factors.

### METHODS:

Online survey to the staff of the University Hospital of Modena. Demographic data and behavioural changes related to COVID-19 were collected; mental health status (by the Depression, Anxiety and Stress Scale - DASS-21), psychological impact (by the Impact of Event Scale-Revised - IES-R), and work-related psychological state (by the Utrecht Work Engagement Scale - UWES-9). Descriptive statistics were used to summarise data, whereas chi-squared tests were used to assess whether the occurrence of psychological distress differs amongst different categories of healthcare workers.

### RESULTS:

1172 out of 4788 members returned the survey (response rate = 24.5%), male/female ratio was 30/70%. At the DASS-21, 21.0% of respondents reported moderate to severe depressive symptoms, 22.5% moderate to severe anxiety symptoms and 27.0% moderate to severe stress levels. 32.0% of professionals reported a high level of work engagement, but 19.0% scored from moderate to severe as to the psychological impact of the pandemic. Symptoms of psychological distress were statistically associated with female gender, job role, ward, changes in lifestyle, whereas first-line work with COVID+ patients was statistically associated with more stress symptoms.

### CONCLUSION:

Healthcare professionals have shown a significant level of psychological distress. The study is still ongoing, to continue monitoring changes in mental health status and to understand the role of risk and protective factors.

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## Metacognitive beliefs of adolescents in a lockdown situation in Poland - Negative beliefs about worry as a risk factor for depression in healthy adolescents

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**Aim:** The aim of this study was to analyze the role of metacognitive beliefs in adolescents in a lockdown situation in Poland.

**Method:** The questionnaire study included 319 participants (158 adolescents ( $M = 15.41$ ;  $SD = 1.77$ ) and their parents ( $N = 158$ ). In adolescent group 110 responders had no psychiatric diagnosis, 48 were diagnosed with depression. Participants completed the personal questionnaire, The Metacognition Questionnaire for Adolescent (MCQ-A) and the Children's Depression Inventory (parents and child version) (CDI 2).

**Results:** The logistic regression analysis for adolescents shows that negative beliefs about worry (one of the MCQ-A scale) are a significant risk factor for depression in healthy adolescents ( $B = 0.150$ ;  $p = 0.014$ ;  $\text{Exp}(b) = 1.161$ ). The mediation analysis of the hierarchical model carried out with the use of Macro PROCESS Hayes (2018) shows that negative beliefs about worrying, together with problems in the functioning, significantly mediate the relationship between emotional problems and depression in adolescents.

**Conclusions:** The conducted statistical analyzes indicated that negative beliefs about worry were an important risk factor for depression in healthy adolescents in a lockdown situation in Poland. They affect their feeling of ineffectiveness in action. Future prevention programs should focus on adolescent meta-cognitive beliefs training since these beliefs are crucial to prevent deterioration in mental health conditions.

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## Correlation between self-esteem and symptoms of depression and anxiety among health care workers during the first emergency situation of COVID-19 in Latvia

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**Objective:** Health care workers (HCW) during the Covid-19 pandemic are exposed to heavy workloads, leading to mental health problems. Self-esteem has been seen as a protective factor of mental health problems. The study aims to assess the correlation between self-esteem and symptoms of depression and anxiety among HCW during the first Covid-19 wave in Latvia.

**Methods:** A quantitative cross-sectional study in the population of HCW in Latvia was conducted in April-June 2020. In the study, 844 HCW participated. Depression symptoms were assessed using the Patient Health Questionnaire-9 (PHQ-9) scale, anxiety symptoms- using General Anxiety Disorder (GAD-7) scale. Self-esteem was assessed using the Rosenberg Self-Esteem Scale. Data were analyzed using SPSS 26.0 (Spearman's correlation coefficient).

**Results:** From 844 HCW 350 (41.5%) were physicians, 710 (84.1%)- women. Age median for all participants- 40 (IQR 29-54).

132 (15.6%) HCW presented with moderate, 55 (6.5%)- moderately severe and 22 (2.6%)- severe depression symptoms. 101 (11.96%) HCW presented with moderate and 44(5.2%)- severe anxiety symptoms. Rosenberg's self-esteem test median- 32 (IQR 28-36), mean 31.4±5.6.

Statistically significant, negative, moderate correlations were found between severity of depression symptoms and self-esteem score ( $R_s = -0.551$ ,  $p < 0.001$ ). Statistically significant, negative, moderate correlations were found between severity of anxiety symptoms and self-esteem score ( $R_s = -0.501$ ,  $p < 0.001$ ).

**Conclusion:** More severe depression and anxiety symptoms correlate with lower self-esteem among HCW during the first Covid-19 wave in Latvia. A further cohort study is needed to assess causality.

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## Psychosocial care during the COVID-19 pandemic in acute care hospitals in Germany, Austria, and Switzerland – an online survey of Psychosomatic, Psychiatric, and Psychological Consultation and Liaison Services

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**Objective:** Psychosomatic, psychiatric, and psychological consultation and liaison (CL) services in acute care hospitals are facing new challenges in supporting patients, relatives and staff during the COVID-19 pandemic. The objective of this study is to generate evidence regarding the following structure and process aspects of psychosocial care offered by CL services in the context of pandemics:

(1) COVID-19 related psychosocial care and support for patients, relatives and staff in acute care hospitals; (2) experiences made so far with the established services; (3) need for networking, cooperation and support; (4) improving psychosocial care in hospitals in the context of pandemics.

**Methods:** This health services research project is being conducted by the working group CL Psychosomatics of the German College of Psychosomatic Medicine (DKPM) and the German Society for Psychosomatic Medicine and Medical Psychotherapy (DGPM) in collaboration with the Swiss Academy for Psychosomatic and Psychosocial Medicine (SAPPM), the Swiss Society for Consultation-Liaison Psychiatry and Psychosomatics (SSCLPP), and the Austrian Society for Psychosomatic and Psychotherapeutic Medicine (ÖGPPM). A cross-sectional online survey in German, French, and Italian with 26 items was developed on the basis of relevant literature and expert knowledge. Dissemination was promoted by contacting the heads of the psychosocial CL services through the national professional societies, relevant working groups and hospital managers, starting in December 2020.

**Results/conclusion:** First results of the survey will be presented which shall be used to develop recommendations for effective psychosocial support in acute care hospitals during pandemics. Promoting international cooperation between psychosocial CL services may enhance synergies.



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## Cytokine storm-induced new-onset depression in patients with COVID-19. A new look into the association between depression and cytokines - Two case reports

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**Background:** Depression appears to be a common complication in patients during and post–COVID-19 infection. Further understanding the mechanism of action of cytokines in depression, such as interleukin-6, interleukin-10, and cytokine storm syndrome, the core component of COVID-19, could shine a new light on future treatment options for both disorders.

**Objective:** This review demonstrates the role of interleukins in COVID-19 pathogenesis and their role in depression.

**Methods:** We performed a literature review across PubMed.

**Results:** We described cases we have treated as an example for the dual role interleukins have in COVID-19 infection and depression and reviewed approximately 70 articles focusing on the role of interleukins in cytokine storm syndrome and depression.

**Conclusion:** This review highlights the key features of cytokines in both diseases. As the scientific community has more time to recover and process the effect of the current pandemic, we believe that additional research will pave the way to diverse pathways to treat depression in these patients and others.

Somatoform Disorders and Persistent Physical Symptoms

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Anxiety and Somatization in Millennials: a cross-sectional study in Cascais, Portugal

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**Objective:** The aim of this study was to analyze if Anxiety was related with Somatization and to test if they were associated with age, sex, education, professional situation and/or academic situation in millennials from Cascais (Portugal), in 2019.

**Methods:** A cross-sectional population-based design was used. An electronic self-administered questionnaire was sent to a random sample of 10.000 adults born between 1980 and 2000, living in Cascais. It was answered by 878 individuals. Generalized Anxiety Disorder-7 (GAD-7), Patient Health Questionnaire-15 (PHQ-15) and sociodemographic questions were included. Tests were considered positive at the cutpoint $\geq 10$ . Binary logistic regression was performed.

**Results:** Anxiety and Somatization had a positive association (Odds Ratio(OR)=6, p-value(p)<0.001). Anxiety was negatively associated with student-workers (OR=0.4, P=0.015), college education (OR=0.7, P=0.026) and II age group (33-39 years old) (OR=0.7, P=0.029). Somatization was positively associated with female (OR=4.6, P<0.001) and unemployment (OR=1.8, P=0.025). Both tests (GAD-7 and PHQ-15) being positive had a positive association with female (OR=3.4, P<0.001) and a negative association with II age group (33-39) (OR=0.6, P=0.006) and college education (OR=0.6, P=0.012).

**Conclusion:** There was a strong positive association between Anxiety and Somatization which prevailed after adjustment for sociodemographic variables. Female was positively associated with Somatization and with both tests positive, but not with Anxiety (p>0.05) unexpectedly. This could be a local or generational characteristic or be related to the described less overlapping of these two diagnoses in general population than in primary care users. The negative association discovered between Anxiety and student-workers should be considered in future studies.

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## Diagnostic Relevance of Doctor-Patient-Relationship in Patients Suffering from Vertigo and Dizziness

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**Objective:** The current study aims to investigate the relationship between the difficulty of the doctor-patient relationship (DPR) and the diagnosis of a structural vs. functional syndrome. The sample was a group of patients with symptoms that often occur due to functional causes, namely vertigo and dizziness (VD) symptoms.

**Methods:** We investigated outpatients presenting at a specialized center for VD on a cross-sectional base (n=321). They underwent neurological and psychological assessments and completed self-report questionnaires. The DPR was evaluated by considering the physicians' perspective. DSM-5 somatic symptom disorder (SSD) was assessed retrospectively. We investigated relationships between the DPR and the type of VD syndrome (functional vs. structural), between the DPR and a diagnosis of SSD and between the DPR and psychiatric comorbidities.

**Results:** Patients with a DPR experienced as difficult were diagnosed more frequently with functional VD (50% vs. 28.5%), with SSD (72.2% vs. 58.2%) and with at least one psychiatric comorbidity (84.7% vs. 73.5%) than patients without a difficult DPR. Functional VD and the severity level of somatization were identified as predictors of a difficult DPR.

**Conclusions:** Our findings may serve as evidence that a difficult interaction may increase the likelihood for a doctor to consider a functional type of VD. Conversely, patients experienced as difficult could be more likely to be presenting with functional instead of structural symptoms. Considering that we conducted cross-sectional examinations we cannot make causal conclusions. Nevertheless, our findings make it seem important to sensitize physicians about the role of difficult DPRs for potential diagnostic biases.

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# The importance of personality traits and caregivers’ perspective for the presence and perception of somatic symptoms in preadolescents

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## Objective:

Somatic symptoms in pediatric care represent a controversial issue, as many of them can be interpreted in a distorted way. This study aimed to assess the associations between preadolescents’ somatization and their emerging personality traits, with gender as a covariate. The perception of somatic symptoms was comparatively evaluated in children and their parents.

## Methods:

131 preadolescents (68 girls, 63 boys) (mean age=12.67, SD=1.23) and their parents participated in the study. They were administered The Nonverbal Personality Questionnaire and the somatization subscales of BASC-2 (Self-Report and Parent Rating Scales). Pearson’s correlates, linear regression and t tests for independent samples were used for assessing the associations between somatization and study variables.

## Results:

The expression of somatic symptoms was directly proportional to neuroticism ( $r=.21, p<.05$ ) and extraversion ( $r=.21, p<.05$ ). On distinct subscales, somatization correlated to impulsivity ( $r=.36, p<.001$ ), play ( $r=.21, p<.05$ ), aggression ( $r=.18, p<.05$ ), autonomy ( $r=.21, p<.05$ ), and need for help ( $r=.19, p<.05$ ). Conscientiousness had a significant predictor effect on somatization ( $F=2.61, p<.05$ ). Parents perceived girls as displaying more somatic symptoms than boys ( $t(129)= -3.21, p<.05$ ), however this difference was absent in the preadolescents’ self-report of symptoms.

## Conclusions:

Neuroticism, extraversion and conscientiousness may be associated to a higher display of somatic symptoms in preadolescence. Gender can play a role in the interpretation of symptoms by the primary caregivers. These findings could be important for the early identification of individuals at risk of somatization and the understanding of gender-related differences in addressing medical services in this age category.

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## Interdisciplinary consilium intervention for medical "complex cases"

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**Objective:** Medical “complex cases”, usually concern patients with syndromes whose etiology remains contested. Medically unexplained physical symptoms (MUPS) are present in 15%-30% of primary care consultations. Lack of known etiology of MUPS can lead to a conflictual doctor-patient relationship, management of these situations being challenging.

**Method:** A general internal medicine Consilium Consultation (CC) was created during 2014 in Lausanne, which receives patients referred by their attending practitioner for an expert opinion, when confronted to “complex cases”. The aim of CC is to make a diagnosis, or to propose a specific treatment. MUPS were present to more than half of CC interventions. To address this issue, a CL psychiatrist integrated the CC team in 2018, participating in clinical presentations, during restitutions and investigations. Supervisions are equally proposed during CC weekly meetings.

**Results:** This model was efficiently implemented, general practitioners (GPs) and psychiatrist benefiting from this collaboration. An amelioration of diagnosis and treatment propositions was identified. In parallel, this type of collaboration promoted: 1) exploration of the contribution of patients’ psychosocial factors to their symptoms; 2) management of incertitude and iatrogenic anxiety; 3) training to functional symptoms and to psychiatric comorbidities; 4) validation of patient’s burden due to chronic diseases; 5) communication skills with referring GP and patients.

**Conclusions:** Integration of Consultation Liaison psychiatrists to this specific “Consilium Consultation”, helps MUPS’ recognition and treatment propositions. This model of interaction can reinforce Psychiatrists/GPs collaboration for “complex cases”, propose specialized medical training and promote a more efficient medical care for a vulnerable population.

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## Development of a national clinical database for functional somatic disorders - clinicians' and patients' perspectives.

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### Objective:

In Denmark, a national clinical database for functional somatic disorders (FSD), FuncData, containing patient reported outcome measures (PROMs), has recently been implemented. The objectives of this study are to present and describe FuncData, including the utility in daily clinical practice and patients' acceptance and satisfaction.

### Methods:

FuncData's utility for daily clinical practice is investigated by three surveys sent to all clinicians who use the database at the five FSD centers in Denmark: One before, one immediately after, and one a few months after the implementation of FuncData (expected n~50). Patients' acceptance and satisfaction are investigated by a survey sent once to all first visiting patients at the FSD centers from November 2020 to April 2021 (expected n~250).

### Results:

Results from the pre-implementation survey among clinicians showed that 86% of clinicians already used PROMs to some extent, and 97% agreed that PROMs can contribute to research and quality improvement.

FuncData is now initiated in all five FSD centers in Denmark and contains a number of validated PROMs, available to the clinicians for use within the primary consultation.

Results from the clinicians' perspectives post-implementation, and the patient's acceptance and satisfaction will be presented.

### Conclusion:

To our knowledge, this is the first study on a systematic use of PROMs in all FSD outpatient departments on a national level. This study will contribute substantially to the optimization of FuncData, thereby enabling systematic FSD research and hopefully inspire other countries to gather high quality FSD data as well.

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## Does music listening affect somatic symptoms and biopsychological markers of stress in depressive and somatic symptom disorder patients?

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**Objective:** Persistent somatic complaints are frequently reported by patients with somatic symptom disorder (SSD) and patients with depression (DEP), causing severe impairments in daily functioning. Music listening qualifies as a promising tool for the alleviation of somatic symptoms that can be integrated easily into everyday life. We aimed to examine the effects of music listening on somatic symptoms and to investigate the biopsychological mechanisms underlying these effects in the daily lives of patients with SSD and DEP.

**Methods:** 29 women with SSD and 29 women with DEP reported intensity of and impairment by somatic symptoms using preprogrammed iPods on five fixed time points per day for 14 consecutive days. They also indicated momentary stress and music listening since the previous data entry and provided saliva samples for the analysis of salivary cortisol and salivary alpha-amylase.

**Results:** Hierarchical linear models revealed that music listening predicted reduced subjective stress ( $p=.03$ ) while particularly musical valence (ranging from sad to happy) predicted reduced intensity of ( $p=.03$ ) and impairment by ( $p=.02$ ) somatic symptoms in both patient samples. Furthermore, listening to music for reasons of activation ( $p=.02$ ) and distraction ( $p=.008$ ) were associated with a decrease in cortisol levels in patients with DEP.

**Conclusions and implications:** This study is the first to provide evidence for the beneficial effects of music listening on somatic symptoms in patients with SSD and DEP while considering underlying biopsychological mechanisms. The results from this study will help to inform the development of music interventions targeting somatic symptoms and stress in everyday life.

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## Causal attributions for somatic symptom disorder

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**Objective:** Two research questions will be addressed: (1) What does the German public think about possible causes of somatic symptom disorder (SSD) and are there differences in causal attributions according to symptom and course of SSD? (2) Are causal attributions associated with beliefs about treatment and stigmatizing attitudes?

**Methods:** Two vignettes with symptoms of SSD were used in a national telephone survey in Germany (N = 1004). Vignettes differed regarding main type of symptom (pain vs. fatigue) and existence of an earlier somatic disease (yes vs. no). Respondents were asked about their agreement with five causal beliefs (broken home, heredity, lack of willpower, work stress, and misinterpretation of body signals).

**Results:** About 90% of the respondents agreed that work stress is a possible cause of the SSD symptoms. Agreement was significantly more pronounced in case of a person with fatigue and an earlier severe somatic disease. A quarter endorsed lack of willpower as a possible cause. Lack of willpower was associated with a significant increase of desire for social distance in both vignettes. Work stress was associated with a significantly increased likelihood of positively evaluating the effectiveness of psychotherapy in both cases of SSD.

**Conclusion:** Public beliefs about causes of SSD are associated with stigma and treatment beliefs. Emphasising work stress as a cause may promote the belief that psychotherapy is effective for treatment of SSD.



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## Helpful explanatory models for somatoform symptoms: study protocol of an experimental study (HERMES)

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**OBJECTIVE:** Somatoform symptoms are a common phenomenon. However, the majority of affected patients do not receive timely and adequate treatment. The present randomized experimental study will investigate whether a new video-animated psychoeducational intervention will be able to reduce psychological and somatic symptom burden in patients with somatoform symptoms.

**METHODS:** Between October 2019 and April 2020, recruitment will take place in a psychosomatic outpatient clinic. Patients with somatoform symptoms without prior psychotherapeutic treatment experiences will be included and randomized into one of three intervention arms: an optimized explanatory model for somatoform symptoms, an optimized and individualized explanatory model or a control intervention with information on the German guidelines on functional body complaints. At baseline and after one month, psychological (SSD-12) and somatic symptom burden (PHQ-15) will be assessed along with qualitative interviews and further validated questionnaires assessing illness perceptions, somatosensory amplification and strategies to avoid symptom-related anxiety.

**RESULTS:** A total of N = 75 patients will be randomized to the three experimental conditions. Changes in psychological and somatic symptom burden one month after the intervention will be compared between groups. Explorative data analysis will examine the mediating effect of illness perceptions, somatosensory amplification and strategies to avoid symptom-related anxiety. Qualitative analyses will investigate the influence of the intervention on health care use and illness behavior.

**DISCUSSION:** This pilot study will highlight the usefulness of tablet computer-based explanatory models as a starting point for both improving early treatment for patients with somatoform symptoms and the respective doctor-patient relationship.

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## Identification of microRNA as regulating somatic factors of adaptive coping in patients with fibromyalgia syndrome

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**Objective:** Identification of cluster specific miRNA signatures related to resilience and disability.

**Methods:** A previous study identified 4 subgroups among FMS patients and characterized them as "maladaptive," "adaptive," "vulnerable," and "resilient" using factor and cluster analysis [1]. Thirty-two FMS patients and sixteen healthy controls were selected to analyze the relative gene expression of miR103a-3p, miR107, miR130a-3p and miR125a-5p in white blood cell (WBC) RNA. The relative gene expression of miRNA was correlated with clinical scores of pain, stress, and resilience-related questionnaires. Potential target genes of the selected miRNA were determined with the online tool "Target Scan Human" and a cluster-specific miRNA-mediated regulation scheme was created.

**Results:** MiR103a-3p, miR107 and miR130a-3p were lower expressed in FMS patients compared to healthy controls ( $p < 0.05$ ). The highest relative gene expression was shown by miR103a in the adaptive cluster ( $p < 0.05$ ), the patient group with the lowest disability in all symptom categories, and correlated with disease-related disability ( $p < 0.05$ ). MiR107 tended to slightly increased expression in the adaptive cluster and correlated with the total score of the trauma questionnaire "physical abuse" ( $p < 0.05$ ). Target Scan Human" identified serine / threonine protein kinase (SNRK), nuclear factor kappa-b, cyclin-dependent kinase (CDK) and toll-like receptor 4 (TLR4) as target genes of the miR103a/107 miRNA family.

**Conclusion:** We show an association between upregulated gene expression of miR103a, tending to include miR107, and adaptive coping in FMS patients. Validation of this miRNA family might lead to the identification of a somatic resilience factor in FMS.

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## Extended application of DCPR in psychosomatic practice of Gastroenterology -a comprehensive report on our series clinical investigations of 10 years

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There is over 50% prevalence of functional GI symptoms in outpatients of gastroenterology which include those unexplained ones in organic GI diseases in China and psychosomatic intervention including psychotherapy and low dose antidepressants is effective for patients with functional GI symptoms in FGIDs and some organic GI diseases . However the assessment system is inadequate in terms of biological model on the one hand and psychiatric assessment can only cover small portion of GI patients related with psycho-social aspects on the other hand. In addition, part of the patients with FGIDs who meet criteria of such common category as depression , anxiety or somatic symptom disorders have low motivation for psychotherapy or antidepressants under diagnosis of DSM or ICD system. A comprehensive psychosomatic model was developed in the practice of gastroenterology. In our multidimensional assessment and intervention frame, it is found that : (1) DCPR fill in the vacancy of conventional evaluation system of biological gastroenterology and conventional psychiatry ; (2) DCPR is of help for intervention and rehabilitation not only for patients with functional GI disorders but also so called organic GI diseases.

Stress-related disorders and trauma

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Recognizing tension in the body in patients with stress-related disorders: The role of early childhood adversity

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**Objective.** The present study explores differences between patient groups –that share stress-related physical complaints as common characteristic– in the recognition of distress in the body and how this relates to personality characteristics and early childhood adversity.

**Methods.** 26 patients with fibromyalgia/chronic fatigue syndrome (MUS), 31 patients with panic disorder (PD), and 36 patients with emotional exhaustion (EE) filled out a self-observation form enquiring levels of psychological distress and somatic symptoms for every hour on seven consecutive days. Further, all patients filled out questionnaires measuring personality and early adverse experiences.

**Results.** A within-subject correlation between self-reported psychological distress and somatic symptoms was calculated using all data points to investigate inter-individual differences in the relationship between psychological distress and somatic symptoms. Trait anxiety and anxiety sensitivity, which were higher in the PD group, were positively correlated with this within-subject correlation. Furthermore, the number of traumatic experiences was higher in the MUS group than in other groups, and was significantly negatively correlated with recognizing distress in the body. The within-subject correlation was not correlated with negative and positive affectivity or alexithymia.

**Conclusion.** Differences between patient groups arise in trait anxiety and anxiety sensitivity as well as traumatic experiences. MUS patients are less anxious and often have experienced more early childhood adversity, which in turn relates to a worse recognition of distress in the body, than patients with emotional exhaustion and panic patients. These differences in the ability to “recognize psychological distress in the body” may have important implications for clinical practice.

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## The impact of neurocognitive functioning on the course of posttraumatic stress symptoms following traumatic brain injury

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**Objective:** We aim to explore the impact of neurocognitive functioning after traumatic brain injury (TBI) on the course of posttraumatic stress disorder (PTSD) symptoms with an additional focus on the intrusion, avoidance, cognition/mood, and arousal clusters of PTSD.

**Methods:** 671 participants with a TBI were drawn from the Collaborative European Neurotrauma Effectiveness Research (CENTER-TBI) study. At 6 and 12 month follow-up, the PTSD Checklist-5 (PCL-5) was administered to calculate change scores and determine probable PTSD diagnosis by the Symptom Cluster Method. At 6 months follow-up, neurocognitive assessment was performed including the Rey Auditory Verbal Learning Test (RAVLT), Trail Making Test, and the Cambridge Neuropsychological Test Automated Battery (CANTAB). Linear regression analyses were performed to assess the association between cognitive functioning and the course of PTSD symptoms.

**Results:** Overall, the mean PCL-5 score did not clearly change ( $-0.20 \pm 9.88$ ). At six months, 79 (11.8%) participants met criteria for a probable PTSD diagnosis. CANTAB Rapid Visual Information Processing (RVP) scores, and in severe TBI, CANTAB Attention Switching Task (AST) scores, were significantly associated to change in PTSD symptoms. CANTAB RVP, AST, Reaction Time (RTI) and RAVLT recall scores were significantly associated to change in avoidance, cognition/mood, and arousal symptoms.

**Conclusion:** Sustained attention and, in severe TBI, cognitive flexibility, were associated with change in PTSD symptoms. Reaction speed, sustained attention and cognitive flexibility predicted change in avoidance, cognition/mood, and arousal symptoms. Verbal memory was inversely associated with change in avoidance and arousal symptoms.

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## Who is at risk? Stress-response syndrome and personality – symptoms of ICD-11 adjustment disorder and the Type D Personality

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**Background:** The ICD-11 adjustment disorder (AjD) describes the development of emotional and behavioral symptoms in response to non-traumatic but stressful life events. Symptoms are preoccupation with the stressor, failure to adapt, depressive moods, anxiety, and disturbance of impulse control. The experience of increased negative emotions while inhibiting these emotions in social situations are traits of a Distressed Personality (Type D), which has been well studied in cardiovascular patients, and is considered as health risk factor. We investigated whether Type D is also associated with an increased degree of AjD-symptoms.

**Methods:** On admission (t1) and discharge (t2), patients from a psychocardiological department of a German rehab clinic were examined regarding ICD-11 AjD- symptoms (ADNM-20) Type D (DS-14).

**Results:** Of N = 208 patients, 64% had clinically relevant ICD-11 symptoms of adjustment disorder and 66% fulfilled the criteria of a Type D. At t1, patients with Type D were significantly more likely to have clinically relevant symptoms of AjD (76%) than patients without Type D (59%). Overall, patients with Type D were significantly more stressed with symptoms of AjD at t1 and at t2. Besides work-related impairment (long-term sick leave, disability pension) was high in patients with Type D. In addition, patients with Type D reported significantly more events that were experienced as highly stressful.

**Conclusion:** Patients with Type D carry a higher risk of developing AjD-symptoms since they perceive potentially stressful events more often as highly stressful.

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## MENTAL PHENOMENA IN INTERNALLY DISPLACED PERSONS

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**Relevance.** The long-term armed conflict in eastern Ukraine (2014-2021) caused an important problem of stress on the population in the conflict zone, deterioration of Health and forced migration.

**Objective.** To study the features of mental phenomena in the internally displaced persons.

**Materials.** During the 2015-2016, 130 IDPs aged 18 to 80 years who left their places of permanent residence due to the armed conflict. Three representative groups were created from the general population: patients with somatic pathology (GSP)(33% of IDPs); patients with mental pathology (GMP) and mental illness disabilities (33% of IDPs); conditionally healthy (GCH) (34% of IDPs).

**Methods:** socio-demographic, clinical, psychodiagnostic (self-questionnaire of health status PHQ).

**Results.** Among mental disorders, other anxiety and major depressive syndromes dominated the PHQ health questionnaire-37.7% and 23.8%, respectively (with a predominance in GSP and GCH). This was followed by alcohol abuse – 16.2% (with a predominance in GSP and GMP), panic syndrome – 10.0% (with a predominance in GCP and GSP), other depressive disorders – 8.5% (with a predominance in GSP and GMP) and somatoform disorders – 6.9% (with a predominance in GSP). The last places were occupied by overeating disorders and bulimia nervosa (5.4% and 0.8%, respectively).

**Conclusions.** The study showed that the dominant mental disorders in respondents are depressive and anxiety, as well as alcohol abuse, panic syndrome, which have become effective markers of focus influence for different groups of IDPs in the development of a differentiated program of psychological and psychiatric care.

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## Pathology of pain in cumulative trauma

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**Objective:** Psychology defines cumulative trauma, in which a psychic structure is prone to suffering that can move between somatic and psychological. Psychosomatic risk predisposes some patients to pathology in balance, between depressions that require medication and serious somatic diseases. The paper presents a 68-year-old patient with psychiatric hospitalizations for an organically modified personality, in which relationship sensitivity, major depression and sensitivity to rejection predominate. Somatically, it presents a skin tumor with unpredictable and unknown evolution in the right jaw, COPD, hypertension, peritrochanteric comminuted fracture MI left (gamma nail implant migration, atrial fibrillation, LVS), nodular opacity, homogeneous, isocostal intensity, located in 1/2 inf of the lung, with a tendency to confluence.

**Methods:** hospitalization, psychiatric evaluation under antidepressant and antipsychotic treatment with HAM, PANSS, GAFS, quality of life scales, pulmonary X-ray, pelvic X-ray, EKG, EEG, brain MRI, counseling, social assistance.

**Results:** The vision of cumulative trauma explains the psychotic depression in which the outsourcing of persecutory projections predominates, while in the somatic plan a neoplastic pathology develops both at the skin and lung level. Feelings of marked pain in the somatic plane, multiple and difficult to respond to analgesics (including opioids) amplify indications of brain organicity (supported by EEG, MRI, psychological evaluation), in which the coloration of rejection predominates, and the activation of the paranoid nucleus and feelings of pervasive exteriorized hatred and revenge.

**Conclusions:** The coefficient of psychogenesis in neoplastic pathology is represented at the level of primitive defense mechanisms, the personality structure being dominated by unconscious aggression turned towards itself.



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## Associations between fatigue and endocrine functioning in individuals with chronic stress

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**Objective:** Individuals suffering from chronic fatigue have been found to experience significantly more stress compared to healthy individuals. However, not everyone experiencing chronic levels of stress becomes fatigued, indicating that inherent individual differences exist in stress sensitivity, and risk for fatigue. While both chronically stressed and fatigued patients show hypoactivity of the hypothalamic-pituitary- adrenal (HPA) axis, it is not known whether differential patterns of HPA axis dysfunction exist in chronically stressed individuals with varying levels of fatigue.

**Methods:** 61 chronically stressed (CS; 38.31±14 years) and 55 low-stress (LS; 37.90±14.37 years) women, were exposed to a psychosocial laboratory stressor. Salivary cortisol measures were assessed throughout the study. Fatigue was assessed using the Multidimensional Fatigue Inventory.

**Results:** The results revealed that CS had overall significantly lower cortisol levels and higher fatigue, compared to LS ( $p < .05$ ). Within the CS group, increasing levels of fatigue were not associated with changes in cortisol. In the LS group, however, there was an inverse relationship between fatigue and cortisol, with increasing levels of fatigue associated with lower cortisol ( $p < .05$ ).

**Conclusion:** Our findings indicate that in CS, stress-related hypoactivity of the HPA axis may have resulted in a floor effect for cortisol, such that increasing levels of fatigue, in addition to existing chronic stress, do not have cumulative effects on the already blunted HPA axis. This was in contrast to the LS group in which fatigue had important effects on the HPA axis functioning, such that decreases in cortisol were observed as fatigue levels increased.

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## Effects of Meaning-Centered and Mindfulness-Based Group Stress Management Program using Marine Resources on the Improvement of Mood States, Sleep Quality, Quality of Life, and Cognitive Function in Family Caregivers of Patients with Severe Disabilities

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**Objective:** It was aimed to determine the effects of meaning-centered and mindfulness-based group stress management program using marine resources on the positive changes in mood states, sleep quality, quality of life, and cognitive function.

**Methods:** A four-day group intervention program using marine resources was administered to the experimental group (N=9), family caregivers of patients with severe disabilities, and the same program was administered to the control group (N=10) at the Seoul-based N rehab hospital. Questionnaire-based subjective assessment and interview-based objective assessment were performed to determine the changes in mood states, sleep quality, quality of life, and cognitive function at the baseline, immediately after the intervention program, and at 6-week follow-up, and the assessment results were subjected to statistical analysis.

**Results:** The generalized estimating equation (GEE), which was applied to the results of self-rated scales and clinician-rated cognitive function tests performed to assess the therapeutic effects of thalassotherapy, revealed significant time–group interactions in the subscales of mood states (fatigue and inertia), sleep quality, subscales of the quality of life (physical health domain and environmental domain), and digit span backward.

**Conclusions:** Marine resources have proven effective in reducing tension and fatigue of life and improving sleep quality and attention/concentration in addition to the beneficial effects on emotional healing of the proposed mind-body healing program. Furthermore, marine resources were found to increase the health-related satisfaction and activity and to have the effect of helping people become more positively aware of the same environment and more satisfied with life.

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## Perceived Stress Levels in Adult Patients With Uveitis

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**Objective:** The aim of this study was to examine perceived stress levels in adult patients with uveitis.

**Methods:** One hundred seventy-three adult consecutive uveitis patients (age range 18 to 85 years) were analyzed in a cross-sectional design for their perceived stress, according to the Perceived Stress Questionnaire (PSQ). Stress levels were classified into normal stress, moderate stress, and high stress.

**Results:** In the majority of uveitis patients a normal stress level (82%) within the last 2 years was detected. In a subgroup analysis, perceived stress of the patients with active uveitis compared with patients with non-active uveitis was significantly higher within the last 2 years (n=80 active/n = 45 non-active; p = 0.005).

**Conclusion:** Overall 18% of the uveitis patient had raised perceived stress, similar to the general population but patients with active uveitis were significantly more stressed. Therefore, consideration of stress levels may be important in the therapy of uveitis patients.

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## Workplace trauma and loss and personal feelings in perinatal care

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**Objectives:** (1) Analyse presently applied practices related to pre- and perinatal loss in preselected healthcare institutions, (2) compare the available guidelines' recommendations with the actually provided support and (3) examine the effects these tragic experiences have on the care-giving personnel professionally and psychologically.

**Methods:** In-depth interviews with the involved personnel (N=16; personnel of dept. obstetrics and gynaecology, NICU, district nurses). The research focuses on the practice of the institutions regarding the care-giving opportunities and facilities for the bereaved families, on the needed theoretical and practical competencies; on the personnel's attitudes regarding death, on the impact of loss and the personal experiences of the professionals. The answers are analysed with the N-Vivo programme.

**Results:** Our findings suggest that supporting the parents struggling with pre- and perinatal loss is a specially challenging task for the care-givers. Their main difficulties are: coping with the recurrent emotions (89%), helping families cope with loss, coping with their own feelings (78%), and the communication (76%). The missing up-to-date guidelines create feelings of helplessness (75%) and incompetency (72%) as much as struggles and negative emotions.

**Conclusion:** Using the research findings we have been working on a specialisation programme where competency development in communication, ethical and administrative elements and support is foreseen as well as ventilation and supervisory activity. Different forms of art therapy are also included in the programme, to provide alternative modes of coping strategies.

Substance-related disorders and addiction

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'Triple-C' Abuse Induced Status Epilepticus with Simultaneous Prolongation of QTc on EKG

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Objective: To illustrate via a dramatic case the problems with Dextromethorphan OTC drug abuse.

Methods: Case Report and Literature review.

Results: A 24-year-old male college student abused Triple-C's (Coricidin) and was seen by a roommate to have several grand mal seizures. -911 was called, EMS upon transport observed 3 further seizures plus large volume emesis. Emergency Department's (ED) Glasgow coma scale 8. ABG upon arrival ED: pH <6.707, pCO2 71 mmHg, pO2 105 mmHg (100% NRB mask). EKG - Rate 162 bpm, regular tachycardia - sinus mechanism, normal QRS axis, PR interval, & QRS interval, with marked QTc prolongation (QTc 500-msec), absent Q waves, peaked T-waves and fusion of QT interval with the beginning of the p-QRS wave. A urine drug screen was entirely negative (amphetamines, barbiturates, benzodiazepine, cocaine, opiates, PCP, Cannabinoids). ETOH level 58 mg/dl, Salicylate level < 3 mg/dl, acetaminophen level < 0.2 mg/dl, lactic acid > 12.2 mmol/L (0.5-2.2 mmol/L), TSH 1.25 mIU/L (0.4 - 4.0 mIU/L). Orotracheal intubation occurred immediately upon arrival and QTc prolongation was reversed within 1st hour of ED treatment by high dose magnesium infusion. Underwent ventilator liberation at ICU day 7. Subsequent psychiatry evaluation revealed the absence of psychopathology.

Conclusion: 1. Dextromethorphan is a leading cause of Over-The-Counter substance abuse worldwide.  
2. Dextromethorphan was the cause of Sympathomimetic Toxidrome and is commonly associated with polysubstance toxicological exposures. 3. Dextromethorphan recreational drug abuse is appealing; easy to obtain, legal, and invisible to parents and teachers if they observe the ingestion.

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## COMPARING ABSTINENCE EXPECTANCIES AND EFFECTIVE WITHDRAWAL SYMPTOMS AFTER QUITTING SMOKING: A LONGITUDINAL STUDY

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**OBJECTIVE:** scientific research has largely investigated the role of expectancies in tobacco use, but expectancies related to abstinence remain understudied. The present study focused on the abstinence expectancies of treatment-seeking smokers and tested whether these expectations are confirmed over time after quitting smoking.

**METHODS:** one-hundred and three adult smokers were consecutively recruited from two Italian smoking cessation clinics and longitudinally assessed during four time points. In addition to clinical information (i.e., cigarettes per day, pack-year), three self-report instruments were administered: the Fagerstrom Test for Nicotine Dependence (FTND) (administered before the Quit Day - QD); the Smoking Abstinence Expectancies Questionnaire (SAEQ) and the Minnesota Nicotine Withdrawal Scale (MNWS) (administered few days, one month and three months after the QD).

**RESULTS:** the cigarettes smoked daily were 18.68 ( $\pm 6.77$ ), the pack/year was 34.20 ( $\pm 14.80$ ), the cigarette dependence level measured via the FTND was 5.28 ( $\pm 1.51$ ). Withdrawal symptoms measured by the MNWS decreased significantly one month after QD. The most frequent expectancies measured by SAEQ before QD were positive consequences and negative mood. Comparing expectancies of abstinence and effective symptoms occurring after QD, the majority of the sample overestimated withdrawal symptoms, which was less experienced than expected. The positive consequences experienced one month after QD were more than expected, but statistically decreased three months after QD.

**DISCUSSION:** the real occurrence of negative withdrawal symptoms is less frequent than expected, this issue should be discussed in the clinical realm to enhance patients' motivation in quitting.

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Announcement - Poster Session: Fri, June 4th, 12.45 – 13.30

## ANNOUNCEMENT

### German Psychosomatic Congress

Mind the Gap  
June ,16 – 18, 2021

<https://deutscher-psychosomatik-kongress.de/>

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<https://www.clipsychiatry.org/>

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## EAPM 2022 Vienna

June, 8 -11, 2022

[www.eapm2022.com](http://www.eapm2022.com)

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Good bye!

