# THE 8th INTERNATIONAL CONFERENCE OF PHYSIOTHERAPY IN PSYCHIATRY AND MENTAL HEALTH

Linking Body and Mind - the Key to Effective Physiotherapy

8-10 February 2021

Online conference

Helsinki, Finland









#### WELCOME.

#### Linking Body and Mind - the Key to Effective Physiotherapy

Welcome to Helsinki 8-10 February 2021, Online conference

As Chair of ICPPMH 2020 Organizing Committee and on behalf of the Finnish Association of Psychophysical Physiotherapy it is my great pleasure to welcome you all to the 8th International Conference of Physiotherapy in Psychiatry and Mental Health in Helsinki, Finland.

This is the biannual conference of the International Organization of Physical Therapy in Mental Health (IOPTMH): http://www.ioptmh.org/

The theme of this year, Linking Body and Mind - the Key to Effective Physiotherapy, highlights the direction of the physiotherapy field and research around the world.

Physiotherapy in mental health is person centered and process-related work. We as physiotherapists study and work with the moving and living body. We study the movement quality, reflect the movements and promote new movement opportunities with our patients.

Do we support or suppress patients willingness to move and use their body? We need to meet and treat the whole person, not just one body part. We can't just do "tricks". We need to include something more, and that something is feeling of safety and presence.

We work in a world where depression, anxiety and chronic pain are increasing. What do we know as physiotherapists about the evolution of mind and body, i.e. why do we have emotions like depression or anxiety, or why is pain an important sensation? We face many kinds of new challenges that science cannot yet explain. We work with patients with different types of functional disorders, unexplained pain, traumatizing backgrounds etc. Unfortunately we have to approach and work with the ugly parts of life too. For example, the after effects of school shootings, wars, torture and exile on the person. We need to consider the body as well as the mind when treating these people. Today we know that all the feelings and emotions are bodily experienced. Not to mention COVID - a pandemic that hit the whole world and has affected each of us in one way or another. Facing these issues daily at work, it's truly important also to take care of ourselves as professionals.

This conference provides a forum for physiotherapists to meet and share knowledge of education, research, clinical practice, and to discuss important professional issues within the field of Physiotherapy in Psychiatry and Mental Health.

You are all warmly welcome to Finland, even if online!

Tanja Balk, Chair of the Finnish Association of Psychophysical Physiotherapy



## THE 8th INTERNATIONAL CONFERENCE OF PHYSIOTHERAPY IN PSYCHIATRY AND MENTAL HEALTH

#### Organized by:

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#### ICPPMH 2020 has received a grant from



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	Returning To Home Environment	(- ) (- )	
		Noëmi Hagemann (Belgium): (17)	
		The Role Of Coping And Perceived Control In Quality Of Sleep In Youth	
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	Entry Level Physiotherapy Curricula	Implementation In Mental Health Physiotherapy	
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	Body Awareness in Patients with Chronic	Exploring Clinical Reasoning And Professional Assumptions In Mental	
	Depression (c) (c) (c)	Health Physiotherapy: The Physiotherapist'S Perspective.	
	Mary E. Davis (Ireland): (27)	Emanuel Brunner (Switzerland): (26) Associations Between Therapeutic Alliance, Physiotherapist	
	Exercise As A Treatment For Clinical Depression And Progressing The Physiotherapists Role	Confidence In Managing The Patient And Patient Distress In Chronic	
	And Frogressing the Frigoidificiapists Note	Low Back Pain Practice	
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	colleagues		

TIME	DAY 2 9.2.2021		
	Helsinki, Finland, Eastern European Time (EET)		
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	Gabriele Biguet (Sweden): (24) The Process Of Acceptance For Patients With Long- Term Pain When Participating In Rehabilitation: A Longitudinal Study	Davy Vancampfort (Belgium): (5) Test-Retest Reliability And Correlates Of The Simple Physical Activity Questionnaire In Ugandan Outpatients With Psychosis	
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TIME	DAY 3 10.2.2021		
	Helsinki, Finland, Eastern European Time		
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11 20 11 45	- LAURI NUMMENMAA: Bodily Maps Of Emotions		
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13.15-14.00	ROUND TABLE DISCUSSION C	ROUND TABLE DISCUSSION D	
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14.15-15.45	PARALLEL SESSIONS		
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	Stratification(Ipis) Approach For Working With Older	For People Who Have Lost Their Proxy To Suicide	
	People Acute Mental Health In-Patient.	To respic who have East men Froxy to saidae	
	•		
		Paul Sercu (Belgium): (28)	
	Remember to vote for the best oral presentation,	Painreduction In Traumatized Adolescent Refugees By	
	workshop and poster!	Fasciatherapy/Movement Awareness Physiotherapy	
15.45-16.30	Plenary session: Closing of the conference		
25.15 25.56	Icl. Music from <b>Club For Five</b>		
	Awards for oral presentations, posters and		
	workshops		
	Announcement of the next conference		
	And more		

#### **POSTERS**

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Laura Hemmings: Access And Experience Of Physiotherapy For Those With Severe And Persistent Mental Illness: An Interpretative Phenomenological Analysis (48)

Laura Hemmings: Physiotherapist And Healthcare Professional Perceptions Of Treating Patients With Mental Health Illness: A Systematic Review (49)

Camilla Lindekilde: Physiotherapeutic Treatment For Patients With Substance Misuse, In A Forensic Psychiatric Setting (43)

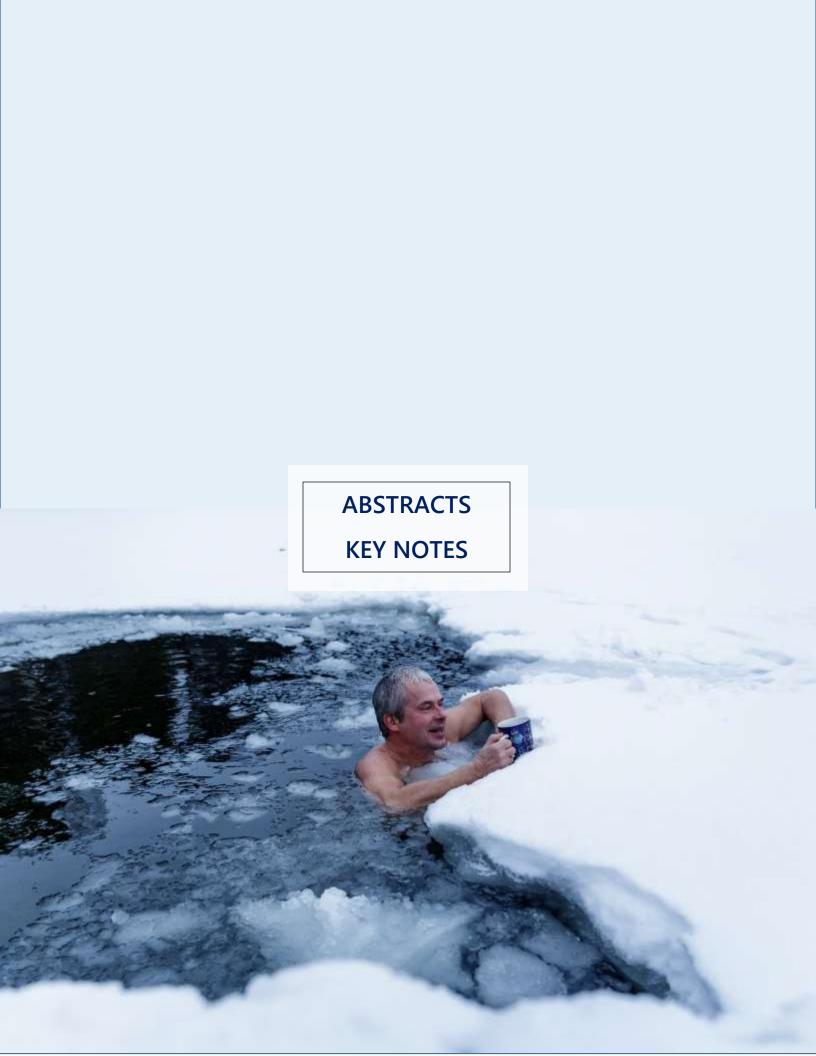
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## Biology of Depression: evolutionary psychological approach to mood disorders

Markus J. Rantala

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Major depressive disorder constitutes one of the leading causes of disability worldwide. However, it is not a unitary disease—it is a heterogeneous syndrome, with patients differing remarkably in symptom profile, pathophysiology and treatment responsiveness. Previous attempts to subtype major depressive disorder have showed limited clinical applicability.

I present a classification of major depressive disorder episodes based on the proximate mechanisms that led to the original mood change that caused the depressive episode. These depression subtypes are induced by: 1) infection, 2) long-term stress, 3) loneliness, 4) traumatic experience, 5) hierarchy conflict, 6) grief, 7) romantic rejection, 8) postpartum events, 9) the season, 10) chemicals, 11) somatic diseases and (12) starvation.

I further examine the ultimate functions of these subtypes and show that not all types of mood changes that trigger depression are adaptive. Instead, some are clearly maladaptive and some are byproducts of other adaptations. In modern societies, low mood after adverse life events may turn into a pathological depressive state. Modern lifestyle increases susceptibility to inflammatory dysregulation and chronic stress, both of which increase the amount of proinflammatory cytokines in peripheral blood, leading to low mood and sickness behaviour. Proinflammatory cytokines may aggravate the previously adaptive short-term mood changes to a chronic maladaptive depressive state by preventing the normalization of mood after adverse life events. Subtyping depression enables an effective and intelligent long-term treatment of patients in each subtype by treating the underlying causes of depression.

#### Physiotherapy for Functional Motor Disorder

#### Dr Glenn Nielsen

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Functional motor disorder (FMD), also known as conversion disorder, is a diagnosis that exists at the interface between neurology and psychiatry. It is characterised by neurological symptoms affecting movement that are not caused by a structural disease process. Patients typically present with a combination of symptoms that may include weakness, tremor, jerks, dystonia and an abnormal gait pattern. The prognosis is considered poor. Historically we have understood FMD predominantly from a psychological point of view. Correspondingly, psychological intervention has traditionally been considered the treatment of choice. More recently, physical based interventions, informed by a biopsychosocial understanding of FMD, have emerged as a promising treatment for FMD. However, there is a lack of controlled trials and there are few descriptions of how physical interventions should be carried out in patients with FMD.

This talk will present a body of work aimed at developing physiotherapy treatment for patients with FMD. I will discuss theoretical "neurobiological mechanisms" that drive symptoms <sup>3</sup> and how these can be targeted with treatment delivered by physiotherapists <sup>4</sup>. I will review the evidence for physical interventions for FMD and describe protocol of a multicenter randomised controlled trial of specialist physiotherapy for FMD that is currently in the recruitment phase <sup>5</sup>.

#### References

- 1. Espay, A. J. *et al.* Current concepts in diagnosis and treatment of functional neurological disorders. *JAMA Neurol.* **75**, 1132–1141 (2018).
- 2. Nielsen, G. *et al.* Randomised feasibility study of physiotherapy for patients with functional motor symptoms. *J. Neurol. Neurosurg. Psychiatry* **88**, 484–490 (2017).
- 3. Edwards, M. J., Adams, R. A., Brown, H., Parees, I. & Friston, K. J. A Bayesian account of 'hysteria'. *Brain* **135**, 3495–3512 (2012).
- 4. Nielsen, G. *et al.* Physiotherapy for functional motor disorders: a consensus recommendation. *J. Neurol. Neurosurg. Psychiatry* **86**, 1113–1119 (2015).
- 5. Nielsen, G. *et al.* Physio4FMD: protocol for a multicentre randomised controlled trial of specialist physiotherapy for functional motor disorder. *BMC Neurol.* **19**, 242 (2019).

## Trauma and the body – combining psycho- and physiotherapy in facilitating trauma recovery

#### Tuija Turunen

PhD, Chief psychologist, Psychotherapist, EMDR facilitator

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A total of twenty lives were lost in two school shootings in Finland in 2007 and 2008. Hundreds of students as well as school personnel, grieving family members, and friends of the deceased were in need of psychosocial support and care. So were the professionals in the fields of first response, law enforcement, and health care.

An outreach project offering both acute and long-term psychosocial care for the traumatized individuals, families, and communities was implemented after each tragedy. This presentation will cover the key findings of a two-year follow-up study that was conducted among the trauma-exposed students after the Kauhajoki school shooting. The main focus of this presentation is to describe how for example physiotherapy, psychophysical physiotherapy, and traditional massage were combined in the psychosocial care of those traumatized in the tragedies.

Threat to life, witnessing homicide, or losing a next of kin through an act of violence are extremely traumatic experiences that may cause post traumatic stress symptoms to anyone and are among the main risk factors for post traumatic stress disorder and complicated grief. The professionals in turn are also at risk for PTSD, as well as e. g. vicarious traumatization.

Treating individuals exposed to traumatic experiences requires comprehensive knowledge of the biological, psychological, and physiological impact of trauma. The body keeps score of what has happened, and thus focusing only on the verbal trauma narrative might not be sufficient treatment on its own. Decreasing the high alertness and severe stress reactions such as hyper or hypo arousal is of great importance in facilitating trauma recovery. For example, learning how to calm oneself through deep breathing was found to be one of the healing elements of psychosocial care according to the trauma-exposed students.

Physiotherapy, traditional massage, physio acoustic chair, and e.g. free dance lessons were included in the psychosocial outreach program in order to facilitate recovery on the physical level as well. Physiotherapy was in some cases combined with the psychotherapy of the severely traumatized individuals and the therapists worked in parallel. There severely traumatized had the possibility to visit a physiotherapist several times alongside trauma-focused psychotherapy. Psychophysical exercises were used in the post trauma workshops for the professionals. The experiences of the comprehensive psychosocial care are covered in this presentation.

#### **Bodily maps of emotions**

#### Lauri Nummenmaa

PhD,

Turku PET Centre,

Department of Psychology, University of Turku Finland

Emotions prepare us for action. They organize our lives by automatically orienting actions and modulating approach-avoidance motivation. In this talk I discuss how emotions can be understood from the perspective of systemic activation patterns across multiple levels of analysis. I describe our work based on machine learning showing that specific emotions and their expressions have discrete neural signatures in the brain. Such emotion-specific patterns are also found for culturally universal "feeling fingerprints" of bodily sensations, which determine the organization of our subjective feelings. Numerous non-emotional feeling states (such as hunger and loneliness) also have specific bodily signatures. The feelings form five discrete groups: positive emotions, negative emotions, cognition, homeostatic states, and illnesses. This grouping is based on the way the brain parses and combines the signals coming from the external environment and the body. Altogether these studies suggest a, clear and consistent categorical structure of emotions across multiple levels of analysis and point towards a key role of the somatosensation and interoception in consciousness.

## Physical activity for the prevention and management of mental disorders: evidence, mechanisms and implementation points for physiotherapists?

#### **Brendon Stubbs**

PhD

Head of Physiotherapy, South London and Maudsley NHS Foundation trust

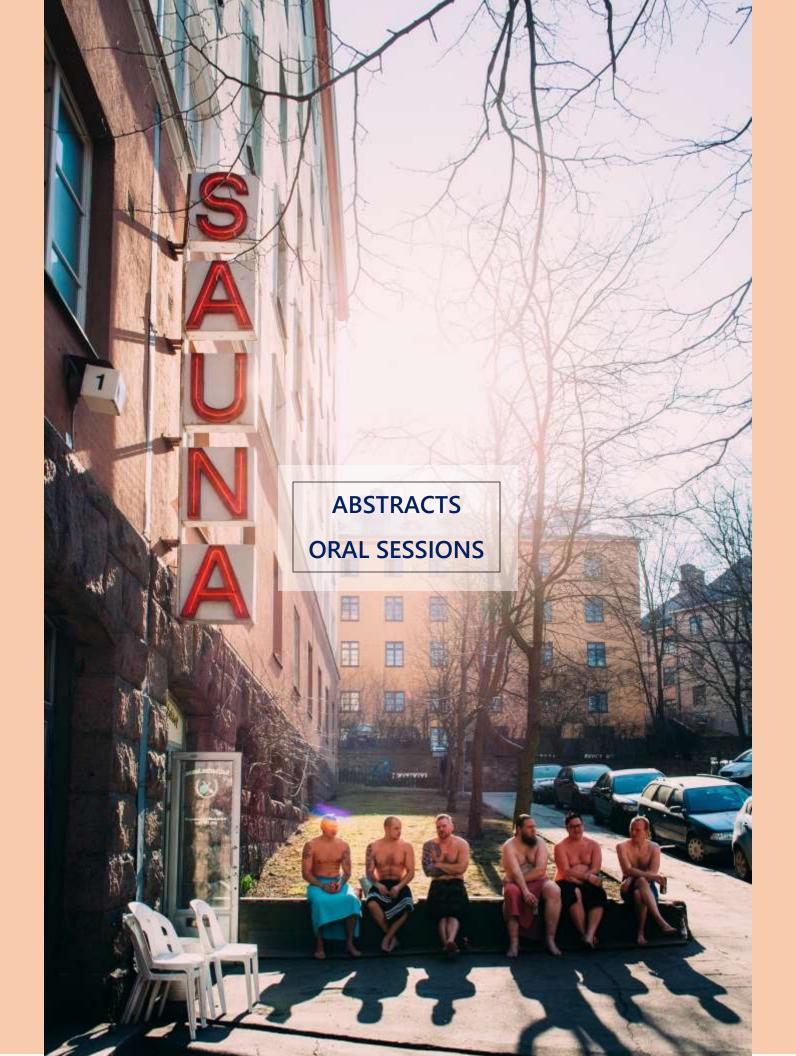
Clinical Lecturer, Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College

London

Dr Brendon Stubbs is Head of Physiotherapy at the South London and Maudsley NHS Foundation trust and a Clinical Lecturer at the Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College London. Brendon's research focuses on physical activity and mental health and the mind-body interface.

Brendon is lead author of the recently published European Psychiatric Association guidelines and position statement on the use of exercise for mental illness and senior author on a forthcoming Lancet commission to improve the physical health of people with mental disorders. Brendon was recently (2018) awarded the Schizophrenia International Research Society (SIRS) senior investigator award for his research investigating physical activity and schizophrenia. Brendon has worked in mental health services for over 15 years and continues to cherish and learn from patients in his weekly physiotherapy clinic in a secure forensic hospital.

Physical activity (PA) and physiotherapy may be therapeutic for people with severe mental illness (SMI) who generally have low PA and experience numerous lifestyle-related medical complications. This session will elaborate on the latest science on the use of physical activity for the prevention and management of mental illness and explore underlying mechanisms. The session will have a strong focus on translation and practical tips for people that attend.



Abstract ID: 1 Presentation type(s): Oral presentation: Scientific oral presentation

Relationship Between Cognitive Impairment And Physical Performance In The Elderly Population With Dementia

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Andreia Antunes, Physiotherapy, ESTeSL - Instituto Politécnico de Lisboa, Lisboa, PORTUGAL

Inês Ramos, Physiotherapy, ESTeSL - Instituto Politécnico de Lisboa, Lisboa, PORTUGAL

Joana Vicente, Physiotherapy, ESTeSL - Instituto Politécnico de Lisboa, Lisboa, PORTUGAL

Luísa Pedro, Physiotherapy, ESTeSL - Instituto Politécnico de Lisboa, Lisboa, PORTUGAL

The aim is to analyze the existence of a relationship between cognitive impairment and physical performance in the elderly population with Dementia.

A quantitative correlational study was performed. Sixty individuals with 65 and older and dementia diagnosis with mini mental state examination (MMSE) assessment between 10 and 24 points were included.

The measurement instrument applied to evaluate the physical performance was the physical performance test - 9 items (PPT-9) and for the cognitive deficit was the mini mental state examination. The spearman correlation test was used and there is a moderate relationship (r ? 0.361; p < 0.01) between the PPT-9 items and the MMSE.

There is a relationship between cognitive deficit and physical deficit in this population, predicting that intervention programs in the field of physiotherapy are fundamental, focusing on increasing physical function and cognitive stimulation. It is crucial that physicaltherapy intervenes with specific models in this population.

#### Abstract ID: 2 Presentation type(s): Oral presentation: Scientific oral presentation

#### Work-Directed Rehabilitation In Primary Care For People With Depression And Anxiety

**Louise Danielsson**, Research Unit, Angered Hospital, Gothenburg, SWEDEN

Kristin Lork, Närhälsan, Gothenburg, SWEDEN

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Background: Sickness absence due to depression and anxiety is on the rise. Pro-active approaches need to be developed to help people cope at work to avoid or minimize sick leave.

Purpose: a) To evaluate feasibility and potential effectiveness of work-directed rehabilitation (WR) in people with depression and anxiety, and b) to explore their experiences of WR.

Methods: A pilot randomized controlled trial, and a qualitative study. Participants were working adults (n=42), mean age 46.2±11.1 years with mild to moderate depression or anxiety disorder. Substance abuse and psychotic symptoms were reasons for exclusion. Participants were interviewed and checked for diagnostic eligibility by a medical doctor, using the Mini International Neuropsychiatric Interview. Eligible participants were randomized to WR or to supported physical activity during 8 weeks. WR included guidance from a physiotherapist and/or an occupational therapist, to develop strategies to cope better at work. Supported physical activity included advice and access to a local gym. Measurements were: the Work Ability Index, the Montgomery Asberg Depression Rating Scale, the Beck Anxiety Inventory and the World Health Organization Five-well-being Index. Semi-structured, individual interviews were conducted at 8 weeks. Data were analyzed intention-to-treat and per protocol. Analyses included descriptive statistics and parametric tests to evaluate change within and between groups. Interviews were analyzed using qualitative content analysis.

Results: Attendance to rehabilitation sessions was 88% (n=147/167) and discontinuation rate was 14% (n=3/21). In both groups, work ability score improved significantly (WR mean change 3.6 (95% CI 0.45-6.7) and physical activity mean change 3.9 (95% CI 0.9-7.0), with no significant difference between groups. For the other outcomes, significant improvements were found within but not between groups. Per protocol analysis showed a trend toward antidepressant effect of WR compared to physical activity (mean difference in depression score - 3.1 (95% CI -6.8-0.4), p=0.075). In the qualitative analysis, a central theme was generated: Increasing belief in one's capacity through supported reflection and practice. Participants' self-belief and strategies developed through a process of shifting between "reflecting" and "doing" in three stages, categorized as: support from a professional, realizing things about oneself and trying new strategies for change.

Conclusion and implication: WR was feasible and improved work ability and mental health. Comparable improvements were seen following supported physical activity. A larger trial should include a treatment-as-usual control. WR increased participants' belief in their own capacity to tackle challenges at work and in everyday life. A person-centred approach seems important to initiate change.

Key words: depression, anxiety, vocational rehabilitation

Funding acknowledgements: The study was supported by Region Västra Götaland.

Ethics approval: The study followed the principles of the Helsinki Declaration and was approved by the Regional Ethics Review Board.

Abstract ID: 3 Presentation type(s): Oral presentation: Scientific oral presentation

Physical Activity Counselling In Ugandan Patients With HIV And A Co-Morbid Mental Disorder

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Aim: We explored the efficacy of physical activity (PA) counseling in inactive patients with HIV/AIDS and a comorbid mental health disorder living in a remote Ugandan fishing community. We investigated associations between changes in PA, sedentary behavior, mental health burden and quality of life (QoL) following an 8-week once per week PA counselling program.

Methods: In the 8-week once per week PA counselling program, we applied a self-determination theory and motivational interviewing framework. In total 41 (33 women) community patients (39.8±10.9years) completed the Simple Physical Activity Questionnaire, Patient Health Questionnaire, Alcohol Use Disorder Identification Test and World Health Organization Quality of Life Questionnaire pre- and post-intervention.

Results: Large effect sizes were found for reductions in time spent sedentary (Cohen's d=2.85) and reductions in depressive symptoms (Cohen's d=1.47). We also found large effect sizes for increases in time spent walking (Cohen's d=1.38), in incidental PA such as household chores (Cohen's d=1.69), and physical health (Cohen's d=1.38), psychological health (Cohen's d=0.95), and social relationships. (Cohen's d=1.39). The more time spent sedentary decreased, the more the psychological health increased (r=-0.33, P=0.037).

Conclusions: In sedentary patients with HIV/AIDS and a co-morbid mental disorder, the mental health burden reduces and QoL improves following PA counselling based on SDT principles and a motivational interviewing framework. Controlled studies are however needed to confirm our findings.

Abstract ID: 4 Presentation type(s): Oral presentation: Scientific oral presentation

Motives For Physical Activity In The Adoption And Maintenance Of Physical Activity In Middle-Aged And Old Age Ugandan Outpatients With A Mental Disorder

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Tine Van Damme, Rehabilitation Sciences, KU Leuven, Leuven, BELGIUM

Aim: Within the trans-theoretical model (stages of change) and self-determination theory frameworks, we investigated motives for physical activity adoption and maintenance in middle-aged and old age people with a mental disorder from a low-income setting.

Methods: Ninety Ugandan outpatients completed the Behavioral Regulation in Exercise Questionnaire-3 (BREQ-3) to assess exercise motives and the Patient-centred Assessment and Counselling for Exercise (PACE) to determine stage of change. The relationship between motives for physical activity and stage of change was investigated using MANOVA with post-hoc Scheffe tests.

Results: Higher amotivation levels were observed in the pre-action compared with action and maintenance stages, while except for external regulation, all regulation scores were significantly lower in the pre-action compared with action and maintenance stages. There were no significant differences in levels of motivational types between the action and maintenance stage.

Conclusions: Our data provide a platform for future research to investigate relationships between motivational factors and physical and mental health outcomes within physical activity interventions for middle-aged and old age people with a mental disorder.

Abstract ID: 5 Presentation type(s): Oral presentation: Scientific oral presentation

Test-Retest Reliability And Correlates Of The Simple Physical Activity Questionnaire In Ugandan Outpatients With Psychosis

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Aim: In order to facilitate people with psychosis to increase their physical activity (PA) levels, a reliable measurement of these levels is of relevance. The primary aim of current study is to explore the test-retest of the Simple Physical Activity Questionnaire (SIMPAQ) in Ugandan outpatients with psychosis. A second aim was to explore correlates of the SIMPAQ, including demographic variables and antipsychotic medication dose.

Methods: Thirty-four women (33.9±8.0 years) and 21 men completed the SIMPAQ twice in a day. The test-retest reliability was assessed using Spearman Rho correlations coefficients. Differences in subgroups were analysed with Mann Whitney U tests.

Results: The SIMPAQ showed a good test-retest reliability with correlates ranging from 0.78 (P<0.001) for structured exercise to 0.96 (P<0.001) for walking. Women, non-smokers and those without HIV/AIDS showed higher incidental PA than men, smokers and those with HIV/AIDS.

Conclusions: The SIMPAQ is a reliable tool to assess PA and sedentary levels in Ugandan outpatients with psychosis. Men, smokers and those with HIV/AIDS appear to be at risk for lower incidental PA.

Abstract ID: 6 Presentation type(s): Oral presentation: Scientific oral presentation

Test-Retest Reliability, Concurrent Validity And Correlates Of The Two-Minute Walk Test In Outpatients With Psychosis

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Aims: The aim of this study was to investigate the test-retest reliability of the 2-minute walk test (2MWT) and the concurrent validity with the 6-minute walk test (6MWT) in outpatients with psychosis. We also explored whether there was a practice effect, determined minimal detectable changes (MDC) and assessed which factors are associated with the 2MWT performance.

Methods: Fifty outpatients [22 women; 33.5 (14.3) years] performed the 2MWT twice and the 6MWT once and completed the Simple Physical Activity Questionnaire (SIMPAQ) and Brief Symptoms Inventory -18.

Results: The median (interquartile) 2MWT score on the first and second test were 128.0 (44.0) meters and 128.0 (31.5) meters, without significant difference between the two trials. The intraclass coefficient was 0.94 (95% confidence interval=0.91-0.97). The significant Spearman Rho correlation between the second 2MWT and the 6MWT was 0.69. The MDC was 22 meters for men and 21 meters for women. There was no evidence for a practice effect. Variability in SIMPAQ sedentary, exercise, incidental physical activity and leg pain following the test explained 54.6% of the variance in 2MWT score.

Conclusions: The current study demonstrates that the 2MWT is a reliable, valid and clinically feasible tool for assessing and evaluating the functional exercise capacity in outpatients with psychosis.

Abstract ID: 7 Presentation type(s): Oral presentation: Scientific oral presentation

#### Feasibility Of Exergames In People With Major Neurocognitive Disorder

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Background: Major neurocognitive disorder (MNCD) is characterized by a decline of physical and cognitive functioning. Therefore, there is a need for safe interventions, which are adapted to the participants' needs. Recent improvements in technology have generated possibilities for combining physical activity with cognitively challenging tasks through exergames (i.e. exercise and video games). These games require the player to be physically active in order to play the game.

Objective: The aim of this study is to explore the feasibility of an 8-week exergaming program in people with MNCD.

Methods: Twenty-four participants with MNCD (mean age: 84,4 years) played exergames for 15 minutes, three times a week for eight weeks, added to their care as usual. Guideline-based semi-structured interviews were taken after 4 and 8 weeks. These conversations were recorded, transcribed and imported to Nvivo qualitative software analysis. Also, activity logs with extra notes were kept, adherence and attrition rates were calculated.

Results: Participants reported positive experiences and preferred to continue the exergame program after 8 weeks. They reported no effects on sleep behavior, memory, attention and concentration. They enjoyed being physically active and reported the relaxation effect after the exergaming sessions. The adherence rate was 80% and participants attended 81,6% of scheduled sessions.

Conclusions and implication: Our data indicate that an 8-week exergaming program is feasible, motivating and enjoyable for people with major neurocognitive disorder.

Abstract ID: 8 Presentation type(s): Oral presentation: Scientific oral presentation

The Efficacy Of Exergames In People With Major Neurocognitive Disorder: A Randomized Controlled Trial

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Background: Major neurocognitive disorder (MNCD) is characterized by a decline of physical and cognitive functioning. Therefore, there is a need for safe interventions, which are adapted to the participants individual needs. Recent improvements in technology have generated possibilities for combining physical activity with cognitively challenging tasks through exergames (i.e. exercise and video games). These games require the player to be physically active in order to play the game.

Objective: The aim of this randomized controlled trial is to explore the efficacy of an 8-week exergaming program in people with MNCD.

Methods: Thirty participants with mild to moderate dementia were randomly assigned to an exergame group (EG, n=17) and a control group (CG, n=13). The training of the EG consisted of playing exergames for 15 minutes, three times a week for eight weeks, added to care as usual. The CG watched preferred music videos for 15 minutes, three times a week for eight weeks, added to care as usual. The Montréal Cognitive Assessment (MoCA), Short Physical Performance Battery (SPPB), Neuropsychiatric Inventory (NPI), Cornell Scale for Depression in Dementia (CSDD), Dementia Quality of Life (DQoL), Katz activities of daily living (ADL) and Instrumental ADL (IADL) were measured at baseline and after 8-weeks. An ANCOVA repeated measures controlling for baseline values was used to analyze differences between the experimental and control group.

Results: Participants in the EG demonstrated significant (P<0.05) improvements in total, MoCA, SPPB, NPI, CSDD, DQOL, Katz ADL, and SPPB scores compared to the CG. No significant improvements were found on IADL.

Conclusions and implication: Our data indicate that an 8-week exergaming program contributed to improvements in physical parameters, activities of daily living performance, cognitive function, quality of life and symptoms of depression. Therefore, exergaming can have a considerable impact on the lives of people living with dementia.

Abstract ID: 9 Presentation type(s): Oral presentation: Scientific oral presentation

Learning And Teaching Human Movement In The Context Of Physiotherapy: A Systematic Review And Meta-Synthesis Of Research

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Background: Human movement is a domain and pervasive focus in physiotherapy, clinical and educational contexts. Furthermore, it is an essential element of health and wellbeing, directed towards the movement needs and potential of individuals and populations. A better understanding of human movement learning and teaching in physiotherapy provides opportunities for further enhancement of education and practice.

Purpose: The purpose of this study is to conduct a systematic review and meta-synthesis to investigate current knowledge to increase knowledge of learning and teaching human movement in the context of physiotherapy education.

Methods: A comprehensive approach to meta-synthesis was chosen to analyze previous research findings, qualitative and quantitative across already published studies. The study process included a systematic search of research, in the period of 1970-2019, within the electronic databases (MEDLINE, CINAHL, ERIC, PSYCinfo, Sociological abstracts and Art, Design, Architecture collection), a critical appraisal of the included studies (following JBI criteria), data extraction and analysis, and synthesis of findings.

Results: An expanding, in-depth understanding of learning and teaching human movement in the context of physiotherapy education is expected.

Conclusions: The review will offer clarity and knowledge of learning and teaching human movement for physiotherapy students' teachers, clinical educators and researchers in the fields of physiotherapy and physiotherapy higher education.

Keywords: Human movement, learning, teaching, meta-synthesis, physiotherapy

Funding acknowledgements: The work is unfunded.

Ethics approval: The study was approved by the committee for educational research ethics.

Abstract ID: 10 Presentation type(s): Oral presentation: Scientific oral presentation

Body Awareness In Patients With Chronic Depression

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Depression is a common disease worldwide and it has a high risk of recurrence. It has been suggested that in one fifth of patients, depression will become chronic. Recent studies have shown that body awareness seems to be decreased in depression. The aim of this study was to examine chronically depressed patients? body awareness experiences. In addition, correlation between body awareness and depressive symptoms, body mass index, level of alcohol consumption and physical activity, duration of current depression episode, starting point of first depression episode and sociodemographic factors were studied.

Data consisted of Neuroimaging in Depression -study that was carried out in the University of Jyväskylä in 2017-2018. Body awareness was studied in 22 participants with chronic depression and 22 controls without a psychiatric diagnosis by using body awareness questionnaire which is based on body awareness interview (BAS-I). In this study BAS-I was modified and used as a questionnaire with maximum score of 78 where a higher score indicates more difficulties in body awareness. Chronic depression was assessed with diagnostical interview M.I.N.I and depressive symptoms were assessed with the Beck Depression Inventory (BDI). Physical activity was assessed with International Physical Activity Questionnaire (IPAQ). Alcohol consumption was studied with three questions (How often you use alcohol? When you use alcohol, how many portions you usually take? How often you drink more than six portions at a time?). Statistical analyses were examined with SPSS using Chi-Squared test, Independent Samples t-test and Spearman correlation.

Mean age of participants was 59 years (43-80) and 73 % of participants were female. Chronically depressed participants had more difficulties in body awareness (31.8) compared to controls (6.5) (p<0.001). Chronically depressed participants? depressive symptoms were higher (25.4) compared to controls (2.8) (p<0.001). Body mass index was higher with chronically depressed participants (29.9) in comparison to controls (26.0) (p=0.013). Higher alcohol consumption correlated statistically significantly to higher score in body awareness questionnaire with chronically depressed participants (Spearman 0.66, p<0.001). Other clinical or sociodemographic factors did not correlate with body awareness score.

According to this study chronically depressed patients have decreased body awareness experience compared to healthy controls. Moreover, higher alcohol consumption correlates with more problems in body awareness in patients with chronic depression. Health professionals, when planning treatment, should take into account that body and mind work together and substantial alcohol consumption may have negative impact on subjective experience of body awareness.

Keywords: depression, chronic depression, body awareness

Abstract ID: 11 Presentation type(s): Oral presentation: Scientific oral presentation

The Relationship Between Intelligence And Motor Skills In Children With Autism Spectrum Disorder

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Background: There are different views on the relationship between motor and intellectual functioning. Studies range from defining these two domains as fully distinguishable to strongly interconnected. Such conflicting results can partly be explained by population-specific research. Some arguments also support the idea that this relationship varies in typically developing children when compared to children with developmental disorders. Regarding children and young people with Autism Spectrum Disorder (ASD), there are various profiles present, both in the domain of intellectual functioning and in the motor domain. Nevertheless, research into the relationship between motor skills and intelligence is very scarce in this population. Moreover, in previous studies, individuals with intellectual disabilities (ID) are often excluded, implying a limited representativeness of the clinical population.

Purpose: To increase understanding of the influence of intelligence on motor skills in children with ASD and the interactions between motor problems, comorbidity, and presence of ID in this population.

Methods: The sample consisted of 120 children aged 3-17 years diagnosed with ASD at the Autism Expertise Centre, UPC KU Leuven. The participants were assessed with the Movement Assessment Battery for Children, 2nd edition (MABC-2), and the Beery VMI, 6th edition (VMI-6), and with different versions of the Weschler Intelligence Scales depending on the abilities and age of the participant. Data were analysed by means of a hierarchical linear regression controlling for co-occurring Attention Deficit and Hyperactivity Disorder (ADHD). Furthermore, associations between ID, motor problems, and number of comorbidities were assessed with a Chi-Square test.

Results: When controlling for ADHD, introducing both verbal and performance IQ into the regression model was found to explain 20.8% of the variance in motor skills (R2? 0.326, R2 Change? 0.208). Furthermore, significant moderate-to-strong associations between ID and the presence of motor difficulties were found, based on the M-ABC-2 scores (?? 0.304) and the VMI-6 (?? 0.432).

Conclusions and implications: The results show a moderate-to-strong association between IQ and motor skills. This supports current literature stating that children diagnosed with ASD perform worse on several areas of the motor domain. Moreover, these results are of high relevance for clinical decision making, centring the expectations with regards to the motor domain given a certain IQ profile.

Ethical approval: This study was approved by the "Sociaal-Maatschappelijk Ethische Commissie" (SMEC), KU Leuven, Leuven, Belgium.

Key words: Autism spectrum disorder, Intelligence, Motor skills

Abstract ID: 12 Presentation type(s): Oral presentation: Scientific oral presentation

Self-Reported Stress In Children And Adolescents With Autism Spectrum Disorder

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Background: Autism spectrum disorder (ASD) is characterized by problems in social communication and social interaction in addition to the presence of repetitive and stereotyped behaviours, activities and interests. Recently, researchers have shown interest into the working mechanism of the autonomic nervous system (ANS) in children and adolescents with ASD. Typically, the two branches of the autonomic nervous system work together in a dynamic balance. The sympathetic branch is responsible for the 'fight-or-flight' reaction whereas the parasympathetic branch is responsible for the relaxation response. The latter acts as a "parasympathetic brake" when body arousal needs down-regulation after being activated by the sympathetic branch. However, recent research provides evidence that in children and adolescents with ASD, both branches of the ANS work differently in comparison to typically developing children (TDC). In general, an under-activation of the parasympathetic branch and an over-activation of the sympathetic branch are present. These physiological data suggest a high level of stress in this population. Unfortunately, little is known concerning self-reported stress in this population and their correlation with physiological or objective stress measures. However, this information can be useful in order to gain more insight into the subjective stress experience in this population. Additionally, if self-reported stress measures in this population are found to be reliable, they can provide additional information to the objective measures during interventions aimed at stress-relief.

Purpose: This systematic literature review will collect all published articles in which self-reported stress in children and adolescents with autism is reported in order to generate an overview of the possible measures, their psychometric properties and the reported data concerning these measures in this population.

Method: Four databases: PubMed, Embase, Cochrane Library and Web of Science were combined in our attempt to be as complete as possible. The search strategy combines two concepts: 'all synonyms for ASD' and 'all synonyms for psychological stress'. A two-phased screening process will be executed by two independent authors according to predefined in- and exclusion criteria. During the first phase, screening is based on title and abstract while the second phase is based on full text.

Results: This is an ongoing study and the preliminary results will be disseminated during the presentation. However, the hypothesis is that self-reported stress in this population is higher in comparison to TDC. Moreover, large differences in the modalities that were used to obtain this self-reported stress levels are expected, which may complicate the generalisation of the results.

Keywords: Autism Spectrum Disorder, Subjective Stress, systematic literature review

Acknowledgements are made to the 'Désiré Collen leercentrum' (KU Leuven) for their support in designing the search strategy. Funding for this project is provided by the Marguerite-Marie Delacroix Support Fund.

Ethical approval: not applicable, given the nature of this study.

Abstract ID: 13 Presentation type(s): Oral presentation: Scientific oral presentation

Screening For Motor Problems And Developmental Coordination Disorder In Children With Autism Spectrum Disorder

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Background: Although motor problems are not a core feature of Autism Spectrum Disorders (ASD), abundant evidence indicates that motor problems are highly prevalent in this population. Consequently, it is postulated that motor assessment should be part of the routine clinical examination in children with ASD. However, standardised motor assessment is time-consuming and puts a significant burden on the child, as these procedures can be quite challenging and demanding for children, especially those with ASD.

Purpose: To evaluate if a parent-reported questionnaire (Developmental Coordination Questionnaire; DCDQ, Wilson et al., 2009) can reliably be used as an initial screening for co-occurring motor problems in children with ASD.

Method: The study sample included 115 children with ASD (5-15 y). All participants received an extensive multidisciplinary diagnostic assessment, including a comprehensive standardised motor assessment. The Dutch version of the Developmental Coordination Questionnaire (DCDQ, Schoemaker et al., 2008) was filled out by the parents. All participants completed the Movement Assessment Battery for Children-2 (MABC-2), Beery VMI-6 and handwriting assessment.

The internal consistency of the DCDQ was examined using Cronbach's Alpha. Concurrent validity was examined by Spearman correlations between the DCDQ scores and the MABC-2 scores. Discriminant validity was explored by comparing the results on the DCDQ between children with or without co-occurring motor problems, using the MABC-2 scores as gold standard. Sensitivity, specificity, positive and negative predictive value was computed. The degree of agreement in classification between 3 reference standards (clinical judgement, diagnosis of DCD, and MABC-2 score) was calculated, using the Kappa statistic.

Results: The internal consistency analysis indicated an excellent degree of homogeneity for the total score ( $\alpha^{-}.91$ ) and acceptable to good at the subscale level ( $\alpha^{-}.75-.89$ ). Concurrent validity between the MABC-2 and DCDQ scores indicated weak to strong positive associations (r total scores-.60). The DCDQ has high sensitivity (ranging from 79,5% to 96.8%). However, the specificity of the scale is too low (ranging from 41.4-54.1%), indicating a high level of false positives. The DCDQ showed good discriminant validity. A fair agreement in classification between the DCDQ score and the three reference standards was found (Kappa-.26-.34).

Conclusion and clinical implication: The DCDQ can reliably be used in a population of children with ASD as an initial screening instrument for co-occurring motor problems. Although the specificity of the DCDQ is too low, for a screening tool, a high level of false positives is not a major concern. Children who are identified by the DCDQ for being at risk for motor problems, should always be referred for further motor assessment.

Key words: Motor problems, Autism Spectrum Disorders, Screening

Ethical approval: The study was approved by the Ethics Committee of UZ-KU Leuven, Leuven, Belgium

Abstract ID: 14 Presentation type(s): Oral presentation: Scientific oral presentation

Physiotherapist Mediated Behavioural Intervention On Locus Of Control And Quality Of Life Among Stroke Survivors

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Background: Regular participation of stroke survivors in treatment sessions and adherence to exercises are the key factors of the success of rehabilitation. Unfortunately, the majority of stroke survivors are failed to adhere to their prescribed exercises due to negative psycho-social variables apart from physical impairments. The top research priorities related to life after stroke have highlighted that combating physical and emotional impairments is an important area of future research which required more attention. Embedding psychological interventions in the management of stroke rehabilitation enhance patient's attitude positively about their quality of life.

Objective: The objective of the study is to assess the effectiveness of autogenic training (AT) in addition to usual physiotherapy in comparison to usual physiotherapy alone in improving the locus of control and functional quality of life of stroke survivors in the community.

Methods: A total of 33 subacute stroke survivors was recruited with block randomization sampling. The Montreal Cognitive Assessment (MoCA) was used to recruit the participants, below the cut-off value (<26) were excluded. Measurement of outcomes was carried out at week first and ninth by a blinded assessor with use of Recovery Locus of control (RLOC) and Euroqol- 5D5L (EQ5D5L). Seventeen subjects from the experimental group received a supervised session of 20 minutes AT followed by 40 minutes of usual physiotherapy once a week and participants were requested to practice unsupervised intervention at least two times per week for eight weeks.

Analysis: The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 24.0. Descriptive statistics were reported in frequency and percentage for categorical data, while the means  $\pm$  standard deviation (SD) were reported for continuous data. Quantitative data was analyzed with the help of mixed-model ANOVA.

Results: There is a statistically significant improvement in both recovery locus of control F (1,31)1484.930.P?0.000 and EQ5D Utility Index F(1,31)1254.563. P?0.000. ART in addition to usual physiotherapy is feasible and beneficial in reducing anxiety and depression, and improving functional ability, mobility and quality of life among stroke survivors.

Conclusions and implication: AT in addition to usual physiotherapy is feasible and beneficial in improving locus of control and quality of life among stroke survivors. Hence this can be used to manage physical and emotional impairments in stroke survivors.

Keywords: autogenic training, physiotherapy, stroke, quality of life

#### Abstract ID: 15 Presentation type(s): Oral presentation: Scientific oral presentation

### The Phenomena Movement Quality And Movement Awareness – Theory Construct And Communication In Mental Health Physiotherapy

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Background: Within physiotherapy of mental health and psychiatry there is a need to clarify terminology, strategies and constructing theory to strengthen an evidence-based practice in the field. Three studies are presented in a PhD thesis, aiming to map a theory for a potential movement awareness domain in mental health physiotherapy. The studies are directed towards the phenomenon movement quality and the growing interest of promoting it through movement awareness learning. The three included studies draws on inspiration from the physiotherapy approach Basic Body Awareness Therapy (BBAT), well-known for its teaching/ learning on movement quality, its specific therapeutic factors and movement pedagogy. Two basic assumptions are implemented, a phenomenological approach to investigate lived movement experiences and a salutogenic approach focusing on assets for health.

Purpose: The purpose was to study clinical core phenomena, a potential movement vocabulary and synthesizing previous research on the phenomena movement quality and movement awareness, to map a theory construct for a movement awareness domain in physiotherapy in mental health.

Material and Methods: In study I, Nominal Group Technique (NGT) was chosen to conduct consensus on core phenomena and statements in BBAT through a workshop, by a cohort of 21 movement experts from 10 European countries. The participants prioritized data through a 6-steps strategy. Content analysis was used for data-analyses and calculation of agreement was used to identify most preferable statements. In study II, a phenomenological design was chosen to identify a movement vocabulary, by a cohort of 15 national movement experts, recruited from neurology, primary health care and psychiatry, tapping health characteristic movement terms, through individual, qualitative interviews. Text-condensation was used for data-analysis. Study III, a meta-synthesis of three previous qualitative publications on movement quality and movement awareness, was conducted, reviewing text-material and models. Content analysis was used for data- analyze.

Result: In study I, the outcome was 106 clinical phenomena, clustered in three categories. Furthermore, the participants reached 100% consensus on 16 statements describing BBAT. In study II, the outcome was a multiperspective movement vocabulary including 122 health characteristic terms of movement quality for clinical communication. In study III, the outcome was a small- and a large-scale map as construct for a movement awareness domain of learning: 1) Movement Quality Components, 2) Choice of Movements Components and 3) Movement Awareness Learning-components, together with the specific learning of the movement pedagogy, learning about, through and being in movement.

Conclusion: The outcome from the three studies provides overview of clinical core phenomena, a multi-perspective movement vocabulary of health-characteristic terms for communication and a small- and large-scale map as construct of a Movement Awareness Domain, along with movement awareness learning. Further studies are recommended to strengthen theory construct and practice in the field of physiotherapy in mental health.

Abstract ID: 16 Presentation type(s): Oral presentation: Clinical oral presentation

Experiences Of A Functional Somebody®-Peer Support Group For People Who Have Lost Their Proxy To Suicide

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Background: In Finland, every year more lives are lost to suicide than in traffic accidents. Each suicide is estimated to have impact on lives of ten other people such as family members and friends. The traumatic experience can decrease their functioning and workability significantly. They may suffer from anxiety, depression, sleep disturbances and feelings of guilt, for example. National voluntary organisation Surunauha ry. has a long history of offering peer support groups for people who have lost their proxy to suicide.

Aim: The aim of this study was to develop a functional peer support group for people who had lost loved ones to suicide in cooperation with Surunauha. The research approach was functional and qualitative. Data was collected through interviews, a field diary and a formal feedback questionnaire.

Implementation and results: The functional group was based on SomeBody® - method that combines functional exercises, body awareness and interaction. The two leaders of the group had peer group counsellor training organized by Surunauha, and the leader-in-charge also had SomeBody® instructor qualification.

The participants of the group were reached with the help of a local branch of Surunauha. Seven participants started in the pilot group but one of them had to quit because of overlap with his/her work schedule. Thus, six persons participated in all or most of the eight sessions. The sessions were organized once a week in the evening and each session lasted about 2-2,5 hours. For each session there was a different theme and the last session also included feedback discussion.

The results of the pilot project revealed that SomeBody® method suited this target group well. According to the feedback, the participants had got new tools in their toolbox to cope with their sorrow. They had learned to acknowledge their resources and coping methods better. Some of them told that they had learned to recognize how their emotions affected their body and how they had learned to use the exercises to decrease anxiety or feelings of despair and guilt. The participants felt that they could be themselves in the group and did not need to 'act brave' or hide their sorrow. Rather, the sorrow was accepted and shared with others in the same situation, which gave them a feeling of 'belonging' to the group.

Conclusions: Based on the experiences and feedback of this pilot study, a functional SomeBody® peer support group for people who have lost their loved ones was a success. This kind of functional peer group activities can be offered as an option parallel to discussion groups for people in heavy life crisis.

Keywords: suicide, grieving, functioning, rehabilitation

#### Abstract ID: 17 Presentation type(s): Oral presentation: Scientific oral presentation

#### The Role Of Coping And Perceived Control In Quality Of Sleep In Youth

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Background: Sleep quality is closely linked with mental health. One of the many factors that influence sleep are coping style and perceived control. Previous research on the coping-sleep relationship show mixed results on the effects of approach, avoidant and emotion-focused coping on sleep quality in youth. This relationship has never been investigated in daily life, nor have the potential underlying mechanisms of the relationship. Understanding these relationships is particularly important in youth, since this is a vulnerable period for the onset of psychopathology.

Purpose: To investigate the role of coping styles on daily sleep quality in youth and the possible mediating role of perceived control in the coping-sleep relationship. We hypothesized that approach coping would be associated with higher quality of sleep, and emotion-focused and avoidant coping with lower quality of sleep. We hypothesized that perceived control would mediate the relationships.

Methods: Participants: N? 376 youths from the TwinssCan study (twins and their non-twin siblings). Instruments: Participants completed the Utrecht Coping List which assessed approach ('active', 'social support', 'thought-focused'), avoidant ('passive', 'avoidant', 'palliative') and emotion-focused coping. They then completed six days of experience sampling, where they self-reported sleep quality each morning and perceived control over the most negative event of the day each evening, using a palm-top device. Analysis: Mixed effects linear regressions were used to assess the effects of coping on sleep. The distribution-of-the-product method was used for building confidence intervals for the mediated effect.

Results: The results showed that avoidant ('passive') coping was associated with lower daily sleep quality. None of the other coping styles were significantly associated with sleep quality. Additionally, perceived control mediated the negative association between palliative coping and quality of sleep. Perceived control did not mediate any of the other coping style-sleep relationships.

Conclusions and implication: In contrast with previous research, avoidant ('passive') coping was negatively associated with self-reported sleep quality. Therefore, our study extends previous work by demonstrating this effect in daily life using experience sampling. Although no overall effects of avoidant ('palliative') coping on sleep were found, perceived control mediated the negative relationship between 'palliative' coping and quality of sleep. These findings may suggest that perceived control has a stronger effect on quality of sleep than palliative coping. Future research should employ alternative statistical methods, e.g. Structural Equation Modeling.

In clinical practice, these findings imply that avoidant coping styles and lower perception of control co-occur with reduced sleep quality, therefore coping style and perceived control should be considered during assessment when individuals present with reduced sleep quality.

Keywords: sleep quality, coping style, perceived control

Ethical approval: Medical Ethics Review Committee university hospital KU Leuven.

Funding: European Community's Seventh Framework Program, FWO Odysseus gran Abstract ID: 18 Presentation type(s): Oral presentation: Clinical oral presentation

Touch Can Affect The Emotions That Words Cannot Reach: The Role Myofascial Structures In Interoception, Emotions And Body Awareness

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Background: Interoception is the sense of the physiological condition of the body mapping the body's internal landscape moment by moment. It is a multifaceted process that is being more and more studied within the fields of psychiatry, psychology, neuroscience and biomedical science. Bodily responding and its perception are key processes in the construction of emotion experience and could be of great significance for many psychological functions. In this way interoception can provide a direct bridge between the biological and psychological functions.

The whole skin and myofascial tissue functions as an interoceptive sensitive substrate. Majority of the receptors in myofascial tissues are free nerve endings whose input convey information from the body physiology. This interoceptive-insular pathway is deeply linked with the autonomic and emotional brain areas along with the neuro-anatomical correlates of verbal and non-verbal memory storage. This pathway serves as the substrate for the emergence of body awareness and is also considered central in normal or psychosomatic functioning.

Purpose: Painful memories are written in the body's memory and the "scars" in the body remind of these events and can lead to psychosomatic, medically unexplained, symptoms. Many bodywork methods use movement to induce "here and now" perception of the body helping patients to regain contact with their body but at times the movement alone is not sufficient to recreate perceptive harmony. Touch can both communicate and elicit emotions and hands on techniques can promote positive emotional responses like feelings of safety and relaxation.

Methods: The therapist is able by treating the myofascial structures to communicate and elicit emotions and reduce negative affective feelings, avoidance and stress-related biomarkers through the deactivation of systems related with stressful response. In this way the hands -on therapy offer the patient the chance to discriminate between safe and threatening stimuli, promoting the conscious perception of an intact body. Realizing that the body is not damaged, nor threatened reduces anxiety, avoidance and defensive responses.

Results: Results are presented via case-reports from patients who have suffered from panic attacks, anxiety and chronic pain and have been treated by Fascial Manipulation.

Conclusions: From a biopsychological viewpoint, it has been interesting to note how memories of long-forgotten traumas and accidents, fears and previous pain experiences can emerge during treatment of myofascial structures. Post-traumatic dysfunctions often present as musculoskeletal pain. The connection between the traumatized body part and the emotions evoked when that part is touched surprises the patient, and it very often represents the first step to recovery. This close relationship between fascial-orientated work and evoked emotions has also been a major step forward in the treatment of patients with long-standing pain states, particularly in those that have very sparse medical findings.

Key words: interoception, emotions, fascia, fascial manipulation

Abstract ID: 19 Presentation type(s): Oral presentation: Scientific oral presentation

Exploring Clinical Reasoning And Professional Assumptions In Mental Health Physiotherapy: The Physiotherapist'S Perspective.

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Background: Clinical reasoning (CR) is a complex phenomenon comprising processes of professional thinking, knowing and decision-making. It is the core of physiotherapeutic practice, and various models are described in the literature. They build on different assumptions concerning the theory of reality, knowledge and method, shaping the professional thinking and acting. Within mental health physiotherapy (PTMH), research focusing on CR and its background is sparse. However, increased professional self-reflection may enhance the further development and strength of PTMH, to which this study seeks to contribute.

Purpose: The aim of this study is to explore and describe the essence of CR of Austrian mental health physiotherapists, and to interpret how CR is shaped by their professional assumptions.

Methods: Recruitment followed a systematic purposive structure. All registered Austrian physiotherapists with clinical focus on PTMH were invited to participate. 23 respondents met the inclusion criteria, of which ten were chosen purposefully. The sample consists of nine females and one male, aged from 24 to 60, with various clinical focus and specializing education. Semi-structured interviews were conducted by the first author, focusing on cases from the informants' clinical practice. The interviews were audio-recorded and transcribed verbatim. Field notes and a reflective journal were kept. Aspects of enhancing trustworthiness were considered. Data is analyzed with a published phenomenological hermeneutical method. It follows defined analytical steps of naïve reading, structural analysis and comprehensive understanding. The second author audits the data analysis.

Results: From the data, two tentative thematic perspectives emerged. One may be described as an inductive openness, where CR builds on the patient's experiences, a lived body perspective, and the patient's resources. Tacit knowing and intuition are vital reasoning aspects. On the other hand, a deductive hypothetical perspective was observable, focusing on the patient from a objective and more biological view, generating hypotheses in relation to norms and pathologies.

Conclusion: As this is an ongoing research, results and implications are formulated tentatively. The study will be finished by April 2020 and therefore finally presented at the conference.

However, there is an indication that CR strategies are dependent on the informants' specialization, which could have educational implications for advanced trainings and studies.

Key-words: Clinical reasoning, professional assumptions, phenomenological hermeneutics, philosophy of science Funding: Unfunded work.

Ethics approval: The Austrian law does not require formal ethical application for this study conducted in line with the Declaration of Helsinki and the GDPR.

Abstract ID: 20 Presentation type(s): Oral presentation: Scientific oral presentation

From Symptom Management Towards Recovery From Fibromyalgia

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Background: Fibromyalgia (FM) is a contested, chronic widespread pain syndrome accompanied by multiple other symptoms, such as extensive fatigue, poor sleep, cognitive problems, depression, and impaired functioning. No known cure for FM exists. Recommended drugs, conditioning exercise and patient education programs have moderate, non-lasting effects. Epidemiological studies show that some patients become symptom-free. For years, we have examined recovery experiences of previous patients. Characteristically, they have engaged in personal, complex processes of making sense of symptoms and recreating a tolerable life worth living. The findings inspired us to develop a patient education program to facilitate patients to use their strengths and resources to discover how their daily life could become tolerable again and still worth living.

Methods: Working process: Two physiotherapists working with research on FM and clinicians with backgrounds in diet counselling, occupational therapy, medicine, nursing, physiotherapy, and social work participated. Five days seminars were held with the purpose to bridge knowledge from science and clinical experience. The reading of qualitative studies about patient illness and recovery experiences inspired the clinicians to reflect on own clinical work. The scientists moderated the group discussions in accord with qualitative interview techniques. The discussions were audiotaped, summed up, and presented for the clinicians for validation in the following meeting. A consensus was reached about the program's purpose, and the clinicians designed the content of the program.

Results: The program's purpose: The purpose was created from an amalgam of evidence about biological, mental and social changes. Displayed by a biopsychosocial model, the interrelationship between the various evidence indicates that life stress is an illness maintaining factor. Thus, the program aims to facilitate a person to engage in discovering how they can create a life with less life-stress.

Themes for exploration: Patients are informed about present knowledge of pathophysiology, patients' illness and recovery experiences. During the 7-8 meetings, patients share and explore personal experiences with peers and health professionals, and try out alternatives for their lives between the meetings. The themes address following questions: What is FM, and what happens to me? What does my body try to tell me? How can I fulfil my roles and life expectations? What gives and depletes me of energy, and what is important and unimportant for me in my life? What can I do to get a better future?

Evaluation: Focus group interviews of patients and clinicians suggest that the program is meaningful. What has happened with the patients after participation in the program is under examination.

Conclusion: During the last two years, the rehabilitation program has been delivered in several groups of 8-12 patients. It is expected that it will take time to recover, but preliminary findings suggest that patients are in recovery.

Abstract ID: 21 Presentation type(s): Oral presentation: Scientific oral presentation

Trauma-Afflicted Refugees' Experiences Of Physical Activity And Exercise Treatment - Results From A Qualitative Study With Focus Group Discussions

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Background: Refugees with prolonged and repeated experiences of trauma, often in combination with post-migration living difficulties, are subjected to severe levels of stress and stress-related ill health. The complex array of post-traumatic and post-migratory stress marks an increasing need of new or adjusted treatment strategies to target both mental and physical health, as well as to promote general health behavior, daily life functioning, and psycho-social adjustment. Physical activity (PA) is well-established as an effective stress reliever and associated with a range of positive health outcomes. However, the effect of PA and exercise has received scarce research attention in the context of PTSD, and particularly in the field of refugees' health.

Purpose: The main objective of this study was to explore trauma-afflicted refugees' experiences and preferences of participation in PA and exercise-based treatment from a holistic perspective.

Methods: An explorative qualitative research design was used. Six focus group discussions were conducted with 33 male and female participants; >18 years old, with PTSD related to trauma from war, torture and forced migration, and who had participated in one or several options of group-based PA and exercise treatment for at least three months. The gathered data were analyzed by qualitative content analysis.

Results: The analysis resulted in one over-arching theme reflecting the participants overall experience of PA and exercise as a process of building resilience. Participants experienced improvements in both physical and mental health domains. Increased self-awareness and self-confidence were seen as important benefits, and the interruption of daily stressors provided a sense of relief and recovery. The treatment group settings became a vehicle for overcoming social fear and isolation, which also carried an empowering impact over to participants' social relationships. Treatment characteristics were experienced as highly supportive and often referred to as the basis of other positive experiences and perceived health benefits.

Conclusions and implication: Our result outlines a detailed account of trauma-afflicted refugees' experiences of participation in PA and exercise-based treatment, pointing to a multitude of pathways towards health and resilience. These findings provide an interesting starting point for future research and may contribute to the design, implementation and evaluation of future PA and exercise interventions in this field. The result also indicates a particular need for both research and intervention development to include the real-life impact of participating in such treatment, including careful considerations of barriers and facilitators at an individual level.

Key words: Refugees, PTSD, post-migration stress, physical activity, physiotherapy

Funding acknowledgement: This work was supported by the Swedish Research Council for Health, Working-life and Welfare (FORTE) under Grant number 2016-00426.

Ethics approval: The study was approved by the Swedish Ethical Review Authority (2016/1815-31/2).

**Abstract ID: 22** Presentation type(s): Oral presentation: Scientific oral presentation

The Lived Body Experience Of Young Adults After Stroke With Physical Functional Impairment Returning To Home Environment

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Background: Stroke is the leading cause of long-term disability in the developed world, which is increasingly affecting young adults (aged from 18 to 55). Comparatively little attention has been focused on the lived experiences of young stroke survivors. A deeper understanding is needed on the way the body is experienced after trauma or illness and the way that the body is conceptualized in physiotherapy.

Purpose: The aim of this research is to explore the lived body experience of young persons after stroke returning to home environment.

Methods: a. Participants: Six young adults after stroke (aged from 37 to 54), having returned to home environment from acute in-patient rehabilitation setting (one to six months post-stroke). b. Instruments: The research design was a phenomenological study. Qualitative individual in-depth semi-structured interviews were conducted. c. Analysis: The interviews were transcribed verbatim and analyzed using psychological phenomenology approach (using a qualitative data analysis software program).

Results: The key aspects of the essence of the phenomena of the lived body experience by persons after stroke were – resources (positive aspects of the lived body experience) and potential risks (negative aspects of lived body experience). Potential risks included negative emotional meanings, concerning the loss of former bodily abilities, activities and participation; negative aspects of environmental factors and difficulties in accepting the changed body after stroke. The experience of resources incorporated the attributed cognitive meaning of survival, the preserved functions and activities, positive aspects of environmental factors, the possibility of a meaningful life after stroke, employment of adaptive coping strategies and acceptance of the changed body. The acceptance of the lived body after stroke was experienced through understanding the lived body – understanding and accepting – and through sensing the lived body as a whole and feeling love for one's body.

Conclusions and implication: Conceptualizing the body as a subject revealed to be a central aspect of the phenomena of the lived body. Conceptualization of the body as a subject and integration of the body allows the person after stroke to accept - through sensing - the changed body after stroke as a unified whole, uniting the sense of self before and after the stroke and promoting the possibility of a fulfilling life. This aspect of the lived body experience allows the conclusion, that conceptualizing the body as a subject in physiotherapy helps integrating the imprint of stroke in person's lifeworld.

Key words: Lived body experience; phenomenology; stroke.

Funding acknowledgements: No funding.

Ethics approval: All procedures performed in study involving human participants were in accordance with the ethical standards of the institutional research committee.

Abstract ID: 23 Presentation type(s): Oral presentation: Scientific oral presentation

# Is Occupational Education Associated With Psychological Pain-Related Features Among Patients With Low Back Pain?

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Background: Low back pain (LBP) is influenced by complex biological, psychological, and social factors. The short form of the Örebro Musculoskeletal Pain Screening Questionnaire (ÖMPSQ-short) and the STarT Back Tool (SBT) have been developed for the identification of psychosocial factors and risk of pain-related disability among patients with LBP. Beliefs in the anatomical causes of persistent pain are related to greater likelihood of beliefs in physical disability and avoidance of activities, low perception of controllability of LBP and poor clinical outcomes.

Purpose: We hypothesize that patients who are professionally inclined to a biomechanical conception (e.g. engineers, teachers, doctors, nurses) have a distinctive response pattern in SBT and ÖMPSQ-short. Thus, we aimed to investigate the association of field of occupation and the SBT and ÖMPSQ-short risk groups and their individual questions among patients with LBP.

Methods: The study population (n = 674) was recruited in Finnish primary and occupational health care units. All patients 18-65 years of age contacting health care due LBP were eligible. Exclusion criteria included suspicion of a serious cause for LBP and in primary care, first patient-reported contact due to LBP with a pain duration of less than 2 weeks. The data were collected through questionnaires.

Results: In SBT, 46% of men were classified to low-, 38% to moderate- and 16% to high-risk groups. Among women, the corresponding percentages were 39%, 47% and 15%, respectively. In ÖMPSQ-short, 50% of men were classified to low-, 22% to moderate- and 28% to high-risk groups. Among women, the corresponding percentages were 50%, 21% and 29%, respectively. There were no statistically significant associations between field of occupational education and SBT (p = 0.081) or ÖMPSQ-short (p = 0.091) risk groups. In all occupational educations, 65–78% of individuals had referred leg pain, 59–78 % comorbid pain, 50–65 % anxiety and 54–65 % depressive symptoms. Fear of physical activity was greatest in technical fields (p = 0.015) and services (p = 0.038), while patients working in health and welfare had least fear towards physical activity (p = 0.025). Pain catastrophizing was highest in technical fields (p = 0.028) and lowest in occupations of health and welfare (p = 0.001).

Conclusions: The hypothesis was supported by the current findings suggesting that patients working in health and wellbeing fields had less pain catastrophizing and most positive attitudes towards staying physically active with pain, whereas patients with technical fields had the most negative conceptions. If interventions could reduce fear of physical activity and increase empowerment among employees in these occupations, it might prevent pain becoming chronic. In a larger study population, it could be possible to evaluate whether psychosocial factors and comorbidities are accumulated in individual occupations and gender differences in these associations.

Keywords: low back pain, work ability, screening, biopsychosocial

Abstract ID: 24 Presentation type(s): Oral presentation: Scientific oral presentation

# The Process Of Acceptance For Patients With Long-Term Pain When Participating In Rehabilitation: A Longitudinal Study

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It has been shown that individuals who were able to accept their pain condition are more likely to benefit from multi-professional pain rehabilitation. In order to gain knowledge about how individuals engage in change we need to understand the meaning of individual choices and challenges, e.g. in the learning-, adjustment- and acceptance processes during rehabilitation. To understand 'meaning' is to understand a phenomenon from a first-person perspective. There is a lack of in-depth studies exploring how individuals experience changes in their understanding during rehabilitation.

Purpose: The present aim was to elucidate the meaning of acceptance and processes of change during a 16-week-long multi-professional pain rehabilitation programme.

Methods: In-depth interviews were conducted with nine individuals, six women and three men, between the ages of 24-52 years, with a duration of pain of 2.5-15 years. Participants were interviewed three times, prior to, in the middle of and after attending the 16-week-long pain rehabilitation programme. The transcribed accounts were analysed in a sequential manner according to Interpretative Phenomenological Analysis (IPA), taking into account a longitudinal approach.

Results: Four different meaning structures of acceptance emerged; (i) acceptance as liberation; (ii) acceptance as acknowledging the need for change; (iii) acceptance as tolerating ambivalence and (iv) acceptance as failure. Characteristics of the phenomenon acceptance was described, as well as key aspects of transformative learning that facilitated or further consolidated the process towards acceptance during rehabilitation. However, we also found that some participants actively rejected the idea of acceptance and that there is a risk that attending a rehabilitation programme may actually further reinforce resistance strategies and prevent moving forward towards acceptance.

Conclusion: The longitudinal nature of the study adds new dimensions to the understandings of acceptance, from the perspective of those living with long-term pain, finding aspects of acceptance not previously described, especially in relation to the experience of the body. The results give valuable knowledge about how to offer a person-centered approach in pain rehabilitation practice. Rehabilitation professionals need to be aware of and sensitive to the different understanding of acceptance and that these different understanding require different forms of support during rehabilitation.

Key words: chronic musculoskeletal pain, embodied experiences, IPA, longitudinal, process of change, transformative learning

Funding acknowledgements: The study received no specific grant from any funding agency, but was supported by the Rehabilitation Clinic, Danderyd Hospital, Sweden.

Ethics approval: Ethical approval was obtained from the regional ethical board in Stockholm (Dnr 2010/138-31/1).

Abstract ID: 25 Presentation type(s): Oral presentation: Scientific oral presentation

Is Massage Therapy Effective In Prevention Of Postpartum Depression? A Randomised Clinical Trial In South India.

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Background: Massage word has its origin either from the French 'massage' meaning 'friction of kneading' or from Arabic meaning 'to touch or feel'. Exact origin of massage as a therapy in not known, but evidence of massage has been found in many ancient civilisations including India. Peer-reviewed medical research has shown the benefits of massage in many psychological disorders including anxiety and depression. Postpartum depression is an important public health problem in India because of high prevalence (22%: 95% CI: 19–25%) and its direct implications on maternal and child morbidity and mortality.

Purpose: The present study has been done to evaluate the efficacy of massage therapy in prevention of postpartum depression.

Methods: Participants: A total of 264 pregnant women residents of one of the eleven villages of Nalgonda district in South India, who met the inclusion and exclusion criteria, and consented to join the study were randomised into intervention and control groups.

Procedures: The study was unblinded randomised clinical trial. The intervention group (132 pregnant women) was provided weekly massage by trained masseurs at their places of residence. Both groups were provided antenatal care including health and nutritional education as envisaged in Reproductive and Child Health National Programme of India. The depression during the postnatal period was identified using Edinburgh Postnatal Depression Scale.

Analysis: The data was summarised as percentages and analysed using chi-square test.

Results: The comparison between intervention and control groups showed the efficacy of randomisation and non-significant variations between two groups as regards socio-demographic profile, environmental variables, utilisation of antenatal facilities and behavioural factors namely smoking and consumption of alcohol. The prevalence of postpartum depression as measured by Edinburgh Postnatal Depression Scale was significantly (p<0.05) higher among control group(13.67%) as compared to among interventional group (6.06%).

Conclusions and Implications: The study revealed the effectiveness and safety of massage therapy during antenatal period in prevention of postpartum depression.

Key Words: Massage therapy, Postpartum depression

Funding: Nil

Ethical Approval: The study was approved by Institutional Ethics Committee. Informed consent was obtained from all study participants.

Abstract ID: 26 Presentation type(s): Oral presentation: Scientific oral presentation

Associations Between Therapeutic Alliance, Physiotherapist Confidence In Managing The Patient And Patient Distress In Chronic Low Back Pain Practice

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Background: The therapeutic alliance describes the collaborative «work together» aspect of the patient-therapist relationship. Physiotherapist often feel insecure managing chronic low back pain (CLBP) associated with psychological problems. Therapists' uncertainty in dealing with psychological factors may influence negatively their ability to foster strong alliances with patients in CLBP practice. Associations between the alliance and therapist factors have never been explored in physiotherapy practice.

Purpose: The purpose of this study was to explore associations between patient-rated alliance, physiotherapists' self-reported confidence in managing the patient and patient-reported psychological distress at treatment baseline.

Methods: Patients with CLBP (N = 21) self-reported their psychological status at baseline. After the intake session, physiotherapists self-reported their confidence (enthusiasm and competence) in managing the patient with CLBP. Patient-rated alliance was measured after the third physiotherapy session. A linear mixed model estimated associations between alliance (dependent variable), physiotherapists' confidence and patient-reported distress.

Results: The linear mixed model estimated a positive interaction effect (therapist confidence \* patient distress) on patient-rated alliance (estimated effect,  $\beta$  = 0.15; 95% Confidence Interval = 0.03–0.27).

Conclusions: Higher self-reported confidence in managing the patient with CLBP by physiotherapists was associated with higher patient-reported alliance after the third physiotherapy sessions. The positive effect between therapist confidence and patient-rated alliance appeared to be dependent on patient-reported psychological distress at baseline.

Implications: Healthcare institutions may need to further invest to support physiotherapists in their clinical skills to deal with psychological distress in clinical practice and skills to foster strong therapeutic relationships with patients.

Key words: Therapeutic relationship, alliance, chronic low back pain, psychological factors

Ethical approval: The study was approved by the local ethical committee (KEK-ZH).

Funding acknowledgement: This project was supported by funding from the Swiss Physiotherapy Association (physioswiss).

**Abstract ID: 27** Presentation type(s): Oral presentation: Scientific oral presentation

Exercise As A Treatment For Clinical Depression And Progressing The Physiotherapists Role

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Background: There has been extensive literature examining the efficacy of exercise interventions in the treatment of depression over the past few decades, with several clinical guidelines recommending its inclusion as a modality. However, to date there has been no review examining the possible implications of utilizing exercise and the expertise of physiotherapists as part of the multidisciplinary approach in the treatment of clinically depressed patients.

Purpose: This systematic review aimed to examine the effectiveness of exercise as a treatment for depression in the absence of other comorbidities and to determine the most effective dosage/mode in treating this population. Moreover, this review strived to appraise the literature for a potential role for physiotherapists in the provision of evidence-based therapy for depression.

Methods: 1.Participants: adults aged between 18-65 years with a clinical diagnosis of depression/dysthymia without any comorbid somatic or psychological conditions. 2.Instruments: following the PRISMA protocol, a systematic review of RCTs published between January 1979 to June 2019 was performed. 3.Analysis: all included studies were appraised for quality using the PEDro scale and Cochrane risk of bias tool. Data was manually extracted using Excel regarding the characteristics of the participants and interventions, pre- and post-intervention depression scores and p-values for exercise efficacy when compared to control.

Results: Eight papers met the inclusion criteria of this review. All of the included trials employed aerobic exercise for their intervention, with one trial additionally including a resistance-based intervention. The duration of the interventions ranged from 10 days to 24 weeks across both inpatient and outpatient cohorts. Both interval and continuous modes were utilized, with seven of the trials providing supervised programs. Overall, the quality of the trials using both tools was fair, with only one of the trials providing adequate allocation concealment and only two trials blinding the assessors.

Conclusions and Implication: Exercise was shown to significantly improve depressive symptoms in adults with depression, both as an independent and an add-on treatment. Given the small number of included studies and issues with incomplete reporting of the interventions' characteristics, it was not possible to determine the most effective dosage or mode of exercise for this population. Despite the minimal input of physiotherapy in the prescription of exercise for this population, this review adds to the growing body of evidence regarding the important role available for the profession in the treatment of psychiatric disorders

Keywords: Depression, Exercise, Intervention, Physiotherapy

Ethics: No ethics approval was needed to conduct this review.

Funding: This review was unfunded.

Abstract ID: 28 Presentation type(s): Oral presentation: Clinical oral presentation

Painreduction In Traumatized Adolescent Refugees By Fasciatherapy/Movement Awareness Physiotherapy

Paul Sercu, Fasciatherapy/Movement Awareness physiotherapy, Fascia College, TEMSE, BELGIUM

Background: Physical pain and emotional suffering are among the interrelated core symptoms of cumulative child maltreatment and can become chronic. This was found to be highly prevalent among sexually abused women. Many patients still report unsatisfactory pain control despite ongoing treatment. Expert-based qualitative research suggests that fasciatherapy may positively affect the pathophysiological and pathopsychological aspects of chronic pain through a phenomenologically orientated physiotherapy.

Purpose: We carried out a study on the pain reducing effects of fasciatherapy. A second goal is to examine if a therapeutical thouch can have a positive effect on traumatized adolescent people. A thirth is te analysis of the therapeutic alliance.

Methods: Agroup of unaccompanied refugee minor girls aged pregnant due to sexual violence was selected. For ethical reasons there was no way to realize a control group. Every participant received 9 or 10 sessions over a period of several months. Before starting the fasciatherapy sessions, three scales (HSCL-37A, SLE and RATS) showed convincingly that all participants (with no exception) were coping with severe post-traumatic stress syndrome (PTSS) including complaints of pain. In order to evaluate the presence or absence of pain reduction, the patients were asked to answer the Mosby Pain Rating Scale immediately before and immediately after the session. As a consequence, our study of pain reduction has to take into account the over all impact of psychotraumatic stress disorder (PTSD): the Hopkins Symptom Checklist 37A (HSCL-37A), the Stressfull Life Events (SLE) and the Reactions of Adolescents to Traumatic Stress (RATS).

Results: The ORS-results generally did not improve during the intervention period. This significant pain reduction was not directly linked to the over all improvement of the situation of the girls. On the contrary, some girls indicated new or increased difficulties. The MPR scale offered statistically significant positive results for pain reduction in different body parts as well as for pain intensity. The results of the SRS obtained during the intervention period were very positive. Finally, there were no refusals or complaints linked to the therapeutic touching of the girls once their trust was gained. The adolescent women testified to the positive therapeutic effect of the touch in the fasciatherapeutic approach MDPTSD, B and generally reported this as pleasant.

Conclusion: Applying the fasciatherapy/MAP in a group of non-accompanied adolescent girls statistically significant positive pgresults were obtained in the areas of pain reduction and of building a strong therapeutic alliance. The use of therapeutic touching was very well accepted by all individuals.

Key Words: Fasciatherapy/Movement Awareness Physiotherapy, therapeutical touch, therapeutic alliance, pain reduction

Abstract ID: 29 Presentation type(s): Oral presentation: Clinical oral presentation

Individual Physiotherapy Intervention Stratification(Ipis) Approach For Working With Older People Acute Mental Health In-Patient.

Kolapo Jegede, Therapy, Northamptonshire Healthcare Foundation Trust NHFT, Kettering, UNITED KINGDOM

Background: The interconnectivity between physical and mental health is increasingly recognised as people are living longer in many advanced world i.e. the population in the UK is ageing with 18.2% aged 65 and above. People living longer are a cause for celebration, however it comes with range of physical or mental health problems or both together. Therefore, health and social care providers are required to ensure services are delivered that do not treat physical and mental health in isolation. Older people receiving treatment in Northamptonshire Healthcare NHS Foundation Trust (NHFT) in-patient mental health services often present with complex clinical conditions; a primary mental health diagnosis prompting admission and a need to consider coexisting physical health conditions, frailty and increased risk of falls are integral parts of their care. The role of physiotherapy in the delivery of this care is very vital, therefore the need to ensure conventional physiotherapy service is available to all older people mental health inpatients inspired IPIS Approach.

Purpose: To provide a dynamic, simple and practical structural approach/guide for physiotherapists to ensure holistic biopsychosocial and person centred care are deliver to all older adults mental health-inpatients. To promote effective communication tool with the MDT and the Management. To help with effective use of resources especially in relation to falls prevention among older adults.

Method: IPIS Approach application is based on 3 key domains of Baseline Domain, Treatment Domain and Maintenance Domain. Baseline Domain is the entry point for all patients admitted; outcome of intervention baseline domain determines the next domain either Treatment or Maintenance domain. Principles Baseline domain of 0-10 patients weekly; Treatment domain less than Maintenance domain weekly. Any contrary results for approximately 3-4 weeks require re-evaluation of the IPIS approach using plan, study, do and act cycle of Quality Improvement (PSDA of QI for evaluation).

Results: The result obtained for the first three weeks of piloting the approach across NHFT's two in-patient mental health units of 4 wards with a total of 48 beds were: Baseline domain 0-2 patients; Treatment domain had 6-13 patients and Maintenance domain had 43-47 patients. Treatment domain patients' numbers are less than the number in Maintenance domain.

Conclusion: IPIS approach is helping as a useful tool in navigating the complexities of physical and mental health in older adult in order to be able to deliver patient centred and biopsychosocial holistic physiotherapy service. It may be adapted by physiotherapists involved in elderly care to structure their intervention. IPIS approach is open to criticism and feedback in order to help with the on-going further work of its validation and developing it to a "Model status".

**Abstract ID: 30** Presentation type(s): Oral presentation: Scientific oral presentation

Making The Body Meaningful. A Conversation Analytical Study Of The Interaction Process In Psychiatric Physiotherapy.

Katja Mustonen, Sociology, University of Helsinki, University of Helsinki, FINLAND

Background: Based on video recorded data from the Finnish psychiatric care, I investigate the therapeutic process of psychiatric physiotherapy. In Finland, individual psychiatric physiotherapy is used to treat a wide range of psychiatric disorders. Physiotherapy sessions consist of both discussions and various kinds of bodily practices through which the physiotherapist and the patient together explore the patient's bodily experience. I concentrate on the ways that bodily experiences are discussed and framed by the physiotherapists and the patients. Bodily experiences – e.g. sensations or perceptions – are mostly pre-conceptual and lacking any unequivocal meaning. Thus, they are open for interpretations and people can attach different meanings to them depending on the context. In psychiatric context, the body needs to be framed anew in order to turn it into something meaningful for the treatment of a mental health problem.

Purpose: My aim is to explore how the body is conceptualized concretely in the talks between physiotherapists and psychiatric patients. I ask how the participants build a link between the body and the mind and how do they treat the body as relevant in the light of the patient's psychiatric problem.

Methods: The video recorded data consist of the physiotherapy processes of two young psychiatric patients, in total of 27 hours of video data. In addition, a data of patient's self-reported experience was collected using a questionnaire after each session. The patients were selected on a volunteer basis from the psychiatric outpatient clinics supported by the physiotherapist's/ professionals' team's evaluation. An informed consent was required both from the physiotherapists and the patients. The video data was analyzed using conversation analysis as method. Conversation analysis is a very detailed qualitative methodology that is used to depict subtle interactional phenomena, both verbal and non-verbal, in naturally occurring interaction situation.

Results: Preliminary results suggest that, in the cases of my data, different kinds of frameworks are established for the body depending on the problems that the patient is experiencing. There is, for example, the "safe body/ threatening body" framework and the "positive/ negative glasses" framework. These frameworks guide the ways that bodily practices and bodily experiences "make sense" for the participants during the physiotherapy process. I argue that in clinical practice, just as important as the actual bodily work are the different conceptualizations of the body that build up in the discussions between the physiotherapist and the patient. These conceptualizations, for their part, allow the patient to experience their body in a new way.

Key-words: psychiatric physiotherapy, physiotherapy process, interaction, conversation analysis

Ethical considerations: The research project plan has been approved by the Ethical Committee of HUH (Helsinki University Hospital District).

Funding: The study is funded by the University of Helsinki, Gyllenberg's Foundation and Kordelin's foundation.

Abstract ID: 31 Presentation type(s): Oral presentation: Clinical oral presentation

The Dutch View - Educational System On Physical Therapy In Mental Health In The Netherlands

Linda Slootweg, Institute for Movement Studies, University of Applied Sciences Utrecht, Utrecht, NETHERLANDS

- 1. Background/ abstract: In this presentation the vision of the master psychosomatic physical therapy at the University of Applied sciences (the Netherlands) on physical therapy in mental health will be explained. The essential skills as well as the program and educational system of the master in psychosomatic physical therapy will be adressed.
- 2. Purpose: Global aging, mental illnesses and a decrease in inpatient care gives a growing demand for physical therapy in mental health. In order to meet this demand we have to educate professionals that can help a broad variety of patients; in- and outpatient care. The educational program is therefore constantly adjusted to keep up with the state of the art on pain mechanisms, depression and anxiety treatments, influence of mindfulness et cetera.

Besides teaching the right treatment methods, we also try to give the student a critical point of view by using different educational methods so that they can not only evaluate clinical research and decide whether the outcomes are relevant for their cases, but also think out of the box in adressing new occupational related problems. This helps the student to profile as an expert and anticipate on changes in the medical and social professional field

- 3. Methods: The program is part of the pilot "Flexibilisering Hoger Onderwijs" by the Dutch government. The educational program and teachers input is evaluated every 3 months with a PDCA. Each year a progess report is presented to the project leaders.
- 4. Results: Even though the program is just fully implemented in the three years education in September 2019, the first results are positive. The students feel they have enough skills and knowledge to treat patients with psychosomatic complaints without compromising on their broad view on the mental health care (options).
- 5. Conclusions: The first results look positive, but we keep on looking for improvement. The first is shortening the actual face-to-face education style and increase the amount of treatment methods. This contradiction asks for an even more flexible education system.
- 6. Key-Words: Education, physical therapy, mental health, psychosomatic

**Abstract ID: 32** Presentation type(s): Oral presentation: Scientific oral presentation

The Effects Of Physical Exercises On Self-Management Strategies In Chronic Schizophrenic Patients At Thabamoopo Hospital, South Africa

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Thabo Moleki Sekwati, Physiotherapy, Sefako Makgatho Health Sciences University, Pretoria, SOUTH AFRICA

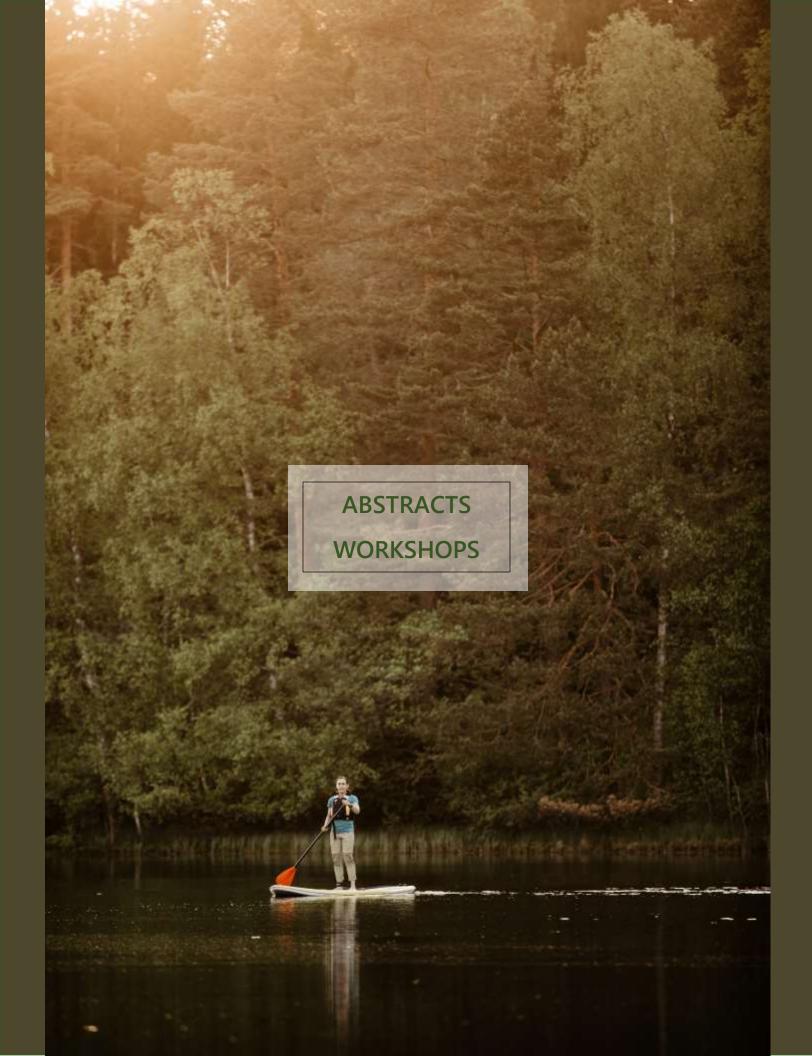
Background: Physical exercise and physiotherapy management strategies for patients living with Schizophrenia has been proven effective. However, no evidence exists to indicate whether physiotherapy is specifically effective to promote self-management strategies in chronic Schizophrenic patients. The researcher hypothesized that physical exercises prescribed by Physiotherapists will aid self-management for patients living with chronic Schizophrenia.

Methods: A pre-test post-test experimental study was executed on 49 patients with chronic Schizophrenia at the Thabamoopo Hospital, South Africa. In-patients at the hospital, who provided informed consent and who had been living with a diagnosis of Schizophrenia for more than six months were included in the study. All participants were assessed with the Life Satisfaction Questionnaire 9 (Lisat-9) and a self-developed self-management questionnaire prior to the onset of the study. Participants received structured physiotherapy exercises, which included individual exercise sessions, group exercises and sport activities, for four consecutive weeks. Thereafter, the participants were responsible for managing two of the five daily treatment sessions, for four consecutive weeks. In the final four weeks of the study, participants were responsible for managing all five daily treatment sessions independently. After 12 weeks of intervention, post-testing was conducted with the same outcome measures.

Results: Results obtained from the outcome measures were analysed with the paired student t-test. The difference in the Lisat-9 and self-management questionnaire pre- and post-test scores were statistically significant (p?0.000), indicating that the patients were more satisfied with their lives and able to self-manage better than before the intervention. Each item on the Lisat-9 and self-management questionnaire was also tested with the student t-test and each item improved significantly for all participants.

Conclusion: Physiotherapy intervention in the form of physical exercises are effective in promoting self-management for institutionalized patients living with Schizophrenia. Physical exercise is also effective in improving life satisfaction in the chronic Schizophrenic population. Despite the positive results, further research into the long term effect(s) of physical exercise and research on non-institutionalized patients is warranted.

Keywords: Physiotherapy; Schizophrenia; self-management; life satisfaction; physical exercise(s).



Abstract ID: 33 Presentation type(s): Workshop

# Capnography Biofeedback In Psychophysical Physiotherapy For Patient With Dysfunctional Breathing

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Outi Suontausta, Helsinki University Hospital, Helsinki, FINLAND

Background: Clinical work experience and research has shown that breathing is important function to pay attention in physiotherapy. We work in hospital with patients who has functional disorders, dysfunctional breathing which causes symptoms and effects to physical and mental ability in every day life. We use capnography at daily work and it is a tool for deeper understanding and real-time information of physiology. Dysfunctional breathing has multidimensional etiology including biomechanical and psychological aspect as well. In workshop we'll present our work in hospital.

Purpose: Learning objective is to see how capnography can help a patient and a physiotherapist to work with physiology-data from present moment and how to help patient to practice self-regulation, to come aware of body, emotions and thoughts, over arousal or under arousal and how to come to window of tolerance. Main goal is to support physical and mental ability.

Methods: Workshop will be divided into three parts.

First part: Background for dysfunctional breathing in theory

Second part: Workshop is conducted by two physiotherapist and capnography. Another therapist is volunteering patient and is willing to work with own thoughts, emotions, body-awareness, body sensations, self-regulation in front of workshop audience.

Third part: The whole group will be practicing together self-regulation and participants will learn from experience.

Result: First part: Background for dysfunctional breathing and what is capnography.

Second part: For physiotherapist who don't have earlier experience of capnography and how to use it in psychophysical physiotherapy this workshop can offer new ideas for work.

Third part: Experience-based learning, thoughts, emotions, body-awareness, breathing, movement and recovery. How we can help our self to come from over arousal or under arousal to window of tolerance. How this effects to our work with patients with functional disorder.

Conclusion: Workshop can offer new information and inspiration for participants and their future work.

Keywords: Psychophysical Physiotherapy, Capnography, Dysfunctional Breathing, Self-Regulation, Bodyawareness.

## Abstract ID: 34 Presentation type(s): Workshop

# Workshop: Incorporating Physiotherapeutic Management For Service Users With Mental Health Disorders Into Entry Level Physiotherapy Curricula

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Laura Hemmings, Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham, UNITED KINGDOM Samantha McIver, Birmingham, UNITED KINGDOM

Mental health disorders (MHDs) have been identified as the leading cause of disability in the recent Global Burden of Disease review. Those with mental health illness are highlighted at significantly greater risk of comorbid physical health complaints. Physiotherapists are identified as having the skills to treat and prevent many of these conditions however are reported to lack the confidence or awareness to work with patients with mental illness. This has been related, in part, to inadequate or inconsistent exposure within entry level physiotherapy programmes.

Research indicates a direct positive relationship between number of hours of education or experience in mental health and positive attitudes towards working with this population. Given the prevalence of MHDs globally is rising and the identified importance of integrated physical health care for this population, it is important that we adequately prepare physiotherapy students with knowledge and skills to work within this area. A recent survey of entry-level physiotherapy programmes in the UK demonstrated that this is an area of focused curriculum development. However mode of delivery and confidence levels appear inconsistent.

This interactive workshop was developed to allow clinicians and academics working in mental health to share best practice and identify innovative solutions to improve and promote education and experience of student physiotherapists working with people with MHDs. It is hoped that from discussion and the expansion of a working group, development of standardised recommendations for inclusion of mental health within physiotherapy curricula globally can commence.

The objectives of the workshop are to obtain a global view of mental health education/support for students and identify any variants as a result of location. The session will promote discussion and sharing of innovative ways to overcome the reported lack of confidence of physio's/students working with mental health patients. Novel recommendations of how to embed mental health into university curricula and provide increased access to placements and experience will be explored.

Briefly, the interactive workshop will consist of introduction from co-facilitators, report of survey results around embedding mental health into physiotherapy curricula (UK), kahoot quiz identifying participant opinions on questions covered in the survey.

Three main questions will be posed for discussion:

- 1) What are potential barriers/facilitators for students, educators and clinicians to increase student engagement and experience of physiotherapy in mental health services?
- 2) How can we best embed education on MHDs into the physiotherapy curriculum? How much is necessary/feasible?
- 3) What is the best model for clinical placements? Considering accessibility, resources, innovative placement methods. Learning outcomes/conclusion:
- 1) Identify best practice experiences from an international perspective
- 2) Synthesize global perspectives and determine feasible take homes for improving student experiences internationally.
- 3) Develop international working group to address issues and develop tools, resources and recommendations for the profession.

#### Abstract ID: 35 Presentation type(s): Workshop

Experiencing The Phenomena Movement Quality And Movement Awareness – Their Theory Construct And Communication For Implementation In Mental Health Physiotherapy

**Liv Helvik Skjærven**, Department of Function and Health, Western Norway University of Applied Sciences, Bergen, NORWAY

Daniel Catalan Matamoros, Faculty of Humanties, Communication and Documentat, University Carlso III of Madrd, Getafe, Madrid, SPAIN

Background: Theory construct is important for an evolving science and theoretical maps are constructed as a pathway to bridge theory and practice, increasing the professionalization in the field of mental health physiotherapy where human movement is the core. The workshop will focus on research of the phenomena movement quality and movement awareness and the identified Movement Awareness Domain, with roots in Basic Body Awareness Therapy. The quote "Movement is more than exercise" provides a multi-perspective movement vocabulary for communication and practical strategies for treatment, intending to add value to the field.

Purpose: The major reason for conducting the workshop is to intertwine theory and practical floor-work of the phenomena movement quality and movement awareness revealing their usefulness. Learning objectives will be directed towards the phenomena, their content and strategies, for implementation.

Methods: The workshop start with an introductory presentation, shift to practical experience through floor-work, ending in conceptualization and reflection, directing attention towards the workshop outcome. Powerpoints with handout-material and references will be provided, together with booklets and material describing practical implementation. The specific principles of movement pedagogy, its health directed vocabulary, and the therapeutic attitude in conveying its content will promote involvement of the participants in the workshop.

Results: Learning outcome will be clarified through theory related to practical learning, aiming towards increased familiarity to the phenomena movement quality and movement awareness, all through personal experiences. A key for understanding is found in the statement: "Promoting movement quality through a movement awareness approach". This will be argued for in the workshop, providing glimpses on the relatedness between the phenomena, their content and clinical strategies as well as the health oriented movement vocabulary for communication.

Conclusions: Conclusion will be developed through a summing up-process, together with proposed visions, missions and strategic pillars for implications for practice, management and educational policy. "Promoting movement quality through a movement awareness aapproach" is presented as suggestions for future clinical practice as well as for research.

Keywords: Movement Quality, Movement Awareness, Movement Awareness Domain, Awareness Terminology, Movement Vocabulary of Health-terms

Ethics: Ethical considerations according to the Helsinki Declaration are followed.

Funding: The project was funded by Western Norway University of Applied Sciences, Bergen, Norway and University of Murcia, Murcia, Spain.

Abstract ID: 36 Presentation type(s): Workshop

Basic Body Awareness Therapy And Eurythmy Therapy- An Enriching Combination.

Anna Bjartmar, Caranna Physiotherapy, Private Physiotherapy clinic, Nyköping, SWEDEN

Backround: From my practical experience from Basic Body Awareness in combination with exercises inspired from Eurythmy therapy I will present a serie of exercises based on a overall context. I use this metod in my work as an physiotherapist in the field of mental health. I both have Individual contact but also in groups whithin 3-8 patients. I would like to share my experience outcome in combining this metods as it has been a big value in the work with my patiens. I have a therapeutic competence in BBAT and a diploma in Eurythmy after 5 years of studies. Eurythmy Therapy has also been described in a large literature review: Lötzke et al 2015. In Eurythmy the exercises are done with an emphasis on the bodily center wich is connected to the heart and breathing and which is manifested in the emotional sphere. However, the wholebody is utilized and stabilizing and bodygroundingis of utmost importance. Here Basic Body therapy and Eurythmy therapy fits as the hand in the glove. A natural relaxed rhytmic movement that involves and connect body, emotion and mind. Exercises in Body Awareness therapy in combination with Eurythmy therapy is experiential and based from sounds of speech, (vowels, consonants) rythms, forms, roomsdirections and it is supporting presence and awareness. A way to link body and mind.

Purpose: The stress-related diagnoses increase with symtoms which in diffrent ways are manifested not only in the physical body but also in a cognitive and emotional level. To work with exercises that stimulates an experience of connection that bridges fragmentation between body and mind are the challenge of our time. A path of meaning making. Eurythmy Therapy is based on a overall context. From a multimodal perspective these exercises sound right at a time when multiple levels of the brain are activated.

Method.: I will introduce a serie exercises in sitting and standing and you will experience Bbat in combination with eurytmy therapy. We are working with natural relaxed rhytmic movement based on bodybalance, rythm, vovels, consonants, forms and roomsdirections in a counscios way. Reflections and discussions with experienced physiotherapist

Results: Through ones own experience of this for physiotherapist new field get inspiration and creativity to take home in their own work with patients.

Conclusions: Can this experience-based exercises support in a creative way new movement opportunites to our patients with in the field of mental health?

Key-worlds: Basic Body Awareness, Mindfullness, Body and mind, Rythm.

Abstract ID: 37 Presentation type(s): Workshop

Physiotherapy In Eating Disorders

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Maria Panas, UPC KU Leuven, Leuven, BELGIUM

Michel Probst, KU Leuven, Leuven, BELGIUM

Physiotherapists will be more and more confronted with persons with weight, eating or trauma related disorders in their daily practice. Most of these patients have a negative body experience including problems with touch and closeness. Some of them show a low physical fitness and experience high stress levels which can cause stress related problems (e.g. tension headache, neck-shoulder pain,...).. The goal of this workshop is to present practical guidelines to treat persons with weight, eating or trauma related disorders within an individual outpatient clinical practice. The general goals are stress reduction and to improve the body experience and the physical fitness. The approach is based on the SMARTER-criteria: specific, measurable, acceptable, relevant, time limited, evaluation and revision. Attention is given to the anamnesis and the assessment (the body attitude test short version, the body cathexis scale, the physical activity and unrest test, the exercise and eating disorder questionnaire and the four dimensional symptom questionnaire). Based on the anamnesis and the assessment, more specific and tailored goals are set up. To accomplish these specific objectives, therapists have several ways and a wide array of skills (postural training, relaxation training, mindfulness, tai chi and yoga, breathing exercises, physical activities, sensory awareness and self-perception (mirror exercises and body awareness), guided imagery and metaphors, ...). This workshop presents practical guidelines for a physiotherapeutic approach of these patients.

#### Learning objectives:

To start up an individual physiotherapy intervention for patients with weight, eating and trauma related disorders

To explore goals, assessment and intervention

To discuss the pros and the cons, the therapeutic and practical implications, the pitfalls

Key-words: Weight disorders, eating disorders, trauma related disorders, body image, physical activity, stress

Abstract ID: 38 Presentation type(s): Workshop

# Presence As A Tool In Manual Therapy And Sensorimotor Rehabilitation

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- 1. Background: (Embodied or full) Presence is a state of awareness the physiotherapist can adopt to refine the quality of the treatment, both in hand-on techniques and in rehabilitation. Presence facilitates body awareness, movement awareness and self-awareness and can be an added value in person-centered treatment and sensorimotor rehabilitation. In this state, which can only be experienced through the body, both therapist and patient are aware of the internal condition of the patient or the executed movement. Presence has to be properly understood and applied in order to positively influence the therapeutic outcome.
- 2. Purpose: Presence and its added values are often referred to in literature. However, it is seldom described how this state of consciousness can be achieved, what level of perception it requires or how attention can be used in this. In this workshop it is explained which different states of consciousness can be applied in treatment and a chronological structure will be proposed to reach and maintain the state of presence during the entire treatment for presencing and how attention can be used in this.
- 3. Methods: Presence is achieved through slow mindful movement. The workshop is supervised verbally and with subtle manual touching of the body. For the rehabilitation session, one seat per participant is required. For the manual techniques, a treatment table per two people is required.
- 4. Results: The participant will clearly experience details regarding somatic markers of emotions, physiological reactions, movement and the sense of existence in both his own body and the patient's body. By learning a clear structure to achieve presence, the participant can more easily apply presencing in his daily practice.
- 5. Conclusions: By proposing a protocol for adopting the state of presence, "presencing" will become an even more concrete tool for the participant in his daily practice. The effects, experiences and testimonials of both physiotherapists and patients can be more clearly described and objectified.

This experience, the narratives, outcomes and the physiologic results (blood pressure, respiration, hearth rate, skin conduction, muscle tone...) can be a new domain for research and it may become a common denominator for understanding the effectiveness of body-mind approaches in body-centered therapies.

6. Key-words: Presence, body-centered, consciousness.



Abstract ID: 39 Presentation type(s): POSTER

Characterization Of The Elderly Population With Dementia In Portugal According To Physical Performance

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The aim is to analyze the physical performance in the elderly population with dementia in portugal. A quantitative observational cross-sectional study was performed. Sixty individuals with 65 and older and dementia diagnosis with mini mental state examination (MMSE) assessment between 10 and 24 points were included. The measurement instrument applied to evaluate physical performance was the physical performance test - 9 items. The mean age was 83,58 years, 73,3% were female, 61, 7% did not use walking aids and 28,3% presented dementia with five or more years of evolution. The mean MMSE score was 17,97. The mean PPT-9 score was 17,30 and the items that revealed the most relevant functional deficits were 1,4,5,6,7 and 8. In the PPT-9, the items related to writing, dressing, balance, gait and climbing stairs, the greatest functional deficits were verified, reflecting the need to implement physicaltherapy intervention programs that stimulate functionality in the described components.

Abstract ID: 40 Presentation type(s): Poster: Scientific poster

Non-Pharmacological Interventions For Preventing Weight Gain In Patients With First Episode Schizophrenia Or Bipolar Disorder: A Systematic Review.

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Background: Patients with schizophrenia or bipolar disorder have an increased risk of cardiovascular disease and type 2-diabetes, partly due to anti-psychotic or lifestyle-induced weight gain. A majority of previous studies of interventions, aiming at reducing cardio-metabolic risk in psychiatric patients, have focused on patients, who were already at high risk.

Aim: To gather knowledge on the efficacy of non-pharmacological interventions for preventing/reducing weight gain or increase in waist-circumference in young, newly diagnosed patients with schizophrenia or bipolar disorder.

Methods: A systematic review was conducted following the PRISMA reporting guidelines. We searched major electronic databases from inception to 04/2019 on RCTs, pre- and post-test studies, and non-randomized controlled clinical trials, comprising young patients with first-episode schizophrenia or bipolar disorder aged between 15–25 years engaged in any non-pharmacological interventions for preventing weight gain or increase in waist-circumference. The quality of the included studies was evaluated using the ROBINS-I risk of bias assessment tool for non-randomized studies of interventions and for RCTs the RoB -2. The risk of bias was independly assessed by two of the authors.

Results: From a potential of 2963 hits, eight studies met the inclusion criteria (n?438, mean age of 18.8 (13–45) years)). The interventions comprised supervised and individually adjusted aerobic exercise activities (5 studies), individual lifestyle counselling vs. control condition (2 RCTs), and dietetic counselling and practical training of cooking and shopping (1 study). Two prospective studies in which participants underwent weekly, supervised aerobic exercise found a significant decrease in WC of 4.3 cm (p?0.015) and 2 cm (p?0.008), respectively. Similar, participants receiving 12 weeks of practical dietetic counselling had a significant decrease in WC of approximately 2 cm (P?0.04). Two RCTs of behavioural weight and healthy lifestyle counselling found no significant differences in weight or waist circumference between intervention and control group.

Conclusion: Physical activity and practical dietetic interventions seem to be more efficient than lifestyle counselling. However, the results should be taken with caution due to the non-randomized designs and other methodologically deficits in the majority of the included studies.

Abstract ID: 41 Presentation type(s): Poster: Clinical poster

# United Kingdom (UK) Physiotherapy Eating Disorder Professional Network

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#### Aims

- •To describe the structure, function and achievements of our UK wide professional network group for Physiotherapists working in the specialist area of Eating Disorders
- •To strengthen the network links with our international Physiotherapy colleagues working in Mental Health and Psychiatry

Methodology: A professional network of Physiotherapists working within this specialist field in the UK has been established for over 20 years. Over the last 5 years the group has developed and enhanced its core membership and taken a strategic approach to strengthening the role of Physiotherapy in eating disorders. Currently there are 14 active group members. The network is a sub-group of the Chartered Society of Physiotherapists in Mental Health (CPMH) and is affiliated to the Chartered Society of Physiotherapy (CSP). The Network group meets twice a year and is attended by Physiotherapists who work within this specialism or have a specialist interest in eating disorders. Examples of the work produced by the group include clinical guidelines, presenting at conferences, published articles and a book chapter.

#### Reflections

- •We are a proactive and enthusiastic group which manages to meet despite pressures of workload and funding in different areas of the UK.
- •We continue to strive for inclusion of Physiotherapy in specialist Mental Health services which is evidence based and patient centred.

#### Future Aims

- •Continued promotion of Physiotherapy in Eating Disorders, including education for our colleagues and services.
- •Recognition and inclusion in national commissioning guidance and policy for Eating Disorder services.
- •Continue to evaluate and develop evidence based practice and research.
- •Wider scoping of other Physiotherapists working in eating disorders within the UK.

Abstract ID: 42 Presentation type(s): Poster: Scientific poster

The Effect Of Basic Body Awareness Therapy On Sense Of Self In Healthy University Students: A Preliminary Study

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Purpose: Physiotherapists promote and recover functional movement in individuals by enhancing their movement quality. Functional movement in humans is influenced by physical and mental states, such as self-consciousness. The theory underlying awareness of self is based on a sense of existence, agency, and ownership. These three components are called the minimum-self construct sense of self-consciousness through narrative-self (identity). To promote and recover functional movement, it is necessary to treat the minimal-self, especially in psychiatric clinical situations. This is because patients can develop strange and dysfunctional movement in the absence of physical function. Patients can recover functional movement if they regain a sense of self implementation using physiotherapy.

Basic Body Awareness Therapy (BBAT) is a physiotherapeutic approach that aims to promote movement quality through a movement awareness program that enhances learning and insight. Movement awareness has a strong relationship with the sense of self. The purpose of this preliminary study was to investigate the immediate effect of sense of self following BBAT in university students.

Methods: We recruited 161 healthy university students as participants (male ? 75, female ? 86; mean age ?  $18.2 \pm 0.43$  years). BBAT was performed at a Health Science class specializing in sitting and standing for approximately 30 minutes in a group setting. Participants were evaluated on their degree of sense of self using the Sense of Self Scale (SSS) before and after the BBAT. SSS is constructed of 25 items in a self-evaluation form. It is divided into 3 sub-scales (sense of agency, 8 items; sense of ownership, 9 items; narrative self, 8 items) and a total score.

Result: All SSS sub-scales and total scores were significantly improved after BBAT (sense of agency: t? 3.93, 95%CI ? 0.35–1.13, p < 0.001; sense of ownership: w? 4152.5, 95%CI ? 0.00–1.49, p? 0.029; narrative self: t? 3.40, 95%CI ? 0.18–1.15, p? 0.007; total score: t? 3.32, 95%CI ? 0.96–2.93, p < 0.001).

Discussion and Conclusion: This preliminary study indicates that BBAT can promote a sense of self. Promoting functional movement through by preforming movement quality and implementing the principles from BBAT may play an important role in strengthening individuals physically and mentally. Further, this may assist with increased control of oneself. Future research will include a larger and more complete study with an adjusted design for clinical situations.

Abstract ID: 43 Presentation type(s): Poster: Scientific poster

# Physiotherapeutic Treatment For Patients With Substance Misuse, In A Forensic Psychiatric Setting

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Frederik Gildberg, Research & Development Unit, Psychiatry Middelfart, Region of Southern Denmark, Middelfart, DENMARK

Background: In most forensic psychiatric hospitals in Denmark, the inpatients are offered physiotherapeutic treatment (PT) as add-on to pharmacological treatment and environmental therapy. Patients with substance misuse (SM), and in addition, mental illness (MI) often experience bodily symptoms such as unease, pain and muscle tension, or motor disturbances which makes PT highly relevant. No international research literature relates directly to the subject of PT for patients with SM in the context of forensic psychiatry.

Purpose: The aim of this study is to generate knowledge of the characteristics of existing research literature and theory regarding PT in psychiatric patients with SM. Further, to generate knowledge regarding the characteristics of the existing clinically used PT in forensic psychiatric inpatients, including the characteristics of the inpatients perceived impact of such treatment, including the perceived impact on symptoms related to SM.

Methods: The study will be grounded in the methodological approach as described by Blumer(1). Knowledge will be generated through three empirically testing steps: Integrative Review or Scoping Review, observations of the physiotherapeutic treatment and semi structured interviews with inpatients. Data from each of the three steps will be analyzed using eight steps of Empirically Testing Thematic Analysis (ETTA): First reading, Formulating Analytic Question, Coding, Condensation, Categorization, Thematization, Theme development and Taxonomic grouping(2). The participants will be recruited at, or closely after, admission (estimated, 20 patients) by volunteer approach. Patients already participating in PT will also be recruited to participate in observations and follow-up interviews (estimated, 10 patients). The patients included are hospitalized in forensic psychiatric care in Denmark, having problems with SM and are aged between 18 and 65.

Results: The results will be published in international peer reviewed scientific journals, and the generated knowledge is wished to be implemented in the clinical practice.

Key-Words: Physiotherapeutic treatment, substance misuse, forensic psychiatry.

Funding: Waiting for approval from applied funds.

Ethics approval: Approval will be sought in the Danish Data Protection Agency and Regional Research Ethics Committee. Regulations given by the EU-data protection regulation will be followed.

1 Blumer H. Symbolic interactionism: perspective and method. Nachdr. Berkeley, Calif.: Univ. of California Press; 1986. 208 p.

2 Gildberg FA, Bradley SK, Tingleff EB, Hounsgaard L. Empirically Testing Thematic Analysis (ETTA). Nord SYGEPLEJEFORSKNING. 2015;5:15.

Abstract ID: 44 Presentation type(s): Poster: Clinical poster

# Interdisciplinary Group Intervention For Patients With Functional Disorders

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Sanna Liesto, Helsinki University Hospital, Helsinki, FINLAND

Background: There is no organized standard rehabilitation for functional disorders in Finnish health care system. Rehabilitation has been separated into different units. This report is made to describe interdisciplinary work that has started in October 2019.

Purpose: This interdisciplinary work intervention started from the need to have multidimensional therapy work under the same roof and not in separated units like it has done before. Purpose is to find outpatients who can work in groups and get tools for self-regulation and control over their symptoms.

Methods: Interdisciplinary theory and practice work including Physiotherapy and Psychological interventions. Theory of experience-based learning, psychoeducation, body-awareness, movement, posture, focus on the present moment, balanced breathing, how to self-regulate and come to window of tolerance from overarousal or underarousal, cognitive behavioral therapy, thoughts, emotions, behavior, physical sensation, learning away from automatic thoughts and action, how to recover, how to make new actionmodel by learning from experience and make short- and long-term goals. These materials have been adapted in to 6 x 90 minutes group sessions. 7 patients diagnosed with functional disorders. Homework has been assigned after every session. Patients have filled in questionnaires concerning quality of life, readiness of change and expectations for intervention at the beginning and in the end of group.

Results: Group intervention is still ongoing by the time of abstract submission. Experience has been promising. By the time of making Poster results will be available for reports.

Conclusion: According to patients preliminary feedback it seems that patients have experienced Interdisciplinary group intervention conducted by physiotherapist and psychologist recommended for patients with functional disorders. According to preliminary feedback, patients feels that it is better to start with body-awareness, focus on present moment, self-regulation practices and after that it is easier to concentrate in theory of thoughts, emotions, behavior and goals. In the end of group intervention we know more from filled questionnaires and conversation. Feedback from patients will be used for further development of the group intervention.

Keywords: Functional disorders, Self-Regulation, Psychophysical Physiotherapy, Psychology, Interdisciplinary Work

Abstract ID: 45 Presentation type(s): Poster: Clinical poster

Respiratory-Sinus-Arrhythmia Biofeedback To Reduce Physiological Stress In Adolescents With Autism Spectrum Disorder

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Adolescents with Autism Spectrum Disorder (ASD) are vulnerable for the experience of psychological stress given the diagnostic criteria of ASD and the rapid changes in this lifespan. Recent evidence has demonstrated an association between an aberrant functioning of the autonomic nervous system and psychological and social problems reported in children and adolescents with ASD. One of the most reported measures within this topic is Respiratory Sinus Arrhythmia (RSA) which is the high-frequency component of heart rate variability – the natural variation between heart beats. In most studies, lower values of RSA have been found in this population, although conflicting evidence exists depending on differences in research protocols. A biofeedback intervention has been proposed to up-regulate the RSA-values in this population. This project proposal contains two objectives. The first objective is to create an overview of the differences in the functioning of the autonomic nervous system between adolescents with ASD and typically developing peers. An extensive assessment protocol including physiological and behavioural parameters will be used in a cross-sectional design. The second objective of this study is to evaluate the potential of RSA biofeedback in adolescents with ASD in a longitudinal design consisting of a supervised and a non-supervised part.

Abstract ID: 46 Presentation type(s): Poster: Clinical poster

Trans-Sensitive Physiotherapy In The Treatment Of Body Dysphoria

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Background: A growing number of social and healthcare professionals encounter gender diversity in their work. There is a need to increase trans-sensitivity in customer work. Previously, information about comprehensive care and physiotherapy that take the special features of this customer group into consideration was not available in a single source. Depression and anxiety disorders are more common in customers suffering with gender incongruence than in the population on average. Minority stress may predispose a person to depression and anxiety and maintain their symptoms. In young customers, gender incongruence is another stress factor experienced during the stressful time of puberty and adolescence. ASD and eating disorders are also more common in people suffering from gender incongruence. They are at a higher risk of suicide, which is important to note when carrying out psychological evaluations. Gender dysphoria can be divided into body dysphoria and social dysphoria and can be treated with psychotherapy, physiotherapy and pharmacotherapy. The body is a core part of our self-identity and strongly affects how we experience ourselves, our functional ability, and how we interact with others. Physiotherapy utilizes various physical exercises and anxiety management methods to treat gender dysphoria. It aims to support the customer's perception of their body through e.g. experiential learning. Physiotherapy seeks concrete methods for experiencing the body safely.

Purpose: The aim was to create a self-care guide and a guide for professionals on body dysphoria in people with gender incongruence. The number of people experiencing gender incongruence is constantly rising and health care lacked clear treatment guidelines. The self-care guide offers readers the opportunity to independently explore their own experience of themselves and their body. The professional guide supports professionals' skills in interacting with people with gender incongruence.

Methods: The guides are a result of multi-professional collaboration between psychiatrists, psychologists, nurses, physiotherapists, and experience specialists. The content is based on the latest available research data and best clinical practices.

Results: The self-care guide and the professional guide are publicly available on the online health service Mielenterveystalo. The self-care guide is free of charge. The self-care guide provides reliable information on gender and body dysphoria as well as exercises that readers can use to learn more about their bodily experience. The professional guide provides information on how to interact with customers, trans-sensitivity, different types of treatment, and referral instructions.

Conclusions: Reflection on gender identity and related bodily challenges will increase in the future. It is wonderful that the significance of the bodily experience has been acknowledged as part of comprehensive care. In the future, more information from research into physiotherapeutic means and methods in relation to body dysphoria would be beneficial.

Key-Words: Gender dysphoria, body dysphoria, physiotherapy, mental health, psychiatry

Abstract ID: 47 Presentation type(s): Poster: Clinical poster

Basic Body Awareness Therapy For Patients Living With Cardiovascular Disease - Patient Experiences Supplemented By Movement Quality Evaluation. A Pilot Study.

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Daniel Matamoros-Catalan, University of Almaria, Almaria, SPAIN

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Background: In Europe, over 85 million people live with cardiovascular disease (CVD). Many of whom rate their health to be bad or less good. Anxiety and depression can occur when taking up everyday activities after heart surgery. Interprofessional rehabilitation is recommended, including psychosocial interventions like therapies to improve body awareness. Often rehabilitation consists of anaerob and aerob training supervised by a physiotherapist. Basic Body Awareness Group Therapy (BBAGT) has been found beneficial for coping with every-day life activities for people living with long-lasting conditions as chronic pain or PTSD. BBAT is a health and resource-oriented movement awareness program – promoting movement quality (MQ) through a set of daily-life movements. Focusing on the whole person and the relationship between physical and mental strategies for health.

Purpose: To study, describe and discuss if BBAT can supplement standard heart rehabilitation.

Method: A pilot study was prepared, where three patients was recruited from the local municipal in collaboration with their physiotherapist. All had undergone heart surgery and participated in the standard rehabilitation program. They described decreased general health, muscle tension, raised respiration, difficulties in socializing and a constant overflow of thoughts. A research design combining qualitative and quantitative methods was applied by Basic Awareness Rating Scale - Movement Quality and Experience (BARS-MQE). BARS-MQE consist of a quantitative element, where the physiotherapist score observed MQ, and a qualitative element with the participant's immediate movement experience. After six sessions of BBAGT, each lasting 90 minutes, the procedure of BARS-MQE was repeated. The results were analyzed to find differences or coherence within quantitative and qualitative findings. A qualitative simi-structured interview was recorded at the municipal after intervention. The interviews were analyzed using Malterud's systematic text condensation.

Result: The quantitative results from the BARS-MQE showed that all participants improved MQ, where observed movement became more elastic, free, originating from the center and stable along the vertical axis. The qualitative results from the BARS-MQE showed a richer vocabulary concerning health and body awareness. The interviews main themes were "Experience of BBAGT sessions", "BBAGT supplementing rehabilitation" and "Importance of Relational work in groups". All participants regarded BBAGT as a beneficial supplement to standard rehabilitation. They valued the focus of body and movement awareness and reported to learn and implement strategies for more well-being transferred it into daily life.

Conclusion and Implications: In this study, the outcome from BBAGT has been described and evaluated in three patients living with CVD. The promising results of this pilot-study may serve as an inspiration to clinical physiotherapy in post heart surgery, suggesting to study BBAGT in a larger population as a beneficial supplement to standard rehabilitation. Larger scale studies are needed to establish the short- and long-term effects of BBAGT in patients living with CVD.

Abstract ID: 48 Presentation type(s): Poster: Scientific poster

Access And Experience Of Physiotherapy For Those With Severe And Persistent Mental Illness: An Interpretative Phenomenological Analysis

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Andrew Soundy, University of Birmingham, Birmingham, UNITED KINGDOM

Service users with severe mental illness (SMI) are at increased risk of physical health co-morbidity such as back pain, obesity and chronic respiratory diseases, many of which require physiotherapeutic input. However, disparities in access to physical health care are apparent for this population and identified as a priority to be overcome. Physiotherapists can play a pivotal role in treatment for those with SMI however access to physiotherapy for this population currently lacks exploration and is identified as a James Lind research priority. This study explored experiences of Physiotherapeutic care for those with co-morbid physical and mental health complaint to identify barriers and facilitators to care.

Semi-structured interviews were completed with service users (n?8) with longstanding physiotherapeutic and psychiatric complaints. Focus groups were also completed with physiotherapists working in the field of mental health hereby achieving methodological triangulation. Verbatim transcripts of interviews were analysed using Interpretive Phenomenological Analysis to obtain in depth insight into participant experiences. Study quality was enhanced through use of investigator triangulation, negative case analysis, reflexivity and secondary coding.

Data was analysed systematically following the structure: individual case analysis, emergence of themes, cross case analysis, validation of themes and ideas. This analysis produced five master themes: Communication [1], holistic care [2], benefit of physiotherapy [3], healthcare politics and service interaction [4], patient activation [5].

Results identified service users felt current service provision mostly inadequate for the complexities of their needs. Improved Physiotherapist awareness of mental health and techniques to communicate with and treat this population were identified. The importance of integration between services was also highlighted as well as more streamlined processes. A positive experience of physiotherapy was vital for patient activation and engagement with Physiotherapy and holistic care was seen as central to this.

Recommendations include the need for more consistent, in depth teaching on mental health for student physiotherapists as well as training packages for qualified physiotherapists. More integrated services consisting of multidisciplinary teams considering the holistic needs of service users are recommended as well as more streamlined processes with less time restriction on appointments. Further consideration must be given to increasing the access to physiotherapeutic services for those with mental health illness as positive experiences of this care was seen to have benefits for both physical and mental health.

Abstract ID: 49 Presentation type(s): Poster: Scientific poster

Physiotherapist And Healthcare Professional Perceptions Of Treating Patients With Mental Health Illness: A Systematic Review

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Fiona Irvine, University of Birmingham, Birmingham, UNITED KINGDOM

Service users with severe and persistent mental illness (SPMI) are at increased risk of physical health comorbidity, many of which require physiotherapeutic input. However, it is suggested that physiotherapists lack the confidence and skill in providing holistic care or working with this population. Although mental health physiotherapy is a speciality in itself, the treatment of those with SPMI is not isolated to within this environment. With one in four people suffering from psychiatric illness and the risk of co-morbid physical health complaints such as pain, arthritis, respiratory disease again multiplied for these patients, physiotherapists in all areas are likely to treat, with potential regularity, patients with mental health complaints and must therefore be competent in this.

This study aimed to explore physiotherapist attitudes towards working with those with mental illness and explore barriers and facilitators to treating service users within this population.

Due to the heterogeneity of methodological approaches within the research a mixed studies review method was utilised following that described by Pluye and Nah Hong (2014). AMED, Cinahl, Medline and Psychinfo were searched using the search terms 'physiotherapist or physical therapist AND perceptions or attitudes or opinions or experience or view or reflection or beliefs AND mental health or mental disorder or psychiatric illness'. Inclusion criteria were papers published between January 2009 and March 2019, papers available in English and only papers available without additional charge. Studies solely exploring perceptions of doctors and medical students were excluded. Titles and abstracts were screened for suitability and appraised using Joanna Briggs critical appraisal tools.

Studies with specific focus on qualified physiotherapists working with patients with mental illness were limited therefore criteria for inclusion was expanded to include studies exploring perceptions of multidisciplinary teams and students (n?8). Thematic analysis identified the following themes; Strategies for Care [1], Regularity and Familiarity [2] and Stigma and the unknown [3].

Results identified a direct positive relationship between number of hours of education or experience in mental health and positive attitudes towards working with this population. Healthcare professionals believed they lacked time, creativity and adaptability to optimise care for those with psychiatric complaints. Service targets were also highlighted as a challenge leading to discharge of those without 'rehab potential'.

Exploration of physiotherapist perceptions of working with service users with SPMI is identified, particularly from a UK perspective. Training and experience of student physiotherapists must be improved and standardised in order to prepare them for working with patients with SMI with minimum face to face teaching of six hours considered. Training should also be developed for qualified physiotherapists and increased integration between physical and mental health care services to promote holistic models of practice and support.

Abstract ID: 50 Presentation type(s): Poster: Clinical poster

Introducing Basic Body Awareness Therapy To HUS Pain Clinic Physiotherapy, A Pilot Study.

Hanna Piispanen, Department of physiotherapy, Helsinki University Hospital (HUS), HUS, SUOMI

Background and purpose: HUS Pain Clinic treats patients suffering from long term pain. The multi-professional treatment is based on the bio-psycho-social model found effective for this group of patients. Basic Body Awareness Therapy (BBAT) has in studies found to be an approach with many positive effects for patients suffering from long-term pain. BBAT aims at improving the quality of everyday life movement by systematically training the persons awareness of movements.

The purpose of this pilot was to introduce BBAT-groups to the clinical physiotherapy modalities at the HUS Pain Clinic, and to evaluate their suitability of BBAT-groups for future clinical work.

Methods: The patients to this pilot-study were recruited from the patients that were in treatment at the HUS Pain Clinic during 2017, by the physiotherapists, psychologists or physicians treating them. Individual evaluations were performed before and after the BBAT-group training. Post-evaluation was performed 3 months after. Data was collected thru Body Awareness Rating Scale – Movement Quality and Experience (BARS-MQE) evaluation, the Body Awareness Rating Scale Interview (BAS-I), and the Tampa Scale of Kinesiophobia –questionnaire (TSK). This study had ethics permission and the clients made an informed decision to participate. In total 17 patients were recruited, 2 dropped out. The subjects suffered from a variation of pain diagnoses. The intervention consisted of 10 weeks BBAT-training once a week, 90 minutes/session. The clients were informed that BBAT includes self-training.

Results: The BBAT-training in group setting was well received by the patients. The measured movement quality (BARS-MQE) improved, and the improvements were sustained or further improved at the 3 months post-intervention evaluation. BBAT-training did not significantly affect the results of the TSK. The points in the BAS-I interview decreased in all participants referring to an improvement in the subjects' perceived health.

Results of this pilot study has led to use of BBAT- groups in everyday clinical work at the HUS Pain Clinic.

Conclusions and Reflection: This pilot-study suggests BBAT-group training to be a suitable physiotherapy approach to use within rehabilitation of patients suffering from long term pain. It is also well received by the patients. These finding are consistent with the findings of earlier studies.

How to promote the patients to sustain the improvements in movement quality by continuing individual practicing after intervention is a crucial theme for future studies.

Key-words: Basic Body Awareness Therapy, pilot study, long-term pain

#### Abstract ID: 51 Presentation type(s): Poster

#### Embodied Minds In Touch And Movement Towards Health

Mette Albertsen, Lunner kommune, Lunner helseværelse og fysioterapi, ROA, NORWAY

The aim of my presentation is to share with you some important elements from my Master's in Mental health care. I am a Norwegian psychomotor physiotherapist and finished my Master's at Oslo Mets in 2018.

This study is a hermeneutic interpretation of the book, "The Embodied Analyst. From Freud to Reich to Relationality ». It was written in 2014 by Jon Sletvold. The research question is as follows: How can the embodied mind be understood and how can therapy in light of this understanding promote health".

I hope, with this study, to contribute the further development and the understanding in Norwegian psychomotor physiotherapy through a hermeneutical interpretation of contemporary psychodynamic texts. The purpose is increase understanding of the embodied mind and the therapeutic relationship. I hope it will help develop knowledge as to how to help improve health. The interpretation is inspired by Gadamer's philosophical hermeneutics. The research question is a question to the book I have chosen. The interpretation of this text led to three assumptions:

- 1. The embodied mind forms the basis of our self and gives us the feeling of what is happening, happened and may happen.
- 2. The embodied mind forms the basis for our being and becoming.
- 3. The therapist can help the patient to become conscious of his/her embodied mind and continue his formation of the embodied mind. It requires a three-dimensional sensitivity and a love creating motions.

In this interpretation process, my own experiences and my own patients found the way to my consciousness. Encounting the text, these experiences gained a new enlightment. The assumptions are reflected in the light of vignettes, previous research, theory and my prejudice. This interpretation changed my reality and understanding, and led to a fourth assumption:

The embodied mind forms the basis of our truth, who we were, are and can become. The embodied mind that suffers can through therapy become more conscious, touched and set in motion towards health.

Due to ethical considerations, I have created the vignettes used in the Master's, preserving the confidentiality of the real patients.

After the Master's I came in touch with Jon Sletvold. Together we have developed an interdisciplinary seminar. Jon is a specialist in clinical psychology and psychotherapy, an author of several books and articles and has taught embodied perspectives on psychoanalysis and psychotherapy both national and international. The seminar is for me a way of incorporating the results from our work into interdisciplinary fields.

I hope my presentation can contribute to the understanding of linking body and mind.

Keywords: the embodied mind, therapeutic relationship, Norwegian psychomotor physiotherapy, psychodynamic therapy, hermeneutics

Abstract ID: 52 Presentation type(s): Poster: Scientific poster

## The Role Of Mental Imagery On Pain, Edema And Range Of Motion Of Ankle Sprain Grade II

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Background: Imagery is a mind-body technique with a long tradition of research in health care. A number of explanations have been proposed to interpret the effectiveness of imagery on recovery outcomes of sport related injuries. Purpose: To examine the effectiveness of imagery on pain, edema, and range of motion in athletes who sustained a grade II ankle sprain. It was hypothesized that the relaxation and imagery participants who received imagery treatment in addition to the physiotherapy course would have lower pain and edema, and higher range of motion than the control group. Methods: Participants: The sample consisted of 18 injured male athletes, aged from 18 to 30 years old, with an ankle sprain grade II that was evaluated objectively by ultrasound testing. The participants were randomly divided into 2 groups —a relaxation and imagery group (experimental group) and a control group— of 9 participants each. The experimental group received 12 individual sessions of imagery rehearsal in addition to a normal course of physiotherapy, while the control group followed only the physiotherapy treatment. The duration of the physiotherapy program for all participants was 33.9 days. Both groups were pretested, followed the physiotherapy program and post-tested.

Instruments: Participants completed a Visual Analogue Scale to measure acute pain intensity. Edema was evaluated with the water volumetric displacement method. The ankles range of motion was assessed using a goniometer. Experimental group also completed a manipulation check, a diary of imagery and a 5-point scale of Vividness of Movement Imagery Questionnaire.

Analysis: T-tests were performed to investigate differences between the experimental and the control group. Paired t-tests were done to examine differences between the five measurements of each dependent variable in each group. Partial variance effect sizes ( $\eta^2$ ) were used to determine the percentage of variation in the data that could be attributed to treatment differences.

Results: It did not show demonstrable effects on pain, edema and range of motion after imagery treatment. However, a reduction in the mean value of pain, and edema, and an increase in mean value of the total range of motion in the experimental group in comparison to the control group. Significant differences were found between the five measurements of each dependent variable. The results indicated that the treatment accounted for: (a) 8% of the variance in pain with an observed power being .19, (b) 4% of the variance in edema with an observed power being .12, and (c) 5% of the variance of total range of motion with an observed power being .13.

Conclusions and implication: The treatment and pain-management imagery did not show demonstrable effects on pain, edema, and range of motion in athletes with an ankle sprain grade II. However, due to other research findings regarding the positive influence of imagery treatment in sport injury rehabilitation, replication of the study is recommended.

Keywords: imagery, pain, edema, range of motion, sport injury, ankle sprain

Abstract ID: 53 Presentation type(s): Poster: Clinical poster

Physiotherapeutic Mind/Body Oriented Approach Within The Out Patient Eating Disorder Service, Fulton Clinic Royal Cornhill Hospital Aberdeen

Sandra Philip-Rafferty, Eating Disorders Service, NHS Grampian, Aberdeen, UNITED KINGDOM

The use of Physiotherapy as an adjunctive treatment for patients with eating disorders is based on the Physiotherapist's expertise in both the body and body in movement.

The two main indicators for Physiotherapy are:

- 1. A disturbed body experience, with a specific focus on perception, attitudes and behaviour.
- 2. The frequently observed maladaptive and extreme use of physical activity.

Both of which if untreated, can lead to a poor prognostic outcome, chronicity and relapse.

Aim: 1. To highlight the results of a closed 7 week x two hour Basic Body Awareness Therapy (BBAT) group as a trans diagnostic intervention, integrated within our patient centred, stepped care approach.

2. To briefly highlight the wider role of the Highly Specialist Physiotherapist within the Multidisciplinary team.

Methodology: The group was co-facilitated by the Highly Specialist Physiotherapist and the Principal Counselling Psychologist in the team. All patients completed Physiotherapy assessment, with the inclusion of pre and post validated outcome measures. Patients were fully informed about the intervention verbally and via additional written information. Each patient was offered an individual review appointment at the end of the intervention. Patients also completed the post group evaluation and service guestionnaires.

Evaluation: - Analysis of validated outcome measure scores.

Individual patient assessment and review appointment

Analysis of patient feedback from evaluation questionnaire

Results: Significant improvements in all outcome measures.

Positive feedback from patients.

Improved body experience both individually and in the company of others.

Reflection: Consideration and acknowledgement is given to the small sample size of five patients. Results are encouraging for on going intervention and evaluation. There is an opportunity for all team members to be involved in co facilitating the group.

Patient information about Basic Body Awareness Therapy is now delivered in a professional leaflet, enhancing the quality of material and in line with our other service publications.

Abstract ID: 54 Presentation type(s): Poster

Reciprocal Impact Of Physical Activity And Cognitive Abilities In Elderly (Preliminary Results)

Blanka Košcak Tivadar, Physiotherapy, Mediko d.o.o., Višnja Gora, SLOVENIA

Background: The longevity of the average human being has increased from about 20 years in a period of Neandertal, up to 85 years nowadays. Therefore, the importance of, as slow as possible, a decline of physical activity and cognitive abilities seem to be one of the main thinking of one and society. Many researchers try to find the proper solution of how to slow the decline. According to some studies, experiencing oneself and ageing beside functional and chronological ageing can be an important determinant of health.

Purpose: To establish whether there is a correlation between experiencing ageing and if we can with physical activity impact on cognitive abilities.

Methods: After meeting inclusion criteria 20 healthy participants were asked to fulfil SF 36 questionnaire. We proceed to "6 minute walking test" and STROOP test at the beginning and at the end of 12 weeks of training 3 times per week, 40 minutes of aerobic physical activity of low intensity (60 % VO2 max) on a treadmill.

Results: The ones that had positive thinking about themselves reached statistically significant better results in "6 minute walking test" at the beginning. As well they had statistically significant better results in attention when they had more walking days during the week. Attention, as one of the important cognitive abilities, enables distinguishing between relevant and irrelevant information, encoding information, cognitive flexibility, memory etc. As a result of limited capability of person to process different tasks, cognitive-motor interference can influence on one to switch attention on a most relevant task at the moment and consequently reduce motor control.

After 12 weeks, results regarding aerobic endurance test showed that participants achieved better results at the second testing (m?670,50) compared with the first one (m?598,50). They also reached significant better results after 3 weeks (m?49,65) compared with the first one (m?44,50), p<0,05 in Stroop test.

Conclusion and implication: Accepting the process of ageing and positive attitude toward ageing, influence on the willingness for physical activity and health-related fitness. On the other side, proper physical fitness is one of the important factors, as well predictors for good, better cognitive abilities. In avoidance of physical or cognitive fragility, physical and cognitive training, besides the social environment should be used as a supportive approach toward ageing.

Key words:physical activity, cognitive abilities, elderly

Abstract ID: 55 Presentation type(s): Poster: Clinical poster

Psychophysical Physiotherapy Group Body'S Words For Treatment Of Anxiety Disorders At HUS Psychiatry Outpatients Clinics

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Background: Anxiety disorders are common mental disorders that weaken the ability to function mentally, physically, and socially. The Body's Words group is a group therapy model utilizing psychophysical physiotherapy. The model was developed for geropsychiatry and mood disorder outpatient clinics for treatment of anxiety.

Purpose: The Body's Words group is a group therapy model of psychophysical physiotherapy aimed at patients who experience physical symptoms related to anxiety and depression. The purpose of the group is to increase body awareness through experiential learning and to further the understanding of how emotions and thoughts are linked to physical reactions and actions such as breathing, body position and movement. The goal is to help the patient learn symptom management techniques and increase the patient's functional capacity and quality of life through body and movement awareness exercises and psychoeducational discussion.

Methods: The Body's Words group includes initial and final interviews, eight weekly 90-minute group meetings and home assignments. A physiotherapist working with either a psychologist or a registered nurse leads the group. The ideal group size is six patients. Group meetings consist of physical therapy exercises for body awareness, movement, and relaxation, and psychoeducational discussion. Before group therapy starts, individual initial interviews are held to evaluate patient suitability for the group, fill out symptom scales, and set personal goals. The themes at the group meetings are body's messages, mind-body connection, physiology of anxiety, relaxation, breathing, self-compassion, feelings, and personal boundaries. At the final individual interview, held once the group meetings are over, the symptom scales are filled out again, the effectiveness of the experience is assessed and an individual forward plan is made for utilizing the acquired skills.

Results: Clinical experiences have been good and patient feedback positive: Patients saw their mind-body connection strengthen, and awareness skills and understanding of their body increase. Patients have learned to be more accepting of their anxiety and control their symptoms in a way that promotes functional capacity. The group has improved the patients' self-esteem, self-compassion, and confidence in oneself and one's own body. Patients have observed that they have gained new ways of relaxing, being present, acting and moving. Furthermore, peer support and psychoeducational discussions were meaningful for the patients.

Conclusions: Based on the patient feedback and the staff's clinical experiences, the Body's Words group has become a substantial part of outpatient care for anxiety disorders at Psychiatry. Therefore, it is justified to continue with the group activity and develop it further.

Key Words: Body's Words group, psychophysical physiotherapy, anxiety disorders, geropsychiatry, adult psychiatry

Abstract ID: 56 Presentation type(s): Poster: Scientific poster

Delivering Pain Education To Clinicians Reduces Pain Catastrophizing Levels.

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Background: Persistent pain affects more than two fifths of the UK population meaning more than 28 million adults are living with pain that has lasted for more than three months (The British Pain Society, 2016). Given the complex interactions between pain, mental health and the difficulties of communication and co-morbidities in the learning disability population, it is understood that a lot of clients seen within this NHS Trust which provides Mental Health and Learning Disability Services will have experienced or be experiencing persistent pain.

There has been plenty of research that looks at pain neuroscience education being delivered to patients and improved outcomes associated with this including; a reduction in catastrophizing levels, improved self-efficacy, decreased fear avoidance and reductions in total health care costs. However, research is lacking into the role pain education plays on clinician knowledge, attitudes and beliefs despite there being an understanding of the association between clinician held attitudes and beliefs and the advice and care they deliver to service users.

Purpose: The purpose of this research is to see if a single, two hour pain neuroscience education seminar delivered to clinicians working in an adult secure care service reduced clinician pain catastrophizing levels.

Methods: Clinicians working in the secure care services of a large NHS Trust which provides Mental Health and Learning Disability services were invited to attend a two hour pain neuroscience education seminar. Prior to the session the nature and purpose of the study was explained. Clinicians who were willing to participate anonymously filled out a Pain Catastrophizing Scale (PCS) questionnaire before and after the seminar. IBM SPSS software was used to analyse the data. Where distribution of data was normal paired-t-tests were used to check for significance. When distribution was not normal the Wilcoxon signed-rank test was used. Data from twenty two clinicians was analysed. Significance was set at p?0.005

Results: Significant improvements were found in total PCS scores (p?0.001). The sub-categories of catastrophizing (rumination, magnification and helplessness) were also analysed for change; significant improvements were found in rumination and helplessness (p?0.000 and p?0.002 respectively) but no significant improvement in magnification (p?0.280).

Conclusions: Attending a two hour pain neuroscience education seminar reduces clinician pain catastrophizing scale scores. Further research is planned to see if similar effects are found on clinician knowledge and understanding of pain, fear avoidance beliefs and behaviours and self-efficacy. Importantly further work is required to see if pain education for clinicians has an effect on the care being delivered to service users.

Keywords: Pain neuroscience education, pain catastrophizing scale, clinician attitudes and beliefs.

Ethical considerations: Information about the study was provided prior to participation. All participants took part voluntarily. All data was anonymised.

Abstract ID: 57 Presentation type(s): Poster: Clinical poster

The Experience Of A Basic Body Awareness Therapy Group Combined With A Mentalizing Based Group

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Purpose: we wanted to study the patients experience of participating in a short-term basic body awareness therapy (BBAT) group combined with a mentalizing based group (MBT) for outpatients in a psychiatric ward.

Relevance: several of the patients were not in a job due to anxiety, depression, lack of sleep and other bodily symtoms. Many people are dropping out of work every year and this cost society lots of money.

Methods: Participants: 7 outpatients, age: 35-55, suffering from PTSD or bipolar disorders.

BBAT group (90 min.), lunch (30 min.) and MBT group (60 min). Both therapists are present during the 3 hours.

Limit of time: once a week for 17 weeks.

Same theme for both groups: examples: flow and rhytm, elasticity, use of voice, boundaries.

In the MBT group everybody were invited to share their experiences made in the BBAT group. Example: the theme was «finding the flow and the rhytm» in BBAT movements. Then they were guided to transferre this to their daily life such as sleeping, eating, physical activity etc. In the MBT group, the patients gave each other support, advice and were helping each other.

All patients agreed to do homework and chose a BBAT movement and a task connected to the theme eksampel: regular meals.

Instruments: all patients completed the basic awareness rating scale (BARS) and the symptom checklist-90 (SCL-90) before and at the end of the group period. The BARS were done with the physiotherapist and the SCL-90 test were done at home.

SCL-90 is a relatively brief questionnaire designed to evaluate a broad range of psychological problems and symptoms of psychopathology and is used when measuring the progress and outcome of psychiatric and psychological treatments.

Results: all patients made some improvements shown in BARS and SCL-90 and all claim they had better contact with body and mind, and experienced less muscle tensions, restlessness and pain, and less problems with use of voice. Three of the patients claimed they needed more group sessions.

Conclusions: all patients show progressions both from the BARS and the SCL-90 results. They have integrated the movements in their daily life and made changes both in the body and in the mind. It seems to be possible to run a short-term group according to these results, but this is a small study and we need more materials to be able to generalize the results.

Key-words: basic body awareness therapy, metalized based group, daily-life

## Abstract ID: 58 Presentation type(s): Poster: Clinical poster

# Is Bodytherapy Relevant For Military Veterans With Ptsd? Evaluation Of Basic Body Awareness Therapy As Part Of Interdiciplinary Traumatreatment

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Body-oriented therapy is used internationally and also in Denmark as part of the treatment of post-traumatic stress disorder (PTSD). Basic Body Awareness Therapy (BBAT) is often used in the Scandinavian countries. Few studies including a PTSD population have examined how BBAT affects the bodily PTSD-symptoms and with mixed results. This study examines the effect of BBAT regarding bodily experience, movement-harmony and arousal-regulation among military veterans with PTSD receiving treatment at a military psychology clinic within the Danish Defence

Method: Non-controlled cohort-study. The participants were examined before and after 12 BBAT-sessions in an individual setting by a BBAT-certified physiotherapist. With the Body Awareness Movement Quality and Experience scale (BAS MQ-E) the movement quality, experience of the body, and –function were examined. Self-rated interoceptive awareness and subjective bodily-, PTSD-, depression-, anxiety- and stress symptoms were assessed by validated questionnaires. The study is followed by physiotherapy students from University College Copenhagen. According to plan, data from a total of 35 clients in BBAT-treatment will be included in the evaluation that runs from 2019 until the end of 2020.

Results: Since 2019 over 25 clients have started BBAT. Preliminary qualitative interviews performed by the physiotherapy students indicate clients appreciate BBAT and that it improves their bodily experience. The clients' experience being able to regulate arousal by using breathing techniques, mindful movements and an accepting attitude.

Discussion and Conclusion: The preliminary qualitative results suggest clients bodily experience improves. Due to a low number of terminated clients at the time of the abstract deadline the quantitative evaluation of the clients' movement quality and other factors to be evaluated was not performed. We expect to present preliminary quantitative results at the conference.

Abstract ID: 59 Presentation type(s): Poster: Clinical poster

"Power To Move": Gym Training Group For Geropsychiatrical Patient In Huh Psychiatry Wards

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Background: There are three acute closed examination and treatment wards for elderly people suffering from psychiatric diseases in HUH Psychiatry. Length of the examination and treatment periods vary from few days to several months. The patients of those wards have a variety of different psychiatric diagnosis like depression, anxiousness, schizophrenia, psychosis and mania. Quite often the patients also have some other diagnosis along with the psychiatric one, like dementia and / or a somatic diagnosis.

Many physical changes occur with aging, like loss of muscle mass, strength and balance. Patients with psychiatric illnesses often also have problems with body awareness and movements, which causes problems with daily functions. A poor physical starting level with some patients can mark increasing problems and fears to move an further return home from the psychiatric ward.

Purpose: We started a gym training group for patients in geropsychiatric wards many years ago. The purpose is to describe our experiences and deepen understanding how to use gym training groups for promoting muscle mass and strength, balance and courage to move, for patients in geropsychiatric wards.

Description: Physiotherapist of the ward choose the patients for the group. There are two meetings per week for every ward. Every meeting last one hour. All sessions have same structure. The session starts with warming-up and ends with stretching the lower limb muscles. In between there is time to train with gym equipments. Physiotherapist is responsible for finding a proper and improving level of training for every patient. All exercises focus on increasing lower limb muscle mass, strength and body awareness.

Results: With our experience gym training group has been beneficial for many patients. We have seen many patient's muscle strength and balance increase. With our experience many patients notice quite soon that they are able to walk longer distances than before. Some have got more courage to move and fear of falling have decreased. After the training some are more expressive, smiling and talkative. Some have continued gym training after a hospital period and training has increased their level of social life.

Conclusions: According to our experiences gym training group has been beneficial for many patients. In the future it would be interesting to research how patients and their relatives experience the effects of gym training in their daily life.

Key-Words: Gym training group, geropsychiatric patients

Abstract ID: 60 Presentation type(s): Poster: Scientific poster

Support Needs Assessment In Individuals With Intellectual Disability

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Background: Intellectual disability (ID) is characterized by limitations in intellectual functioning and adaptive behavior. It is originated before age 18. Knowing the support needs and applying the necessary support to respond to people's needs, reduces their functional limitations and contributes to their participation in community life, in a normalized social context.

Purpose: To know the Support Needs in a sample of people with ID and establish a profile of the Support Needs of the population studied according to the results of the study.

Participants: After authorization, the 34 Day Centers of the Region of Murcia were identified. A person outside the study randomly selected 3 centers to be part of the study. Informed consent from the legal guardian and the assent of the people with ID who participated in the study was obtained. The sample consisted of 91 subjects with ID who spend the day at Day Centers.

Instruments: Supports Intensity Scale (SIS) measures the individual's support needs in personal, work-related, and social activities in order to identify and describe the types and intensity of the supports an individual with ID requires.

Analysis: We perform: univariate analysis of simple frequency distribution (for qualitative and quantitative variables); bivariate analysis with the comparison of means between two groups (t-Student test, assumption of normality verified with the Kolmogorov-Smirnov test); comparison of means between more than two groups (ANOVA, assumption of homogeneity of variances verified with the Levene's test); correlation between variables (Pearson correlation coefficient).

Results: 60.4% (n ? 55) of the sample are men. Age ranged between 19 years and 61 years (mean of 36.0 years and standard deviation (SD) 10.1). 39.8% have a moderate level of disability, 28.4% mild, 15.9% severe and 13.6% profound. Regarding the level of adaptive behavior, 50.7% have a moderate level of disorder, 25.4% severe and 23.9% mild. All the centers have Physiotherapy services, and 45.5% receive treatment from 8.2 years ago (SD? 7.8) on average. The areas in which more support is needed are community life (score of 10.5), followed by lifelong learning and health and safety (both with 10.0). And those that need less support are employment activities (8.0) and home life and social (9.0). The Support Needs Index (SNI) or composite standard score, is 96, corresponding to a 39-40 percentile.

Conclusions and implication: People with ID have greater needs for support in community life activities, lifelong learning and health and safety. Age correlates negatively with the need for support in employment activities. Women do not differ from men in support needs.

Key-Words: Intellectual Disability; Health Care Facilities; Manpower; Services, Health Planning Support.

Ethics approval: This research was approved by the Clinical Research Ethics Committee of the Murcia University, Murcia, Spain (14/10/2016).

Abstract ID: 61 Presentation type(s): Poster: Scientific poster

Effects Of Physical Exercise In The Prevention Of Falls In Patients With Alzheimer's Disease: A Systematic Review

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Background: Falls are the leading cause of death in people over 65. To prevent falls, the effects of physical exercise in the elderly population have been studied, however, these effects have been less studied in patients with Alzheimer Disease (AD). To date, there hasn't been any systematic review that evidences the effects of physical exercise in preventing falls in people with AD.

Purpose: The objectives are to know the effects of physical exercise in the prevention of falls in people with AD, and what type of physical exercise has the best result in the prevention of falls in people with AD.

Methods: For this systematic review, the PRISMA statement guidelines has been used. We performed a systematic review of the literature from randomized controlled trials that met the inclusion criteria established in the PICO strategy: Patients: people with AD; Intervention: physical exercise; Control: usual treatment or walking: Outcomes: risk of falls or the number of falls. A manual and electronic search was carried out in the databases Pubmed, Scielo, PEDro, Cochrane Library, Web of Science, Medline, IBECS and LILACS (Jan 2009- Jan 2019). The studies might be written in English or Spanish. To assess the risk of bias, the PEDro scale was used.

Results: 278 articles were identified through database searches. 61 articles were assessed for eligibility, of which only 9 met the inclusion criteria. 5 studies reported in 9 articles were included. The 5 studies included have obtained significant differences in the groups that have been treated by physical exercise in their posttest measurements. Individual home exercises have better effects than group outpatient exercises. The favorable results will be obtained at 8 weeks after starting treatment and will disappear at 8 weeks after the end of the exercise program. The patient and therapist have not been blinded in any study.

Conclusions and implication: A physical exercise program that includes strength training, balance training, functional exercises and walking can improve gait and balance and prevent falls in patients with AD after 8 weeks of treatment, considering that the effects decrease after 8 weeks after the end of the intervention. To exercise safely and reliably in patients with AD, it's necessary to control the effort and take into account the limitations of each patient.

Reducing falls, we will decrease morbidity, mortality, and institutionalizations improving the quality of life and independence.

Key-Words: Alzheimer's disease, Falls, Physical exercise, Systematic review.

Funding acknowledgements: None.

Ethical considerations: It is not necessary.

Abstract ID: 62 Presentation type(s): Poster: Scientific poster

Integrative Physiotherapy Approach For Breast Cancer Patients After Mastectomy To Improve Body Awareness: Multiple-Case Study.

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Background: Mind-body concept includes different terms like body image, body awareness, body perception, body experience. The concept of body perception consists of emotional, cognitive, behavioral and physical dimensions that can be affected by used therapy and the side effects it cause, and can change the physical and psychological integrity of the body. For cancer patients, physical changes and difficulties related to adaptation to them are associated with emotional distress, depression and anxiety.

Purpose:to analyze impact of integrative physiotherapy intervention on body awareness and quality of life.

Methods: Body awareness in patients with breast cancer after mastectomy was defined as a phenomenon of this study, with two units of analysis:(1)body awareness in the context of functional restrictions and quality of life, and(2) results of the integrative physiotherapy program focusing on improving body-mind connection. Integrative physiotherapy program included therapy techniques focused on the interaction of body function and emotional behavior. In context of physiotherapy two dimensions where included: dimension of movement - posture, balance, muscle tonus and breathing that revealed in motion patterns and dimension of experience emphasized by subjective body sense.

Six persons participated in this study. As measurement tools in this study was used the SCB, BIS, DASH and FACT-B, to analyze patients experience narrative approach of participants written reflections was used.

Results and conclusions: After ten sessions improvements in body awareness, shoulder and hand functional capabilities, patients reported more and safer movements in daily activities (including work related activities). Results showed better satisfaction with one's body and reduced distress levels caused by the disease, thereby improving the quality of life. Results showed improved body-mind connection. Patients reported better control over they own body and physical and emotional well being. It can be hypothesized that such a program is effective for improving the quality of life over a longer period of time.

Key words:Breast cancer patient;Mastectomy;Body awareness;Physiotherapy;Embodiment;Quality of life

Abstract ID: 63 Presentation type(s): Poster: Clinical poster

# Assessment Of Scoliosis In University Hospital In Finland

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Background: Scoliosis deformity is a 3-dimensional one as the spine laterally sideways and becomes fixed in this unbalanced posture. Specific Exercises for treatment of scoliosis have an important role in decreasing progression of the deformity and improving quality of life in adolescent idiopathic scoliosis (AIS). Mobility and muscles strength exercises and corset treatment are mostly use in physiotherapy. The studies have found that there is a connection between the quality of life and body image experienced and the scoliosis. The body image is defined as an belief of your own body at that moment, the perception is influenced by the human biopsycho-social environment since childhood. Scoliosis patient research forms are different and physical measurement is easier, but evaluating body image is difficult because the questions are hqualitative. Commonly used to evaluate body image are Scoliosis Research Society's Scoliosis Patient Questionnaire and Mc Gill Pain Questionnaire. MAT- measure (scoliosis patient questionnaire) can be considered a valid tool for measuring body function, pain and quality of life on patients treated for adolescent idiopathic scoliosis.

#### Objectives

1)How physiotherapist assess a scoliosis patients?

2)How physiotherapist analyses body image a scoliosis patients?

Method: Five physiotherapist were included and answered questions about assessment of the scoliosis patient and body image. The questions was "how are you assess a scoliosis patient?" Second questions was "do you ask how patient feels hers/his own body.

Result and discussion: The study involved 5 physiotherapists from each university hospital. Physiotherapists didn't use a structured form. The study showed that physiotherapists were assess a body posture, a posture of spine, spine movement with scoliometer, stomachmuscles and backmuscles strength and muscles stiffness of lower limb muscles. The scoring of the body image of the scoliosis patient wasn't evaluated.

Conclusion and significance: The assessment of scoliosis patients should be harmonized, taking into account body image assessment. The physiotherapy education and a postgraduate education has important role to educate and make research how the body image is influece to scoliosis patients.

Thank you for the music and dance

#### **CLUB FOR FIVE**

– a Finnish gold-selling a cappella quintet – have toured around the world for 20 years enriching the world of a cappella with premium Nordic quality spiced up with a dose of native Finnish craziness. The group stands out with its remarkable versatility. Combination of diverse musical backgrounds and distinctive vocal abilities of the five musicians have laid foundation for striking musical vibrancy and reputation Club For Five have today. The tonal fluidity of the group extends to many genres and locations. Having a blast on big festival stages comes to Club For Five as naturally as an acoustical church performance. Club For Five is influenced by international pop and jazz, but also rooted in Nordic music tradition in their approach. The repertoire is primarily in English and Finnish, along with a little Chinese, Russian and other smaller rarities. The Dire Straits anthem Brothers in Arms (from the album You're the Voice, Warner Music 2009) has become one of the signature songs of Club For Five.

### TUULETAR // GODDESS OF THE WIND (IN FINNISH MYTHOLOGY)

Fierce energy, beatbox rhythms and other-worldly harmonies: Vocal performance group Tuuletar is taking new Finnish music abroad with a novel approach. The band's singers create a sonic landscape, where beatbox rhythms meet Finnish poetry tradition and global influences. With their freshly invigorating original music, Tuuletar enchants audiences globally with their heartfelt, tribal and captivating spirit.

Tuuletar's (Goddess of The Wind in Finnish mythology) second album Rajatila / Borderline was released in May 2019 by Bafe's Factory. The album was produced by Pekko Käppi and it has already gained raging reviews and been playlisted on radio shows all around the world. In 2017 Tuuletar's song Alku was sold for the HBO hit tv-show Game of Thrones. The band's debut album Tules Maas Vedes Taivaal (On Fire and Earth, In Water and Sky, Bafe's Factory 2016) received In February 2017 the prestigious Finnish EMMA award (the Finnish equivalent to the Grammy Award) for the best ethno album of the year.

#### YLIOPPILASKUNNAN LAULAJAT // YL Male Choir

For more than 135 years, the YL Male Choir has been at the cutting edge of the art of male choir singing in Finland. Established in 1883 as Ylioppilaskunnan Laulajat [the Helsinki University Chorus], the YL Male Choir is Finland's best-known male choir and a national institution. It is recognised as one of the best male choirs in the world, and as such frequently tours worldwide as an ambassador for Finnish culture in addition to giving concerts at home. In everything the YL Male Choir does, the main thing is to bring audiences enjoyment and unforgettable experiences with musical performances of high quality.

## **POLOKKARIT**

Folk dance group from OULU, Finland

#### ICE SKATING VIDEO

Esko Liukas and Tiina Pakkanen

#### CITY OF HELSINKI

Helsinki video



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