Abstracts
Physical balance as a measure of psychological imbalance: Balance performance in psychiatric patients in comparison to healthy subjects.

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**Background:** Acute psychiatry is a highly demanding area of public healthcare. There is an ever-increasing pressure to treat acute psychiatric patients in the fastest and cost-efficient way possible. In this setting, there are fewer and fewer physical therapists involved in patient assessment and therapy. From years of practice, psychomotor physical therapists have for example observed psychiatric states as physical imbalance. However, the practice has never been empirically validated and therefore perhaps not gained foothold in psychiatry. This research aims to test if mentally unstable patients admitted to emergency care units have poorer ability to stay physically balanced than healthy counterparts.

**Purpose:** To empirically test whether psychiatric patients admitted to acute psychiatric care, display less ability to maintain physical balance compared to healthy subjects in the same age segment.

**Method:** Thirty-two (n=32) patients age 18-30 years were randomly recruited from an emergency ward over a six-month period. The patients participated in a controlled experiment in which participants had to perform a physically challenging balance task while simultaneously attending to a cognitive task. During the task, physical balance was objectively measured with the use of three gyroscopes which tracked movement of trunk and limbs. The results were compared to the results from a sample of healthy college students in the same age group.

**Results:**
The balancing task proved to be extremely hard for the psychiatric participants. Results show that the test group had significantly (\(P=.050\)) more movement in a balance challenge compared to the control group. The difference is found despite the fact that researchers were forced to downgrade the visual manipulation of the task for the psychiatric participants in order to avoid injury.

**Conclusions:**
In support of the notion held by many practitioners, acute psychiatric patients have poor physical balance in comparison to healthy subjects. The finding marks the first step towards a comprehensive understanding of the interplay between physical balance and cognitive performance.

**Implications:**
Regardless of condition, a reduction in physical balance capabilities can have a considerable effect on daily life, even though ADL performance seem to be normal. The finding allows for further research of physical balance in the care and treatment of psychiatric patients.
**Funding acknowledgment:** The Blakstad Psychiatric acute ward in Vestre Viken H+ Norway has facilitated for this research project.

**Ethical considerations:** The study received approval from NSD, Data protection official for research in Norway.
ACTiveAssessment: A clinically useful method of pain acceptance clustering.

Graciela Rovner

Background: Behavioral approaches to living successfully with chronic pain are now known to be effective in rehabilitation settings. In addition, Acceptance and Commitment Therapy (ACT) has shown to be effective to improve the patient functional capacity (physical, social and mental). However, the responsiveness to such rehabilitation programs are uneven, with effect sized medium to low, leading many to search for ways to identify differential responsiveness to treatment, organize services and meet patients’ needs. To cluster and group patients by their pain acceptance indicate their shared behavioral patterns and rehabilitation needs, however these clustering methods are too complicated to be implemented in the clinical everyday practice.

Objective: This study describes the development of clinical clustering taxonomy, called ACTiveAssessment, and inform how it can be used in the clinical work with patients with chronic pain.

Method: Routine assessment data from 1775 consecutive referrals to an urban pain management center in Sweden and 360 participants from two studies from Cyprus and Greece were included in this study to replicate previous pain acceptance-based clustering studies. Visual plotting of new clinical clusters on a matrix of pain acceptance scores was used to identify boundary scores for each cluster using ROC and AUC analysis to correctly identify and match the statistically-developed cluster membership.

Results: ROC analysis showed that clinical cluster membership could predict the statistically-based cluster membership with excellent sensitivity (AUC between 89.3% to 96.6%). The clinical algorithm performed near identically to the LCA clustering, in terms of distinguishing a different pattern of psychosocial needs for each cluster in relation to Anxiety, Depression, Kinesiophobia, Pain Interference, Life Control, Activities away from Home, General Activity Index, Physical/Mental and social Functioning, Mindfulness level, avoidance behaviors and values clarification.

Conclusions: A clinically derived algorithm for clustering patients according to their pain acceptance, performed near identical to statistically derived clustering. This algorithm, called ACTiveAssessment, allows clinicians to use clustering in their assessment and triage decisions, enhancing the potential for further progress in principle tailoring and modularizing rehabilitation programs in a stepped care model.
Do participants understand questions as intended?
Exploration of the 3-step Cognitive Interview

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Background:
Questionnaire is a common used method in research, but do the participants in fact have a similar understanding of the questions as the researcher has intended? The purpose of the study is to explore the method 3-step Cognitive Interview as a method to clarify participants’ understanding of questionnaires.

Method:
The exploration of the use of 3-step Cognitive Interview includes nine participants. Each participant was individually interviewed using 3-step Cognitive Interview. Afterwards the data were analyzed using the Framework Approach.
The questionnaire used in this study is the questionnaire intended for the national survey to assess the extent to which the current physiotherapeutic treatment of the Subchrorimial Impingement Syndrome follows the National Clinical Guidelines in Denmark.

Results:
The results were structured in two areas; the understanding of the questionnaire and observations during interview:

1. The understanding of the questionnaire: The results confirmed challenges in understanding of some of the previously identified questions e.g. use of technical terms, while other expected problem areas were not confirmed e.g. constructions as ‘latest shoulder problem’. To this, we discovered new unexpected problem areas during the analysis of the interviews e.g. the participants’ difficulties in understanding the questionnaire cross-sectional.

2. Observations during interview: The questionnaire was processed three times with different focus, which seemed to give the participant the possibility to reevaluate their memory and cognitive schema to qualify their reflective answer. It was difficult for the participants to verbalize their thoughts as requested in the method.

Discussion:
The Cognitive Interview showed to be an advantage in clarifying participants understanding e.g. in relation to understand the difficulties which the participants experienced when answering the questionnaire cross sectional. However, it could be argued that the results were affected by the participants’ cognitive abilities, due to the demands of the method.

Implications for practice:
Based on the results the 3-step Cognitive Interview is evaluated as an appropriate method to explore participants’ understanding of a questionnaire. The results are supported by other studies. The Cognitive Interview is opening up for new understandings of questions to reassure the quality of the data collected in questionnaires.

Funding:
The project is supported by The Association of Danish Physiotherapists’ Foundation for Research, Foundation and Development of Clinical Practice
Physiotherapy assessments in Mental Health- Are we measuring the right things in a societal perspective?

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Background,

According to WHO the European policy for health and well-being framework 2020 (Health 2020) the focus for health development is “Health is a resource that enables every person to realize his or her potential and to contribute to the overall development of society.” In the WHO publication International Classification of Functioning, Disability and Health, (ICF, 2001) a foundation and a common framework was created allowing all conditions to be compared using a common metric - the impact on the functioning of the individual. In clinical settings ICF is used for treatment planning and monitoring, as well as outcome measurement. The components body structure, body function, activity and participation as well as Environmental factors form the organizational framework of ICF. There are plenty assessments and measurements within Physiotherapy in mental health. This study focus what Physiotherapists are measuring/assessing in the mental health area and its relevance in a societal perspective.

Methods,

Physiotherapy assessments or measurements published in relevant scientific papers and recently published books in the mental health Physiotherapy area, are analyzed in the perspective of Health 2020 and ICF domains using descriptive statistics and qualitative content analysis.

Results/Discussion,

The results are presented and the discussion focus: “Are Physiotherapists measuring the right aspects/domains of health to highlight the importance of Mental Health Physiotherapy in the societal perspective”.

Implications for clinical practice:

It is of importance that Physiotherapists become aware of and are updated on how to focus the societal perspective found in Health 2020 and ICF.

Funding:

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The feasibility and effectiveness of a dance-related exergame in people with major cognitive disorder

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The feasibility and effectiveness of a dance-related exergame in people with major cognitive disorder

Nathalie Swinnen, Michel Probst, Davy Vancampfort

**Background**

Current treatment of dementia is insufficient or even not efficacious and may introduce undesirable side-effects. Physical activity has been defined as a non-pharmacological treatment for people with dementia and evidence suggests that it is beneficial for these patients. A variety of guidelines advise health professionals to refer these patients to physical activity. Despite these new developments, there is a dearth of evidence on how to motivate and to engage with older adults in care settings. Both dance and exercise-based videogames (exergames) that combine movement, cognitive tasks, performance feedback, recreation and social connectivity have been shown to promote motivation in older adults. In this pilot study, we are trying to combine these motivational strategies in an innovative dance exergame intervention (8 weeks, 3 times per week, 15 minutes) and investigate the effectiveness in residential people with dementia.

**Methods**

To our knowledge, this is the first study focusing on a dance-related exergame in people with dementia. In this presentation, we want to share our first experience about feasibility and effectiveness with clinicians and researchers. Following research questions about the process evaluation of the intervention will be handled: (a) Which were participants’ reactions to the exergame? (b) How was the intervention implemented in an inpatient unit for dementia (UPC KU Leuven, campus Kortenberg?) (c) How and under what circumstances does the intervention bring about benefits? (d) Are these benefits enduring? (e) Were there any unintended consequences/side-effects of the intervention? To assess these research question a focus groups of (a) health care professionals, (b) family members, and (c) patients will be performed. The data will be analyzed using an inductive content analysis. The inductive approach enables researchers to identify key themes in the area of interest by reducing the material to a set of themes or categories.

**Results**

The first results of the pilot study the feedback will be presented. The feedback of the health care professionals, family members, and patients will give some indications concerning the benefits, the side-effects and the pitfalls of this innovative method.

**Discussion and implications for clinical practice**

The feasibility of this intervention in people with dementia and the recommendations for the future will be discussed

**Funding**

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Steps to overcome barriers to health for people with intellectual disability

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Background

Despite higher health risks in people with Intellectual Disability (ID), in everyday life these people face a variety of barriers to health (under diagnosis and inadequate treatments). Furthermore, health professionals are unaware of this situation and lack adequate professional competencies.

Special Olympics International (SOI), the world biggest sports organization for people with ID, provides training and competition in year round sports. Since 1997 SOI implemented the Healthy Athletes (HA) Program (health screenings and health education) aiming to address the before mentioned health care problems of ID people and athletes. The aim of this work was to get more information about the impact of the HA program in people with ID and in health professionals.

Methods

In 2017, the Special Olympic World Winter Games took place in Austria/Styria with 2,700 athletes. Parallel to the sports events, in the HA Program 1,700 athletes were screened in different health disciplines. 800 medical professionals and students from all over the world were trained and volunteered for the program: health education, screenings of basic fitness and motor skills, health behaviour, hearing competence, vision, foot health, dental check-up and mental competencies as well as stress management skills. After the program, athletes and health care professionals/students were interviewed in focus groups.

Results

The athletes gave feedback that they had good experience with the program. It changed their attitude towards health screenings and decreased the fear of medical treatment. They learned to express feelings about their individual health status. They liked the specially designed health education programs. Health care professionals and students replied that their self-confidence for the specific therapeutic screening skills increased. Additionally, they learned to communicate with people with impaired cognitive and verbal understanding capacities - with the extra challenge of interacting in different languages. After this experience they felt better prepared to work with people with ID. They experienced this work as highly rewarding.

Discussion/implication

As a first result of that experience, the Medical University of Graz, the FH Joanneum G and the FH Campus Wien plan to implement placements as well as education in the field of health care for people with ID within their curricula. There is a need of well-defined and evidence-based medical and therapeutic training in the field of ID to build a workforce which is better
equipped to meet the complex health need of this population and to improve equity of access to healthcare.

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EXPERIENCES OF BASIC BODY AWARENESS GROUP THERAPY IN OLDER PEOPLE.

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BACKGROUND

World’s demography is changing due to the increase in the number of the elderly people. In Mexico the population aged 60 years and more, represent 10.4% of the total population. The best health indicator to study population is the functional status. The physiotherapy modality called Basic Body Awareness Group Therapy (BBAGT) includes movement awareness training and aims to improve functionality. It builds in the four perspectives of human movement: physical, physiological, physico-socio-cultural and existential.

METHOD

This Project was made with qualitative and quantitative approaches. A therapeutic group of five participants was carried out from the private consultation in Mexico City. At baseline and after 1 and 12 session, changes in Movement Quality (MQ) was evaluated using Body Awareness Rating Score (BARS). Interview data and data from the therapist’s log were qualitative analyzed based on the model described by Giorgi and modified by Malterud. The focus of interest was the subject’s experiences during the treatment process and their opinion about if BBAGT helped them to improve functionality considering the point of view of the four perspectives used in BBAGT.

RESULTS

All the participants showed improvement regarding to body awareness and MQ on BARS score. From the biomechanical perspective all participants reported improvement in flexibility, in joint pain, more flow in their movements and posture. They experienced better support in their feet, thus obtaining more balance and better coordination.

From the physiological perspective all participants reported improvement coordination and freedom in the breathing. From the psycho-socio-cultural perspective all participants noticed better synchronize on movement, performing the movement in a more harmonious way. From the existential perspective, all the participants commented on feeling more integrated, giving themselves the opportunity to feel their body and with better quality of life.

DISCUSSION

Implicit in all physiotherapy interventions in older patients, is that the therapist guides the patient to move in a way that prevents the development of dysfunctional compensatory movements and at the same time promotes economic and balanced movement strategies. The present intervention focuses altogether on promoting more functional movement quality in every day movements and actions. BBAGT can help diminishing pain, improving mobility, postural control and breathing in older people and thereby they became to have unity sense.
IMPLICATIONS FOR CLINICAL PRACTICE

BBAGT has proven to be very useful in different groups of patients, in older adults can be effective in the prevention of falls and improving functionality.
Augmenting CBT with physical exercise in treatment of generalised anxiety disorder in older adults – results from a pilot study

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Background.
Generalised anxiety disorder (GAD) is a frequent and severe anxiety disorder among older adults. GAD increases the risk of developing other disorders such as depression and coronary heart disease. Older adults with GAD have less effect of the recommended treatment – cognitive behaviour therapy (CBT). Physical exercise (PE) may enhance the effect of CBT by improving cognitive functions, and by increasing levels of the brain-derived neurotrophic factor (BDNF), a predictor of the effect of CBT in patients with anxiety. The main purpose was to implement a combination treatment protocol in a sample of older adults with GAD. This included testing protocols for physical exercise and CBT, developing procedures for recruitment, assessment and treatment, and educating personnel.

Methods.
Four older adults aged 62-70 years with a primary diagnosis of GAD were included in the pilot for a larger trial. Participants received 15 weeks of physical exercise in combination with 10 weeks of CBT. Physical exercise was conducted three times a week, one supervised and two un-supervised sessions according to an exercise manual. CBT was conducted as one session per week in parallel with the last 10 weeks of physical exercise. Participants completed self-report measures and clinical, biological, physiological and neuropsychological tests pre-, interim- and post-treatment.

Results.
Treatment rationale, procedures and protocols are presented with results for four participants with GAD. One participant dropped out during treatment. The total feasibility for PE was 80%, whereas the total feasibility for CBT was 100% for participants completing full protocol. There was an independent rating of the three participants who completed the protocol, concluding that none of the participants had a diagnosis of GAD after treatment. Change in self-report measures suggests symptom reduction related to anxiety, worry, depressive symptoms and sleep disturbances. The sample is considered representative for the population.

Discussion and implications for clinical practice.
The results from this pilot indicate that combining CBT and physical exercise is feasible, and that the procedures and tests employed are suitable and manageable for the current sample. The current, and limited results indicate that this intervention could also be efficacious for these patients.
Funding.
The project is currently being funded by Solli DPS (local mental health facility), the University of Bergen (UiB) and the Western Norway Regional Health Authority.
Physical training versus cognitive training – effect on cognitive functioning of older adults

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**Aim:** Complex process of social, natural and physical components that intertwine one with another determinate the quality of aging. Thus studies that are investigating the effect of physical (PT) or cognitive training (CT) of older adults are becoming increasingly important in recent years. The decline in cognitive functions is a normal process and is a part of aging, since some biological changes occur also in the brain. Cognitive functions that decline most with years are central executor, selective attention, distinguishing about relevant and irrelevant information and recall of information from working memory. However, the decline can be reduced.

**Methods:** *According to PT we did a review of 44 transparent scientific articles and sample surveys carried out and published in the period between 2001 and 2016, restricted only to human studies,* and a review of 30 transparent scientific articles and sample surveys carried out and published in the period between 2005 and 2014 about CT, *based on the keywords: age, aging, physical activity, aerobic physical training, cognitive training, working memory, cognitive abilities, cognitive reserve.*

**Results:** From physical point of view it seems, that it is aerobic physical activity of proper intensity (60 % VO2 max) the one that has a positive effect on general cognitive abilities, even though the ideal dose varies and it should be based on age, fitness level, comorbid illness, and other factors. *Also cognitive abilities can be improved with CT. Usually CT refers to specific cognitive stimulation, memory rehabilitation, realistic orientation and neuropsychological rehabilitation.* According to studies *CT has important role on cognitive functioning and reducing of cognitive decline.*

**Conclusion:** The importance of the decline of CA with the age is essential for individual, economic and social levels and increases the importance of finding appropriate solutions. PT and CT could or should be used as a supportive therapy for patients as well for healthy people, since individuals who are physically and cognitive active are less likely to develop cognitive impairment and dementia and have improvement in at least some aspect of cognitive function, brain volume, and functional brain connectivity. *It would be necessary to standardize cognitive test battery, so the results could be comparable. For the relevant findings it is absolutely necessary to have an interdisciplinary approach.*
The prevalence of childhood obesity: Are children with intellectual disabilities different?

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Background: Robust literature supporting childhood obesity in typically developing children (TD) accentuates the dearth of evidence for children with intellectual disability (ID) in South Africa and globally. The aim of this study was to determine the prevalence of childhood obesity in TD and ID children in Cape Town, South Africa. The results will provide comparative information on the weight status of these children, which may inform interventions designed to address childhood obesity with the potential for adaptation for all children.

Methods: Children with mild-moderate ID, and TD children, aged 9-11 attending urban Special Needs and mainstream schools in the Cape Town, Western Cape respectively were eligible for inclusion. Demographic and family health information was obtained by questionnaires. Anthropometric measures were determined by BMI Z-scores.

Results: The prevalence of overweight/obesity in ID children was 37.1% compared to 26.4% in TD children. Comparison of BMI Z-scores in the two groups showed significant difference (p=.048) between the BMI Z-scores of TD and ID children. Weight category associated with ID children revealed more obese children (p=.001). The dummy variable of ID did not predict overweight/obesity.

Discussion: The prevalence of overweight/obesity amongst ID children was higher than in TD children, and comparable to international rates. This has implications for long-term risk of developing non-communicable diseases. The intrinsic and extrinsic factors contributing to high BMI Z-scores was supported by birth weight, maternal obesity, ethnicity, school quintile (proxy for SES) and maternal education level. The higher quintiles were predictive of BMI Z-scores, which implies that children in higher SES brackets should be targeted for intervention. However, the proportions of overweight children were similar across quintiles. It is therefore important to prevent obesity development in children in the lower quintile schools as the overweight/obesity drivers are different across quintiles and different intervention strategies might be required.

Implications for clinical practice: Children with ID have significantly higher level of overweight/obesity than TD children. While the health of ID children is compromised by their existing health conditions, this is compounded by health problems associated with overweight/obesity, therefore confounding the burden of disease, with implications for their families, communities, health system and the economy. The call to action is therefore imperative to avoid the long-term risk of non-communicable diseases in ID and TD children, which are largely preventable.

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Exploring LGBTQ-youth’s embodied experiences of mental illness and suicidality – a qualitative interview study from northern Sweden

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Background: Youth mental health is a major public health concern in Sweden and globally. LGBTQ-youth (lesbian, gay, bisexual, transgender and queer) report poorer mental health compared to peer heterosexuals, and particularly significant is the higher proportion of suicide attempts and suicides. Other differences concern poorer quality of life, dissatisfaction with school and working situation, insecurity and discrimination, and high exposure to violations and violence. In addition, LGBTQ-youth report negative experiences from health care because of biased heteronormative and stereotyped values and assumptions. Within psychiatric and psychosomatic physiotherapy, specific knowledge is still lacking about LGBTQ-youth’s embodied experiences of mental illness and suicidality, as well as of their needs of social and professional support. The aim of this study was therefore to explore experiences of mental illness and need of support from the perspectives of young LGBTQ-youth.

Method: Qualitative interviews were conducted with 15 LGBTQ-youth with mental illness, 16 to 25 years, recruited from school health services, youth health clinics and outpatient psychiatric services in two counties in northern Sweden. Among participants, there were variation regarding type of mental health problem, contact clinic, age, gender/sexuality, ethnicity, education and occupation, and place of living (rural/urban). The study was guided by the principles of the research method Grounded Theory (GT).

Results: The results highlight experiences, which include facing experiences of being outside the norm; being exposed to harassment and violence; suffering from mental illness; living with self-harm and suicidal thoughts; not feeling at ease with the body; and seeking for strategies for enhanced wellbeing. Moreover, participants’ experiences included engaging in social media and Internet.

Discussion: The young LGBTQ-youth’s embodied mental illness were tied to social marginalisation, bullying, abuse and violence – which call for a context-sensitive understanding of their suffering. Experiences of an uncomfortable body and suicidal thoughts were prominent. All these experiences are important to take in respectful physiotherapeutic ‘body-work’. The WHO’s policy on youth-friendliness can here be an important guidance, as well as principles of gender-sensitive interventions.

Implications for clinical practice:

Results from this study may help to enhance physiotherapists’ awareness of LGBTQ-youth’s specific contextualized and embodied challenges and needs. Increased knowledge of and responsiveness to LGBTQ-youth’s life situation, including potential exposure to harassment and violence, are crucial. Based on the results, one future direction is to develop a gender-sensitive and ‘youth-friendly’ physiotherapeutic intervention model specifically tailored to LGBTQ-youth.
Funding: The Public Health Agency of Sweden; The County Council in Västerbotten (ALF), Centre for Psychiatry, Umeå, Sweden; Community Medicine and Rehabilitation, Physiotherapy, Umeå University, Umeå, Sweden.
Impact of a school-based physical activity intervention on mental health variables of elementary school children: Results from a real-life intervention in Flanders, Belgium.

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Background: With a 20% prevalence rate in children and adolescents, mental health problems are of major public concern. However, few attempts have been made to investigate interventions that can prevent mental health problems to evolve into mental health disorders.

In comparison to more traditional interventions, physical activity has few side effects and is relatively cost-effective. Research has indicated that physical activity provides physiological as well as psychological benefits. Growing evidence suggests that physical activity interventions increase self-concept and self-worth in children (Liu, Wu, & Ming, 2015), a factor that is closely related to the development of mental health disorders. Furthermore, some evidence indicates that school-based interventions generate the strongest effects (Liu et al., 2015). The aim of this study was to investigate the effect of a school-based physical activity intervention ('One Mile a Day') on mental health variables in elementary school children, and this within a real-life setting.

Methods: Elementary school children, aged 5-13 years, participated in this study (n = 550). Parent and child reports were employed to examine the effect of a simple school-based physical activity intervention in which all children run or walk one mile each day, during school hours. All variables were recorded at three points in time. The Self-Perception Profile for Children (Harter, 1985) was used to assess the self-perceived competence of children across various domains. The Strength and Difficulties Questionnaire (Goodman, 1997) is a brief behavioral screening questionnaire, used to assess a range of psychological attributes.

Results: Based on parent-reports, the intervention yielded positive effects regarding emotional symptoms, hyperactivity/concentration, prosocial behavior and peer problems. No significant effects were found for behavioral problems. Based on child-reports, initial results yielded no significant effects. However, additional analyses indicated that children with low perceived competence levels did benefit from the intervention.

Discussion: Despite the recommendations, daily physical activity is not common among elementary school students. Our findings suggest that children with low self-perception and low self-esteem benefit most.

Implications for clinical practice: Our findings suggest that integrating a simple physical activity intervention improves several mental health variables in elementary school-aged children. Therefore, implementation of school-based physical activity interventions is recommended. Moreover, the intervention of ‘One Mile a Day’ has proven its feasibility in a real-life setting.

Funding: This research was partly funded and supported by the Ministry of Education, Flanders, Belgium.
Relaxation Program for Adolescents with Anxiety

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\textbf{Background:} Anxiety is a natural protective mechanism which can act as a warning signal for danger. However, when this mechanism is over-heightened and the symptoms of anxiety begin to affect our daily lives, these same protective signals can become symptoms of a psychiatric illness. Anxiety as a psychiatric diagnosis is a multidimensional condition caused by an activated sympathetic nervous system which can ultimately affect behavior, cognitive processing, bodily symptoms as well as emotions. Anxiety is a common diagnosis in adolescents and its treatment needs to tackle its multidimensional nature. The aim of developing a program with relaxation techniques (tension-release, suggestive, narrative, applied relaxation method), cognitive therapy (conceptualization, therapeutic discussion) and psychoeducation, was to tackle many different aspects of anxiety. This program was created as an individual psychotherapy option for patients suffering with anxiety symptoms, even when other comorbidities are present.

\textbf{Methods:} This study included 24 participants, aged 14-18 years old. All participants filled the Beck Anxiety Inventory (BAI) and bodily symptoms questionnaire (muscle tensions, pain, breathing problems, heart problems, stomach problems, sleeping problems) in the first and last sessions of the program. The data was examined with matrices, Excel and SPSS.

\textbf{Results:} 22 patients reported a decrease in their anxiety according the BAI and bodily symptoms questionnaire points (the remaining two reported the same level of anxiety). Both patients with the same beginning and end scores suffered from personality disorders. The largest decrease in self-reported anxiety symptoms were found in patients with generalized anxiety (GA). In the program feedback patients reported that following the program they were able to understand their anxiety better, and they were less afraid of their symptoms.

\textbf{Discussion:} This research shows that a program which combines psychotherapy with mental health physiotherapy can help patients with anxiety. One key element is the patient's own motivation and willingness to work with their body. This program can also be used with adults and the elderly but is not recommended for use in children.

\textbf{Implication for clinical practice:} With increasing demand of adolescent psychiatric services in the Helsinki area, the Helsinki University Hospital Adolescent Psychiatric Department is continuously looking for focused, effective therapies to treat patients. This well-structured relaxation program has been shown to reduce anxiety symptoms and can be used to effectively treat a major symptom leading to hospital care in the future.
Motor abilities of male adolescents with a psychiatric disorder: Highlights from a doctoral dissertation.

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Background: Within the field of child and adolescent psychiatry, the motor ability domain is a relatively neglected area. Research related to the motor domain has received far less attention than other developmental areas. Although impairment in motor abilities is highly prevalent in child psychiatric populations, severe emotional and behavioral problems often obscure the manifestation of underlying deficits that may contribute or impact the functioning of an individual.

Methods: Starting from a systematic literature review, several studies were designed and conducted. Throughout this work, special attention was paid to an in-depth investigation of the motor profiles, taking into account the true heterogeneity of an inpatient clinical sample and the confounding factors.

Results: There is reasonable evidence indicating an increased prevalence of impairment in motor abilities in male adolescents with a psychiatric condition, with different psychiatric categories explaining a significant amount of variation in motor ability scores. Relationships between different developmental domains (emotional, intellectual, motor) appear to present themselves differently across psychiatric populations.

Discussion: It remains undetermined if motor impairment is inherent to some psychiatric conditions or if these individuals should receive a diagnosis of co-occurring Developmental Coordination Disorder. Future research is needed to explore the impact of motor problems on physical activity levels in adolescents. Moreover, longitudinal research is needed to investigate the developmental trajectories and the impact of motor impairment on other developmental domains.

Implications for clinical practice: The motor ability domain is in need of attention, regardless of the diagnosis. There is an urgent need to increase awareness concerning the high prevalence of co-occurring motor problems in an inpatient clinical population. Motor assessment should be part of the routine clinical practice in child and adolescent psychiatry.

Funding: This research was conducted without any funding.
PHYSIOTHERAPY IN MENTAL HEALTH: AN HISTORICAL OVERVIEW

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Physiotherapy in mental health is a field focused on working with persons who have mental health problems or mental health disorders and it covers a wide area of interventions (exercise therapy, psychomotor therapy, body awareness methodology, psychosomatic physiotherapy, relaxation, …). The development of physiotherapy in mental health started in the sixties. In some countries, the implementation of physiotherapy in mental health care and psychiatry has a long and strong tradition. Why is this not the case in other countries and how could the different approaches in physiotherapy in mental health between countries be explained?

This paper explores and presents different historical facts that have contributed to the development of physiotherapy in mental health. The overview of the evolution starts from Descartes, followed by external influences and important landmarks such as, the French revolution, Per Henrik Ling, the First World War, the golden century, the Second World War, the influence of psychiatrists (Reich, Simon, Meyer,…), philosophers and phenomenologists, the development of psychotropic medication, the integration of psychotherapy and exercise in psychiatry. In the last 60 years, a huge evolution of physiotherapy in mental health took place. Under the influence of the European idea, a collaboration between different countries started. The IOPTMH was established and physiotherapy in mental health became member of the Staff groups active in mental health (WHO). The presentation concludes with a state of the art of physiotherapy in mental health anno 2018.
MAPPING A ROAD TO A MOVEMENT AWARENESS DOMAIN IN PHYSIOTHERAPY – A THEORY
CONSTRUCT DEVELOPED FROM BASIC BODY AWARENESS THERAPY (BBAT)

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Background: A theoretical framework is an important indicator of an evolving science
and professional clinical approach. Arguments have been forwarded by clinicians,
expressing need for theory within the movement awareness domain of physiotherapy.
Basic Body Awareness Therapy (BBAT) is one of several approaches within the specialty
of physiotherapy in mental health. Because of its increasingly wide use, clinically and
geoographically, there is a need to process theory development, identifying and defining
basic concepts, visualized in mapped models as indicators for clinical
implementation. Method: For construct of the three first maps, a phenomenological
approach was chosen to study clinical experiences described by three groups, each of five
physiotherapists (neurology, psychiatry and community health care), in total 15
physiotherapists, using in-depth, face-to-face interviews, audiotaped, transcribed and
analyzed according to Giorgi’s and Malterud’s research methodology. For the forth map,
the Nominal Group Techniques (NGT) was used to conduct a consensus-building process,
prioritizing information by 21 international physiotherapists, volunteering to participate
in a twenty hour workshop during a weekend from Friday afternoon till Sunday lunch.
Ethical considerations according to the Helsinki declaration were included. Result: 4
maps as theory construct is developed with reference to BBAT: 1) the Movement Quality
Model providing overview of the phenomenon, including perspectives, elements and
aspects, 2) Therapeutic components revealing prerequisites for clinically promoting
movement quality, 3) the Movement Awareness Learning Cycle, presenting cyclical steps
for clinical implementation and 4) overview and relationship between clinical core
phenomena in BBAT. Discussion: The described studies have unpacked, structured and
related phenomena, implemented in BBAT, mapping a possible road for physiotherapists
to work within a movement awareness domain with human movement as a
core. Implications for clinical practice: The strength of theoretical explanations is to
provide a conceptual framework for clinical implementation. Unless models and
frameworks reflecting current clinical practice are described, misinterpretations may be
reinforced.

Funding: Western Norway University of Applied Sciences, Bergen, Norway
Prevention of Deconditioning amongst Long Stay Psychiatric Patients

Sumanth Kumar Venigalla

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Background:

Deconditioning amongst long stay psychiatric patients has been on the rise at the Institute of Mental Health (IMH), Singapore. Currently 18% (180/1000) of the patients assessed in IMH long stay wards are deconditioned. In this project, we will first assess the number of patients who are deconditioned at 63A&B long stay ward. Next, we assessed the structural system level problems in the hospital that cause deconditioning. A third aim was to reduce the number of deconditioned patients by increasing the patients Elderly Mobility Scale (EMS) score of >10 with 30% in six months and with 50% in nine months following a Clinical Practice Improvement Programme (CPIP).

Method:

Deconditioning was assessed with the EMS. A score of <10 is the cut-off for a deconditioned status. The CPIP was developed based on an assessment of the barriers for a possible deconditioning program via semi-structured interviews of the existing multi disciplinary staff.

Results:

At baseline 27% of the patients in 63A&B ward were deconditioned. The most important system level barriers for targeting these high rates were: (1) the long restraint periods, (2) lack of exercise options for restrained patients, (3) no training in physical activity delivery of the nursing staff. Based on the interviews a multidisciplinary program was developed including a nurse-led chairs-based Zumba intervention, and activities of daily living training by occupational therapists for all patients and musculoskeletal training by physiotherapists for those with an EMS score <10.

After implementing the CPIP for 9 months the number of patients with EMS >10 increased with 67%.

Discussion:

A multidisciplinary approach is very efficacious in reducing deconditioning in psychogeriatric patients residing in long stay wards. Stratification of patients based on EMS scores is effective in identifying those in need for additional physiotherapy.

Implications of Clinical Practice:

Stratification of patients according to their EMS is effective in identifying deconditioned patients in high need for a physiotherapy program.

Funding: Institute of Mental Health, Physiotherapy Department
WHO, Staff groups active in mental health in the European Region: physiotherapy survey

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Background

In 2016, IOPTMH became a member of the World Health Organization (WHO) - Regional Office for Europe, Mental health workforce, consisting of occupational therapists, psychologists, psychiatrists, social workers and nurses. The workforce developed “The consensus statement: working together towards an effective and influential mental health workforce”. One of the agreements for joint action was to set up a workforce survey.

In order to support good policy and practice development, information is required about numbers and competencies of the workforce. At the last WHO-meeting, a request for all professionals to develop a workforce survey was proposed. The development of the survey is a cooperative effort of the Staff groups active in mental health in the European Region World Health Organization (WHO), the IOPTMH, and the Department of Rehabilitation Sciences of the KU Leuven (Belgium).

Methods

The IOPTMH executive committee agreed to develop a survey to collect general, anonymously data from physiotherapists working in mental health and within the field of psychiatry. The expert survey consisted of 28 closed- and 5 open-ended questions regarding the expertise and the experience of physiotherapists working in mental health.

The International Organization of Physical Therapy in Mental Health sent by electronic mail the invitation to the list of interested colleagues/experts in physiotherapy in mental health, to participate in this international project.

Results

Over 200 colleagues, mostly from the Scandinavian countries, Belgium and the Netherlands, answered our invitation. The survey was closed December 1 2017. The results of this survey will be presented at the 7th ICPPMH in Reykjavik.

No Funding: The handling of survey data was done by Liese Stappaerts, Tine Standaert, Sebastien Serck as a part of their master thesis physiotherapy at the KU Leuven, Belgium.
Identifying treatment modalities for a multidisciplinary and blended care intervention for patients with moderate medically unexplained physical symptoms: a qualitative study among professionals

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Background
Medically unexplained physical symptoms (MUPS) are an important health problem in primary care, with a spectrum from mild to moderate and chronic. The burden of chronic MUPS is substantial for patients, health care professionals and society. Many studies assessed the efficacy of different treatment approaches in patients with chronic MUPS, where multimodal treatments are suggested. So far, little research is conducted in patients with moderate MUPS, while preventing chronicity to decrease the burden is as important. Patients with moderate MUPS can be identified with the PRESUME screening method. The next step is to develop an intervention, using the Medical Research Council framework. During the development phase, the aim is to identify existing relevant themes for intervention. Therefore, the objective of this study is to identify expert based treatment modalities for a multidisciplinary and blended primary care intervention for patients with moderate MUPS to prevent chronicity.

Methods
Two focus groups with professionals experts were carried out and structured using the Nominal Group Technique (NGT). The sample of participants included general practitioners, (psychosomatic) physical therapists, (health care) psychologists and mental health nurses. NGT is a formal and structured stepwise consensus procedure. Participants enable individual ideas, obtain ideas from other members, and rank ideas with equal input from all participants. Rank orders of the two groups were merged into one final rank order using a structured method for analysing multiple group data. Subsequently, the principal researcher combined ideas into themes through content analysis.

Results
In total, fourteen professional experts participated. Seventy ideas were generated from two nominal group meetings and sorted into eight separate themes. According to the participants the most important treatment modalities for a multidisciplinary and blended intervention in patients with moderate MUPS were 1) Coaching to a healthier lifestyle, 2) Education regarding psychosocial factors, 3) Therapeutic neuroscience education, 4) Multidisciplinary intake, 5) Multidisciplinary cooperation and coordination, 6) Relaxation / body awareness exercises, 7) Clear communication of professionals to the patient, and 8) Graded activity.
Discussion
From professional experts perspective eight themes should be included in a multidisciplinary and blended intervention to prevent chronicity. These themes provide a first step in developing an intervention for patients with moderate MUPS.

Implications for clinical practice
This study helped in developing a multidisciplinary and blended primary care intervention for patients with moderate MUPS to prevent chronicity. The next step is to investigate the effectiveness of the intervention in patients with moderate MUPS.
Men, masculinity and fibromyalgia

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**Background:** Fibromyalgia is often understood as a chronic pain condition, which mainly affects women in their midlife. However, according to recent epidemiological studies where ACR2010 criteria was applied, the prevalence among men was almost as high as among women. Men with fibromyalgia are rarely heard in qualitative studies and accordingly masculinity issues that are linked to living with fibromyalgia have not been in the focus of studies earlier. The purpose of this study is to explore narrative interviews of men with fibromyalgia from a gender perspective.

**Method:** Narrative approach was adapted as a starting point in this study to capture men’s experiences and perspectives of living with a predominantly ‘female’ condition. Eight men with fibromyalgia were interviewed for the study using life-story interview technique. The data was then subjected to rigorous narrative analysis where both the content of the story and the way of telling the story were explored.

**Results:** The results show that onset of fibromyalgia raises many questions among men in terms of masculinity. Due the symptoms of fibromyalgia, they had given up ‘manly’ hobbies and domestic or work tasks. Moreover, the men felt that they were not able to fulfill the expectations of the society, their family or even those of themselves. They explicated that they were in transition from experiencing a strong, powerful, active body to experiencing a painful, vulnerable and helpless body. The masculine identity needed to be re-evaluated and reconstructed, as the men were balancing between identities of ‘a manly man’ and ‘a man with a disability’ or in other words; ‘the previous Me’ and ‘the unwanted Me’.

**Discussion:** In the future, more and more men with fibromyalgia will be seen in physiotherapy interventions because the new criteria for diagnosis seems to even out the gender difference in prevalence. Our results imply that in addition to pain and other symptoms of fibromyalgia, men suffer from psychosocial consequences of the illness, which affect deeply their identity, masculinity and social roles.

**Implications for clinical practice:** Physiotherapists need to develop their knowledge and competence on the psychosocial consequences of chronic pain conditions. In physiotherapy settings, it is possible to give time and space to discussions concerning identity and gender issues alongside with physical activities.

**Funding:** The research has received funding from the European Union Seventh Framework Programme (FP7-PEOPLE-2013-COFUND) under grant agreement n°609020-Scientia Fellows.
Physical therapists’ clinical view on management of functional neurological symptoms in Iceland.

Sif Gylfadóttir.

BACKGROUND: Functional neurological symptoms (FNS) are symptoms that are not explained by organic disease. FNS are estimated to be present in 1-10% of neurological inpatients each time (Stone et al., 2009). Patients tend to have diverse, ever changing symptoms interfering with their daily life. About 11% have “other” psychiatric disorders (Carson, et al., 2000). Incidence of FNS is more common in women (80%) than men (20%) (Stone, et al., 2017). Today no clinical guidelines are available in physical therapy (PT) approach to FNS, but recently a consensus recommendations were made by clinicians with extended experience in treating FNS (Nielsen, et al., 2014).

METHODS: In this special interest report we evaluated available research data on FNS in Iceland. We discussed the consensus recommendations by Nielsen and colleagues published 2014. Finally, using our clinical expert view and the information collected we proposed future steps for improving service and management of FNS in Iceland.

RESULTS: Very limited information is available on FNS PT management in Iceland. We found two research articles in Skemman, a repository of academic and research documents. Also, one poster presented at Research day at Reykjalundur 2015 and one ongoing clinical research at Reykjalundur.

According to a retrospective study on patients’ charts from the National University Hospital, Landspítali in the years of 2014-2015, 122 patients had FNS documented and of those 40,2% were diagnosed according to ICD-10. Also, 51,6% were referred to PT’s after discharge from hospital and of those 68,2% were referred to longterm rehabilitation. According to a poster presented in 2015 at Reykjalundur Research day, of 25 patients admitted to rehabilitation 60% had minor symptoms or were symptom free following rehabilitation.

Reykjalundur started a clinical research study on effects of interdisciplinary rehabilitation in patients with FNS in January 2016. Today 17 patients have participated in the study. Preliminary results are proposed to be presented in this special interest report.

DISCUSSIONS AND CLINICAL IMPLICATIONS: No prospective study is available on the number of patients diagnosed every year with FNS according to ICD 10 in Iceland. Although discussed in patient charts, diagnosis is not necessarily set. Clinical recommendations have though been set forward by experts in the field. By using the research reports, our clinical knowledge and the clinical recommendations, we defined 5 important steps that need to be approached to improve service and management of FNS in Iceland.
Self-Efficacy and Body Awareness in Chronic Migraine - A phenomenological study

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Background
The purpose of this thesis was to search for more understanding of the phenomenon of migraine from the perspective of persons with chronic headache. Migraine care is primarily controlled by medicament, but nonpharmacological interventions are practical for persons with such problems as deficient coping skills, cumulative body tension and work disability. It has been established in increasing number of researches that there is a relationship between chronic migraine and personality, which commonly shows poor coping strategies for the management of pain.

Methods
This Master’s study includes a research on eight chronic migraine patients. There were five group sessions for body awareness exercises and five weeks of home practicing before the individual interviews. The transcribed interviews were analyzed using Giorgi’s phenomenological method consisting of four phases: (1) reading the transcriptions several times, (2) discriminating meaning units, (3) collecting meaning units into groups (4) the synthesis, describing the phenomenon of chronic migraine.

Results
The results indicate that chronic migraine impaired the participants life by controlling thoughts and disturbed body integration. The strongest results noted by the participants were inability to identify and adjust their body due to headache. One of the significant migraine trigger is tiredness, which is recognized mentally but not physically. The beliefs of one’s own body and its ability to recover seems to be unclear for some of the participants. In the analysis, three essential themes of migraine pain behavior emerged 1) meaning of persistence 2) insensible body 3) lack of regulation in physical activities.

Discussion
Chronic migraine is a psychophysiological disorder which requires biopsychosocial approach to understand the phenomenon. It is important to identify the personal traits of migraine patients such as persistence and harm avoidance which may help in addressing the complexity of headache presentations and be useful when planning appropriate interventions in rehabilitation. With physiotherapy exercises for improving one’s body awareness with coping styles there may occur new factors of self-efficacy.

Implications for clinical practice
Implementation of stress management strategies reduces development of stress-related body affections including muscular tension, sympathetic hyper-arousal and tiredness. Being aware of factors which precipitate or aggravate migraine allows patients to progressively modulate the frequency and duration of their attacks.

No Fundings
Basic Body Awareness Therapy in patients suffering from fibromyalgia: a randomised clinical trial

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Background

Fibromyalgia nowadays is recognized as the most common cause of widespread chronic muscle pain being frequently diagnosed in the last decade (Wolfe et al. 1990). The aim of this study is to assess whether Basic Body Awareness Therapy (BBAT) improves musculoskeletal pain, movement quality, psychological function and quality of life.

Methods

The effects of BBAT in addition to treatment as usual (TAU) were studied in a randomised controlled trial. 41 patients with fibromyalgia were randomly assigned to control group (n=21) and intervention group (n=20). Both groups received TAU including pharmacological therapy. The intervention group received 10 BBAT sessions. Outcomes variables were measured regarding pain, movement quality, psychological function, and quality of life. Outcome measures were assessed before intervention, post-test immediately measured after intervention and follow-ups at 12 and 24 weeks.

Results

BBAT group showed a significantly improvement in ‘pain’ at post-test (p=0.037), and in ‘movement quality’ from baseline to 24 weeks (p=0.000). The intragroup analysis showed significant improvements in SF-36 body pain subscale at 12 and 24 weeks (p=0.001, p=0.014), HAD scale in anxiety subscale at 12 weeks (p=0.019), STAI anxiety questionnaire at 12 and 24 weeks (p=0.012, p=0.002) and STAI state at 12 and 24 weeks (p=0.042, p=0.004).

Discussion

Significant differences were found in the VAS at post-test. According to Jones et al. (2011), dynamic posturography has found consistent sensory problems in middle-aged people with FM. The effect of BBAT through postural control might also have improved the level of pain. More else, the theory of central sensitisation explains an improvement in symptom severity post-treatment in response to low-to-moderate exercise therapy (Nijjs, Van Houdenhove, and Oostendorp, 2010).

According to Di Tella et al. (2015), patients suffering from FM have a high prevalence of psychological distress levels of depressive and anxiety symptoms. In BBAT the three basic coordination movements connect with the psychological perspective (Skatteboe, 2005), those
movements are intimately related to the emotional life through the close connection with breathing (Ekerholt and Bergland, 2008; Skatteboe, 2005; Skjærvøn, Gard, and Kristoffersen, 2004). Because of this, the patients may have impairments in both the regulation of their own affect and in recognising other emotions, as well as in representing other people’s affective mental states.

**Implications for clinical practice**

BBAT might be an effective intervention in patients suffering from fibromyalgia in relation to pain, movement quality and anxiety, due to BBAT should be include in the care services as BBAT.
‘Walk This Way’: results from a pilot randomised controlled trial of a health coaching intervention to reduce sedentary behaviour and increase physical activity in people with serious mental illness

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Background

Cardiovascular disease (CVD) is the leading cause of premature death among people with severe mental illness (SMI). Sedentary behaviour (SB) is an independent risk factor for CVD and mortality and recent research has demonstrated this population spend almost 13 hours a day being sedentary. We developed a health coaching intervention called ‘Walk this Way’ aiming to reducing sedentary behaviour and increasing physical activity in people with SMI.

Methods/Design

We conducted a feasibility randomised controlled trial over 17 weeks and recruited 40 People with SMI across three community mental health teams, who were randomised into the WTW intervention or treatment as usual. The WTW intervention consisted of an initial education session, fortnightly coaching, provision of mHealth devices and access to a weekly walking group. Objective SB and physical activity (PA) were captured with accelerometers, a range of physical and other wellbeing measures were collected.

Results

We recruited 40 people to the study and followed up 32 (80%). In total 65% and 80% people completed the intervention and control arms respectively. In addition, a reduction in objective sedentary behaviour and increase in physical activity was observed in the intervention group in comparison to the control group. Overall, participants in the intervention found the intervention helpful and acceptable.

Discussion

In the first RCT focussing on reducing SB, our preliminary results suggest that the intervention was effective in reducing behaviours and increasing moderate and overall PA. A larger study is needed to assess the effectiveness of the intervention and to assess the implementation challenges.
Predictors of hospital admission due to falls and fractures in people with schizophrenia spectrum disorder: a large representative cohort study


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Aim

People with schizophrenia have poor bone health and may be at increased risk of fractures. However, a paucity of information is available on falls and fractures in people with schizophrenia spectrum disorders. The aim of this study was to investigate predictors of falls/fractures leading to hospitalisation and associated length of hospital stay in people with schizophrenia-spectrum.

Methods

A longitudinal cohort study among people with schizophrenia-spectrum (ICD F20-29) from 01/2006-12/2012 was conducted using data from the South London and Maudsley NHS Foundation Trust and Biomedical Research Centre Case Register. Falls and fractures data were extracted from data linkages to hospital episode statistics. Multivariate cox-proportional regression analyses adjusting for confounders were employed to identify predictors of falls and fractures.

Results

From 11,174 people with schizophrenia-spectrum, 579 and 528 individuals were admitted to a hospital due to a fall and fracture respectively (9.4%) over 6 years. Mean length of hospital admission due to falls and fractures was 5.65 days (0-216, total=6,270) and 9.15 days (0-260, total=10,668) respectively. The presentation will consider a comprehensive overview of the predictors of falls and fractures in this large cohort of people with schizophrenia-spectrum disorders to inform clinical practice.

Conclusion

People with schizophrenia-spectrum disorder appear at greatly increased risk of falls and fractures requiring hospitalisation. Given the poor bone health and increased risk of falls/fractures and absence of evidence, future interventions targeting bone health and falls/fractures are indicated.
Sleep: Physiological Stages with Tremendous Influences on our Psyche

Staub Cristina¹.

Background
At least one third of the population has sleep problems. The consequences of nonrestorative sleep on physical and mental health are well documented. Sleep impairments provoke an increased risk for immunodeficiency and cardiovascular diseases, for problems in breathing and weight, for neurologic pathologies and type 2 diabetes, for chronic pain and functional disability, for fatigue and accidents, and last but not least for psychological disorders. Many factors are influencing each other, there exist many vicious circles (Siegsukon et al., 2017; Staub, 2017). Sleeping pills and mental medication can worsen sleep quality as well as mental health (Kripke, 2016).

Methods
Three case studies of psychological patients will be presented: (1) insomnia and suicidal schizophrenia, (2) positional obstructive sleep apnea syndrome and depression, (3) disorder of the sleep-wake schedule and alcohol addiction. The patients are treated by behavior therapy (including sleep hygiene and relaxation skills), sleep position adaptations, and physical activities. These examples illustrate some possibilities of physiotherapeutic practice.

Results
Physiotherapeutic treatment resulted in health improvements in all 3 patients: Their physical and mental health improved (enhanced sleep quality, improved breathing, psychological stability) measured by quality, quantity and regularity of sleep, Apnea-Hypopnea Index (AHI), Insomnia Severity Index (ISI), Modified Scale for Suicide Ideation (MSSI), Beck’s Depression Inventory (BDI-II) and amount of substance use.

Discussion
Sleep impairments are seen as precursors of different disorders, often exacerbate the psychological problems, and need to be treated to improve health. Sleep consists of different physiological stages which can be influenced by physiological/physiotherapeutic treatments. Physiotherapy offers a variety of options to ameliorate sleep quality.

Implications for clinical practice
Sleep is often neglected by healthy persons, patients, and medical staff. However, many patients benefit from an integration of sleep therapy.

Funding
Private

References

Funding: Western Norway University of Applied Sciences, Bergen, Norway

general questions as well as specific questions related to the topic. Furthermore, qualitative information was gathered by using verbal interviews with the student group.

Results

In total 221 students took part in the course. General evaluation score was 8.0 on a 1-10 scale (range 7.0-9.1). Positive items were the interaction with real patient during a one day internship, passionate lecturers, integration of theory and practice during clinical reasoning and de theme-oriented structure of the course. The students experienced a greater understanding of behavior, physiology and clinical reasoning strategies during (major) internship.

Negative feedback was given on transparency of examination and organization aspects as schedule.

Discussion/ Implications for (clinical) practice

What we experience during our work with students and what do we want impact we want to achieve in their work as a physical therapist. For our students, seeing and experiencing the real patients, and physiological approach of the topic, made the topic very appealing to our students. Although a psychological explanatory model is considered valid in clinical psychosomatic physiotherapy, specific attention to physiology of diagnostics and treatment in psychosomatics is advised, to match the students’ preferences, and finally deliver better physical therapists.

Furthermore I would like to discuss with the audience the option of working together at bachelor level. We are thinking about building an international summerschool about psychosomatics.

Funding: none
The Master of Physiotherapy in Basic Body Awareness Methodology. An International post-graduate study programme of Physiotherapy in Mental Health

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This Master program, 60 ECTS, is held at the University of Almeria (Spain). It is the development of the previous postgraduate education for physiotherapists in Basic Body Awareness Methodology (BBAM) that began in 2003 at Bergen University College (Norway) and was completed by more than 100 physiotherapists from 20 countries. This clinical master program provides tools for physiotherapists to face the challenges of our society such as long-lasting musculoskeletal disorders and mental health problems which are current leading causes of disability. To obtain a positive treatment outcome, it is important for physiotherapists to understand how life experiences and diseases can foster lack of contact with the body, expressed in human movement and function. With these regards, this university program is developed from the clinical hypothesis of the three-fold contact problem, the person’s lack of contact with the physical body, inner life, external environment and in the relation to other persons. In this education, physiotherapists learn movement co-ordinations mirroring everyday life, lying, sitting, standing, walking, relational movements, use of the voice and massage (touch) aiming to improve movement quality and human being, bridging the therapy situation with the persons’ everyday life and needs. The structure of the Master builds on three important educational and therapeutic principles all from the view of human movement, movement quality and movement awareness learning: 1) person centered, 2) health directed and 3) process oriented. The program qualifies the physiotherapist in the body – and movement awareness learning program, re-establishing contact with the body, movement quality, movement habits and ways of being, enhancing personal insight and coping strategies. This education involves the student and patient, providing practical skills and insight for professional and/or personal use. Our goal, when creating this university program, was to develop an educational program for mental health physiotherapists in need of professional skills, treating persons suffering from long-lasting muscle-skeletal and mental health problems, psychiatric disorders and psychosomatic problems. The goal was also to strengthen the physiotherapists’ identity, both from the professional and personal perspectives. The Master of Physiotherapy in BBAM is given during one year combining online courses with on-campus intensive practical teaching during three blocks of 2, 2 and 1 week each. The BBAM education has reached a high international reputation and it has received a high recognition and support by many national physiotherapy associations and universities.
**Physical Therapy in Mental Health: a flexible master of science education program**

Linda Slootweg

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Title: Physical Therapy in Mental Health: a flexible master of science education program

Author: Linda Slootweg, MSc. Head of the master Physical Therapy in Mental Health, University of Applied Sciences, Utrecht.

Abstract:

Physical therapy in mental health (PTMH) is a growing expertise in global health care. In the Netherlands the University of Applied Sciences in Utrecht is the only institution that has a master program in PTMH. It started in 2006 with a 3 year part-time Master of Profession degree. In 2014 the educational level was upgraded to Master of Science. In the Netherlands the majority of PTMH is working in primary care. There is a close collaboration with the other physical therapy masters in Utrecht, even to that extend that the first year is generic.

At the University of Applied Sciences in Utrecht we constantly aim to improve the educational system and environment. In early 2016 the PTMH master program was rewritten into learning outcomes (instead of learning goals) and a more flexible program was introduced. We also invested in a computer based blended learning system to support the learning outcome based education. Both the flexible master program as the blended learning were evaluated.

Methods:

Focus groups were assembled and asked to redefine the curriculum, changing it into learning outcomes and introduce flexible education. The new curriculum was then evaluated by both the tutors and the students.

Results:

The flexible 3 year part-time master program in PTMH contains both recent developments in the field as well as a sound academic education. Students appreciate the flexibility in learning pace and way of learning. Tutors experience more quality teaching time because the blended learning environment offers the possibility to view the lectures at home and use the actual teaching time for practical lessons or discussion.

Discussion:

The PTMH master program seems to be a success. However, there are also still a few goals to achieve. We would like to have a more international program. At this moment both language and program organization stands in the way. We would like to discuss how other countries have dealt with it. Second, we would like to exchange more knowledge between different
PTMH educational institutions around the world. By combining experiences we can enhance global education in PTMH.

Funding: -