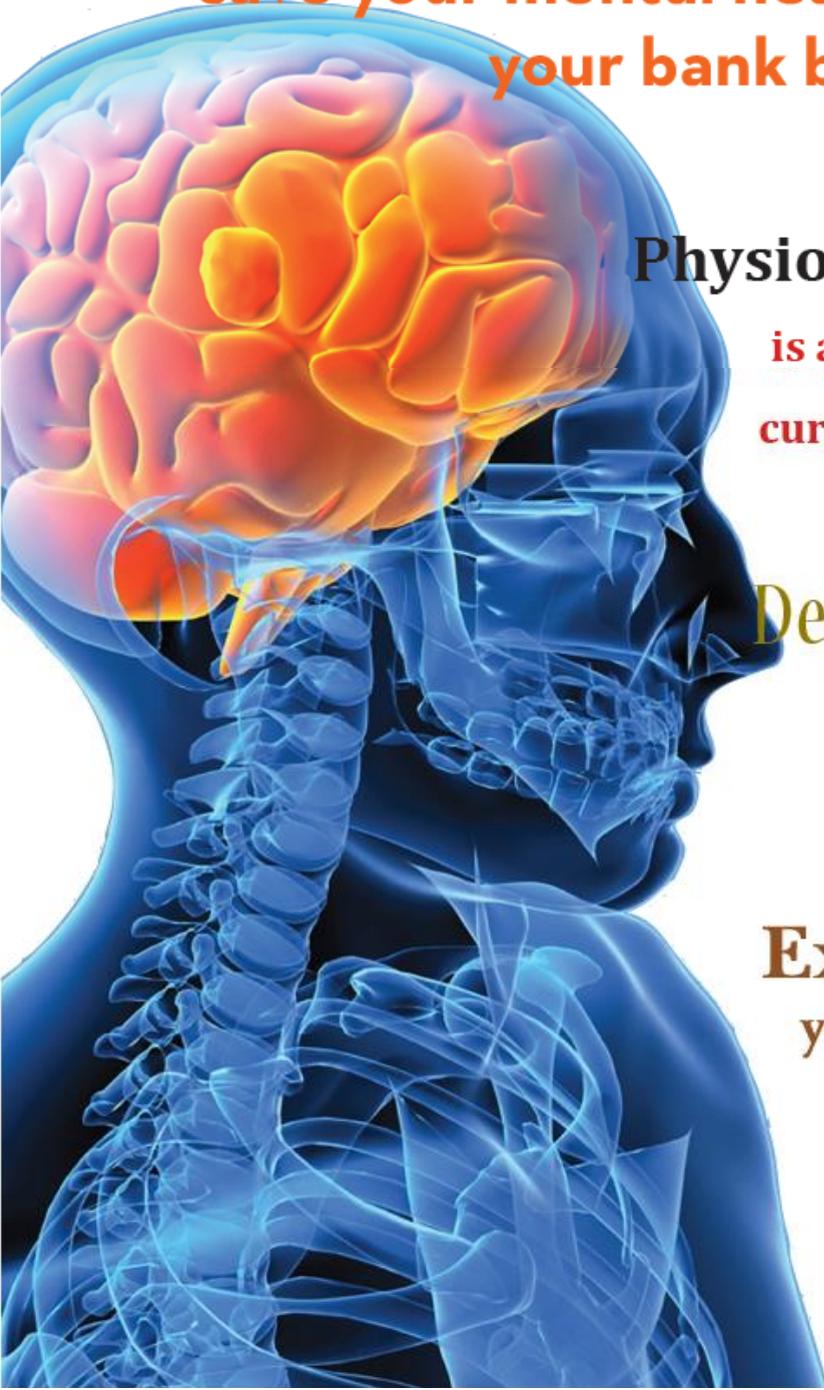


# Mental Health & Physiotherapy

Magazine

Could your local physiotherapist  
save your mental health, and  
your bank balance?



**Physiotherapy**

is a demand of  
current society

**Depression**

can affect your  
body posture

**Exercise**  
your brain  
healthy

6<sup>th</sup> ICPPMH



**Mental Health &  
Physiotherapy Magazine**  
Number 1 · Year 2016



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Dr. Daniel Catalan-Matamoros  
President of the Spanish Association  
of Physiotherapists in Mental Health

## Welcome to the new “Mental Health & Physiotherapy Magazine”

We are proud to announce the new “Mental Health & Physiotherapy Magazine”. This is a very important step in the field of Mental Health Physiotherapy, a well-established research and clinical specialty especially in Western and Northern Europe, which is rapidly emerging in some other areas of the Globe such as America, Asia, and Africa. The magazine includes news, latest developments and interviews to specialists in Mental Health Physiotherapy around the World. The Magazine shows how in the field of Mental Health Physiotherapy there are different perspectives, different approaches and different methodologies sharing the same goal: improving the person’s quality of life, wellbeing and mental health through physiotherapy.

We are also privileged to announce this new “Mental Health & Physiotherapy Magazine” in the most important and unique scientific event in the field: the 6th International Conference of Physiotherapy in Psychiatry and Mental Health taking place in Madrid (Spain), 9 - 11 March, 2016.

During this event, about 210 experts from more than 30 countries around the World shared best practices and discussed how we can better improve mental health in society through physiotherapy.

This magazine aims to bridge the clinical/scientific community with society. After 10 years of scientific events from the first International Conference of Physiotherapy in Mental Health (Belgium, 2006), it is the right time to translate research into practice so the society get benefit from all these developments.

We have poured our hearts in the making of this volume. Special thanks to all journalists, graduated from the University Carlos III of Madrid, and all staff that worked hard in making this magazine a reality. All of us had the goal that this magazine will guide you on how to improve your mental health through physiotherapy. We wish you enjoy reading it!

“This magazine will guide you on how to improve your mental health through physiotherapy”.

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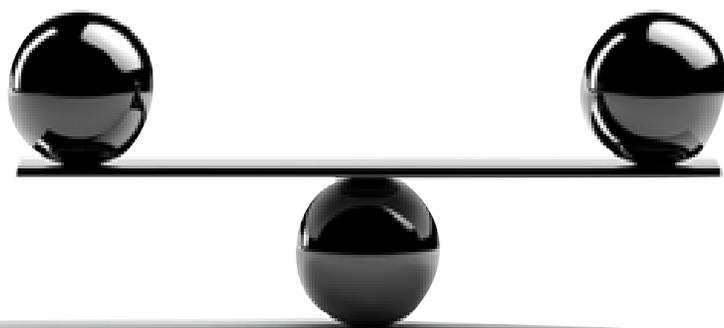
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## Could your local physiotherapist save your mental health, and your bank balance?

Harry Goldman

The contemporary move towards holistic health is becoming apparent in an array of social and scientific settings. The general public is always searching for a new method for spiritual enlightenment through a wonder diet combined with a two-minute exercise program. There is an underlying internal-dialogue between most people and themselves about achieving that perfect balance of physical and mental health. Scientists have been determined to create a balance between mental and physical health for the betterment of holistic health, yet failed to find a perfect solution. Previously, science has been unable to provide conclusive evidence or strategies to assist the general public on their quest for good mental and physical health, which has engendered a contemporary change of research tactics, and health treatment strategies. Due to the archaic separation of health and mental health within scientific research sectors, contemporary scientists and doctors have come together to gather information on how they can enhance each other's practices by treating both simultaneously. Research endeavours and international conferences on the integration of mental and physical health are currently underway in order to discover an improved treatment of health holistically.

Physiotherapy is an extremely effective physical health treatment industry, and physiotherapy interventions also have the propensity to improve mental health issues in patients using some simple psychiatric mental health treatment techniques. Health providers, and the educational sectors for health within Australia have begun to integrate psychiatric treatment into the effective physical treatment plans of physiotherapists. Joanne Connaughton from Australia is a physiotherapist who provides advice to physiotherapists and physiotherapy students on how to engage with the person with mental illness in order to provide physiotherapy treatment to improve their physical health problems thus improving the person's mental health. One of Associate Professor Connaughton's specific research areas is how the improved education of Australian physiotherapists working with people with mental health issues can enhance holistic health. Associate Professor Connaughton believes that research initiatives into the value of combining mental and physical health treatment are of the utmost importance for advancing holistic health in patients; "Research drives industry change. Therefore, research can highlight the importance of including physiotherapy in mental health services to health



providers and managers.” Associate Professor Connaughton highlights the significance of research not only for the ability to gather data and provide concrete conclusions, but to also engender change within the health industry itself. The flexibility of an industry to innovation is extremely critical to the effectiveness of an industry. If an industry is too rigid in its rules and structures, it will stay stagnant, and never improve its depth of treatment.

The science industry is providing its research into the effectiveness of treating mental and physical health simultaneously, and is attempting to deepen the understanding of the Australian health industry to how important good physical health is for mental health. By providing up to date research conclusions to health service providers, and their educational systems, the Australian Physiotherapy Council could improve the effective mental health strategies for practicing physiotherapists nationally. The introduction of mental health strategies in the education of practicing, and in-training physiotherapists will improve their ability to deal with mental health issues in their patients, and consequently improve the treatment of patients holistically. Associate Professor Connaughton supports this deepening of knowledge, yet still believes that physiotherapists already “understand that they (mental health issues) need to be considered along with the physical aspects of health in order to achieve a good outcome for the patient.” This outlines that if the health

providers of Australia highlight physiotherapy intervention has a positive impact on mental health issues, it will illustrate to both patients and physiotherapists that good mental health, and good physical health are intertwined. Moreover, by aligning physical and mental health treatment, the Australian health industry could alter pre-conceived social stereotypes of mental health issues as taboo, and significantly minimize the gap between the general public’s understanding of physical and mental health issues. If the Australian health industry can standardize health treatment as holistic through aiming to improve mental and physical health simultaneously, then holistic health treatment could become expected by Australian patients, and therefore the normalized depth of treatment for health providers. If the strengthening of knowledge on mental health issues for physiotherapists is enforced



Dr. Joanne  
Connaughton,  
physiotherapist  
specialist in  
Mental Health,  
Australia

it will reinforce the necessity of treating mental health and physical health simultaneously for physiotherapists, and the Australian health industry will emphasise physiotherapy as a catalyst for holistic health improvement within Australia.

The Australian educational system for aspiring physiotherapist is adapting to the holistic needs of their patients, and therefore is becoming extremely useful within the health industry. The improved efficiency of contemporary research projects on combining physiotherapy and mental health treatment has enriched the physiotherapy educational systems. Emphasizing to Australian physiotherapy educational facilities how important physical health is for mental health, and visa-versa, is vital to the improvement of holistic health treatment within Australia. If educators understand the importance of addressing physical health needs of people with mental health problems, then the health providers of Australia will have more incentive to drive organizational change for more effective patient treatment. Associate Professor Connaughton states that, "Research



has shown that physiotherapists working in general practice encounter clients/patients with comorbid mental health issues on a very regular basis, and I believe that as a profession we are well placed to address both the



## Physiotherapy interventions have the propensity to improve mental health

physical and mental health of our clients.” This highlights how prevalent mental health issues are for physiotherapists in general practice, and outlines the importance of recognizing the necessity to apply psychiatric strategies in to physiotherapy treatment. Associate Professor Connaughton has also poignantly outlined that physiotherapists have an obligation, as professionals, to not disregard the mental health issues of their patients. However, to actually treat people with mental health issues effectively, physiotherapists must both alter their analysis of their patients so as to evaluate both physical and mental health issues, and incorporate effective psychiatric strategies to engage with the person. The educational facilities of Australia must continue to integrate mental health treatment training in to their physiotherapy course structures, and ensure that students and practicing physiotherapists get a wide, and deep knowledge of mental health. By deepening the knowledge and understanding of Australian physiotherapists on the successful approaches to improving mental health issues in patients, Australian health providers will increase their effectiveness in treating patients of all varieties due to the skills they have

integrated in to their systems of treatment.

The complexity of mental health issues makes treatment extremely difficult due to the inherent subjectivity of each case and patient. Physiotherapists may be equipped to recognise and accommodate common mental health issues but their ability to treat people with unusual, or severe mental health issues may be hampered by the nature of the general psychiatric education provided through the modern educational systems. Individuals within the health industry, such as Associate Professor Connaughton, have been focusing some of their research on specific fields of mental health so as to apply their prior knowledge and skills to improve the ability of physiotherapists to treat extraordinary patients. One of Associate Professor Connaughton research areas is headaches in individuals with schizophrenia and schizo-affective disorder. Her research delves into prevalence, characteristics, impact and management of headache in this population. The research has identified that physiotherapists are not involved in the management of Cervicogenic or Tension Type headaches in this population despite evidence to support the efficacy of physiotherapy for the management of these specific headache types. Associate Professor Connaughton believes that “many other (health) professionals do not understand that we (physiotherapists) are indeed holistic practitioners, and therefore do not believe that physiotherapists





are the profession of choice to work with clients with mental health issues meaning that many patients, like those with headache, are missing out on best practice treatment". Associate Professor Connaughton's sentiments illustrate that the Australian physiotherapy industry needs to endorse itself as a reliable mental health treatment service, and I believe that this will come with its ability to educate physiotherapists with particular physical, and mental specifications.

Therefore, further specific research into how physiotherapy intervention can impact not only on the physical health but can also help mental health irregularities is essential for the physiotherapy industry to become trusted as a mental health practitioner. The confidence of physiotherapists to treat people with irregular mental health issues will only occur when general knowledge is expanded, and specific understanding is deepened. If specified mental health practitioners begin to utilise physiotherapists as an added effective treatment method, it could stimulate greater communication and cohesion between the two industries; and consequently outline to the Australian health industry that physiotherapists have the propensity to treat patients holistically. If the Australian health industry is confident that the Australian physiotherapy industry can confidently treat people with both specific and general mental health issues, it will advocate and promote physiotherapy as a service for holistic health improvement.

The Australian physiotherapy industry is promoted as a profession that addresses many physical health issues but physiotherapists are not recognised as professionals who work

### Physiotherapists have the propensity to treat patients holistically

with people with mental health problems. This is extremely unfortunate for the health industry in Australia because it has minimized the possibility of physiotherapists to apply their knowledge of holistic health treatment to Australian patients, and diminished communication between the varied health providers due to the normalized divide between physical and mental treatment. However, as research continues into the effectiveness of physiotherapy treatment for mental health improvement, the contemporary stereotype of separating mental and physical health is shifting. Holistic health improvement of patients will always be the physiotherapists end goal, it is whether it can adapt its education facilities to incorporate effective psychiatric treatment strategies, and promote itself as a reputable mental health treatment facility in the eyes of the public, other health providers, and the Australian health industry. ■



# The 6th International Conference of Physiotherapy in Psychiatry and Mental Health

Madrid (Spain), 9-11 March 2016



The biggest ever scientific event in the field of Physiotherapy in Mental Health

The Conference was organised by the University Carlos III of Madrid and the International Organization of Physical Therapists in Mental Health, the official subgroup of the World Confederation of Physical Therapy. The event addressed innovative and effective strategies to address today's complex health challenges such as mental health, long-lasting musculoskeletal disorders, chronic pain, psychosomatics, etc. For the 6th Conference, we selected the theme Communication in a connected World. This theme reflects on the digital world in our current society where communication is now spread out throughout every aspect of healthcare, enabling greater data sharing for both patients and health professionals, which is in turn empowering health settings. The Conference brought together around 200 specialists from more than 30 countries and 6 continents! This has been the biggest ever scientific event in the field of Physiotherapy in Mental Health. More information about the Conference at: [http://icppmh.org/madrid\\_home.html](http://icppmh.org/madrid_home.html)

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- Turkey Associate Professor Hamiyet Yuce

Conference venue: Hotel Tryp Atocha, Madrid



# The physiotherapy is a demand of current society

Petra DVORÁKOVÁ



We live in fast and stressful time, which has a bad impact on our bodies and mental health. The solution might be physiotherapy, field with long tradition especially in Eastern Asia, which considers not just knowledge from medicine, but also natural sources of energy and influence of the complete life style. The physiotherapist Norma Elisa Gálvez Olvera from Ciudad de Mexico

works at Universidad del Valle de México and gives the consultations at private hospital. She is taking a part at the conferences about the mental health and physiotherapy all over the world so she can compare the situation in her home country and in Europe. Do Mexicans live healthier then us? And what are the biggest mistakes of current society's lifestyle?

## Interview with Ms Norma Elisa Gálvez Olvera, Mexico

**Why have you chosen the field of physiotherapy and mental health instead of classical medicine?**

I have always believed in dealing with people, not with a knee or shoulder. We cannot ignore the psychological and social aspects of our patients, because if they have a personal problem, it can affect them physically and increase their pain.

The current way of life causes more mental illness

**Which method from physiotherapy do you use the most?**

The physiotherapy is usually multimodal, but what I use is more exercise based, since almost all of my patients have limited mobility or pain. In future I would like to use also different artistic techniques such as painting, dancing or dance therapy either as forms of expression or release of emotions or feelings or to increase body awareness.

**What is the difference in the perception of these practices by the old and young generation? It is becoming trendy nowadays?**

I think that physiotherapy has evolved rapidly in recent years, created new techniques and methods, like electrotherapy equipment, different schools of movement. Physiotherapists are more experienced. New generations learn these techniques at the university, but there are others method-

ologies such like basic body awareness that is not included in the curriculum, only as an optional subject in some countries as Denmark and Norway. At the same time new approaches to are getting included, not just treating skeletal muscle abnormalities, as it has been done traditionally, it is getting more interdisciplinary. It means more than just fashion, it is

a demand due to the needs of the population. The incidence of mental problems such as depression, eating disorders, aging, metabolic illness like diabetes and obesity is increasing.

**Can you compare the physiotherapy in Mexico and Europe in general? Which has the longer tradition, where is it used more? Why?**

Europe has more economic resources to Mexico. In Mexico if a physiotherapist wants to have a good preparation he has to invest his own resources to follow updates. In

terms of working in government institutions, there is an opportunity to enroll in continuing education courses. On the other hand, due to high demand in these centers, treatments may not be of high quality, because the time for therapy is limited. Europe is one step ahead trying to anticipate health problems, making effort to provide preventive treatments. On the other hand this tradition goes back to prehistoric times. Not as much as physiotherapy, physical therapy or kinesiology, but as shamans, healers or bone-setters and masseurs. From this point of view, my country has a long tradition since pre-Columbian times to the present. For us, the trained physiotherapists are responsible for raising science, all this knowledge accumulated through the ages and create new techniques and methodologies.

**How do you perceive the current society and its lifestyle? Is it getting worst?**

People live with a lot stress, because of social problems such as a lack of resources, limited access to education, rising unemployment, insecurity, individualism, lack of otherness. That leaves young



Ms Norma Elisa Gálvez Olvera, physiotherapist specialist in Mental Health, Mexico

## Physiotherapy has evolved rapidly in recent years, created new techniques and methods

people live with great despair. Modern lifestyle is unhealthy because people have very demanding work schedules, poor diet and no exercise, which does not contribute to maintain health. The young people lose their physical capacities, they work hard and want to have fun, but give little opportunity to allow their bodies to recover, while having an unhealthy diet. Adults live at a rapid pace, which causes a lot of stress. I think we have lost many family and social values, we live in a consumer society where what matters is what you have, rather than who you are.

**What do you think about the mental health of the current society? Do we suffer more mental diseases than before? Why? How can we prevent from mental diseases?**

I think the current way of life causes more mental illness through social conditions such as overcrowding, violence, drug abuse, stress, poverty, environment. I think these illnesses could be avoided through better allocation of human and material resources as well as the strengthening of family and moral values in a society supported by ethical principles that promote good health.

**Can you see the differences between mental health and diseases in Mexico and Europe?**

An important one may be cultural. Many people in Mexico

and Latin American countries seek treatment from healers, shamans and sorcerers, who speak with the patient, which has a psychotherapeutic effect while using herbs and rituals to heal. In Europe there is more heterogeneity, so it makes it difficult to say. With the current problem of immigration, I think in the future there will be many psychiatric problems, while in Mexico, the current situation of insecurity, poverty and drug trafficking also make these disorders increasing. Regarding to the perception of mental diseases in European countries education supports a person with depression or anxiety more.

**Can you see the differences in lifestyle of Europeans and Mexicans? Who live more healthy?**

The middle class has a similar way of living with access to education and healthcare, but the working classes in Mexico, which is the majority has less support from the government

and has to work harder for less money. It has a determining effect on the lifestyle. On the other hand Mexicans have traditionally increased family or social contact to reduce anxiety or depressions. The weather in Mexico is also favorable. In countries of northern Europe where are just few days of sun people are more prone to get depressed. In Europe the diet is healthier while obesity has increased in Mexico in recent years causing many health problems. Based on this, I think Europeans live healthier.

**You took part also at the conference about mindfulness, which is connected to buddhism. What do you think about buddhism and other Eastern Asia religions and cultures?**

I think mindfulness is a way to have body awareness, now neuroscientists are searching and checking its positive effect on health. Buddhism is a style of life, not only a religion. For several decades, western countries have looked at different oriental techniques or traditions as different massage techniques or movement, such as tai-chi, but I think the most important thing is that the health system in those countries try to promote good health through exercise like yoga or Tai-chi and a healthy diet. Meditation is a practice that helps to release stress and can provide several benefits to body and mind. ■

In Mexico, the current situation of insecurity, poverty and drug trafficking also make these disorders increasing



## It does not matter if you eat or do not eat sheeps But do not behave like sheeps

Petra DVORÁKOVÁ

Although we cannot change our genetic makeup or the environment we are growing up in, we can make changes to our lifestyle. That is the factor which influences our health the most – from more than 50 percents. So called diseases of civilization such as cardiovascular disorders or obesity are said to be avoidable in 80 percent of cases and they mean big ballast not just from healthy point of view but also from economical point of view. “The current way of life causes more mental illness through social conditions such as overcrowding, violence, drug abuse, stress, poverty, environment. These illnesses could be avoided through better allocation of human and material resources as well as the strengthening of family and moral values in a society supported by ethical principles that promote good health,” claims Mrs. Olvera.

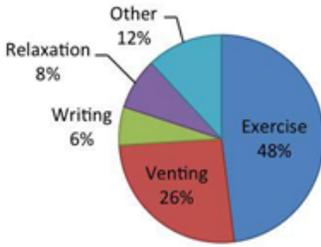
Mentioning the role of family and moral values, which started to be king of forgotten, purpots a lot. Somebody thinks that if he will eat healthily and make exercise regularly, he is okay. But especially for our mental health the healthy socialization could not become overlooked. All

kind of our relationships are being reflected into the condition of our mind – lonely people incline much more often to psychical diseases such as anxiety or depressions more than the sociable ones. Japanese scientists are inventing bizarre solutions such as plush robots, whereas there is more than 7 billion of human beings. Some people also claim that engagement to the volunteering altruistic projects helped them to feel much better.

Nowadays the mental diseases are the sixth most world spread illnesses and their occurrence is getting higher and higher. The bi-polar disorder entails one of the most common reasons of invalidity. In 2010 each tenth American citizen had an experience with taking antidepressants. “With the current problem of immigration, I think in the future there will be many psychiatric problems,” warns Olvera.

People slowly start to react. There are individualists or whole group who are inclining to alternative ways of living and who are getting distanced from the conventional values of the society. For example the culture of Eastern

## What is your preferred method of dealing with stress?



Source: vividpupil.wordpress.com

Although we cannot change our genetic makeup or the environment we are growing up in, we can make changes to our lifestyle

Europe is becoming trendy. I think mindfulness is a way to have body awareness, now neuroscientists are searching and checking its positive effect on health. Buddhism is a style of life, not only a religion. "The most important thing is the health system in those countries try to promote good health through exercise like yoga or Tai-chi and a healthy diet," compares the lifestyle of east and west the physiotherapist. Carnegie Mellon University found out that 25 minutes of mindfulness meditation in row can reduce stress.

The people surrounding us are not influencing just our social life, but our life style in general. "People are like wolves, they want to work in groups. Most people just don't think about what they really want and they just follow society. Until I met vegans I didn't think about the way I eat neither," explains Fernando the most important point of view. Although there are some general ideas about what the healthy life style means, we should stop and think for a while. Our body is often sending us signals. Each of us is unique. However we decide, we should listen to our body and decide on our own. ■

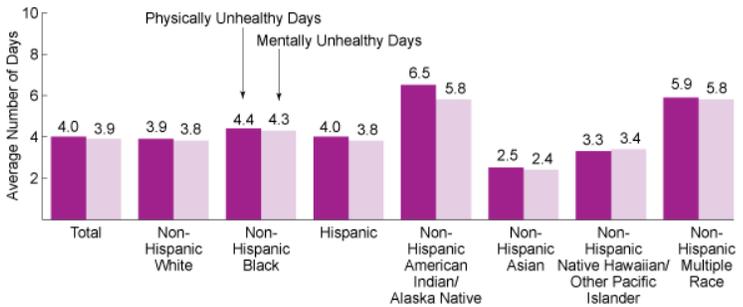
Significant movements are significantly raising up also the area of diet. Not just the aspects of health but also of ethic are getting important in the eyes of people. The debate about helpfulness of vegetarianism, veganism or raw diet are being held. "I do not like this labels. I just choose what I want to eat as you do. There are people who do not eat tomatoes and we do not call them non-tomatoes eaters," laughs vegan Alvaro claiming that he had better results at doctor than two years after he started to refuse all animal products. Even though punk evokes image of cheap beer and drugs sometimes, among punk community there is a movement Straight Edge and the members of it do not reject just animal products but all drugs such as alcohol or cigarettes.



Ms Norma Elisa Gálvez Olvera, physiotherapist specialist in Mental Health, Mexico

Nowadays the mental diseases are the sixth most world spread illnesses and their occurrence is getting higher and higher

Average Number of Physically and Mentally Unhealthy Days\* in Past Month Among Women Aged 18 and Older, by Race/Ethnicity, 2007–2009



\*Self-reported number of days in past 30 days that physical or mental health were not good.

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey, 2007–2009. Analysis conducted by the Maternal and Child Health Information Resource Center.

# Depression can affect your Body Posture

A Brazilian researcher suggests that patients with depression have a recognizable appearance and body posture

Thaís Freitas do Vale



Publicado em <http://hypescience.com/dica-depressao/>

They can be characterized by sad facial expression, furrowed brow, curved shoulders and a lack of spontaneous body movements. The results indicate the treatment of this psychiatric disease should consider body aspects and not only the psychologic ones.

The research was developed in a Public Hospital in Brazil by doctors of the Faculty of Medicine and Institute of Psychology, both in University of São Paulo. The objective was to quantify posture and body image in patients with major depressive disorder. They analyzed the

depressive episodes and the changes after drug treatment, comparing the results with data of healthy volunteers.

Over a 10-week period, we evaluated 34 individuals with Major Depressive Disorder (MDD) and 37 healthy volunteers, from 20 to 50 years of. The first group had the diagnosis of MDD made in accordance with the Diagnostic and

Dr. Janette Canales, physiotherapist specialist in Mental Health, Brazil



Statistical Manual of Mental Disorders (Fourth Edition). They were receiving care at the Mood Disorders Unit of the Psychiatry Institute of the Universidade de São Paulo Hospital das Clínicas, a public hospital located in the city of São Paulo, Brazil.

To study the posture, pictures were taken on orthostatic position (sagittal and frontal planes). Then, the photos were imported to CorelDRAW and were enlarged to identify the reference points. They analyzed the position of the head, shoulder, knee, scapula and Ankle, besides the thoracic kyphosis and lumbar lordosis.

The height and weight were measured before the images were taken, and the body mass index (BMI) was calculated. To evaluate the body image they used a Body Shape Questionnaire considering affective, cognitive and behavioral aspects. They attributed points according to these categories: 0-80 = no dissatisfaction; 81-110 = mild dissatisfaction; 111-139 = moderate dissatisfaction; and 140 or more = strong dissatisfaction.

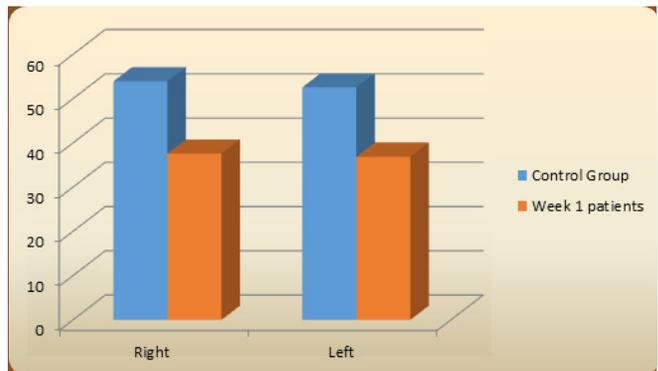
*“When an individual is unable to express their feelings using their face, posture becomes an ideal vehicle for bodily expression and is an important diagnostic tool in therapeutic practice”.*

Dr. Caneles

Postural Variable		Group Control	Week 1
Head Position (°)	Right	53,92	37,56
	Left	52,57	36,88
Shoulder Position (cm)	Right	2,04	1,79
	Left	2,02	1,79

The assessment of body posture can be made in the first interview, which is observed both mental and physical aspects. Considering this, lots of information were compared. This is the data of patients in week 1 and the people from group control:

The following graphic compares the data of Head Position (°) between the patients in week 1 and the people from group control:



As the information demonstrates, the patients with MDD have great differences compared with the control group. The researches could identify that during the depressive episodes there are measurable changes in the posture of individuals with MDD. Such changes included significant increases in head flexion and thoracic kyphosis, for example, which is a problem because all of the changes interfere on the proper functioning of the skeletal muscles.

*“The ideal alignment in the vertical posture allows the body to maintain its balance with a minimum expense of energy. By analogy, bad (or abnormal) posture means the defective relation among the multiple parts of the body” (Extract from the article Posture and body image in individuals with major depressive disorder: a controlled study)*

The research was developed in a Public Hospital in Brazil

Dr. Janette Zamudio Canales, from the Institute and Department of Psychiatry of Medical School in Universidade of São Paulo (FMUSP), is one of the integrants of the research. She explains that psychiatric disorders can directly affect the body image, because they interfere on perception the patient has of himself. Diseases such as Disorder Body Dysmorphic, Anorexia and Bulimia can lead to irrational concerns about defects in some part of your body (eg nose crooked, misaligned eyes, skin imperfections).

This is importante because posture and body image are closely related, once body image determines differences and plasticity of the postural organization. According to the research, we are continuously remodeling the posture due to constant changes in position, tactile and visual perceptions force: "Body image is defined as the mental perception of the size, contour and shape of our bodies, as well as our feelings related to those characteristics and to the parts that constitute our body. Therefore, body image has two major components: a perception component, related to the self-estimated body size, and an attitude component, related to affect and cognition. Body image disturbances are seen in neurological and psychiatric disorders". (Extrat from the article Posture and body image in individuals with major depressive disorder: a controlled study)

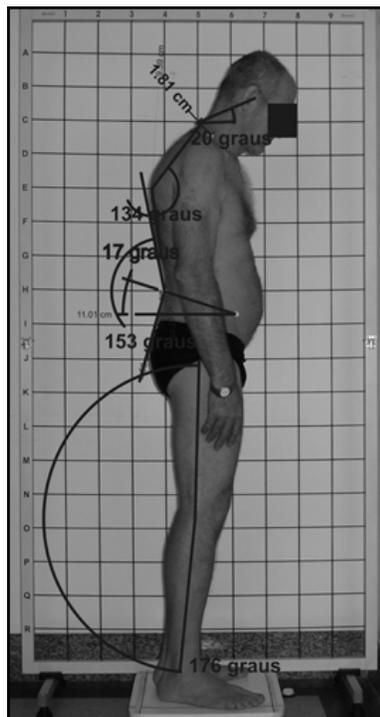
Dr Canales explains, "this distorted perception can be totally false (imaginary) or be based on subtle appearance changes, resulting in an over-reaction about, with important losses in personal, family,

social and occupational functioning. It affects more frequently females and usually begins in adolescence. Dissatisfaction with body image seems to be more related to emotional disturbance".

The process includes Depression, a mental illness which changes on cognitive and affective processes of development. The disease can result in disruption of the reasoning, behavior, understanding of reality and adaptation to the conditions of life, causing physical and somatic symptoms in the patient. Specifically about the body posture, Dr. Canales explains that there are different factors that might influence the posture of the person. They can be in intrinsic, such as heredity and emotional factors, or extrinsic, such as the environment, physical conditions in which the subject lives and socioeconomic level.

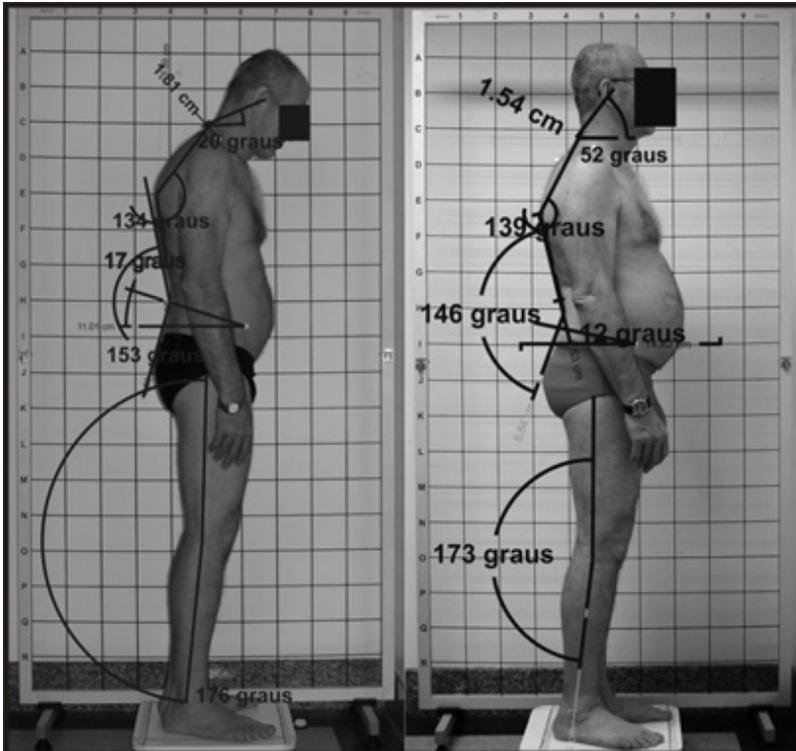
*"When an individual is unable to express feelings using their face, posture becomes an ideal vehicle for bodily expression and is an important diagnostic tool in therapeutic practice. Therefore, psychiatric disorders directly affect posture, by altering the individual as a whole. With regard to body image studies show that the body image formed in the mind of the individual and is closely linked to body posture".*

(Dr. Canales)



Patient in depressive episode

During remission, these aspects improved, as the graphics below demonstrate. The alterations are positive because have consequences on aspect such as pain, tension and shortness



Patient with depressive episode and after treatment

of breath. These symptoms, often part of the spectrum observed in MDD, characterize a “depressive posture.”

During the 10 weeks of the research, the treatment was pharmacotherapy. After that period, the postural variables in the MDD group of the week 1 was compared with weeks 8-10, and important differences were verified, specially about the head position (they compared the angle) and the shoulder position (measured in centimeters)

The results pointed out that after the treatment the patients tended to show results more similar to the data of the control group than to their previous information. In this study the quality of life has not been evaluated, but Dr. Canales says the questionnaire used to evaluate the severity of depression demonstrated that the

following medical treatment for remission of symptoms and therefore improved quality of life.

One of the reasons that can explain the results is that the position and relative arrangement of the body parts have an ideal alignment in the vertical posture, which allows the body to maintain its balance with a minimum expense of energy. Considering this, it's possible to say that the bad or abnormal posture cause defective relation among the multiple parts of the body. According to the research, postural problems typically generate higher tension over the supporting structures which constitute the musculoskeletal system.

Even though depression can cause some changes on it, t's not the only reason, being influenced also by: mechanical and emotional aspects; heredity and race; flexibility; muscle strength; vision; and habits. The research also points out that, feelings of excitation, confidence and satisfaction manifest as an alert attitude and erect posture, whereas depression typically manifests as a slouching posture. ■

During the depressive episodes there are measurable changes in the posture

# High Failure Rate in Treating Anorexia Nervosa

Daniele Iannarone



A purely psychological disorder, Anorexia Nervosa can have lasting effects on some individuals. In fact, over a third of the people effected by the disorder have the disease become chronic and have serious difficulty recovering from it, if they ever recover from it at all. Despite the low treatment rate, however, there is hope that Anorexia Nervosa will one day become more treatable and maybe even cease being a problem.

According to a well-known physiotherapist and eating-disorder expert, Anorexia is difficult to treat. Professor Michel Probst of Belgium's University of Leuven admits that treating the disorder is difficult and is contingent on the willingness of the patient. "The point of a treatment is to try to change because the majority of patients at the beginning will try to deny the problem," he says. "They will say 'OK I'm normal, there's nothing wrong with me, I'm not sick.' And that's the reason why we have to, first of all, motivate the patients

for a treatment, and normally most of them have a sort of phase of denial."

Anorexia Nervosa is an eating disorder involving people's perception of their own body. As Probst writes in his article from 2013, *Advances in Eating Disorders: Theory, Research and Practice*, people with Anorexia Nervosa have a distorted body image that causes them to see themselves as overweight even when they're dangerously thin. "Both body weight and shape are typically distorted," he writes. "Persons suffering from an eating disorder often evaluate their body structure, their size, or certain body parts in an unrealistic manner. Even when clearly underweight, some patients experience their appearance as normal or even overweight." Probst goes on to say that regardless of weight loss, many patients will continue to see themselves as too fat and will continue to try and lose even more weight.

Professor Michel Probst, President of the International Organization of Physical Therapy in Mental Health



Though Anorexia Nervosa is stemmed from one's misperception of their own body weight, it can be provoked by many factors. As Probst explains, Anorexia Nervosa stems from a negative self-image and one's dissatisfaction with their body. This negative self-image may also be due to cultural factors, such as the media's or the general population's portrayal of a 'perfect body,' which most people do not have.

Once a patient becomes anorexic, the disease is sustained through 'maintaining factors,' which are symptoms that the patient sees as a positive influence. The most notable example of a maintaining factor would be the so-called 'sick-role,' and this is important because, as Probst explains, "when you are in a role of illness a lot of persons, you don't need to take responsibility, you don't need to do your work, a lot of people are concerned about you, and that's, of course, a positive influence."

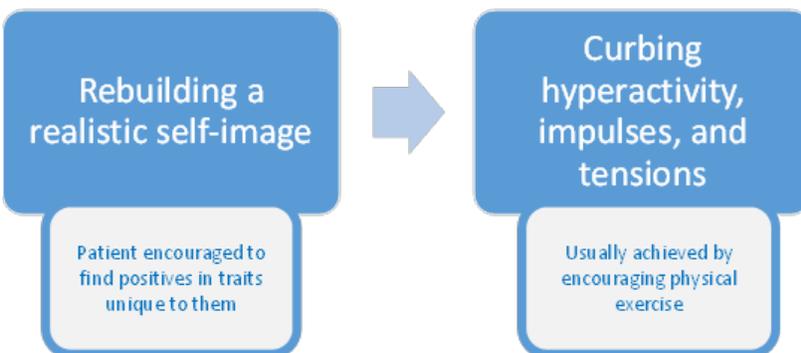
According to Professor Probst, physiotherapy as an adjunctive therapy represents a potent

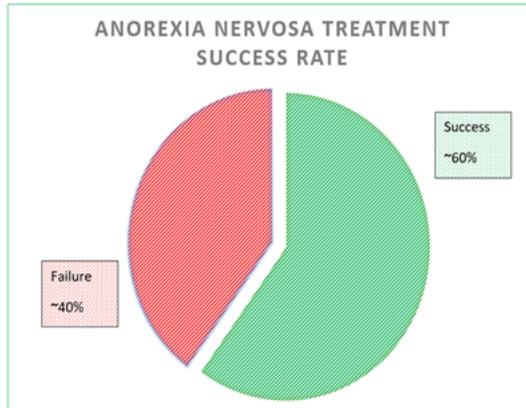
clinical addition to the regular eating disorder treatment. Physiotherapy can help patients better understanding and feeling their bodies, improving body image, and boosting confidence. In his paper, he cites two main objectives of physiotherapy: rebuilding a realistic self-image and curbing hyperactivity, impulses, and tensions. Probst explains that patients are initially encouraged to adapt a positive thinking about their body, and this is encouraging patients to identify and appreciate aspects of their own physical uniqueness instead of conforming to societal norms. Patients are then encouraged to adopt a physically active lifestyle, which is meant to help reinforce the positive self-image they're supposed to be acquiring. As Probst explains, "It is desirable to curb hyperactivity and restlessness - characteristic for many anorectic patients - into a more controlled form of physical activity, where the patient is allowed to move intensively only within certain limits as determined by the therapist. Learning how to limit physical activity." A person who is healthier due to physical exercise is, undoubtedly, more likely to have a more positive self-image.

Despite the well-structured approach, only about 60% of Anorexia Nervosa patients are successfully treated, meaning that the dis-

There is hope that Anorexia Nervosa will one day become more treatable and maybe even cease being a problem

## Main objectives of Physiotherapy

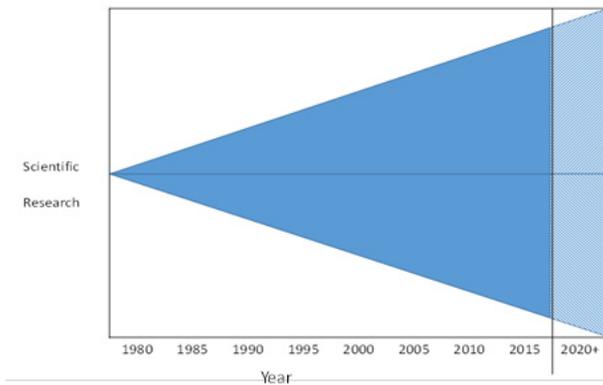




ease becomes chronic (long-lasting) in about 40% of cases, a success rate worse than that of Bulimia. Probst explains that patients can still recover once the disease has become chronic, but that is not usually the case seeing as patients could also have developed other types of disorders, such as personality disorders, for instance. Probst explains that patients who have the disease become chronic usually go from one treatment to another, slowly losing hope and developing an even more negative attitude about their condition.

There is reason to remain positive about the treatment of this disease; however, as the study of eating disorders is relatively new.

Probst is one of the leading scientists in the field of physiotherapy in eating disorders and he says that when he decided to enter the field, that there was very little previous work done. "When you receive a question from psychiatrist, then you have to look at the literature, but it is the literature that can help you to build a kind of therapy, but at the time there was nothing [...] and so we built up in the beginning of the 80s and we built up a program, and at the moment I am very satisfied with the results of this program." Since research in the field is relatively new, only 35 years old, the hope is that it continues to progress to the point where the success rate of treatments climbs, and that more and more people suffering from Anorexia Nervosa get treated. ■



Even when clearly underweight, some patients experience their appearance as normal or even overweight



## The refugees benefit from basic body awareness therapy

Santiago Herrero Martín

In the recent months, we have been receiving constant information about people from Syria who moved to western countries looking for help and shelter. These people, who saw themselves in the middle of a terrible war, whose houses were being destroyed and whose lives were in danger are the so-called refugees. Their situation is the biggest European humanitarian crisis since the Second World War, and, in addition, whilst thousands of them have died trying to make it to Europe, those who have managed to do so, are facing the lack of reaction of the European Union.

It is the individual force who has been especially noticed: people opening their home's

doors to these people in need, people giving out food or clothes, and some others offering their professional knowledge to help them cope with their difficulties, like, for instance, been a Basic Body Awareness therapist for 23 years now. The Basic

Body Awareness Therapy involves both activating and experiencing one's body through movement, assuming that these experiences affect different aspects of life: physical, physiological, psychological, and existential. In her own words, "It entails the



Jonna Jensen,  
physiotherapist specialist in  
Mental Health, Denmark

Their situation is the biggest European humanitarian crisis since the Second World War

interaction of body and mind by exploring slow movements with awareness of postural stability, breathing, and flow in the movements.”

A physiotherapist can address diseases “where disturbances in body awareness are an important part of the pathological picture”; this would be related to the psychotic status dealing with disturbances of body consciousness, body image and psychomotor behaviour. Then, they could treat symptoms as anxiety, problems with body boundary, and feelings of loss of control, hypertonia or hypotonia.

Along with some colleagues of her - Trine Starup Madsen, Jessica Carlsson, and Maja Nordbrandt - Jonna focused the benefits of this therapy on the refugees, aiming to investigate refugee experiences of individual Basic Body Awareness Therapy (BBAT) and the level of transference into daily life. As Jensen said, “the main aim is to decrease the patient hyperarousal and make them feel stable in their life as well as in their body”.

To conduct this study, the professionals used semi-structured interviews; furthermore, the data was analysed by using Malterud’s version of Giorgi’s 4-step analysis. They decided to try the Basic Body Awareness Therapy on refugees because it had shown some positive



Refugees migrating to Europe, 2015

results for individuals with pain and anxiety before, and those “are two symptoms traumatised refugees are suffering from so it is obvious to try to apply this therapy for this specific patient group”.

The refugees who collaborated in the study got used to the treatment, as there were several movements/ exercises they had to do and then to repeat for a while.

When repeating the movements, the patients have to manage to go beyond the last try, looking at different aspects of the movement and deepening their experience with themselves. Therefore, patients’ experiences of the Therapy related to increased balance, awareness, handling of body signals, and movement control.

The results of the study were revealing. The Therapy managed to relieve pain and tension, bring peace of mind and body, and even make it easier to sleep. The participants experienced positive changes in the contact to themselves and to each other, along with a development of new coping strategies. “Some of them feel that they are better to handle their feelings

and frustration”, says proudly Jonna Jensen, “others say that they are not so afraid anymore and can find internal peace by themselves”.

Encouraging as it sounds, the conclusion of their study shows that refugees experienced positive effects from Basic Body Awareness Therapy, and that transferring it into their lives helped them cope with their situation: “Their selfconfidence grew as they developed sensitivity to body cues and mastering their bodies in movement”.

Then again, this Therapy - far from being solely adequate for people suffering from a great pain such as refugees - would be highly recommended and beneficial for almost everyone “as it offers human beings a break from the high amount of sensations & stresses coming from the outer or inner world”, concludes Jonna. ■

“The main aim is to decrease the patient hyperarousal and make them feel stable in their life as well as in their body”

# Exercise your brain healthy

Milyka McCutcheon



It's often said that 'exercise makes you happy' - but is this really true? Or is it just self-serving propaganda from phys-ed teachers and gym fanatics? Well according to recent research, exercise not only makes you happy, but could even play a significant role in treating serious mental illnesses.

Research led by Dr Simon Rosenbaum has revealed that exercise could be just the thing needed to improve mental health symptoms in those with illnesses such as post-traumatic stress disorder, schizophrenia and those exhibiting the first sign of psychosis.

"Our research has shown that structured exercise interventions can have a clinically significant result on both mental and physi-

cal health outcomes in these conditions," he explained.

Trials revealed that when combined with usual care, structured exercise such as resistance training and walking significantly improved symptoms for people with post-traumatic stress disorder (PTSD), a condition of persistent mental and emotional stress occurring as a result of injury or severe psychological shock.

Exercise could be just the thing needed to improve mental health symptoms

The trial concluded that exercise not only improves depressive symptoms but also improves cardiometabolic risk in people with PTSD, which essentially means a lower risk of diabetes, heart disease or stroke.

“Exercise is such a powerful intervention as it can help both mental and physical health, simultaneously with virtually no side-effects,” explained Dr Rosenbaum.

Out of 81 participants with a diagnosis of primary PTSD, 39 were offered a 12-week exercise program with three, 30-min resistance-training sessions/week and a pedometer-based walking program.

Those who were in the intervention group had significantly reduced symptoms as compared to those who were offered the usual care alone, which included psychotherapy, pharmaceutical interventions, and group therapy.

A systematic review and meta-analysis also led by Dr Rosenbaum published in the *Journal of Clinical psychiatry* concluded that Physical activity reduced symptoms of schizophrenia and improved anthropometric measures, aerobic capacity, and quality of life among people with mental illness.

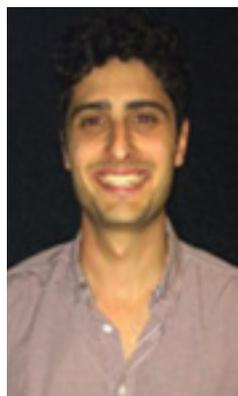
In this study, randomized controlled trials of adults with a clinician-confirmed diagnosis of a mental illness other than dysthymia (mild depression) or eating disorders were examined.

The intervention included exercise programs, exercise counseling, lifestyle interventions, tai chi, or physical yoga.

Whether the studies methodological quality and intervention were in compliance with American College of Sports Medicine (ACSM) guidelines was also assessed.

Exercise programs that did not meet ACSM guidelines still had the same positive impact, with little difference. The exercise interventions had the most impact on improving schizophrenia symptoms, and also showed an improvement on anthropometry, aerobic capacity and quality of life.

These studies show that any physical activity can improve symptoms of Mental illness and increase quality of life: “Even sitting less and moving more can be beneficial and a good place to start,” said Dr. Rosenbaum.



Dr. Rosenbaum,  
exercise specialist,  
Australia

But it is not only mental illness that benefits from exercise. Dr Rosenbaum explained that “Exercise also has the capacity to bring people together. Increased opportunities for socialising, can provide structure and routine, improve sleep quality as well as reducing symptoms associated with a variety of mental and physical health conditions.”

Physical Activity could also potentially be used as a preventative strategy for people developing mental illness. Dr Rosenbaum described this as “a very exciting prospect” but explained that it “requires more research.”

“Regardless, we need evidence-based public health interventions that are effective in increasing Physical Activity participation in both the general population and those experiencing mental disorders. This needs in part, a paradigm shift away from associating exercise with weight loss and towards encouraging Physical Activity adoption for all the other multitude of benefits,” said Dr Rosenbaum. ■

Exercise also has the capacity to bring people together. Increased opportunities for socialising, can provide structure and routine, improve sleep quality as well as reducing symptoms associated with a variety of mental and physical health conditions



## How Movement Quality could affect Mental Health

Clara López García

**Physiotherapists from all the world will meet in the Sixth International Conference of Physiotherapy in Psychiatry and Mental Health in Madrid. We talk with one of the attendants, Jordy den Engelsman, expert in Basic Body Awareness Therapy.**

The Sixth International Conference of Physiotherapy in Psychiatry and Mental Health in Spain in March 2016. Researches from all the world will come to talk about addressing complex challenges in mental health, chronic pain, long-lasting musculoskeletal disorders and psychosomatics through physiotherapy.

One of the attendants will be the Dutch physiotherapist Jordy den Engelsman, expert in Basic Body Awareness Therapy. He is also the owner of Kineoo Training & Coaching, a company based on health promotion and education. He is also active as the secretary of the board in the International Association of Teachers in Basic Body Awareness Therapy and he defends the work across international borders in order to “share knowledge and inspiration

Movement quality could be related to quality life and health mental issues.

within the quickly developing field of physiotherapy in mental health”, he says.

### **Movement and Mental Health**

Basic Body Awareness Therapy is a method introduced which “aims to rebalance the patients physical and mental self” according to den Engelsman. This would be done through the improvement of movement quality. Therefore this therapy, introduced by Gertrud Roxendal and further developed by the International Association of Teachers in Basic Body Awareness Therapy, relates movement quality with a healthy and a vital life. As the expert explains movement quality is based on three key elements, “postural stability, free breathing and body awareness in human movement”.

Mr. Jordy den Engelsman, physiotherapist specialist in Mental Health, The Netherlands



Den Engelsman says to be very excited with his current project, focused on the relationship between walking and mental state. Together with other colleagues from Estonia, Faroe Islands and Spain, they are doing tests and researches. “First data has been very exciting and I can see the results spin of into various follow up investigation and research”, he states. If the results are to be positive and there is an association between both factors, the next step would be to apply this theory to people with bipolar disorder.

Therefore movement quality could be related to quality of life and health mental issues. In fact, it has been showed that that body awareness therapy and the improvement of movement quality may have an effect in reducing pain, copying with emotions or improving energy levels.

He talks about the situation of this research in his country and he explains that Body Awareness Therapy has a strong tradition in the Scandinavian countries, especially in Norway. However not in Netherlands in which there is a deeper knowledge about psychosomatic physiotherapy, nevertheless, as he says “these two educations are complementary to each other” and exchanges between teachers from both countries are promoted. ■

Body awareness therapy and the improvement of movement quality may have an effect in reducing pain, copying with emotions or improving energy levels.

# Basic Body Awareness Therapy contributes in the treatment of patients suffering from different mental illnesses

Ester Legaz

Although Spain is not the country where Basic Body Awareness Therapy is most developed, the tendency is growing and public hospitals are including physiotherapists to perform therapies such as this one.

People have always been informed about the benefits of physical activity to maintain a proper health status. Sometimes it is recommended to prevent physical problems and sometimes it is implemented for the treatment of mental illnesses as anxiety, but it is always a positive factor in the improvement of health. What is not so well-known is the development of some therapies regarding the function of movements in the field of mental health such as Basic Body Awareness Therapy (BBAT).

BBAT is a treatment modality based on the basic function of movements like posture, coordination, free breathing and awareness. All this builds the basis for the quality of movement in action and interactions with others and daily life activities. There are 5 attributes for this quality, which are alignment, coor-

dination, dissociated movements, stability and weight shift. Some other factors as control, speed and smoothness are also influential for the quality of movement. Liv H. Skjaerven, Kjell Kristoffersen and Gunvor Gard in their study about movement quality developed 4 main themes, seeing movement quality as



BBAT in patients with schizophrenia showed 4 categories of positive effects that were affect regulation, body awareness and self-esteem, effects in a social context and effects on the ability to think.

biomechanical, physiological, psycho-socio-cultural and existential. Inside of each of them there were different aspects of BBAT like posture, free breathing and self-awareness. In general, it was concluded that movement quality is a general and unifying phenomenon comprising all these characteristics.

Patricia Serranos de Andrés is a physiotherapist working at the public psychiatric hospital Dr. Rodríguez Lafora based in Madrid, where there is a great number of patients diagnosed with schizophrenia. Added to this mental illness that requires different treatments as antipsychotic medicines, they develop some psychiatric disorders as depression. Furthermore, 70-75% of them are physically inactive, which increases the negative symptoms of schizophrenia. Some of these consequences produce a higher mortality due to cardiovascular diseases or type 2 diabetes. According to one study made by T.W. Scheewe, F.J.G. Backx, T. Takken, F. Jörg, A. C. P van Strater, A.G. Kroes, R. S. Kahn and W. Cahn, exercise therapy decreases the symptoms of schizophrenia and depression when practiced at least once a week during 1 hour, producing a better improvement than occupational therapy.

Another study by L. Hedlund and Gyllensten on the effects of BBAT in patients with schizophrenia showed 4 categories of positive effects that were affect regulation, body awareness and self-esteem, effects in a social context and effects on the ability to think.

At the Physiotherapy Department in Dr. Rodríguez Lafora hospital, they develop group programs promoting healthy habits and patients are encouraged to do cardiovascular exercise, physical activity for the improvement of muscle tone, coordination, balance, alignment, awareness... and therapies like BBAT. However, there are also challenges to face related to the continuity of the treatment so coordination with other professionals is crucial, being team work at the basis of these therapies.

The results that professionals observe after implementing therapies such as BBAT are both in the physical and men-

tal field. Many of the patients consider the experience as a positive one. Patricia Serranos has experienced on her own that even people with grave cases of mental illnesses are sometimes able to express that they want to take part of BBAT therapy and that it makes them feel better. As the physiotherapists know, it is also helpful to encourage patients to take their time and make them responsible of their health, as well as boosting even small achievements because they are important too. To implement this therapy, Patricia informs about the necessity to make an initial evaluation of the patient and periodic assessments because it is necessary to adapt it to each specific case and observation day by day is also needed because you have to adapt to the needs and performance of the patient.

This area of BBAT is not very well known in Spain yet, but the Spanish Association of Physiotherapists in Mental Health (AEF-SM) is trying to promote it, together with the implementation of Physiotherapy in Mental Health in general. This association represents Physiotherapy at both national and international level in the assessment and treatment of mental illnesses. The tendency on BBAT



Patricia Serranos de Andrés, physiotherapist specialist in Mental Health, Spain

BBAT makes  
them feel better



Spanish participant in the BBAM group 2015-2017, Bergen University College, Norway

studies is slowly growing and an evidence of that is that 8 Spanish physiotherapists have started Basic Body Awareness Methodology studies at Bergen University this year. The interest in the field seems to be increasing as people suffering from mental health related diseases like anxiety or stress are more and more focusing on physiotherapy as a solution treatment.

The effects of BBAT on society could be even greater if there was a better knowledge and information about it. It can also be a preventive measure as Patricia Serranos says. "My experience practicing BBAT is that it helps me to cope more ably with daily life". There is still necessary to make more research to support these ideas but experience talks by itself. Ba-

sic Body Awareness Therapy seems to be a good therapy for any person that requires to improve their health because according to the WHO, "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", and any member of society will need help to obtain this health at a certain moment of their life. ■

The effects of BBAT on society could be even greater if there was a better knowledge and information about it.

# Physical and mental work integrated for elderly and multiple sclerosis patients

Marta Pereira de la Infanta

We talk with the scientist Luísa Pedro, who has worked on the use of physiotherapist as a way to influence the mental health, specially on multiple sclerosis and elderly patients. The influence of the positive variables of personality (optimism, hope, wellness...) in physical and mental health of people with these two subjects was the subject of her doctoral thesis.

In rehabilitation processes the challenges are becoming wider. "The physical therapists as well as having a therapeutic intervention and social inclusion, have new challenges such as health education and management of chronic diseases in which case it shall have a management role in the processes of promoting quality of life and well-being of its users", affirms Luísa Pedro. Physical activities can have really good influences in mental health, specially if we focus on chronic patients it can be used positively for their rehabilitation. For the "rehabilitation and management of chronic disease, intervention plans with a physical, mental and social integration approach are more effective", affirms the scientist.

Luísa Pedro has mainly worked on the use of physiotherapy on multiple sclerosis and elderly patients. She is a Portuguese scientist who is currently working in the University of Porto, in the Faculty of Psychology and Education Sciences, doing her post doctorate.

She has mainly worked on the positive influences of physical exercises on mental health, focusing mainly on multiple sclerosis patients

and elderly. Multiple sclerosis is a chronic disease of the nervous system that gradually makes it difficult for someone to move, speak or see. It affects the central nervous system and affects mainly young adults. It has no cure and its cause is unknown.

Physical activity has a positive influence in our daily lives, not just on these two groups Luísa Pedro has worked on. According to her, the use of physical activity and exercise promotes in all cases a psychological well being, a better quality of life and also affects mental health in a positive way.

The physical health is related to mental health. Exercise can reduce the symptoms of anxiety and depression and promote a better mental functioning. According to the British Mental Health Foundation "physical activity is good for your body but it is also great for your mind too". So, through exercise we can reduce tension and mental fatigue, have a sense of achievement and a better social life between other advantages.

Luísa Pedro studied a Physiotherapy degree in the Technical Institute of Lisbon and later did a Psychology master in the Higher Institute of Applied Psychology in Portugal. Her doctoral thesis was about the influence of the positive variables of personality (optimism, hope, wellness...) in physical and mental health of people with multiple sclerosis and the elderly. "The purpose of my study was to evaluate to what extent hope, optimism... can



Ms Luisa Pedro, Physiotherapist specialist  
in Mental Health, Portugal

influence the autonomy, participation and the quality of life in people with multiple sclerosis". She conducted the study using 280 individuals in Central Hospitals of Lisbon.

The results of the study carried out showed that young women with less education, without work, less social support and greater severity of the disease have a considerable decrease of autonomy and participation, quality of life, optimism and hope. "It seems that the most optimistic people and hope cope better with the adjustments to chronic disease, and these facilitating factors in rehabilitation processes, management of chronic disease and promoting quality of life of these people," explains Luísa Pedro.

She did her practice as a physiotherapist in a hospital in Lisbon, working with neurological patients 18 years."In this context the mental health issues associated with the rehabilitation process, seemed to me an important field of knowledge skills and intervention practices in physiotherapy."

Young women with less education, without work, less social support and greater severity of the disease have a considerable decrease of autonomy and participation, quality of life, optimism and hope

From then on, she developed her master's degree in Health Psychology and later she did her post doctorate on those subjects.

She examined in other studies the implications of the physical activity in the perception of illness and wellbeing multiple sclerosis patients. The working team applied an intervention programme for physical activity in 24 patients in portuguese hospitals. They asked to all of them the same question about the severity of their disease at the beginning and the end of the programme. The results showed differences between the beginning and the end: the perception of illness had decreased and the well being had increased. So the physical activity can modify the perception of the disease severity and personal well being.

A study published by the University of Utah in 1996 was the first to demonstrate the benefits of physical activity in these patients. The exercise done has to be according to the limitations and capabilities of the individuals, affirms the American National Multiple Sclerosis

Society. But a good physical activity on those people with multiple sclerosis produced an improved strength, a more positive attitude and an increased participation in social activities.

Another field of study of Luísa Pedro has been physiotherapy on the elderly population. She has studied the positive influences that physical activity have on them and its relation with the positive variables of personality (optimism, hope, wellness...). As people get older, the body also goes through physical changes and it is more susceptible to illness. Physiotherapy helps them to stay as active as possible, improving also the strength, coordination, balance... of the elderly.

In the last years, Luísa Pedro has developed an intervention model for the promotion of physical activity in people with reduced mobility: elderly and multiple sclerosis patients. This model is based on conceptualizations of self-determination and self-regulation strategies for mental health in those patients. Through these self-regulatory models, people can work on their individual goals to achieve. The strategy is to focus on the individual skills of each patient to control the own psychological, physical and social limitations of each and be able to overcome them.

But this model proposed by Luísa Pedro can also be applied to other fields. "Yes, of course, the principle of this programme is to identify the person and its limitations, physical difficulties and mobility to achieve the goals he wants and then develop strategies so as to circumvent these objectives and achieving the goals set by the individual".

She has applied this model of promoting physical activity from a perspective of self-regulation strategies in a research done with

patients with multiple sclerosis and elderly. Now, the results of the study are being presented in conferences and they are preparing different articles to present them to the scientific community. But the research is still being implemented on the older people that are in the community. These patients have functional limitations and therefore have a reduced social participation and are at a disease risk.

In the future, Luísa Pedro would like to continue working and developing this physical therapy intervention model with patients with functional limitations, based on the contextualization of the physical rehabilitation in their personal development according to these self-regulation and self-determination strategies. "I think that the investigation of mental health therapy is crucial, not only for the person with mental illness, but also for all people, in situations of illness or frailty, in which the physical and mental work integrated physiotherapy intervention is key", opines Luísa Pedro.

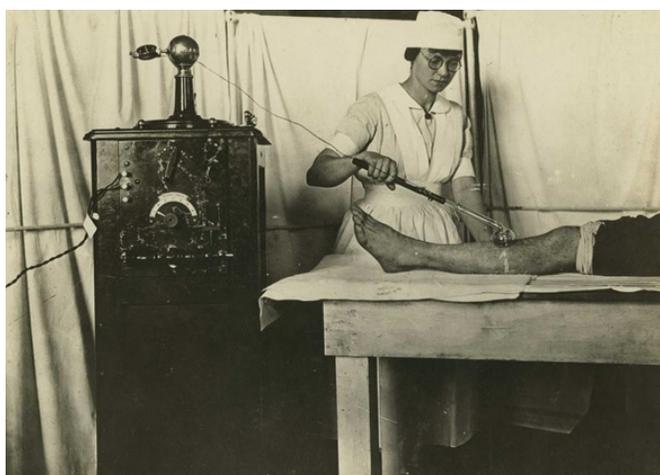
The International Conference of Physical therapy in Psychiatry and Mental Health (ICPPMH) brings together scientists all around the world specialized on physical therapists in mental health. Its objective is "to meet and share knowledge about education, research, clinical practice, role and organisation". "It seems to me very relevant and important goals and I think it may be important to share knowledge and experiences with physiotherapists working areas like those that I have developed", points out Luísa Pedro. It is her first time in a ICPPMH, but she has participated in other conferences, such as the last on WCPT Congress in Singapore, where she "had the opportunity to listen to several communications from this group and I liked a lot". She thinks that the ICPPMH "is important for the development of physiotherapy in this area both regionally and internationally". ■

She did her practice as a physiotherapist in a hospital in Lisbon, working with neurological patients 18 years

## Working out against the oblivion

Physical therapy can help both preventing and treating cases of dementia, diseases that affect around 47.5 million nowadays and that produce 7.7 million new cases every year

Adriana Pérez García



A nurse applying high frequency vacuum tube for peripheral stimulation as part of a WWI soldier's rehabilitation | National Museum of Health and Medicine (CC)

Physical therapy has been proven to be, not only good for the body, but also for the mind. That is why many specialists in the field are focused on the study of how working out with patients can improve their mental health. "The prevention and treatment of dementia are fields of work very wide in Physical Therapy", said Antonia Gómez Conesa, specialist in physical therapy, that added that modalities such as physical exercises have proved to be very effective, especially in "the prevention and termination of Alzheimer, an illness considered to be one of the most frequent dementias".

Antonia Gómez Conesa is graduated in Physiotherapy and Nursery, specialized in Pediatric, by the University in Valencia. She has also a degree in Kinesiology and Physiatry, as well as in Psychology, with a Ph.D. from the University of Murcia, where she is working nowadays as a professor and investigator. She is currently the President of the Spanish Association of Physiotherapists. Her focus of study for the last years has been the field of mental health within physical therapy, mainly Alzheimer's disease.

The neurologic disease called Alzheimer, although widely

known, was only described a hundred years ago by Alois Alzheimer, but it has become one of the most worrisome illnesses for aged people and the most frequent cause of dementia. It is estimated that it constitutes between the 60% and 70% of the cases, according to the WHO.

This disease affects nowadays approximately 10% of the population around 65 years old and this number has been progressively increasing year by year. In fact, it already affects 50% of the people over 85 years old. In 2006, the total number of people suffering Alzheimer was ap-

Alzheimer Disease affects nowadays approximately 10% of the population around 65 years old and this number has been progressively increasing year by year.

proximately of 26 million, and experts estimate that in 2050 the number will increase up to 106 million.

In general terms, the WHO stated that there are around 47.5 million people suffering diseases related to dementia and that there are 7.7 million new cases every year. In fact, in 2030, they predict that there will be 5.6 million cases and almost triple by 2050, up to 135.5 million.

The effects of dementia are a decline and cognitive deficits that are developed with memory loss, aphasia, agnosia, apraxia and impaired functionality. As seen, many problems but no cure known nowadays. According to experts, the only way to go for now would be prevention, that is, as in other kind of diseases, having good life habits

that could reduce the number of cases up to 40%.

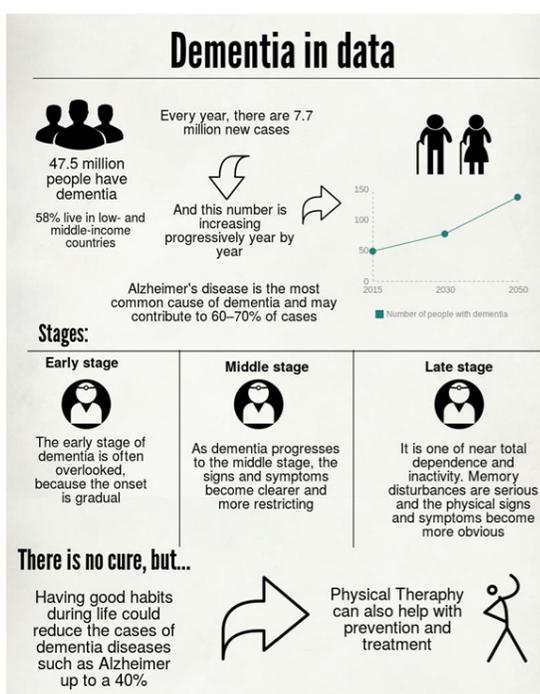
The other solution is an adequate treatment, that could begin with physical therapy. “Physical therapy has a huge potential to the field of mental health specialty”, Gómez Conesa remarked. According to the expert, it could be applied in patients with dementia, psychotic disorders, autism spectrum disorder, eating disorders, depressive disorders, stress, anxiety or chronic pain. “The modalities and methods used in physical therapy vary depending on the pathology and the problem that the patient presents”, Gómez Conesa clarified, and added that: “Mental Health is a specialty of Physical therapy, with methods of assessment and treatment there are different from the required ones for

other specialties of Physical Therapy”.

Working out against Alzheimer is, therefore, very effective. According to Gómez Conesa “meta-analysis studies have proven that a more active life is associated with a decrease of developing Alzheimer in aged 65 years”. For that reason, she considers that promoting physical exercises would be a good way to prevent and stop the increase of cases. Furthermore, “It has been shown that physical exercise helps the production of brain chemicals that promote the formation and connections of nerve cells, encouraging the brain to cope with Alzheimer’s in better condition, despite the pathological changes causes this disease”, the physical therapist explained.

### The treatment

The treatment to fight against this kind of diseases begins after the patients are diagnosed with cognitive impairment. “It is at the stage of mild cognitive impairment when physical therapy treatment adapted to the patient’s condition should be initiated”, Gómez Conesa described. Regarding the primary prevention of this kind of diseases, Physical Therapy can be also effective, in the sense that it can work as a prevention against the development of Alzheimer. “So, in consequence, physical exercise in any stage of life it is truly ben-



“The prevention and treatment of dementia are fields of work very wide in Physical Therapy”, said Gómez Conesa

eficial and can become a huge protector against the disease”, the physical therapist assured.

Another important point in the treatment is that it always needs to be adapted to each specific case, for each patient. “Together with the diagnosis, the cognitive and functional evaluations (including the balance) are extremely important”, Gómez Conesa explained, since it is the best way to choose the best modality in physical therapy for each patient. Also, the doctor should have to define the intensity of the treatment that must be adapted to the stage of the disease and age, as well as the physical characteristics of the patient. Some of the specific exercises that can be executed are the ones that focus on aerobics, resistance, strength and flexibility, Psychomotricity or Multi-Sensorial Stimulation.

### Multi Sensorial stimulation

This is one of the therapies that Gómez Conesa, along with her team, have been studying. It consists on “stimulating the primary senses (sight, audition, touch, taste and smell) in a positive and relaxed environment for the patient to activate or maintain a well-being state without having the need of too much attention, intellect or any cognitive processes like memory”, the specialist described.

This technique has proved to be effective against Alzheimer, because “it allows to take advantage of the residual sensory capacities of the patients by focusing in the promotion of positive behaviors, decrease desadaptive behaviors, and encourage the interaction and communication”, she explained.

The patients who have responded positively to this new therapy are short-term ones. “Those patients can benefit from treatments which aim to improve the cognitive development within daily life activities”, said Gómez Conesa. However, she also warned that further study with longer length needs to be done about this new technique in order to be sure of its effectiveness. She also added that there is a need for “a more realistic and objective assessment of behavior, that confirms the effectivity of the therapy also in a long-term”. The final objective of the specialists focused on this study would be to integrate this treatment into the daily care of patients in nursing homes and day-care centers within Spain.

### Physical Therapy in Spain

Physical therapy has proved to be very important in both preventing and treating dementia diseases, however, in Spain, this method is not as present as in other places, such as the United Kingdom or the Nordic Countries in Europe. “In fact, there is no recognition within the Spanish Health Ministry”, Gómez Conesa remarked. Nevertheless, as she explained, many physical therapists are demanding further training, not only within Spain, but also abroad. “The quality in the research and clinical Physical Therapy would improve in this focus area by obtaining formal recognition of the speciality of Physical therapy in Mental Health by Spanish Health System”, the specialist argued.



Prof. Antonia Gómez Conesa, graduated in Physiotherapy, Nursing and Psychology, specialized in Pediatric. She is Professor of Physiotherapy at Murcia University.

Apart from these claims, there are many PhD dissertations and relevant papers published in Spanish scientific journals within this field. “There are also European researchers in physical therapy (Spanish and other ones), working in different kinds of treatments in mental health on physical therapy and promoting the specialized training and clinical”, Gómez Conesa said.

In her opinion, it is essential for Spain to take further steps to promote these ideas. The first one would be to make more visible for health authorities, society and health professionals this speciality of Physical Therapy. “It is also extremely convenient to start training in this speciality the students of the Bachelor degree in Physical Therapy, and promoting post-graduate studies in this area, as well as improving the research and quality of clinical results in this specialization”, Gómez Conesa remarked. ■

“Physical therapy has a huge potential to the field of mental health speciality”, Gómez Conesa remarked.

# The International Organization of the official subgroup of the World



The Executive Committee of the IOPTMH. From left to right: Rutger IJntema (Holland), Anne Parker (United Kingdom), Liv Helvik Skjaerven (Norway), Amanda Lundvik Gyllensten (Sweden), Michel Probst (Belgium).

The International Organization of Physical Therapy in Mental Health, IOPTMH, an international network of physical therapists working in the field of psychiatry and mental health, was admitted as a subgroup of World Confederation of Physical Therapy in June 2011. Several nations in Europe, Asia, America and Africa have organised subsections of physical therapy in mental health for several decades.

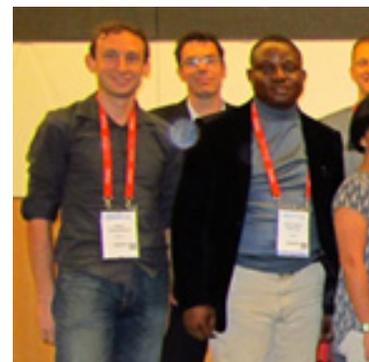
## Why an international organization?

To meet a need in society, an international network of physical therapists working in the field of psychiatry and mental health was established through the three international research conferences of physical therapists done before 2011: at Leuven University, Belgium 2006, at Bergen University College, Norway 2008, and at Lund University, Sweden 2010. The network has an elected board, more than 1000 members, representing 45 nations from 6 continents.

The objectives for IOPTMH are to:

1. foster co-operation between physical therapists practicing in mental health throughout the world
2. encourage improved standards and consistency of practice in mental health care by physical therapists
3. advance practice by communication and exchange of information
4. encourage scientific research and promote opportunities for the spread of knowledge of new developments in the field of mental health
5. assist WCPT member organisations in the development of recognised sub-sections in mental health

IOPTMH believe that physical therapy will have an effect on worldwide health problems, including views, strategies for actions and research where body, mind and existence is treated as a unity and the physical therapist is working at the highest professional standards with human movement as its core.



Participants at the General Meeting of the IOPTMH in Singapore, May, 2015

# Physical Therapy in Mental Health, Confederation of Physical Therapy

SUBGROUP OF WCPT

**World Confederation  
for Physical Therapy**



Meeting with the President of the World Confederation of Physical Therapy in Singapore, May 2015. From left to right: Daniel Catalan (Spain), Marilyn Moffat (USA), Michel Probst (Belgium) and Davy Vancampfort (Belgium).

## Members of the IOPTMH\* (at May 2015)

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Austria	Manuela Kundegraber	manuela.kundegraber@fh-campuswien.ac.at

\* Greece, Latvia, Mexico, Poland and Switzerland will become an IOPTMH member at the Madrid Fifth General meeting on 10th March 2016.



# Connecting mind and body

Paula González Gutiérrez



Participants in the Body Awareness Rating Scale training, at Metropolia University. Source: <http://www.metropolia.fi/>

When we think about the professionals who have to deal with their patients' mental diseases, we usually think about psychologists and psychiatrists. But, in reality, there are other branches of medicine which also deal with these issues. And, this case, we are talking about physiotherapists. According to the World Confederation for Physical Therapy, this discipline "provides services to individuals and populations to develop, maintain and restore maximum movement and functional

ability throughout the lifespan". Physiotherapy offers a non-pharmacological therapeutic alternative in order to palliate symptoms of multiple diseases through therapeutic exercise, hot, cold, light, water manual techniques such as massage, and electricity.

In March 2016, it will be held The 6th International Conference of Physical therapy in Psychiatry and Mental Health in Madrid, Spain, which will be organized by the University Carlos III of Madrid and the International Organization of Physical Therapists in Mental Health, the official subgroup of the World Confederation of Physical Therapy. According to the ICPPMH webpage, "the event will address innovative and effective strategies to address today's complex health challenges such as mental health, long-lasting musculoskeletal disorders, chronic pain, psychosomatics, etc.". It will be attended by Spanish and international scientists.

The International Association of Teachers in Basic Body Awareness Therapy (IATBBAT) has been an important resource for gaining international co-operation with physiotherapy professionals

We have spoken with one of the scientists who will collaborate in the conference: the Finish Sirpa Ahola. She is senior lecturer in physiotherapy at Helsinki Metropolia University of Applied Sciences, Finland's largest university of applied sciences, which educates the professionals of tomorrow in the fields of culture, business, health care and social services, and technology. Her work consists of teaching subjects such as neurological physiotherapy, physiotherapy with elderly, balance, and currently more mental health in physiotherapy.

"I have specialization of neurological physiotherapy and now I am deepening my specialization in movement quality and movement awareness pedagogy", Ahola informed us. She studied her postgraduate on Basic Body Awareness Methodology in Bergen University College from 2009 to 2011, which provided her "with evidence based methodology that has enabled to meet the needs of patients who are suffering from conditions such as neurologic conditions, depression, eating disorders, chronic musculoskeletal pain and also areas within rehabilitation healthcare and health promotion". These conditions cause both economic and human challenges. For Ahola, "the membership in the International Association of Teachers in Basic Body Awareness Therapy (IATBBAT) has been an important resource for gaining international co-operation with physiotherapy professionals" as well.

A very relevant institution in the physiotherapeutic world is the World Confederation for Physical Therapy (WCPT). It represents physical therapists and their organizations around the globe. Physical therapists, also known as physiotherapists, are the specialists in human



Ms. Sirpa Ahola,  
physiotherapist specialist  
in Mental Health, Finland

Physiotherapy offers a non-pharmacological therapeutic alternative in order to palliate symptoms of multiple diseases

activity and movement. According to WCPT (2015), "movement is an essential element of health and wellbeing and is dependent upon the integrated, coordinated function of the human body at a number of levels. Movement is purposeful and is affected by internal and external factors. Physiotherapy is directed towards the movement needs and potential of individuals and populations". Related to this topic, when Ahola is asked why she decided to study it, she says that she felt "curious to deepen in understanding the phenomenon of movement quality and how knowledge, skills and general competence promote a learning movement pedagogy that can be transferred to knowledge and skills of teachers to be useful for clinical practice".

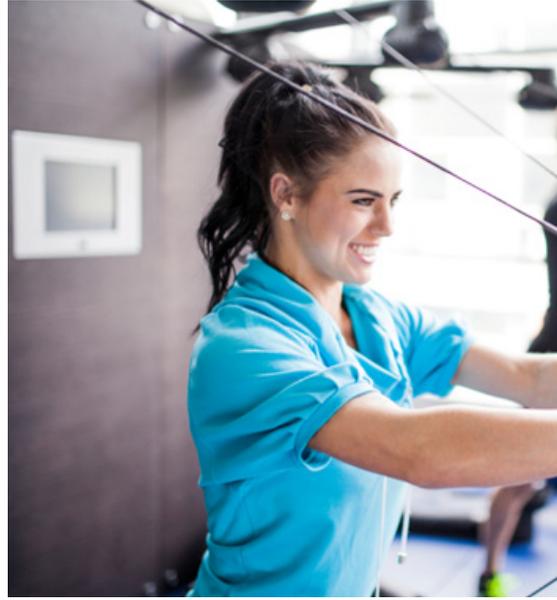
Nowadays, the scientist is in a PhD program in Jyväskylä University and her research subject consists of a deeper understanding of "the phenomenon of movement quality in physiotherapy and how the teaching of that phenomenon can implemented in bachelor program. I am now collecting data and analyzing the material", she stated.

Ahola sounded interested and excited when she spoke about the ICPPMH: "it has been established for physiotherapy professionals in an important, excellent meeting place. They want to network in the development in areas of professional education, clinical practice and research". As last words, she stated that the ICPPMH "promotes also forums for informal talks of burning issues and the opportunity for sharing and reflecting during the conference days". ■

According to WCPT (2015), "movement is an essential element of health and wellbeing and is dependent upon the integrated, coordinated function of the human body at a number of levels. Movement is purposeful and is affected by internal and external factors. Physiotherapy is directed towards the movement needs and potential of individuals and populations".

# Physiotherapy contributes to an “improved body experience” during eating disorders treatment

Rodrigo Salguero Torrado



Bulimia and Anorexia Nervosa are the main diagnostic categories of eating disorders, which has once affected the 1.5 % of the United States' population, according to 2012 statistics. Both are associated with physical imbalances such as a reduced body mass index and a low percentage of body fat, as well as with psychosocial impairments like depression, anxiety and quality of life's perception. The risk of death is also high among the affected population. Anorexia Nervosa is particularly associated with weight loss during the period of growth combined with an excessive exercise engagement with

fear of gaining weight and fat, a distorted body image and the loss of at least three consecutive menstrual cycles, while population suffering from bulimia present signs of binge eating and purging, as a way of compensating the behaviour after the binge taking advantage of the vomit, laxatives and excessive exercise (Scott, 2012). These eating disorders are considered as one of the most challenging psychiatric conditions to deal with and the treatment is usually comprised of a cognitive-behavioural therapy and pharmacological handling. Exercise is usually not recommended for patients since it

is believed that it may worsen the disorder's evolution. Nevertheless, research shows off that exercise increases body mass index, and as a consequence reducing depression among people who suffer from binge eating.

Physiotherapy may have an important role on the treatment of eating disorders, as the physiotherapist is able to physically intervene the patients, as well as educating them and helping them on overcoming the illness' symptoms and accepting the changing shape of their bodies as they gain weight. “The PT can help the person with eating disorder to obtain an improved relation to her body”, Amanda Lundvik, who is a physiotherapist and Senior lecturer in the University of Lund (Sweden) states. “The PT can work with body awareness methods and strengthen stability and

The physiotherapist can work with body awareness methods and strengthen stability and acceptance of the person herself



acceptance of the person herself”, the expert on Basic Body Awareness Therapy (BBAT) continues. Traditionally, patients have been put on bed rest due for reducing the caloric expenditure. But this view is changing because of different found evidences: a research dated in 2007 concludes that patients with eating disorders can safely engage in exercise programs during the treatment since at first, supervised exercise does not adversely affect weight gain or menstruation return. At last, evidences demonstrate that there is an increase on the treatment compliance, an improved therapeutic relationship, a decreased food preoccupation and a decrease on the bulimic symptoms and negative behaviours with supervised exercise. Therefore, patients consider that there is an “improved body experience” with the use of these techniques during the treatment (Hausenblas, 2007).

To reinforce the previous thesis, another investigation (“A systematic review of physical therapy interventions for

patients with Anorexia and Bulimia Nervosa”) published in 2014 determines that after eight randomised controlled trials took place involving 213 patients aged between 16 till 36 years, results demonstrate that aerobic and resistance training had significant benefits such as an increased muscle strength, BMI and body fat percentage in Anorexia patients. Moreover, “aerobic exercise, yoga, massage and BBAT lowered scores of eating pathology and depressive symptoms in both Bullimia and Anorexia Nervosa patients”, while no adverse effects were reported (Vancampfort et al., 2014)

The role of the physiotherapist within the process is to assess, advise, educate, treat and manage the different physical and psychological elements that take part in the eating disorder (referred as “functional diagnosis”, as Professor Lundvik states), which can result into osteoporosis (reduced bone mass), compulsive sport exercise and an altered body image (Rigotti et al., 1984). Moreover, not the same treatment is applicable in all patients, as there are different stages during the illness, and the physiotherapist must be aware of the Body Mass Index (BMI) in order to induce a “slow and coordinated weight and mental restoration”, according to Yvonne Hull, physiotherapist and chairperson of The Physiotherapy Eating Disorders Network Group, which is a specialized unit of PTs working with eating disorders patients across the United Kingdom.

A study published in 2014 in the Journal of Eating Disorders (Chase, 2014) shows off the efficacy of the implementation of a physiotherapy treatment in eating disorders’ patients. The Paediatric Unit at Flinders Medical Centre in Australia launched an Eating Disorder Program which incorporated a flexible and multidisciplinary physiotherapeutic treatment that involved an educational approach on posture and a safe environment for healthy exercise. The class consisted of two half an hour sessions a week. The result was defined as successful since involved girls were pro-active during the sessions, and the level of knowledge reached by the patients and their parents (regarding compulsive exercise and symptoms prevention) was more than satisfactory. It was also recommended that the treatment should be progressively established in the Australian eating disorders’ clinics. Regarding the exercises put in practice during the treatment, Mrs. Lundvik claims that it depends on the BMI of the patient, but generally PTs work with massage, sitting, lying and standing movements done slow and with awareness (what Basic Body Awareness Therapy consists of). Individualized physiotherapy instead of a group one is also prescribed during the treatment as “in group settings, patients influenced each other in a negative way as they used to compare how thick they were, in a competitive way”, Professor Lundvik concludes. ■

The physiotherapist can help the person with eating disorder to obtain an improved relation to her body



Ass. Prof. Amanda Lundvik-Gyllensten, Sweden

**“Physiotherapy helps in strengthening stability and acceptance of the person herself”**

Rodrigo Salguero Torrado

Cases of eating disorders are the order of the day among the global young population. According to the World Health Organization, Anorexia Nervosa occurs in a proportion of 0.5 till 1 % of the young adult and female adolescent population, while a 5 % till a 13 % present partial symptoms. These numbers have increased during the last 50 years in developed countries, particularly in the United States, where a ratio of a 5 % till a 15 % of the adolescent girls use unhealthy dieting control mechanisms like laxatives, diuretics and most common: self-induced vomiting. These mental diseases appear at a young age, comprehended between 14 to 18 years.

The integration of physiotherapy as a method for treating patients who suffer from eating disorders may sound unusual. However, it sounds reasonable taking into account that physiotherapists have experience on fields like the “body” or “body in movement”. Therefore, physiotherapists are able to use a wide range of techniques like relaxation, breathing exercises or awareness exercise in order to address symptomatic issues like the distorted body perception or compulsive physical exercise to control the body shape and weight.

Amanda Lundvik Gyllensten is a Swedish physiotherapist and Senior lecturer of the Department of Health Sciences of the University of Lund (Sweden) whose field of interest is psychosomatic and psychiatric physiotherapy. Her work focuses on rehabilitation mainly using Basic Body Awareness Therapy within the psychiatric spectra, including the use of physiotherapy for treating eating disorders’ patients. She explained us the role of the physiotherapist and the body awareness therapy within the treatment for the eating disorders’ patients in this interview.

**Is there a direct relation between physiotherapy and the treatment of eating disorders?**

Yes, I think there is a relation since the physiotherapist (PT) can help the person with eating disorder to obtain an improved relation to her body. We as physiotherapists in mental health, work with the body and the embodied identity. The embodied identity is the working field of the PT in mental health.

**How can physiotherapy help to cure eating disorders like Anorexia Nervosa and Bullimia?**

To work with body awareness methods and strengthen stability, the ability to express their problems and acceptance of the person herself.

**But, isn’t exercise usually not recommended for patients who suffer from eating disorders?**

Yes, exercise is often misused as a mean to loose weight and to stop unpleasant sensations (e.g. anxiety). It has to be slow movements, like the treatment with e.g. Basic Body Awareness Therapy (BBAT) however use movements that are done in lying, sitting, standing and walking and direct attention to the inner core of the person. You should be very careful with active movements on Anorexia cases as they have a very low mass index.

**How can exercises like yoga and aerobic help to treat these illnesses?**

I think that these types of exercise/movements (Like BBAT) strengthens the healthy aspects of the person. One of the results found in my research is that the self-efficacy and belief that I can handle difficulties in life is improved (statistically significant in a simple of patients with depression, anxiety and personality disorders that received BBAT in addition to treatment as usual in an RCT design).

### Can we apply the same treatment techniques for curing both illnesses when they are different?

The techniques must be adjusted to the resources and difficulties of the individual. In physiotherapy we work not with diagnosis but with something called "Functional diagnosis" that is depending on functional abilities of the individual.

### Which exercises are put in practice in the treatment? Which frequency should the treatment have?

Depending on their BMI (Body Mass Index) you work with massage, sitting, lying or standing movements done slow and with awareness (Basic Body Awareness Therapy). In the beginning you do it very often, maybe every day in the clinic.

### Which are the benefits that can be obtained from applying physiotherapy on eating disorders' treatment? Why are they recommended?

That they accept their life with specific difficulties as they are and not do these self destructive things they do (like not eating or exercising too much). They become more respectful with their bodies, not using them in a destructive way, but helping them in finding patients themselves.

### Is it economically suitable the usage of these techniques for eating disorders' treatment?

I have not seen any health economic evaluations that has focused specifically on PT in eating disorders. This is a very interesting target for research. In my randomized controlled study we had a health economic touch and found that the use of BBAT in addition to treatment as usual for patients with depression and anxiety showed a significant lower cost concerning less use of the the Swedish sickbenefit system and significant less use of psychiatric health care. So we can say that the economic benefits for using PT and BBAT for this group was very good.

### Is physiotherapy becoming a more extended treatment in clinics when dealing with eating disorders?

It has become more popular in Sweden, so I think there is not difference with other countries.

### Can physiotherapy help in the prevention of eating disorders?

Maybe this is another positive effect of BBAT but has not been shown in any RCT studies. From the clinic we find that many girls in Sweden now have severe stress related problems and in a Thesis-study by another PT she found that groups in a youthcenter with specific focus on the stressors connected to the female role (gender specific

group talks) BBAT and relaxation helped to improve their well-being and reduced stress a lot.

### How is the experience of working with Bulimia / Anorexia patients?

I have done this some years ago and found that when I worked in a group setting, they influenced each other in a negative way, by comparing how "thick" they were and they were very competitive in this. Individual PT was much more simple in my experience.

### How can all this information be translated to the teenagers/adolescents who are suffering from these eating disorders?

I think that the groups should focus not only on their bodies but be a combination of gender specific talks how it is to be a girl/woman in this society and use BBAT and relaxation therapy to find means to handle stress, negative emotions and other difficulties. They need tools other than starving themselves and running excessively to cope with all the conflicting demands and emotions as adolescents. But I think that the PT is well equipped to help with the use of BBAT movements and other techniques. Also journalists can help in spreading the message not only through health channels, but also on mass media such as newspapers or TV or even in social media like Facebook..

### May the same treatments and diagnosis be applied to patients who suffer from binge eating disorders?

The same treatments can be used IF they are adapted to the specific needs and demands of the person that suffers. I know of how to do that using the BBAT.

BBAT is no "cook book". It is a process oriented method that is done in an interaction with the individual or the group. The concept of interaction here means that the patient herself is taking part in how the dose should be delivered. This is done by stimulating her senses, proprioception and interoception. She then eventually learn to feel from inside what feels OK to do for her. Exposure to difficult situations or emotions like feeling big can be a part of the treatment but is should be done in respectful collaboration with the patient.

### Which message do you want to spread to the society?

The use of physiotherapy in treating eating disorders is very important as PT work through the body and we can help many others in finding basic security and acceptance of themselves in order to overcome difficulties. ■

# The importance of self-assessment and training of body awareness, new techniques dealing with bipolar disorders

Cheyenne Sánchez



Ms. Ursula Danner treating a patient.

Bipolar disorders are among the most frequent diseases in the world leading to invalidity and therefore to great suffering for patients and their family members. According to the latest report published references German Fund on the population of the Earth the world's population is around 7.2 billion people. close to a 2% of the world's population

Ursula Danner, a physiotherapist and researcher specialized in this mental disorders, and, her multidisciplinary team from the University of Graz, Austria, developed new methods for the evaluation of self-perception and optimizing of coping-strategies of patients with bipolar disorders. They developed a new self-assessment ques-



tionnaire –the ABC Awareness Body Chart- and a program of body-oriented group interventions. In several studies they highlight the importance of new techniques beyond the traditional use of antidepressants, pharmacological mood stabilizer or other drugs. The ABC and the group intervention focus on self-awareness.

According to the doctor, enabling the patients to recognize the symptoms in time, and to react with efficient coping-strategies and better stress-management will allow - not to get cured of course-but to avoid in many cases re-hospitalization. Which is not few, as it is one of the main disadvantages of the illness, the relapse.

If we think about it, it seems to be logical, and it is true that it has been generally stated in psychology research that changes in the mood, and the bodily symptoms, are often a cause of a lack of awareness.

Body-oriented treatment strategies like mindfulness, relaxation training, and awareness exercises, sometimes in combination with fitness programs



Ms. Ursula Danner,  
physiotherapist  
specialist in  
Mental Health,  
Austria

We try to help the patients to increase the stress coping strategies, to find a balance of their physical activity and so normalize their perception”

(like aerobic and anaerobic trainings) are increasingly implemented in the indoor care of psychiatric patients. This is why, this group of scientists, decided to develop a study on the power of these techniques. As Ursula Danner argues “we try to help the patients to increase the stress coping strategies to find a balance of their physical activity and to normalize their perception”.

The combination of this physical activities in the physioque-

cal area allows patients to “a new understanding of the dynamics of affective, mental or emotional reaction”.

From these programs patients immediately experience the positive effects on their mood. They find it easier to relax their thoughts, regulate their sleep and eating patterns as well as control of their body weight. “There is a high acceptance rate for these therapies from the patients” Ursula argues, and, concludes argu-



Team of physicians, physiotherapist, psychologists, biostatistician, physiologist and psychotherapists

The new ABC form is a very practical tool for patients with bipolar illness for self-assessment as well as gaining an increased body-awareness

ing that patients “additionally benefit from the therapeutic group effect by the social interaction”.

The new tools have their challenges and limitations, as the mood of persons with bipolar disorders can change so immediately. So, Ursula argues “it is almost impossible to have a homogenous group over a longer period” Which is more, many times patients suffer from deficits of concentration, if this happens, they maybe have to do a big effort to compile the

ABC questionnaires. But nevertheless, the acceptance of the ABC and group intervention was very high.

We offer this kind of therapy program to people in the euthymic phase (that means when they are whether depressed nor in a mania). In this phase it is more probably that they can participate regularly in the weekly therapy sessions, with one hour per week. The aim is that the patients learn to do the exercises by themselves, to continue the various exercises also at home and everywhere.

Despite this last difficulties argued, what we conclude is the high rate of success in the program, which contributes to the self-awareness of the patients who, thanks to these programs, and with the basic treatment of medicines can

stabilize the illness, and control it at home so there will be less need to be rehospitalized.

The new ABC form is a very practical tool for patients with bipolar illness for self-assessment as well as gaining an increased body-awareness. Furthermore, the new body-oriented grouptherapy is well accepted by the patients for the benefit of the improved body-awareness and coping-strategies for stress-management. The ABC questionnaire has to be validated in further studies and the effects of the body-oriented group intervention also has to be examined in further studies. Implications: These new tools are relevant not only for the treatment of people with bipolar or other psychiatric disorders, but also for burn-out prevention programs. ■

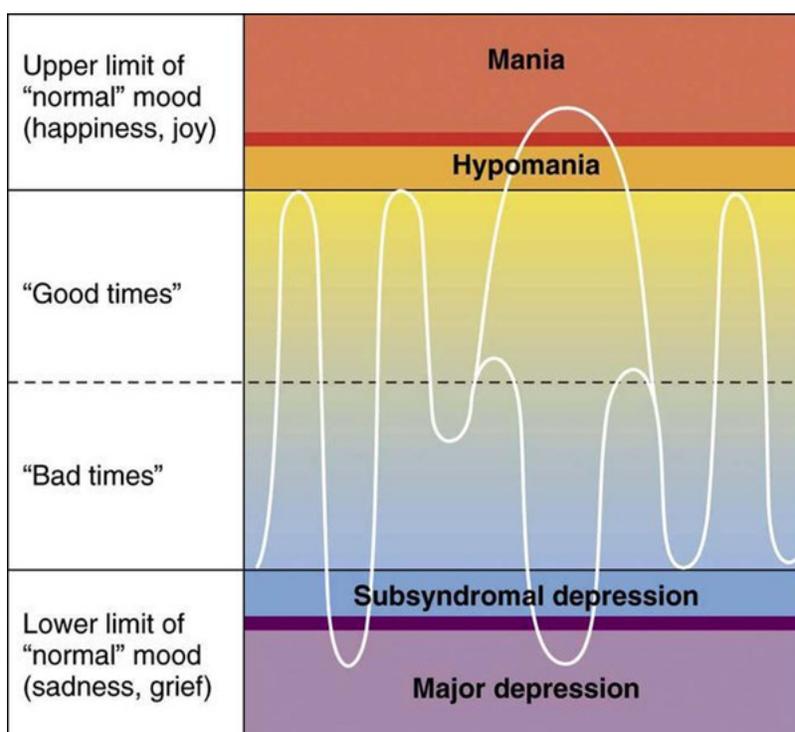
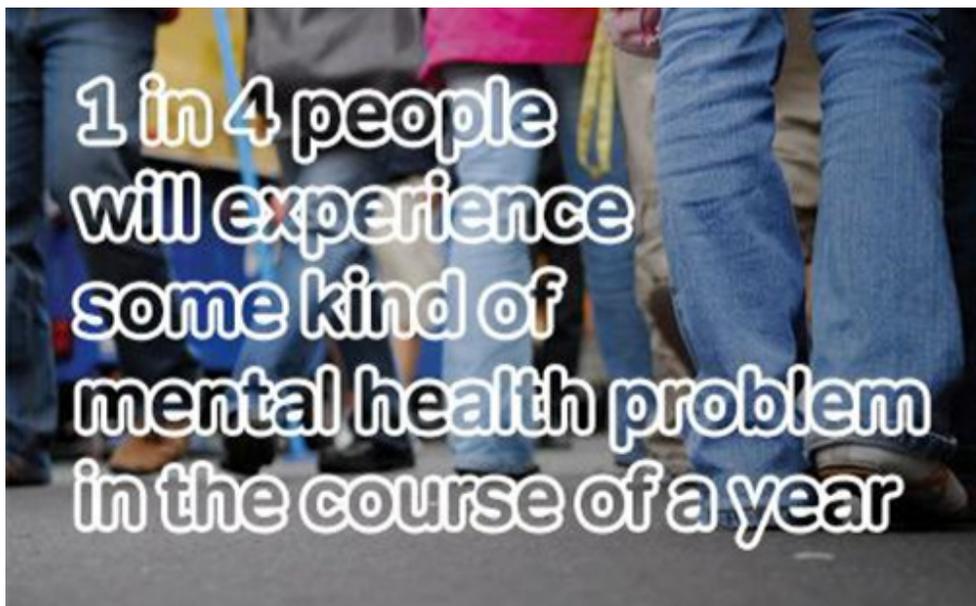


Chart on the different stages of Bipolar Disorder



## Treating anxiety with the movement of the body

Alicia Sansalvador

Mental health is our emotional, psychological and social well being. It directly affects our relationships with people, how we think, and act in different situations. Over the course of our lives, we will encounter the many different factors that contribute to our mental state such as genetics, life experiences or our family history. There are also many ways that can give hints about our mental state; sleeping or eating too much or not enough, feeling constantly irritated, feeling hopeless or hearing and seeing things that may not be real. However, this can be treated.

The statistics about mental health are staggering. It is estimated that approximately 450 million people worldwide have a mental health problem (World Health Organisation, 2001). It doesn't seem like a real problem, however thousands of people suffer its consequences on a daily basis, whether is social

anxiety or schizophrenia. Thanks to science, mental issues can be treated in a variety of means. Medication is one of them, although body therapy seems to be gaining room over them.

Dr. Yuce, a specialist on the benefits of physiotherapy to treat mental illness, was kindly interviewed. She believes in the importance of body and mind integration in order to be mentally healthy. Her main area of study is orthopaedic and psychiatric rehabilitation and also studies how movement therapy can improve a patient that has been diagnosed with anxiety.

Anxiety is one of the most prevalent mental health problems in the world. Occasional anxiety is a normal part of life. People might feel anxious when faced with a problem at work, before taking a test, or making an important

decision. Anxiety disorders involve more than temporary worry or fear. For a person with an anxiety disorder, the anxiety does not go away and can get worse over time. These feelings can interfere with daily activities such as job performance, schoolwork, and relationships. It takes over their life. And here is when the problem begins.

Dr. Yuce studied how body movement can improve the symptoms of anxiety. One of the newest strategies is a method called Basic Body Awareness Therapy (BBAT). BBAT is a treatment modality that focuses on the basic function of movements related to posture, coordination, free breathing and awareness that constitutes the basis for the quality of movement in action, the expression. It began in the field of psychiatry and mental health, however is now used in other fields such as preventive care or chronic pain. BBAT can help treating patients with General Anxiety Disorder (GAD). GAD seems much bodily and concrete in terms of symptoms and significant muscle tension. According to a study carried out by

There are also many ways that can give hints about our mental state; sleeping or eating too much or not enough, feeling constantly irritated, feeling hopeless or hearing and seeing things that may not be real.

Dr. Hamiyet Yuce,  
physiotherapist  
specialist in  
Mental Health,  
Turkey



Norre (2015), patients felt a rare experience of tranquillity. It increases their sense of control. Therefore they are able to develop a higher self-efficacy, empowerment and constructive coping strategies

For someone diagnosed with GAD or other sorts of social anxiety seems clear that body movements improve their symptoms. Body movement therapies can also help patients to stay on their weight, given that over eating is one of the symptoms and feeling a lack of self-esteem, which tends to end up in eating more.

This is a topic that needs more research but it has advanced a lot, and has proved that medication is not the only way to treat mental illness. Ass. Professor Yuce states that stress, depression; schizophrenics, personality disorders and post traumatic stress disorders can be treated with physiotherapy instead of the consumption of aggressive medicaments. ■

Depression	2.6 in 100 people
Anxiety	4.7 in 100 people
Mixed anxiety and depression	9.7 in 100 people
Phobias	2.6 in 100 people
OCD	1.3 in 100 people
Panic disorder	1.2 in 100 people
Post traumatic stress disorder	3.0 in 100 people
Eating disorders	1.6 in 100 people

Prevalence of mental disorders in the general population

# Basic Body Awareness Therapy – a movement approach to therapy and rehabilitation

Tyra Stave



Liv Helvik Skjærven with students of BBAM at Bergen University College.

“Physiotherapy, with its specific focus on and use of human movement and function, incorporates a unique and very special opportunity to reach the whole human being.”

Liv Helvik Skjærven teaches Basic Body Awareness Methodology (BBAM) at Bergen University College in Norway. Basic Body Awareness Therapy (BBAT) is a form of physiotherapy that can help and prevent musculoskeletal disorders and mental health problems and traumas. It is a way of approaching health with a holistic and mindful view.

The method was developed in France in the 1960s and brought into physiotherapy by the Swedish physiotherapist Gertrud Roxendal in the 1970s, Skjærven explains. “BBAT was accepted in physiotherapy in the late 1980s in Norway and Sweden. Originally, it had a theory rooted in the clinical practice. Since then it has been influenced by advances in physiotherapy research. During the last 40 years, it has been implemented in higher education at Bachelor and Post-Graduate Programs: for example in Basic Body Awareness Methodology at Bergen University College.”

## How is BBAT different from other types of physiotherapy?

“Physiotherapists are mostly trained to attend to physical aspects focusing on separate joints and limbs. This model has roots in the biomedical perspective and the tradition of physical training, using a strategy and vocabulary rooted in physical activity and exercises,” says Skjærven.

“BBAT incorporates several perspectives into its movement awareness training, considering physical, physiological, psycho-socio-cultural and even existential aspects that affect the person in the daily life. The



Basic Body Awareness Methodology teaching at Bergen University College. Picture: Liv Helvik Skjærven

therapy aims to involve the patient personally, integrating new movement habits directly into their daily routines.”

Physiotherapy is often seen as a way of treating muscle and joint problems, but a physical approach to therapy can treat various psychological sufferings.

“Physiotherapy in mental health is a specialty within physiotherapy. It provides physiotherapy for persons suffering from long-lasting musculoskeletal disorders, chronic pain and mental health problems, like depression and anxiety. It is also used in therapy and rehabilitation for people suffering from eating disorders, fatigue syndrome, burnout syndrome, Fibromyalgia, psychiatric disorders, violence,

incest, concentration problems, breathing problems and balance and coordination problems.”

#### How can physiotherapy be a support for psychological problems?

“According to World Confederation of Physical Therapy in 2014, the main objective of physiotherapy is human movement and function, identifying and maximizing quality of life and movement potential, encompassing physical, psychological, emotional, and social wellbeing,” says Skjærven.

“To address today’s complex health challenges such as long-lasting musculoskeletal disorders and mental health problems, physiotherapists have a central role in the treatment. To obtain a posi-

tive outcome of therapy, it is important to understand how life experiences and diseases are expressed in the human body and thus, affect movement and function. Basic Body Awareness Therapy, a physiotherapeutic approach, is based on the hypothesis that patients suffering from these disorders are lacking sensory-motor awareness or contact with the physical body, the physiological and mental processes and with the external environment including relationships with other people.”

When patients are suffering from a lack of contact between the body and the mind, it may create painful movement habits. This is why movement therapy can be important when treating mental health problems.

According to the research article “A pilot study on the effect of Basic Body Awareness Therapy in patients with eating disorders: a randomized controlled trial” by Liv Helvik Skjærven, Daniel Catalan-Matamoros, M Teresa Labajos-Manzanares, Alma Martinez-de-Salazar-Arboleas and Eduardo Sánchez-Guerrero in 2011, BBAT has showed results in treating patients with eating disorders. The research proved that patients participating in the research showed a better quality of life after the therapy – one of the main objectives of BBAT. It is however important to note that the therapy method does not work similarly for everyone, and all patients have different responses to the method.

BBAT is not just useful for people suffering from mental health disorders or musculoskeletal discomforts. It can also be used as a preventive method.

“BBAT represents a wide scope of training possibilities being implemented into preventive health care and health promotion. It is a person-centered and process-oriented approach with a strong focus especially on the healthy movement aspects as a support to personal development. In addition, the physiotherapist requires a high degree of personal involvement, from the very first day in the training which makes it concrete and practical useful for example at work, at home, when being out or in relationship with others,” Skjærven explains. “BBAT has shown to be effective and useful for self-development, strengthening self-efficacy and self-confidence through the fourfold perspective on human movement and its focus on movement quality.”

It is a therapy that puts the patient in the centre of the therapy, and builds on strong a relationship between therapist and patient. According to Gyllensten A. L, Hansson

During the last 40 years, it has been implemented in higher education at Bachelor and Post-Graduate Programs: for example in Basic Body Awareness Methodology at Bergen University College.

L, Ekdahl C. and their article “Patient experiences of basic body awareness therapy and the relationship with the physiotherapist” from 2003, people who had a good relationship with their therapist benefited more from the therapy.

#### **A student melting pot in Bergen**

##### **What is Norway’s international role within BBAM?**

“With the national reform of universities and university colleges in the early 2000, a stronger internationalization within study programs, in general, were asked for. Accordingly, the study program of Basic Body Awareness Methodology (BBAM), was developed, being especially

designed for English speaking, physiotherapists to create an international and professional competence and network within the field providing a special focus on movement quality through a movement awareness learning program,” Skjærven explains.

“Upcoming reports describe BBAM at Bergen University College as an invaluable resource for gaining clinical and practical skills and knowledge in human movement for many international professionals. It is reported that BBAM have supported organizations, therapeutic as well as educational institutions, in many countries to move forward in the field of physiotherapy, in general and particular in mental



Basic Body Awareness Methodology teaching at Bergen University College. Picture: Liv Helvik Skjærven

BBAT incorporates several perspectives into its movement awareness training, considering physical, physiological, psycho-socio-cultural and even existential aspects that affect the person in the daily life.

health, because of its in-depth knowledge in human movement. The study program is described as innovative with a solid and unique international network. It is highly recognized within the profession. Thus, Norway has a leading role, through the BBAM study program, developing, structuring and thus defining a movement awareness domain within physiotherapy.”

The BBAM master program at Bergen University College hosts students from all over the world.

“From the first graduation of 2005, about 140 physiotherapists have graduated from [the master program], students from 18 countries and

3 continents,” says Skjærven.

This year, students from 15 different countries, from Hong Kong to Mexico to Faroe Islands, are studying to be experts within this branch of physiotherapy. Skjærven says this is “making BBAM 2015 a multicultural melting pot of physiotherapy in mental health”.

The international students bring their knowledge back to their home country. The number of people coming from the other side of the world to study in Bergen must mean there is use for competence in the Basic Body Awareness Methodology field.

Skjærven says: “There is a need in society for profes-

sional competence within treatment, rehabilitation, preventive health care and health promotion in mental health because of the increase in persons suffering from long-lasting musculoskeletal disorders, chronic pain and mental health problems.”

“Movement is a fundamental element in the human being. When it comes to physiotherapy, knowledge, skills and general competence needs to address the arising problem of the tomorrow society. Physiotherapy needs to be in line with demands of society and provide services that add more to human movement than physical activity and physical training.” ■



Liv Helvik Skjærven with the students. Source: Bergens Tidende



## Clinical researchers weigh in on the importance of addressing the physical outcomes of young patients

Emily Trinh

Mental illness has always been a touch subject to tackle. With the negative stigma that surrounds it, perpetuated unfairly by the media, it is a challenge enough for those diagnosed with psychosis or a mental illness to seek treatment and the help that they need. Nowadays, it has also been realised that there is more to changes that occur in the mind for those with psychosis. In fact, physical health can decline rapidly simultaneously.

This realisation has been discovered with the help of Professor Philip B. Ward; associate professor at UNSW in Sydney, Australia, and Director of the Schizophrenia Research Unit in Liverpool.

Professor Ward is a prominent figure as a research scientist in Sydney, Australia who works to help improve the physical and mental outcomes for young people diagnosed with mental psychosis.

Whilst running the 5-year Minds in Transition program that targeted young people with Curtis, a psychiatrist and clinical director in the early psychosis program, the team “had started to notice that the physical health of the young people in the program was suffering. When they started their anti-psychotic medications, which were a core part of their treatment, the young people would rapidly put on weight.”

Subsequently, he stipulates that addressing physical concerns of the mentally ill is just as important as providing treatment for their mental needs and that understanding the physical challenges that are confronted by young people who are diagnosed with psychosis is key in order help them with their needs, as well as to help break down the negative stigma that surrounds mental illness



Prof. Philip B. Ward, University of New South Wales, Australia

that is presented and perpetuated by the media.

While weight gain itself would be distressing to these people, it can also lead to more physical problems because that “their metabolic measures and their blood sugars and blood lipids would become abnormal...then people would go on to then develop metabolic syndrome or diabetes which are chronic illnesses that are definitely linked to long term cardiovascular disease which in the end, would reduce your life expectancy.”

Dr. Ashish Sharma, Vishal Madaan and Frederick D. Petty echo this sentiment that exercise is crucial in improving mental and physical health. In their 2006 paper, “Exercise for Mental Health” they state that “many of these individuals [with mental illnesses] are at a high risk of chronic diseases associated with sedentary behaviour and medication side effects, including diabetes, hyperlipidaemia and cardiovascular disease.”

After recognising the many physical consequences that those with mental experience, preventing these problems is key. As Professor Ward points out, “it is a lot better to prevent the weight gain than help people lose the weight they’ve gained. Just as people in the normal population have struggled with losing excess weight, people with mental illness have the same level of difficulty, if not more because they have a whole range of psychological issues going on as well.”

Once having established the notion that lifestyle modifications are crucial in order to address the physical concerns confronted by young people diagnosed with a mental illness, a lifestyle intervention program should be implemented as a way to prevent weight gain. A study undertaken by Professor Ward has shown significant results. “Instead of people gaining a mean of about 18kgs in 12 weeks, with some gaining even more, we were able to limit that to 1.8kg. The same

goes with weight circumference...Young people tended to put on around 8cm of waist circumference, and we were able to limit that to 0.1cm which is effectively no change.”

This hypothesis that exercise and lifestyle intervention can improve the physical outcomes for those with psychosis is supported by Dr. Sharma’s study. Focusing on patients suffering from schizophrenia, these patients “who participated in a 3-month physical conditioning program showed improvements in weight control and reported increased fitness levels, exercise tolerance, reduced blood pressure levels, increased perceived energy levels, and increased upper body and hand grip strength levels.” The positive results of these two experiments illustrate the necessity of a lifestyle intervention program for those with psychosis.

While Dr. Sharma has stated that “evidence has suggested that exercise may be an often neglected intervention in mental health care”, exercise is not the only lifestyle modification that is used in order to improve the physical health outcomes of these young people. Educating them on the importance of eating healthily is also an effective deterrent to weight gain. In Professor Ward’s lifestyle intervention, the patients also participated in “a cooking group [where] they learn skills on how to buy fresh food and cook it in a healthy way.” In this group, they also learnt to “reduce the number of takeaways that they ate and how to reduce the amount of sugary drinks like sodas and so forth.” This illustrates that exercising combined with educating young people on the importance of eating healthily are core elements of these lifestyle intervention programs.

However, it is one thing knowing what strategies and programs to use in order to address the physical health of young people with mental illness and it is another to implement it effectively.

Professor Ward claims that “the secret was having dieticians and exercise physiologists and a nurse with a special interest and knowledge in metabolic health working as a dedicated team to get the young people engaged in a physical health program.” This is interesting to note because until recently, “exercise physiologists and dieticians weren’t seen as people working in mental health; they weren’t seen as relevant.” Dr. Sharma supports this as he comments that “the importance of exercise is not adequately understood or appreciated by patients and mental health professionals alike.”

This lifestyle intervention program was really challenging the idea that when it comes to mental health, the only people you need are psychologists, psychiatrists and people dealing with the brain. The program stipulated that as it is also important to deal with physical health issues that arise and have professionals onboard, such as “dieticians and people with exercise experience delivering these lifestyle interventions in a psychiatric setting.”

The lifestyle intervention program not only helps the patient’s physical health, but it also helps them to be more engaged in society. There are many benefits with regular exercise and healthy food habits. Dr. Sharma’s study concluded that the health benefits of these lifestyle modifications included “improved sleep, increased interest in sex, better endurance, stress relief, improvement in mood, increased energy and stamina, reduced tiredness that can increase mental alertness, weight reduction, reduced cholesterol and improved cardiovascular fitness.” However, there are other benefits such as “distraction, self-efficacy, and social interaction.” Not only that but “exercise has also been found to alleviate symptoms such as low self-esteem and social withdrawal.” This will enable patients to improve their interactions with others in society.

In addition, physical intervention and lifestyle modifications assist in breaking the negative stigma surrounding mental illness. As many people carry negative ideas about mental illness, “one of the sad things are the stories about the mentally ill that make it into the media are often about some violent acts that a person with a mental illness has committed.” While Professor Ward acknowledged that sometimes this can occur, he also recognises that “very few of them do it, and a person with a mental illness is much more likely going to harm himself or herself through a suicide attempt than they are going to hurt anybody else.”

Unfortunately, this is not the perception held by the general population, and this negative perception is part of the stigma.

Professor Ward believes that a way of trying to improve this image is “trying to get the message out that mental illness is something that many people experience - up to half of the population will experience some sort of mental disorder, mostly depression or anxiety - at some points in their lives, so it’s the norm rather than the exception to have some sort of mental illness.” In saying that, those with a mental illness should not be seen any differently as somebody with diabetes or any other chronic illness where there are treatments readily available to assist them in leading a normal, productive life.

He highlights that “this understanding of the physical consequences that go with it is a way of breaking down the stigma because it helps make people with mental illnesses seem like everyone else.” By using the physical outcomes as a bridge between those with a mental illness and those with not, it helps to break down the negative stigma surrounding them and opens up a dialogue within the population. By making them aware that “they have problems with putting on weight, as does everyone, they suffer from spending too much time sitting and not enough physical activity.” Dr. Sharma has noted that “interestingly, adherence to physical activity interventions in psychiatric patients appears to be comparable to that in the general population”, further closing the gap and opening the dialogue between the mentally ill and the rest of the population.

By ensuring that “this is something that we can address and is really something in all out community is aware of”, this lifestyle intervention program can really help improve the physical outcomes in those diagnosed with a mental illness, while also making progress in improving their image. As Professor Ward has outlined, supported by the studies conducted by Dr. Sharma, physical and mental lifestyle intervention is significant in improving the physical outcomes for those with a mental illness, while also breaking down the negative perception surrounding mental illness and can really improve the future outcomes. ■



# Mental healing through physiotherapy in Kenya

Lidia Villanueva

Physiotherapy is a worldwide spread practice and techniques have highly improved in the past years. However, its application to the mental health field is not so well known. Joanne Kibet, is a scientist and physiotherapist born in Kenya who decided to go deeper in the mental health approach. She realized how many people in her country needed these treatments while only a few professionals were involved. "Physiotherapy for mental health is a specialized field, because the kind of patients / clients physiotherapists work with most of the time do not have good body awareness and self-regulation. Apart from the physical problems, they also have challenges with psychological problems", explains Joanne. Mental health involves lots of different variables which differ from one patient to another therefore increasing the complexity of healing treatments.

However, it is difficult to understand the importance of

something without having some knowledge about its practical appliance. Joanne says that, first of all, a general examination has to be carried out by the physiotherapist and, after the initial study, she or he comes up with a suitable treatment plan for the patient. The second step requires the professional to make sure physiotherapy equipment does not involve any danger for the subject. For example, "when using heat therapy, some patients might not be able to tell whether it is hot or not yet their sensation is good because of other psychological issues". This is a proof of the high degree of specialization attached to physiotherapy when applied to mental health.

A specific application of physical activity treatments is in case of torture. Torture means deliberately causing severe physical and mental pain to a person. Most of the people who experience this kind of situations usu-

ally suffer from psychological after-effects which can evolve in permanent damages changing their lives forever. Concretely, as Joanne explains, torture survivor patients have both mental and physical consequences. In this case, "physiotherapists will have to work with both issues, for some psychological issues will be present with somatic problems and they will need to be addressed". There are different types of torture, and the specific type the patient has experienced needs to be identified. This way, the physiotherapist can establish a correlation between the body structures which have been injured and the presenting symptoms and, consequently, develop the most adequate plan.

Human beings feel closer to the things they have at least some knowledge of. To be really aware of how important the physiotherapy field is when it comes to patients dealing with mental illnesses, it is important to get to know

In Kenya, she alleges that there is one national mental hospital placed in the capital city plus several departments distributed along eight regional hospitals.



Ms. Jepkemoi  
Joanne Kibet,  
physiotherapist  
specialist in  
Mental Health,  
Kenya

There is a challenge to implement evidence based practice in the field and this way raise awareness, which would result in an increase of its development.

specific cases, for to knowing something means understanding. Joanne says, “I had a very depressed patient who did not want to get out of bed, eat or perform any activity like personal care (bathing etc.). Physiotherapy was prescribed to this client and her programme included exercises in the gym, treadmill, static bicycle, pulley exercises, swiss ball exercises. Finally hydrotherapy happened for a week and the patient was discharged from hospital feeling strong physically and happy”.

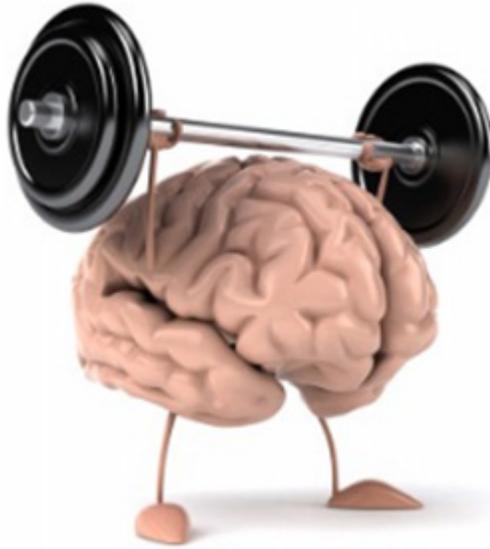
Despite the useful implication physical activity has when it comes to treatment plans, this practice is not commonly

considered nor developed in the world nowadays. This situation is even more complex in developing countries in which, as Joanne let us know, mental health is not something many people usually talk about. The reason why is mainly related to cultural issues.

Concretely, in Kenya, she alleges that there is one national mental hospital placed in the capital city plus several departments distributed along eight regional hospitals. Nevertheless, “this is not enough to meet the needs of the citizens”, Joanne adds.

There can be different reasons why this practice is not

worldwide carried out on a regular basis. First, because of the lack of knowledge about its usefulness. Second, due to the difficulties it implies. One of them has to be with the need for a process of sensitization by the physiotherapists regarding their role in mental health. Besides, there is a challenge to implement evidence based practice in the field and this way raise awareness, which would result in an increase of its development. Deep implication and interest in the field as Joanne does and believes to be crucial is needed for forward improvement of physiotherapy and mental health. ■



## Facing the challenges of science and health in developing countries

Esperanza Vivanco Biderbost

Scientific research has developed around the world incredibly fast, thanks to new technologies. The Internet has built a huge global database of shared knowledge which everyone can have access.

However, the speed of such technological growth has resulted in huge differences among countries, there is a clear gap between developed countries and developing ones. A quite concerning problem in the developing countries must be addressed, as there is no information about science or scientists' projects and discoveries. The lack of information is brutal, and the political and social restrictions are playing

an important role in making this problem even more difficult to solve.

Therefore, scientists, doctors, professors... face many challenges when they carry out their jobs. This is the case of Dr\

Dr. Noaman  
Ali Elkosayer,  
physiotherapist  
specialist in  
Mental Health,  
Egypt



Noaman Ali Elkosayer, physiotherapist at Ministry of health in Egypt, a country that faces many confrontations in this field, “the first challenge we have is absence of evidence based database making a lot of burdens in researches, also affecting practice.” explains the doctor.

Furthermore, one of the biggest problems of the developing countries is the lack of resources, specially financial ones. They suffer from low incomes and the failure to have acces to knowledge, researchs, news... As a consequence they remain unable to adapt new discoveries and technologies to the needs of the community. Actually, Egypt is spending less on health care than other comparable income countries. Less than 3-5 % of government expenditure is devoted to health.

New ideas and projects are needed in order to overcome the pressures from the governments and the restrictions in the communication systems. Policies should be revised in order to open the acces to information and knowledge.

However, there is still hope for these countries, for example “physiotherapy in Egypt had taken a lot of steps forward among other medical professions after a hard struggle with physical medicine which belongs to faculty of medicine looking for more steps.” explains Dr\Noaman Ali Elkosayer. During the past years, several measures have been carried out in order to strengthen the national performance in health research. Indeed many advanced deartments have been inaugurated to develop new researchs and projects in this field.

In pursuance of a brighter future for the health system, Universities are key to implement research projects as well as

## Physiotherapy in Egypt had taken a lot of steps forward among other medical professions

keeping an open academic research program. Younger generations are vital to hope for a better future. Inspiring them to be involved in investigation projects will be decisive for the countrie’s future.

There are many fields that need to be improved, “the final step is the starting the degree of DPT which become a must to be obtained, but we are walking forward, there are also some several fields still in need for more improvement such as mental health,women’s health, occupational health.” adds Dr\Noaman Ali Elkosayer.

With the appropriate use of the modern tools available as the Internet, there are plenty of new options to improve the country’s situation, “Internet has become basic in science as all over the world you know that... one press get all what you want, for example open online courses, overseas conferences, participation in international organisations...” says Dr\Noaman Ali Elkosayer. In additions there are many international conferences of scientists all over the world which, as Dr\Noaman Ali Elkosayer says “ they help me to know what’s new, making global relationships, new friends, new abstracts mainly in interests, I haven’t yet participate in specific studies but I am preparing for my first abstract that may be presented in the 18th Wcpt in capetown in South Africa in 2017 in mental health.”

Finally, the list of challenges to be addressed in the future is infinite, from limited national funding of research, increasing cost of interventional and applied research in the communities, to inadequate networking among research centres, poor dissemination and use of research findings, insufficient coordination between different research organizations... But what is for sure, is that they need help from other countries to accomplish their goals, Dr\Noaman Ali Elkosayer suggests “more help from different international organisations in this field to our developing countries is needed to get more improvements.” ■





## Mind & Body Entangled Hippocrates, Physiotherapy and Sigmund Freud's Couch

Victor Wagner

“Walking is the best medicine.” This is what the famous greek physician Hippocrates of Kos suggested about 2400 years ago. A rather plain statement, one might say, similar to those outworn phrases used by parents to make their couch potato kids go outside. But the ancient doctor's opinion does by no means only refer to physical health. And in the light of new find-

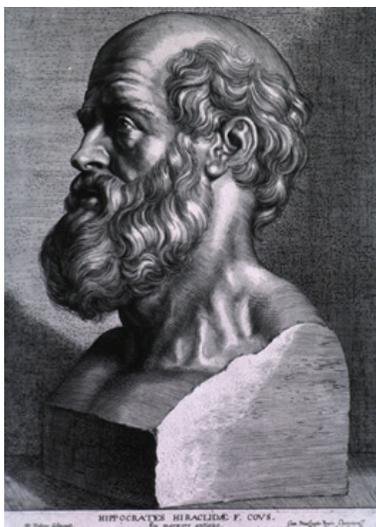
ings about physiotherapy and it's influence on mental health, the old aphorism indeed receives a much more profound meaning.

In 2015, scientists from the of Physical Education at the Wenzhou University, China, could observe a significant reduction of anxiety and depression symptoms in Diabetes patients by combining shadow boxing sessions with mind-body relaxations. Another recent study from the Málaga University shows a significant increase in mental well-being after the physiotherapeutical treatment of chronic neck pain. By now, there is an astounding amount of studies and articles that find positive effects of various physical exercises and treatments on mental health. All of these studies are part of the new academic focus and research on physical therapy that has begun about 15 years ago.

Dr. Ellen Zambo Anderson, PT, PhD, GCS, is a board certified geriatric physical therapist and Associate Professor at the School of Health Related Professions at Rutgers, the State University of New Jersey, USA



The term “physiotherapy” or “physical therapy” contains a wide range of treatments with the objective of overall well-being: “In addition to exercise, mind-body interventions such as Ba-



Hippocrates of Kos, the “Father of western medicine”

sic Body Awareness Training, progressive muscle relaxation, and other forms of relaxation also fall under the purview of physical therapy”, explains Dr. Ellen Anderson, Associate Professor at the Rutgers State University, New Jersey.

The studies mentioned before show this variety of approaches and also of the diseases that can be treated with physical interventions. Yingying Zheng and other scientists from the Wenzhou University prepared training circles consisting of Twenty-four Move Shadow Boxing – an old Chinese martial art also referred to as “T’ai chi ch’uan” – and psychosomatic relaxation sessions. The subjects of their study were Type-2 Diabetes Mellitus patients with depression or anxiety problems, assessed with self-rating depression and anxiety scales. After 24 weeks of training the re-

People suffering from depressive illness or anxiety grows – and so does criticism on conventional treatment.

sult of the controlled experiment showed not only a significant decline of blood glucose levels, but also of anxiety and depression.

At the Málaga University, Antonio Ignacio Cuesta-Vargas and Manuel González-Sánchez treated patients suffering from chronic non-specific neck pain with a combination of various physical exercises on land, swimming while keeping a neutral neck position, and health education for 8 weeks. They could observe positive changes in the physical disability, and also a significant increase of quality of life and mental health. This was assessed by standardised questionnaires among other health survey tools used as screening measures of depressive illness.

#### “A Healthy Mind in a Healthy Body”

These studies are only two concrete examples for the new perception of physical interventions in mental health. The ancient “mens sana in corpore sano”-slogan (“a healthy mind in a healthy body”) is experiencing a vivid comeback as the number of people suffering from depressive illness or anxiety grows – and so does criticism on conventional treatment. More and more patients believe that the customary depression treatment only consisting of medication and psychotherapy is insufficient, and therefore turn to alternative and complementary medicine, including physical therapists. This critical view



T’ai Chi Ch’uan is often referred to as shadow boxing



Lacks all signs of physical exercise: the “Freudian Couch”

and the demand for a closer collaboration of psychotherapy and physical therapy is shared by many experts on psychiatry, who are worried about the unhealthy lifestyle of their patients. Dr. Lydia Chwastiak from the Washington University states that more than half of the mentally ill adults in the US are also obese and face serious physical dangers, such as cardiovascular disease. This is due to the absence of motivation for lifestyle changes and to quick discouragement, and it is a problem that lies beyond conventional treatment. It seems strangely coherent that the most famous symbol of old school psychotherapy – Sigmund Freud’s couch – lacks all signs of physical exercise.

The close relation of mental well-being and physical health is also visible in the work of Dr. Anderson, who is a board certified geriatric physical therapist. She reports that patients who receive physical therapy because of chronic diseases or physical disabilities suffer from depression more often than the normal population. According to Anderson, “up to a quarter of people post-stroke have depression, 33% of people post MI [= “myocardial infarction”, commonly known as heart attack] experience depression, half of all people with Parkinson’s disease have depression”.

### Characteristics of a vicious circle

After combining these observations with Dr. Chwastiak’s statements, the high correlation

between physical disease and mental illness shows characteristics of a vicious circle: depressions facilitate the outbreak of chronic physical diseases; physical diseases or disabilities may in turn cause depressions. But considering the results of the various studies on physiotherapeutical interventions, this ill interdependency could be dealt with.

Older studies claim that physical exercise partially based on lifestyle changes and – Voilà Hippocrates! – walking programs has the very same effect as psychotherapeutical interventions. Although the said studies are more than 10 years old, they leave an enthusiastic feeling and a lot of questions. What is the true potential of physical activity and physiotherapy? Where are it’s limits? Could it even replace the “Freudian couch”?

Dr. Anderson remains realistic: “Physical therapy interventions are not likely to “cure” depression and mental illness, [but] physical therapy can certainly contribute positively to the treatment of depression and help people improve their overall health and well-being.” She suggests that physical therapists should know about mental health issues and recognize depression as a disease that needs to be treated simultaneously in “patient centered care plans”. The research results from the last 15 years wisdom: “If you are in a bad mood go for a walk. If you are still in a bad mood go for another walk”. Of course that sounds plain again. But why not give it a try? ■

**Table 2.** Depression changes in patients before and after intervention

Group	Before Intervention	After Intervention	Difference	Intra-Group Comparison	Inter-Group Difference Value Comparison
Intervention Group	53.2±8.5	47.1±8.1	6.1±4.9	P<0.001	t=3.596
Control Group	54.3±9.2	52.2±8.5	2.1±6.7	P=0.123	P<0.001

This table shows the results of the depression treatment with shadow boxing and psychosomatic relaxation.



## Inside Out: Miguel Muñoz-Cruzado y Barba

Ana Delgado

It's dark and one can only guess it's the beginning of the day by the first rays of sun, which although timid, can be seen through the small slots of the shutters.

It is 5:30am and the alarm clock goes off. Time to wake up. Without over thinking it, our main character -Miguel Muñoz- Cruzado y Barba- gets up, puts his slippers on and walks towards the bathroom. A warm shower always does the job.

While he lets the many drizzles of water that fall from the shower head wash sleep away, he goes back to the book which helped him build the person he is today. General System Theory, by Ludwig Von Bertalanffy. That was it. Even though it's too early to articulate the Austrian name, he remembers it clearly.

He was 14 years old and his father had just given him the book as a gift. He smiles as he heads for the wardrobe; it is not a normal gift to give a 14 year old. However, now that he looks back on that memory, he knows that was the moment he went from being a young boy to being

a little bit more of an adult. That was the moment everything clicked on his mind and he began to understand science as a whole, knowledge as a whole and life as the place where everything is connected.

Coffee time. One of the most important steps when you wake up at the crack of dawn. It has to be quick though, the day has only just started. Also, he has still 50km until the Faculty of Science in Málaga, where he works. No time to waste.

He gets inside the car and turns the engine on. The machine greets him with an already too familiar sound and they both let the journey begin. Trees, houses and more cars welcome them to the

new day. What if he hadn't had that accident which had led him to abandon his initial vocation of being a Marine? Truth is it is hard to picture a life where he doesn't help others feel better about their maladies.

He lets the steady pace of the car take him back to the time when he realized physiotherapy wasn't just a technique used to cure broken arms. Everything is interrelated- for both good and bad.

It is interesting to think about how something as simple and accepted as a winter cold can affect the body in a visible way, but also the mind and the social relations a person might have. There is no illness which is just psychic or physical or social. Any alteration in

Dr. Miguel Muñoz-Cruzado y Barba, physiotherapist specialist in Mental Health, Spain



he is author to various publications of scientific magazines, has participated as a speaker in international and national conferences and has written three books which have been translated into German. He was also director and host of the TV program “Por su salud” and has been a co-worker in various medical magazines.

any area of the human being will interfere, undoubtedly, in the others.

It is 7:00am and he has arrived to the Faculty. It is time for a second morning coffee, although this time, he accompanies it with some toast to make it a good morning breakfast. His classes start in an hour so he has enough time to revise all the material he is going to use.

Another thing which would be hard to picture would be his life without those students who manage to stand out from the rest. The feeling he gets when he knows one of his pupils has grown into a thinking mind full of potential is one of the most exciting rewards.

There was this girl once who was a student in his class. She had a brilliant mind and was always cheerful. Today, she is working as a clown in Clowns Without Borders and goes out in missions to make children smile.

That is an example of how everything is related. In the solving of a problem, there has to be a team of people who are specialized in various departments to help fix it. A transdisciplinary team. Having people who know a lot about their area, but who are also familiar with the different areas which form the team. This way, there would be a conjunction of knowledge and understanding.

Human issues are connected, but so are their solutions.

It is 15:00pm and it is time to go back home. His wife is probably waiting for him to have lunch. This is something he appreciates, even though he feels bad for being the reason why she doesn't eat earlier.

When he arrives, they both sit at the table and start a conversation. They don't watch TV -not because it is banned- but because they like to talk. She is a music teacher and works at a high school with children. After lunch, they both watch the news and for a few minutes, they relax.

However, they don't delegate much time to relaxing and they soon start to prepare their material for tomorrow's classes. Miguel also takes advantage of this time to investigate, answer questions on the thesis he is directing and focus on his other activities; he is the director of Revista Española de Comunicación en Salud and director, scriptwriter and host of the radio program “Con el debido respeto” in Onda Líder Radio and AxarquíaDigital.es

He has always had something to do. He still does. In fact, he is author to various publications of scientific magazines, has participated as a speaker in international and national

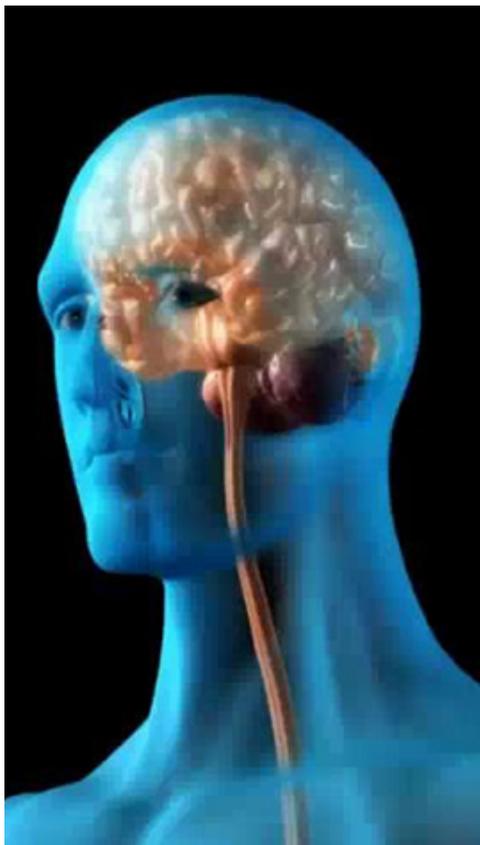
conferences and has written three books which have been translated into German. He was also director and host of the TV program “Por su salud” and has been a co-worker in various medical magazines.

Currently though, it is Monday afternoon and two of his grandchildren have just arrived. They all go to his office and, leaving all noise behind, they submerge in some quality time together.

For approximately two hours, Miguel travels back in time to school and surrounds himself by subjects like maths, science, literature, history... but the clock soon strikes 21:00pm and the flashback ends. His two grandsons go home and his stomach makes a light rumbling sound.

After having dinner, Miguel and his wife share the last hours before going to bed and by the time the clock strikes midnight they decide it is time to go to sleep. Everything is pitch black already and not a sound can be heard. The shutters have been closed again, although some slots have remained open, ready to welcome the first rays of sun and with it, a brand new day. ■





## Doctor Taisei Yamamoto and His Way on Physiotherapy in Mental Health Treatment in Japan

Sun Yuchen

Doctor Taisei Yamamoto, an Asian participant in the 6th International Conference of Physiotherapy in Psychiatry and Mental Health, is an expert in Physiotherapy in Mental Health.

He was a physical therapist in the past years and he has been a full time lecturer of Kobe Gakuin University in Japan since 2005. He has made researches on a much clearer relationship between mental illness and physical movement by using brain imaging apparatus and in recent years, he mainly focuses on studying the effects of Basic Body Awareness Therapy (BBAT) on sense-of-self, body-awareness and movement-awareness for the person with schizophrenia. Investigations in these issues have shown positiveness but there are still a lot to do ahead the way.

The improvement made in imaging diagnostic technology and the possibility to get numerical data of brain activity aid to figure out the relationship between mental disorders and physical movement. In his studies, Taisei Yamamoto uses brain imaging techniques such as optical topography and suggests that the nerve activity in the brain, particularly frontal lobe activities and the cognitive function are significantly increased by physical movement approaches. This result could be applied to the treatment of schizophrenia in his studies. Though this has not practically operated on patients of psychiatric and mental health disorders in clinical settings, it is insisted that the intervention of physical movement could contribute to turn the negative symptoms in people with schizophrenia into better situations.

Taisei is now concentrating on the effects that Basic Body Awareness Therapy or BBAT brings to schizophrenic's perception of self and cognition of body and movement. BBVA, a treatment form in physiotherapy, has roots in a number of different movement systems. It has been reported in the 70's to contribute to the maintenance and improvement of mental health. In his studies, how body-awareness and movement-awareness are dedicated to sense-of-self which connects to the promotion of functional movement



Dr. Taisei Yamamoto, physiotherapist specialist in Mental Health, Japan

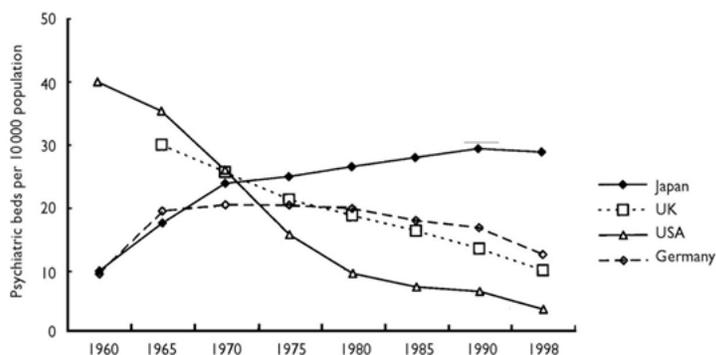
The fact that a person is schizophrenic it doesn't mean the one can't be physically active

Doctor Taisei is optimistic on the physio-therapeutic intervention in psychiatry or mental health disorder and looks forward to see a further development. These years psychiatry such as schizophrenia outbreaks in Japan. Some statistics showed that the number has surpassed that in the Western countries in recent years.

is discussed. Further on, a balance function, movement image and sense-of-agency are improved by intervention of BBAT for people with schizophrenia. Based on the hypothesis that the appropriate movement intervention can contribute to promote movement quality in people with schizophrenia, he endeavors to show clearer in his researches how can physiotherapy improve body-awareness and movement-awareness through enhancing the sense-of-self. It is thought that enhancing the sense-of-self can contribute to promote functional movement in daily life for people with psychiatric and mental health disorders. Doctor Taisei said that the learning process of movement-awareness is very important, and it becomes a key for the treatment of physiotherapy toward to promoting functional movement.

Physical activity has a useful impact on the people diagnosed with schizophrenia. Exercising can relieve symptoms of depression and anxiety.

He mentioned that there are more than 3 million people in Japan with psychiatric or mental health disorders and around 300,000 are hospitalized. Sixty-five percent of the population is limited in terms of daily activities as they stay in closed wards. Half among these people are older than 65 and over 60,000 in-patients have been in hospital for more than 10 years. Under this serious situation, auxiliary means may assist to change the current situation. Physiotherapy has the affirmative influence on the functional movement which is the main factor to be healthy (WCPT). Therefore it can be one of the important interventions to maintain both physical and mental health. However, nowadays physiotherapist has not been applied in psychiatric and mental health area in Japan and the systematic operation has not been established in Asia yet. The good thing is that physiotherapy in psychiatry and mental health is improving and the necessity of rehabilitation has been recognized in Asia. Many countries like Singapore, Japan are participating in the exploration of physiotherapy in psychiatry and mental health. Therefore, the development of physiotherapy for mental disorders is gradually moving forward. We can anticipate this promising study evolving in Asia and being put in practice. ■



IWAO OSHIMA etc., 2003





exercising can relieve symptoms of depression and anxiety. Also, some medicines cause weight gaining but exercising keeps a person fit. Actually, 40-80% of schizophrenics treated with antipsychotic medications gain excess weight. This is a major factor for various medical disorders that might be responsible for the increased morbidity rates in schizophrenics. Regular exercising is keeping a person in shape, as well as, helps the one to maintain a healthy weight.

Schizophrenics can use physical activity as a way to improve their communication skills. By participating in different exercising classes, they become more social because they communicate with other people. Also, schizophrenics may find other individuals with this condition and motivate each other into achieving better results regarding exercising.

According to Dr Brendon Stubbs, clinical researcher and physiotherapist, other reason to promote physical activity in people with schizophrenia is: `` Sedentary behavior is associated with

elevated inflammation and metabolic risk. Therefore, we need to pro, one physical activity to reduce these risks.``

Physical activity makes it easier for the schizophrenics to control their cardiovascular health. Exercising is beneficial for them because it improves muscle function and prevents common conditions in schizophrenia such as metabolic syndrome and diabetes.

### Physical activity for a Psychological Wellbeing

Exercising leads to physiological changes such as improved perceptions of competence and self-efficacy. Physical activity can be used as a way to reduce stress, improve mood and develop a sense of autonomy. Exercising helps the schizophrenics to grow self-esteem and decrease anxiety. Including physical activity in the therapy of a person with schizophrenia can better the one`s ability to focus.

### What kind of exercise

Moderate aerobic exercises can relieve feelings of de-

pression and social isolation. They could reduce the metabolic risk and weight. Aerobic exercises increase the motivation of the schizophrenics. Also, they affect the eating habits and the sleep patterns of the individuals with schizophrenia.

The kinds of physical activity that schizophrenics can do are cycling, jogging, walking, weight training. For instance, swimming will improve the stamina, yoga reduces psychiatric symptoms and weight training is good for bone strength.

### How much to do

Following the recommendation of the doctors, it is good idea to practice 30 minutes a day by doing moderate exercise because over-exercising may increase the levels of anxiety.

### Risks

First things first, consult a doctor before starting any exercise program. The one might need to screen you for both physical and mental health conditions due to the fact that schizophrenics have an increased chance of having morbidities.

According to a study, people with schizophrenia are at increased risk of developing fractures. Schizophrenics have reduced bone mineral density, so they are more apt to suffer from osteoporosis than the people without mental illness. Also, schizophrenics take antipsychotic and other psychotropic medications that have side effects such as drowsiness, muscle spasms, tremor (shaking) etc.

Hence this leads to falls. This is one of the leading causes for

fractures due to trauma in the individuals with schizophrenia. A risk factor for falls is the reduced strength in the legs area and the probability of experiencing high levels of pain.

Dr Stubbs said: ``Pain is common in people with schizophrenia (33%) yet hardly receives any attention in clinical practice or research. Our recent research has shown pain is unsurprisingly associated with lower quality of life and more depressive symptoms. Physiotherapists can therefore have a key role in assessing and managing pain. ``

Sometimes the exercising should be supervised because schizophrenics may experience delusions, hallucinations etc.

### **What types of physical activity do the physical therapists prescribe?**

The most recommended activity by physical therapists is walking. General cardiovascular exercises with circuit training, running, cycling and aerobics are nice approach, as well. Some therapists recommend team sports such as soccer, basketball and racket sports. A good idea is mind-body interventions such as body awareness therapy, relaxation classes, Tai chi mental fitness, yoga etc.

### **What to consider before you start**

At first think whether you want to practise on your own, be part of a group or train at the gym. If you feel more comfortable when you are training alone you may do it at home. For example, press ups and push ups. All you have to do is to free space in



your home and practise 30 minutes a day.

If the idea of attending the GYM sounds good for you, go and speak with your doctor, especially if you haven't trained before. There might be some checking's that your clinician have to do. For example, if the exercise routine is suitable for you, if it is in accordance with your pre existing or chronic health conditions. Another thing is that you may get GYM membership with a discount or even for free.

A nice whim is to keep record on your achievements by measuring how many calories you have burned or how many km you have walked or run.

### **What are the challenges that the researchers of the physical activity in people**

### **with mental health problems facing?**

Dr Brendon Stubbs said: `` The main challenge (which is being overcome) is convincing the wider team the value of physical activity. Thanks to Davy Vancampfort and others, clinician and research funders are being won over in this regard. The next major challenge is demonstrating what is the role of physiotherapists in promoting physical activity and why we should have a key role above other people. ``

To cope with schizophrenia is not an easy task. People diagnosed with this severe mental illness are experiencing a lot of difficulties in their everyday life. Physical activity can be a useful mean to try to increase schizophrenics' energy and self-esteem, as well as, motivation. Exercising helps them to fit better among others by developing their social skills. Physical activity gives a schizophrenic the chance to live not only healthily but also fully. ■





## Interview with Dr Brendon Stubbs

**What are the challenges that the researchers of the physical activity in people with mental health problems facing?**

The main challenge (which is being overcome) is convincing the wider team the value of physical activity. Thanks to Davy Vancampfort and others, clinician and research funders are being won over in this regard. The next major challenge is demonstrating what is the role of physiotherapists in promoting physical activity and why we should have a key role above other people. Again, Dr Vancampfort and I addressed this in papers in schizophrenia and bipolar disorder respectively highlighting that physiotherapists can prevent drop out from exercise in these populations.

**How UK health care professionals that are working in mental health settings incorporate the physical activity in the treatment of people with schizophrenia?**

This is evolving and varies across the nation, but the emphasis and importance is shifting.

**What are the gaps in the health care provision of the schizophrenia?**

Pain is common in people with schizophrenia (33%) yet hardly receives any attention in clinical practice or research. Our recent research has shown pain is unsurprisingly associated with lower quality of life and more depressive symptoms. Physiotherapists can therefore have a key role in assessing and managing pain.

**Why moving more should be promoted for SMI?**

Sedentary behaviour is associated with elevated inflammation and metabolic risk. Therefore, we need to promote physical activity to reduce this risk (among many other good reasons). ■

## Does Studying Abroad lead to better health professionals?

Alexa Coso

Maite Cenoz Huarte, a Spanish physiotherapist, has managed to cross medicine's borders by completing her studies in over four countries and two continents. In a world where it's estimated that 9 million American adults find themselves in need of outpatient physical therapy services, their training could never be of greater importance. A native of Pamplona, Spain, Cenoz began her studies of physical therapy in the city of Barcelona. While preparing to do her work experience, Cenoz came across the opportunity to fulfill her requirement in Belgium. It is there where she discovered a new field, "Physiotherapy applied to psychiatry. In Spain I had studied psychiatry as a subject, but the main difference was and still is the approach: in Belgium the physiotherapist was an active member in the psychiatric team." There she learned

that it's vital for the body and mind to be taken as a unity instead of as two distinct parts of the human being. One of her biggest inspirations was the quote, "How we move in-

fluences how we sense, and in turn how we sense affects how we move." (Sumway-Cook and Wallacott, 1995) This discovery became the starting point in Cenoz's de-



Ms. Maite  
Cenoz Huarte,  
physiotherapist  
specialist in  
Mental Health,  
Spain



cision to become a mental health physiotherapist. After completing her Bachelor's degree, Cenoz found herself with an opportunity she could not refuse: study Chinese medicine. When asked to describe the major differences between Chinese medicine and European medicine Cenoz stated, "The metaphor I find to help me to answer this question is that

to use? Cenoz claims that by studying in very different parts of the world she is able to consider all possibilities of treatment including those not often traditionally seen. Her experience of living and studying in China has allowed her to give better diagnosis when working with patients. As she states, "a minor aspect can change the whole situation, as in a Chinese charac-

depressants, physiotherapy relies more on the connection with mind and body to relieve anxiety in a natural manner. Finally, during her stay in China, Cenoz realized that in order to continue her studies in physical therapy in mental health she would have to go to Norway and study a postgraduate in BBAT, or Basic Body Awareness Therapy. After her BBAT degree she realized how vital physical and body awareness therapy is for society. During one of her group's sharing time, one person from the group described how being more aware of her body and feelings had made her realize how she could and wanted to bring her children up, and how raising them up with therapy could potentially lead to a happier family.

"How we move influences how we sense, and in turn how we sense affects how we move."  
(Sumway-Cook and Wallacott, 1995)

we are comparing two fruit trees. An apple tree and a cherry tree, for example both give fruit that can be used in desserts, but their taste, flowers and other qualities are different." As an example, though acupuncture and dry needling both require needles, China and Europe use completely different instructions on how they are to be used. So how does a professional decide which method

ter, one stroke can change the whole meaning and word. It is important to look for the treatment that suits the patient you are working with best, no matter where it comes from and weird that could be." According to the relationship between mental health and physiotherapy, a simple remedy for high stress is lying down sunbathing on a beach in a summer day. While a doctor might prescribe anti-

Though physical therapy is often associated as a post surgery or injury related requirement, Cenoz's focus on physical therapy and psychiatry have proven that medicine and its doctors are constantly innovating themselves in order to provide the best care possible. ■

# “Physical therapy in mental health plays crucial part in society”

## Rutger IJntema

Irene González

Head of the master program physical therapy in mental health and secretary of the international organization physical therapy in mental health, Rutger IJntema explains to us how the health system works in his country and what the main developments are and what his contribution are to this field.

For him education is one of the most useful tools for implementing new health care knowledge in society: “So we aim for an education- and research program that is in line with the goals of the Science Park Utrecht. A main idea is to focus on specific districts or communities, so educators, researchers and health care professionals work with the same goal in creating a healthy urban living and healthy citizens” the expert says.

Rutger explains that through his master he wants to highlight and teach why physical therapy is an important matter for today’s society and how it can contribute to make innovations and advances. “Our Master of Science Advances in Society - physical therapy



I am convinced that physical therapy in mental health plays a crucial part in approaching this challenge

program has the number 1 ranking in The Netherlands and has a focus on applying science in relation to innovation -, implementation- and evaluation research. The University of Applied Sciences Utrecht has its accommodation at the Science Park Utrecht. The Science Park Utrecht focusses on a 'Green', 'Healthy' and 'Smart' Utrecht region. To be more specific, patient self-management, e-health and a healthy urban living are main points of focus." As he recognizes knowledge must be applicable in daily life and must solve the problems that citizens have or don't know how to afford.

"The HU master physical therapy program is modular, so we can be flexible in adjusting our program to society needs. On the one hand we teach students to write case reports, do literature reviews, implementation research and evaluation research leading to a master thesis. On the other hand we teach students to apply the best evidence in practice by studying and practicing diagnostics, interventions and multi-professional collaboration, leading to a master proof."

He tells us that he educates students to be able to apply their knowledge in professional practice.

"Most important here is that students take responsibility for patients in society. In this way our masters play a pivotal role in disseminating knowledge into professional practice. So in case of physical therapy in mental health, depression, anxiety, burnout, work related stress

and somatization in combination with physical activity and adaptation are important. Especially related to patient self-management and participation in society"

He says that it is one of the reasons why we want to be involved in Dutch society in collaboration with regional government, small and medium enterprises, like physical therapy practices and hospitals. Sharing the same goal in creating a healthy urban living and healthy citizens. For example, they pre-invest money, before additional funding is applied for.

He says "I am convinced that physical therapy in mental health plays a crucial part in approaching this challenge."

And he ensures that the 6th International Conference Physical Therapy in Psychiatry and Mental Health that is going to take place in Madrid will be celebrated with a main aim: to improve physical activity combined with mental health.

For him these kind of conferences help his sector to gain in importance: "the world confederation physical therapy subgroup, the international Organization Physiotherapy in Mental Health is gaining influence in the world, thanks to projects like this conference". He says that is the best way to share ideas, inspire each other and return back to our countries feeling even stronger and more convinced that their pivotal profession is on the right track by serving society and their needs in the field of physical activity and mental health. ■

Our Master of Science physical therapy program has the number 1 ranking in The Netherlands and has a focus on applying science in relation to innovation and implementation



## Physiotherapist to Dame knighted by the king of Norway

Juan Francisco Delgado Entrambasaguas

Berit Heir Bunkan is a physiotherapist doctor with a magister degree in psychology, who has undergone many changes since it was introduced to this field. Berit tells us about her experience in the area of study and present the influence of technology and the future of their profession. Berit is not only a pioneer of psychomotor psychology but also provides a method for improving the physical condition of his patients she experienced to understand it and to perfect it. Her life has been dedicated to The Braatoy and Bülów-Hansen physiotherapy since 1956.

Berit was born in 1929 in a small town in Norway. During this time, there was an economic crisis that affected the entire global picture, however, the position of the Nordic countries on this crisis was always away. Later came the WWII, where Berit was still a girl barely 11 years. But as in the economic field, Norway also maintained the conflict, however, it was occupied in the early 1940s by the Nazis and liberated in the winter of 1944, all this influenced the

development of the country as well as in society. Berit finished her studies in psychology with an enrollment of Haagaas Artiumskursus in 1955, and went from there when he decided to pursue psychology psychomotor starting at Rikshospitalet University Hospital. She was working as "a physiotherapist at a hospital in the middle of Norway and a psychiatrist who was a friend of the late psychoanalyst dr.med. Trygve Braatoy, said to me: -You should go to Oslo and learn from the physiotherapist Miss Aadel Bülów-Hansen-. The psychiatrist explained the therapy to me and I answered. "We have so many patients that is impossible to use a whole hour for each of them" she explains. However, she had experienced that many tense patients felt worse when she treated them according to the relaxation methods she learnt in her physiotherapy education."

She explains that after waiting for two years, she was accepted as a student of Miss Aadel Bülów-Hansen, she became Miss Aedel's favorite

student, and she was "fascinated by her and her method too" The professor, treated her whole body, in order to understand her feelings, her senses and her movements too. Berit, even says her hearing sense was not working very good although with this method she started to improve it and it became normal again, not only physically but psychologically she became more confident about her self. This, was a big impact for Berit who decided to take her own courses, where she started to initiate into the Braatoy and Bulow-Hansen method, the BBH method. The courses



Dr. Berit Heir Bunkan, physiotherapist specialist in Mental Health, Norway

ended into an education in the BBH physiotherapy within The Norwegian Physiotherapist Association, in 1993 this became a post graduate education in the Oslo and Akershus University College, she worked there until she became a pensioner in 1999.

### Studies and achievements.

The relation between psychology and physiotherapy is a fundamental concept to understand in order to go through Berit's achievements, so Berit explains that "The muscular tension in the body is a defense against troublesome experiences and memories", she mentions Wilhelm Reich, the father of modern psychotherapy, and Bulow-Hansen as her main influencers with the relation between emotional changing and physiology. However, one of her past mentors, Bulow-Hansen did not like the idea of Berit working as a psychologist too, after doing her magister.

Berit has been honored many times because of her studies and her works too, even by the king of Norway. Answering our question about which is her most important work until today she answered: "I think the work that led to my PhD is most important for me. I developed the Comprehensive body examination (CBE) (4,5) on the background of the Braatoy and Bülow-Hansen therapy. In a quantitative

study, I showed that variables from the body could discriminate between groups of healthy individuals and patients with pain, respective patient with psychoses"

All this work is highly rated in her field, as a pioneer, she is also a influence person for future students and workers of this field. Eventhough she has experienced many cases, she claims that as a physiotherapy psychologist she has not experimented a lot of trouble with her reserchs "My research was performed at the Department for research and education in psychiatry at the Faculty of Medicine at Oslo University, in collaboration with 3 professors in medicine", however, she has experimented a kind of disappointment because she feels that physiotherapists have not been interested in her research. She recently she worked in a pilot study in which se explained the relation between the heart rate viability and respiration, which he hopes it helps to increase the interest in qualitative research.

The future of this field is unknown, but Berit sees technology as a way of changing "there are a lot of machinery invented for increasing the strength of the body" although her work is to go beyond technology and deeper because most of the technology used is based in physiological aspects.

Finally, we asked Berit if she is optimistic about the future of her field:

I am not too optimistic. Individual therapies are more expensive than the group therapies. Thus, I think the authorities always will choose the least expensive therapy. Group therapy, inspired by Norwegian Psychomotor physiotherapy exists. To my knowledge the deepest development and change in a patient is dependent on a close relationship between the therapist and patient in a dyade. We have an unique therapy which comprises manual guiding in specific movements, touch, specific massage, and therapeutic talk, in an emphatic climate. The education is on master level, and leads to a specialty and a higher fee within the national health system. To progress further we need that physiotherapists in the field go to the regular public media and write about cases and the useful therapy we give, and thus enlighten and inform about the field. For the time being, there is an increasing international interest in the Braatoy and Bülow-Hansen method. The Norwegian teachers of the method have many invitations to teach the method on international level. Further, in this interview I have not discussed the alternative therapies that are breathing us in the neck. ■





# M A D R I D



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