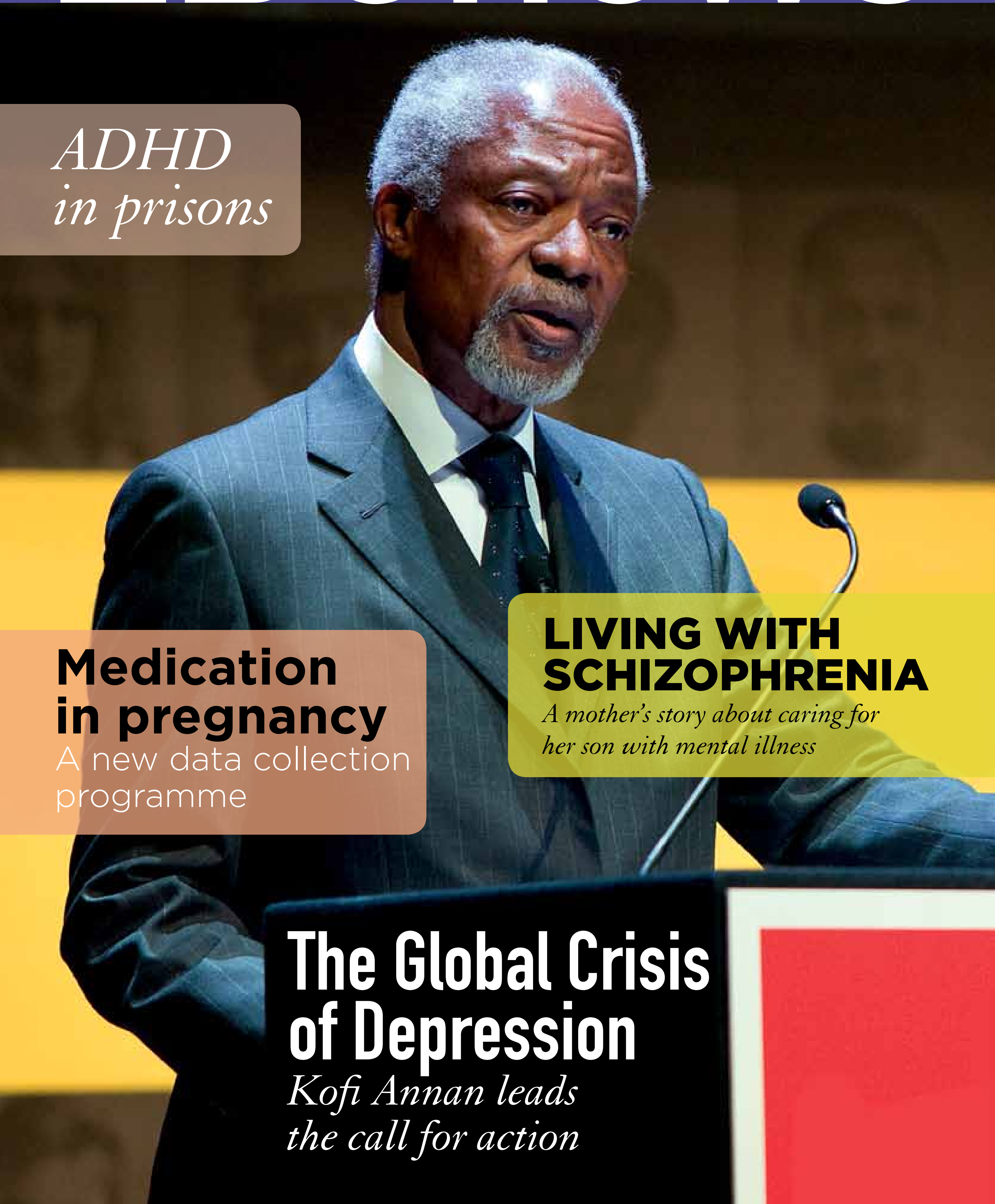
EBCnews

The Official Biannual Newsletter of the European Brain Council



ADHD in prisons

Medication in pregnancy

A new data collection programme

LIVING WITH SCHIZOPHRENIA

A mother's story about caring for her son with mental illness

The Global Crisis of Depression

Kofi Annan leads the call for action

The Official Quarterly
Newsletter of the
European Brain Council
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Dear Colleagues

Welcome to the third edition of EBCnews, the bi-annual magazine of the European Brain Council (EBC). As this is the first edition since I have become president I would like to take this opportunity to say how delighted I am that the EBC continues its excellent work on behalf of researchers doctors and patients across the range of brain disorders in Europe. This publication looks at some of the very many challenges that EBC has to deal with on a regular basis, and puts forward evidence-based ways we can improve treatment and person-care to the benefit of European society.

This issue examines the long-standing controversial issue of medication during pregnancy: whether to take the medication and expose the developing baby to often unknown developmental risk, or stop medication and risk the damaging effects of the mother's uncontrolled disease. This is a dilemma that patient and doctor often need to tackle. A new data-collection initiative in the Czech Republic aims to help.

And what of repeat offenders and their mental health? Why is it still a battle to have ADHD correctly diagnosed in prisons? Effective treatment is available and studies suggest they can dramatically reduce reoffending rate and improve patient lives and that of their victims. Professor Susan Young, clinical psychologist at Broadmoor Hospital, London, discusses.

This issue also addresses the emerging area of regulatory science; a moving story about caring for a young man with schizophrenia and how family life is changed forever; the ever-controversial issue of neuroenhancement and overarching all of these issues is the need for radical change to support sustainable healthcare across Europe according to EBCnews contributor ex-Health Minister for Ireland, Mary Harney.

But we also introduce the newly appointed Executive Director, Frederic Destrebecq, who shares his ambitions for the EBC as a robust and high-performing organization (page 3).

It leaves me to thank you for reading this issue of EBCnews.

David Nutt

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Lundbeck

EBC’s new Executive Director shares his ambitions for the organisation

With ambitions to bring stability, and create a “robust and high performing” organisation, Frédéric Destrebecq took up his role as Executive Director of the EBC in October this year.

Asked for his reaction upon being offered the role he said that he was increasingly curious and passionate about EBC’s activities and projects, current or pending. “I am utterly determined to deliver on the set goals and way ahead.”

Those goals include helping the organisation to consolidate its position and achievements made over recent years, explained Mr Destrebecq. “The EBC has already achieved much, particularly in terms of raising awareness on the cost of brain disorders for society as well as allocating increased resources for brain research in Europe.”

> *I will strive for the organisation to come up with concrete proposals, particularly regarding ways of improving the quality of life of patients suffering from brain disorders.”*
>
> Frederic Destrebecq, new Executive Director of the EBC

“Building up on its Year of the Brain, EBC needs to be brought to a position where it becomes sustainable and steady in its advocacy and activities,” Mr Destrebecq pointed out. “Maintaining a high degree of coherence in our activities will therefore be essential for that purpose.”

Mr Destrebecq has a strong history of working on pan-European agendas. Immediately prior to his new role he was Chief Executive of the European Union of Medical Specialists (UEMS), which encompassed major projects such as the European Accreditation for Continuing Medical Education and the creation of a web platform for the harmonisation of medical education and specialist training. “I also set up the Domus Medica Europea as the common premises of medical organisations active and present in Brussels under a common roof.”

With a fascination for advancements in medical technology, Mr Destrebecq explained that brain diseases together comprise a field “where research has known tremendous advances, yet the margin for progress remains enormous.” He intends the EBC to be an active contributor to some of the ambitious international and European projects that are currently underway.

He highlighted that the recent Nobel Prize for Medicine had been awarded for some key breakthroughs in the field of brain research and that such findings might facilitate the development of new treatment options for brain disorders. “It is to be hoped that we shall eventually be able to cure these diseases, rather than only treat their symptoms.”

Within that context, Mr Destrebecq hopes the EBC will continue its advocacy for these achievements. “At the same time, I will strive for the organisation to come up with concrete proposals, particularly regarding ways of improving the quality of life of patients suffering from brain disorders.”

First World Brain Day held in July

The first World Brain Day took place on 22 July this year and is set to raise awareness of brain disorder issues across the globe, in an effort to bridge the resource gap that leaves preventable diseases unchecked in poorer nations.

World Federation of Neurology President, Raad Shakir

The event was launched by the World Federation of Neurology (WFN), which was founded on 22 July 1957 and today counts 117 countries' neurological societies in its membership.

"The World Brain Day is not just to inform the public that brain diseases constitute 12% of every disability across the world, but to celebrate the function of the brain, as well as to highlight the deficiencies that exist between the developed and the developing world," said WFN President Raad Shakir to EBCnews.

Hence, the WFN will be working closely with World Health Organisation (WHO) regional representatives in order to publicise the dire situation of brain diseases in the regions of Southeast Asia, Africa and Latin America.

> *"We hope to spread the collaboration between the more advanced European countries and the parts of the world which are devastated by infections such as Ebola."*
>
> Raad Shakir, WFN President

Of course, more could be done to address the vast wealth disparities that exist within Europe's borders, Dr Shakir pointed out. "Many of the developing countries in Eastern Europe have a different health resource allocation to the Western European countries such as Luxembourg, Norway and Switzerland."

The emphasis of the World Brain Day, explained Dr. Shakir, is on prevention. "Stroke, brain injury, accidents, and all of the other brain diseases not only cause a lot of disability, but they also cost a lot of money – and a lot of them are preventable. Hopefully we will be able to pass on that message."

It is hoped that, by promoting the often underestimated physical, social and economic significance of brain health and disease prevention, the importance of basic neurological resources can be demonstrated to governments and international organisations alike. This will be achieved through national, regional and local promotion and education, and through WHO regional directors' influences upon government health ministers.

"Hopefully, with experienced organisations like the EBC, we hope to spread the collaboration between the more advanced European countries and the parts of the world which are devastated by infections such as Ebola."

This is no mean feat, especially considering that, for example, the WHO region of the Eastern Mediterranean includes countries such as Somalia, Eritrea and Afghanistan, areas experiencing violent conflicts that overshadow other issues. Moreover, the huge numbers of refugees fleeing the warzones of Gaza, Iraq and Syria are an immediate and tragic concern.

These social issues only solidify the need to achieve change in these regions, by bringing together influential international organisations in the push to rethink funding allocation on the national level. "Our expertise is to try to give those countries and their associations materials to try to influence their decision-makers and politicians," said Dr. Shakir.

Protecting the brain today for a better tomorrow

THE 3RD INTERNATIONAL MULTIPLE SCLEROSIS (MS) PATIENT SUMMIT, HELD OVER TWO DAYS IN MAY, WAS CO-HOSTED BY SPEM, THE PORTUGUESE MS SOCIETY, AND NOVARTIS PHARMA AG WHILST THE EVENT WAS ENDORSED BY THE YEAR OF THE BRAIN IN EUROPE 2014/15.

The Portuguese Society of Multiple Sclerosis (SPEM) at this year's International MS Patient Summit

With an attendance of over 100 advocates and leaders of patient organisations from 13 countries, the summit focused on the theme of "Protecting Brain Today For A Better Tomorrow". The outreach was further enhanced with an additional 150 young people, who participated in a live local online forum called Academia-35.

Up for discussion were sessions including: Protecting the Brain for better outcomes, MS and employment, getting the right information and access to people with MS, a Best Practice Sharing fair, Capability Building Breakouts and the Year of the Brain. Moderating the sessions was Fernanda Freitas, a renowned Portuguese journalist who was joined by a discussion panel whilst keypad voting featured throughout the two-day conference.

The keynote speech at dinner and an inspirational opening lecture were eloquently delivered by Dr. Mary Baker, MBE, immediate past President of the EBC. Dr. Baker spoke about the brain as a human being's most vital asset; she explained that, for people living with MS, who are typically diagnosed in the prime of their lives, between 25-30 years of age, it is paramount to protect, preserve and nurture their brains from the accelerated shrinking that is an inherent part of the diffuse damage and associated with loss of physical and cognitive function.

Other eminent speakers included Professor Joao de Sa from Lisbon, Professor Antonio Freire Goncalves from Coimbra, Dr. Joaquim Pinheiro from Porto, Dr. Vitor Tedim Cruz from Aveiro, Emma Rogan from the European Multiple Sclerosis Platform (EMSP), Denise Stephens from Enabled by Design, George Pepper from Shift.MS, Christoph Lotter from the Swiss MS Society, Ava Battles from MS Ireland, Ana Torredemer from Esclerosis Multiple Espana, and Jean Mossman, a patient advocate as well as the leadership team of SPEM.

The 3rd International MS Patient Summit strengthened both international and local channels of communication and provided a unique forum for exchange.

Luísa Sacchetti Matias, from the Portuguese Society of Multiple Sclerosis (SPEM) commented that over the past 20 years, the advances in MS with respect to research, clinical approaches, communication, and self-management had been so huge that sharing knowledge, creating networks and spreading motivation between all stakeholders was critical to rise above the natural complexity of the disease. "The third MS Patient Summit provided the right environment to engage people and to equip their respective MS organisations with better tools and practices."

Continued on page 6

Protecting the brain today for a better tomorrow

Continued from page 5

She also remarked that the summit had created a deeper connection and level of support for patients and families, and more productive activities to raise MS awareness and raise funds. "This is important for sustainability of patient organisations and better research, and a much wanted closer contact with the specialists. That's a true win-win situation for all patients and MS organisations."

Finally, she pointed out that the summit also provided a special focus on the needs of younger MS patients, showing that they have a voice and their concerns matter even in silent topics like brain atrophy, cognitive issues and even employment problems. "Academia 35 is the proof that the initiatives aimed at young people with MS provide more access to knowledge and improved self-management, and a courageous belief in patient empowerment to help slow down or even stop MS progression."

"Patients' futures can be brighter with this new kind of international collaboration because it clearly improves the quality of life despite the type or stage of the disease."

More information can be found on the Twitter handle #thinkMS. The dialogue to improve the quality of lives of people with MS in areas such as brain health will continue throughout the Year of the Brain.

The 3rd International Multiple Sclerosis (MS) Patient Summit was held in Lisbon on May 22-23 2014.

Living with Schizophrenia

A MOTHER'S MOVING STORY ABOUT CARING FOR HER SON WITH SCHIZOPHRENIA AND HER DESIRE TO GIVE A VOICE TO THOSE THAT CANNOT SPEAK UP FOR THEMSELVES. NADINE FOSSION LIVES IN BELGIUM WITH HER SON, PHILIP. SHE HAS BEEN HIS CARER SINCE HIS DIAGNOSIS 22 YEARS AGO.

One evening just before Christmas 1993, a mother, a father, and their three teenage children were gathered in front of the television to watch the King of Belgium's Christmas message followed by the movie, Amadeus. The details of that evening are remembered in fine detail and with good reason.

Suddenly Philip, the 17-year old son of Nadine Fossion became very agitated. "He proclaimed in an odd way that the King's message was addressed exclusively to him with all kinds of hidden meanings that only he could understand," she recounted.

> *"What would family and friends think? Would I be able to still care for him, to bear his chaos and lack of personal hygiene, his disrupted thinking?"*
>
> Nadine Fossion, mother of Philip who has schizophrenia on hearing the diagnosis.

Philip had other experiences during the movie including hearing strange voices convincing him that he was a genius comparable to Mozart or Einstein. His two sisters started laughing which made him even more confused and aggressive.

In early October 2014, Mrs Fossion addressed an audience at the European Parliament telling the heartfelt story of her son's mental illness and her experience as his mother and carer. She was speaking as a board member of EUFAMI, the European Association of Family Members of people with a Mental illness.

She began by highlighting the challenges associated with speaking about her sick child. "To speak about the mental illness of your own child is painful and confronting, for it discloses your intimate life and that of your family members," his mother said. "Inevitably, you encounter your doubts and feelings of guilt. You feel reluctant to divulge the privacy of your child, or worse, to diminish him to 'someone with a disability.'"

The stigma and taboo surrounding mental illness do not only affect the patient. "Great is the ignorance and incomprehension of the outside world and even of the close family."

A voice to those who cannot or dare not stand up for themselves

Nevertheless, giving a testimonial can bear healing power in itself. "I infringe the taboo about mental illness and give a voice to those who cannot or dare not stand up for themselves," remarked Mrs Fossion. "As a mother, I feel valued and empowered by the fact that I try to do something positive with a negative life experience."

Philip, who is now 38 years old, developed serious problems at the age of 17. Mrs Fossion was surprised when he started having bad reports at school, felt extremely tired and alienated from his friends and family members. One day he was deeply depressed, the next day he was euphoric and hyperactive. We sought help from our family doctor, but he never mentioned the possibility of a mental illness in its early stage. A psychologist, however, the family was advised to contact a psychiatrist.

Picture care of: http://beyondisability.org/archives/tag/schizophrenia

The story of a mother's dedication to caring for her son

> *"For us, Philip remains irreplaceable and as long as we care for him with love and patience and don't criticize him, he is fine and even humorous company."*

After the incident watching the television before Christmas, when Philip had unknowingly had his first psychotic incident, he was admitted in a psychiatric hospital for observation.

"It was a relief that someone else took care of him for a while," Mrs Fossion recalls candidly. "He had become so chaotic. He was sleeping during the day and being hyperactive at night. The whole family life was off the rails and conflicts with his younger sister, who needed structure and calmness for her studies, became frequent."

At the psychiatric hospital, they started immediately with heavy medication: anti-psychotics and neuroleptics to minimise the voices and hallucinations. However, the side effects were considerable. Philip paced the corridors like a zombie, collapsed emotionally and started to smoke heavily.

"For us this was a shock. Although we were not physically bereaved of our son, something was irrevocably lost. Philip had become an elusive and hostile stranger," Mrs Fossion told the audience.

However, she admits that they were unprepared for the harsh diagnosis of schizophrenia, which would become chronic and probably hold her son in its life-long grip.

"Many uncertainties came upon us: how to cope with this outcome? How to manage our future life as a family? Could Philip become a danger to society? What would family and friends think? Would I be able to still care for him, to bear his chaos and lack of personal hygiene, his disrupted thinking? What is going to happen with him when we will not be there anymore?"

Many restless years followed. Philip experienced a second psychotic episode and forced hospital admission; there were crises associated with readmission to hospital; the day-care clinic, which was only a partial success, and the trials and errors of medication. Eventually, he found the road to recovery and was put on a waiting list for sheltered living.

Sheltered living and side effects

In July 2003, a decade after his first psychotic episode, Philip went to live in his own apartment. Healthcare workers came by to help him with his medication and daily routine. "Beyond our expectations, he managed to live on his own and felt happy."

Today, 20 years after his first psychosis, Philip stills lives in his apartment. Unfortunately, negative symptoms of the illness, side effects of medication, unhealthy food, lack of exercise, made him fat and inactive. "Whereas he liked to draw a few years ago, today he lies on his bed for long hours or watches TV. Although his cognitive functions have improved, his physical condition is deteriorating," Mrs Fossion explained regrettably.

Meanwhile we have learned to accept that Philip lives with a psychosis but has no insight in his condition. "Often, he has told us, 'there is nothing the matter with me, why did you put me in a hospital three times, you are the people who are sick,'"

Recently, my eldest daughter told me that Philip's life seemed so empty and useless and it hurt me deeply. "Who are we to utter a judgment? What do we know about his inner life and spirituality? For us, Philip remains irreplaceable and as long as we care for him with love and patience and don't criticize him, he is fine and even humorous company."

Mrs Fossion concluded with a quotation by Vaclav Havel, which she said she finds a constant source of comfort. 'Hope is not the conviction that something will turn out well, but the certainty that something makes sense regardless of how it turns out.'

Three European scientists

The world's largest prize for brain research

The 2014 Brain Prize – the €1 million **Grete Lundbeck European Brain Research Prize** – was awarded to three European scientists for their pioneering research on higher brain functions earlier this year

Stanislas Dehaene, director of INSERM Cognitive Neuroimaging, France; Giacomo Rizzolatti, neurophysiologist at the University of Parma, Italy; and Trevor Robbins, Professor of Cognitive Neuroscience at the University of Cambridge, UK were awarded the €1 million Grete Lundbeck European Research Prize in March for elucidating understanding on higher human brain functions including reading, mathematical ability, motivated behaviour and social cognition. They have each played a role in translating knowledge from basic science on complex cognitive and behavioural disorders to the possibility of new forms of treatment.

Professor Colin Blakemore, chairman of the Foundation's selection committee, said, "These three scientists.. .have each made unique and lasting contributions, which have motivated the interest and the efforts of many other researchers around the world. All three have made particular efforts to move from basic research to clinical application – in cognitive development, mental health, addiction, brain damage and educational delay."

From numbers to consciousness

Stanislas Dehaene is best known for his work on mathematical ability. Through research on patients with brain damage, imaging of healthy human brains, and observations on normal infants and children with Turner's syndrome, Dr. Dehaene produced evidence that simple and complex mathematical skills involve different networks in the parietal lobe of the brain. He has also provided insight into the neural mechanisms for the representation of letters and words, and the cause of reading disorders produced by brain damage.

He has also contributed to the scientific study of consciousness, and has devised ingenious methods to show that the conscious awareness of a sensory event is associated with activity in a specific network of regions of the frontal and parietal cortex.

Translating this understanding to a clinical level, Dr. Dehaene developed adaptive software for the remedial treatment of children with difficulties in learning mathematics, and his work on consciousness has led to a simple test to reveal the state of awareness in patients in comatose or vegetative states.

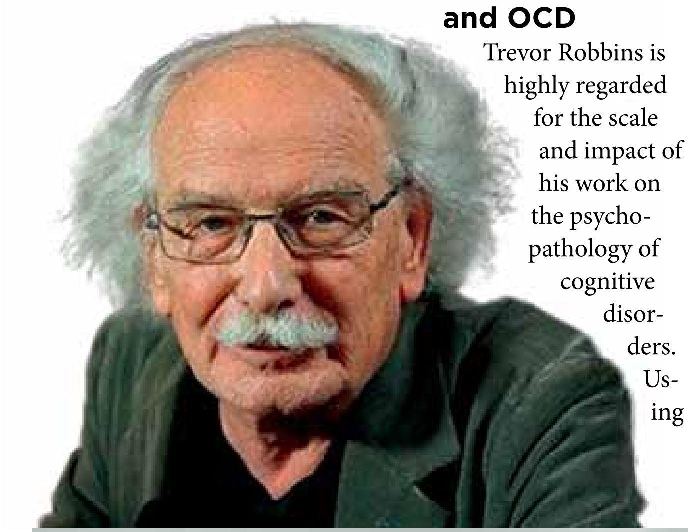
Mirror neurons and social cognition

Giacomo Rizzolatti and his colleagues made the seminal discovery of 'mirror neurons' in regions of the frontal and parietal lobes of monkeys. These nerve cells are active either when the animal is performing a particular movement or when it sees or hears another animal carrying out the same movement. Dr. Rizzolatti argued that mirror neurons transform sensory representations of the actions of others into motor representations of those actions, providing

share the Lundbeck prize

a possible mechanism for understanding the goals and intentions of others.

The discovery of mirror neurons energised the new field of social neuroscience. It also had an impact on the understanding of autism spectrum disorders, providing a possible interpretation of failures of social cognition as deficits in the motor representation of the intentions of others.



The basis for addiction, ADHD and OCD

Trevor Robbins is highly regarded for the scale and impact of his work on the psychopathology of cognitive disorders. Using pharmacological, anatomical and behavioural methods in animals, he has developed sophisticated models of the regulation of behaviour.

His work on addiction has transformed the field, showing drug abuse to be dependent on habit formation via specific circuits in the forebrain, and not simply disruption of the brain mechanisms of reward and pleasure. This work has not only illuminated understanding of drug addiction but has shown how disturbances of this circuitry can lead to compulsive and impulsive behaviour, giving new insights into clinical conditions including Attention Deficit Hyperactivity Disorder (ADHD) and Obsessive Compulsive Disorder (OCD).

Dr. Robbins also developed the CANTAB computerised battery of psychological tests, widely used for clinical assessment of cognitive processes.

The Brain Prize is awarded by the Grete Lundbeck European Brain Research Prize Foundation and 2014 is the fourth year of its award.

Chairman of the Foundation's board, Professor Povl Krogsgaard-Larsen, said, "The three prize winners are complementary to each other; together they comprise a forceful trio. We are pleased to award this year's prize to scientists who are providing us with a better understanding and better treatment of cognitive and behavioural diseases, which are a huge burden to society."

Clockwise from opposite page:

Trevor Robbins, Professor of Cognitive Neuroscience, Cambridge, UK;
Giacomo Rizzolatti neurophysiologist at the University of Parma, Italy;
Stanislas Dehaene, director of INSERM Cognitive Neuroimaging, France

Chiropractors part of multi-disciplinary care team for neurodegenerative diseases

Gitte Tønner, European Chiropractors' Union Convention Academic Organiser

CHIROPRACTORS SHOULD PLAY A CENTRAL ROLE IN THE INTERDISCIPLINARY CARE OF PATIENTS WITH NEURODEGENERATIVE DISEASES. THIS WAS THE KEY MESSAGE OF A LINE UP OF DISTINGUISHED SPEAKERS AT THE EUROPEAN CHIROPRACTORS' UNION ANNUAL CONVENTION HELD IN DUBLIN IN LATE MAY THIS YEAR.

Mary Baker and Dr. Derick Mitchell at this year's European Chiropractors' Union Convention.

Promoting the 2014 conference theme of diversity, chiropractors welcomed speakers from outside of the profession to hear more about the rise of neurodegenerative diseases. Dr. Mary Baker from the EBC, Dr. Derick Mitchell from The EU Joint Programme – Neurodegenerative Disease Research (JPND), and Professor Charles Normand of Trinity College, Dublin, discussed the societal impact of neurodegenerative diseases.

They drew attention to the cost implications if we fail to act now, but also explained how research agendas across Europe are being carefully coordinated to optimise the research effort. In essence, they stressed that there was little time to waste if we want to impact the people at risk for developing Alzheimer's, frontal lobe dementias, Parkinson's and other neurodegenerative diseases.

Highlighting the need for cross-disciplinarity, during last year's Healthy Brain, Healthy Europe conference in Dublin, James Reilly, Minister of Health for Ireland pointed out that the predicted burden of neurodegeneration was too large for individual countries. By extrapolation, he added that it was also too large for individual professions: "We will have to work together across disciplines to slow the progress of disease," he said.

This is where we need to recognise that chiropractors have a valuable role to play in the team effort to tackle these diseases. Chiropractors have a unique background: a five-year Master's degree, of which the Bachelor part is equivalent to a medical student's Bachelor degree. Thus, they represent a partner, although one not traditionally invited to sit at the proverbial table and participate on an equal footing.

However, considerable changes have occurred in this respect in recent years. For example, in Denmark, around 30 chiropractors work in secondary health care divisions. These practitioners mainly work on orthopaedic wards alongside surgeons doing triage or training new chiropractors at the multidisciplinary Back Center Funen, a ward set within a hospital.

Denmark sees a record number of chiropractor PhD students working in a healthy and progressive research environment at the University of Southern Denmark. Zurich, Switzerland, also provides another prominent example. Here, chiropractors are trained as primary health care providers at the same level as medical doctors, dentists and veterinarians. Most countries in Europe have strong chiropractic associations that are working towards better recognition and regulation to better help patients looking for care that falls in the gap between physiotherapy and surgery.

> *"We will have to work together across disciplines to slow the progress of disease"*
>
> James Reilly, Minister of Health for Ireland

As it is generally accepted that staying physically active is one of the best prevention strategies of neurodegeneration, chiropractors are thus well-equipped to keep people out of back pain and other mechanical complaints, and keep people moving with safe, proven and efficient methods.

Mary Baker MBE

recognised for lifetime of research outreach

This summer saw Dr. Mary Baker MBE, immediate past President of the EBC, receive a lifetime achievement award for her contribution to the world of brain and neurological research.

The 'Dana/EDAB Special Lifetime Achievement Award for Outreach on Behalf of Brain Research' was awarded to Dr. Baker by the Federation of European Neuroscience Societies (FENS) and the Dana centre in a special ceremony held in Milan in July.

"I was delighted to receive my award. I have always admired Dana and have known them for decades. Recognition from them means a great deal," Dr. Baker told EBCnews.

The award recognises Dr. Baker's commitment and dedication to researching the brain. Throughout her distinguished career, Dr. Baker has championed the brain, tirelessly raising awareness about the brain and its disorders, as well as raising research funds to study the brain and help brain-disordered patients.

In 2013, Dr. Baker launched an extensive campaign that succeeded in the European Commission declaring May the European Month of the Brain. The success of the initiative led to the European Brain Council's current 'Year of the Brain' project, which she continues to lead.

In her long and influential career, Dr. Baker has served as president of the European Federation of Neurological Associations, consultant to the World Health Organisation (WHO), and chair of the Working Group on Parkinson's disease formed by the WHO in May 1997. She retired as chief executive of the Parkinson's Disease Society of the United Kingdom in 2001 where she worked for 18 years.

Dr. Baker's academic appointments include Associate Membership of the Health Services Research Unit, University of Oxford and Visiting Fellow within the London School of Economics (LSE) Health Centre. In 2009, she received the prestigious British Neuroscience Association Award for Outstanding Contribution to British Neuroscience and for Public Service.

Dr. Baker has been consistently passionate about advancing public education about the potential of brain research. And while great strides have already taken place in the field of brain research, there remains more to be done, especially when it comes to prevention, as she explained:

"The cost of brain disease is unsustainable and therefore it is really important that everyone involved in the brain space gives greater thought to prevention, such as stroke, traumatic brain injury and alcohol addiction and promote better management for those diseases that we cannot prevent."

Living a healthy life with schizophrenia

World Mental Health day 2014

On October 10, the World Mental Health Day 2014 was dedicated to living a healthy life with schizophrenia. World Mental Health Day is observed on the same date every year, with the overall objective of raising awareness of mental health issues around the world and mobilising efforts in support of mental health.

Stakeholders working on mental health issues find the day highlights their work, and stimulates discussion on what more needs to be done to make mental health care a reality for people worldwide.

The focus of this year's theme meant the WHO called for better health and social services for people living with schizophrenia.

Here are a few facts why schizophrenia remains a major mental health issue globally:

- Schizophrenia affects more than 21 million people worldwide
- People with severe mental illness, including schizophrenia, die on average 10-25 years earlier than the general population.
- One in two people living with schizophrenia worldwide does not receive care for the condition. The problem is particularly serious in low- and middle-income countries.

In a paper prepared by the WHO, authors led by Dr Mohammad Taghi Yasamy Medical Officer WHO Department for Mental

Health and Substance Abuse report that the severity of disability in general reflects the interaction between features of a person and features of the society. "Disability and morbidity experienced by people living with schizophrenia are not purely caused by brain pathology," they wrote. "People with schizophrenia die earlier not because schizophrenia per se is fatal but rather because of the discrimination and lack of access to good health services, regular monitoring for other risk factors for health and physical diseases, and poor family and social support."

WHO's work in the field of schizophrenia management includes the Mental Health GAP Action Programme, through which tools and guidance on expanding service provision for mental health are provided to countries, especially low- and middle-income countries.

Web: www.who.int/mental_health/world-mental-health-day/2014/en/

Radical change needed for sustainable healthcare in Europe


Mary Harney

BY MARY HARNEY, CHAIR OF A 22-COUNTRY EUROPEAN SUSTAINABLE HEALTHCARE PROJECT TO PRODUCE A ROADMAP TOWARDS SUSTAINABLE HEALTHCARE IN EUROPE. MS. HARNEY WAS MINISTER FOR HEALTH AND CHILDREN, IRELAND, 2004-2011.

Demographic change plus an increase in the number of people living with chronic diseases is placing unprecedented pressure on European healthcare systems. Neurological disease is a case in point. A sustained emphasis on health promotion and disease prevention is key to managing the crisis.

Notwithstanding the enormous medical advances over the last thirty years, we have huge unmet medical needs. Affordability is the biggest issue confronting our healthcare systems. Across Europe, despite the complexities and differences in how healthcare is funded and organised in member states we all face the same challenges: how to continue to provide high quality and universally accessible public health services in a financially sustainable way.

Expenditure on health has grown much more rapidly than GDP in all OECD countries. Nowhere is this unsustainable growth in spending more evident than in the area of neurological disease. Across 30 European countries and 19 brain disorders, expenditure has more than doubled from €386 billion to €798 billion in the six-year period 2004-2010 (European Brain Council).

Low fertility rates, increased life expectancy, a smaller working population and a higher proportion of retired people with health problems and chronic illness all combine to exert pressure on health systems. Chronic illness affects 80% of people over 65 (with two-thirds having co-morbidities) and consumes between 70-80% of health budgets in Europe. Reducing the prevalence of chronic illness means reducing the cost of healthcare, and the most effective way to achieve this is through a sustained emphasis on disease prevention and health promotion.

We know that there are four main behavioural risk factors that have fuelled the substantial growth in chronic disease, viz. tobacco use, alcohol abuse, sedentary lifestyle and unhealthy diets.

More emphasis on disease prevention and health promotion

As healthcare costs outpace the rate of economic growth there is a pressing need to radically transform how we design, operate and organise our health systems. Currently, only 3% of health budgets in Europe are allocated to illness prevention while 97% is spent on the treatment of diseases. This paradigm needs to change quickly so that more resources are assigned to preventative strategies that over time will be seen as a powerful and ongoing investment in our well being.

> *Prevention is better than cure, and early intervention delivers substantially improved patient outcomes at considerably reduced cost.*

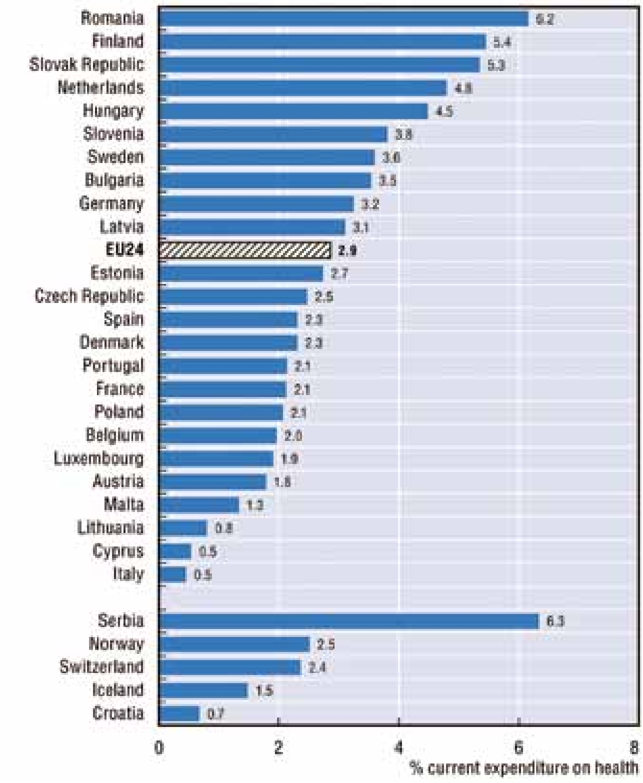
Effective health promotion implies the education and empowerment of citizens of all ages to take more control and responsibility over their own health and to become actively involved in managing their own care. This requires making our citizens more 'health literate' and equipping them with the necessary information and support to adapt their lifestyle or manage their disease effectively. Modern information communications technology opens up great possibilities in this regard.

Prevention is better than cure and early intervention delivers substantially improved patient outcomes at considerably reduced cost.

De-hospitalisation of care for chronic diseases

Hospitals were historically established to deal with acute events, such as serious infections, perforated ulcers and surgery for gall bladder or appendicitis. In the first half of the twentieth century, acute illness accounted for most of the activity of healthcare services, but a number of factors gave rise to fundamental change in this profile over time. Improved technology and drugs means that many common acute conditions are now dealt with much more effectively. But the improvement in average life expectancy inevitably brought focus on other kinds of diseases.

Over the last forty years, the increasing prevalence of chronic disease has resulted in a hospital system designed for acute care dealing with huge numbers of patients with chronic conditions. Most of these hospital-based processes are totally inappropriate for this task. It is also wrong to subject patients to treatment in an outmoded system of care – which also happens to be highly expensive. Research in the US has shown that one acute hospital episode for chronic obstructive pulmonary disease costs the same as eight years of management in the community. The de-hospitalisation of care for chronic illness to a community or home-based system is the future.



Source: OECD report *Health at a Glance Europe 2012.* http://www.oecd.org/els/health-systems/HealthAtAGlanceEurope2012.pdf; © OECD

Expenditure on organised public health and prevention programmes, 2010 (or nearest year)

Given that the European population is rapidly ageing, the number of people over 60 is increasing at twice the pace it was seven years ago. If the current disease pattern continues, many millions more Europeans will suffer unnecessarily from disorders like cancer, diabetes, cardiovascular and neuro-degenerative disease, given their prevalence among older people.

It is incontestable that disease prevention and population health education must be given much more emphasis. On the other hand, new methods of managing people already ill are also needed. Resources management is central to this; likewise, technology and innovation are important – investment in new cures and new treatments to deliver better outcomes.

> *Currently, only 3% of health budgets in Europe are allocated to illness prevention while 97% is spent on the treatment of diseases.*

Value not volume driven care

Experts in global healthcare are focussing on ways to encourage value-driven care rather than volume-driven care. This is a big and important topic, which will encompass quality issues across the spectrum of care. It will encourage and reward innovation and must, of course, have improved patient outcomes as a priority.

The status quo in European healthcare is not an option. This is true both from the point of view of health outcomes and from the financial viewpoint. In the absence of radical change, care rationing will inevitably emerge. Our focus therefore must be on prevention, early intervention and the re-design and re-organisation of delivery systems. Much work and new thinking is needed.

> *Experts in global healthcare are focussing on ways to encourage value-driven care rather than volume-driven care. This is a big and important topic.*

I have the honour to chair a 22-country European Sustainable Healthcare project, supported by Abbvie, involving a wide-ranging group of experts and stakeholders (clinical, academic, patient advocacy, etc.). The aim is to produce a 'white paper' which will give an implementable "roadmap" towards sustainable healthcare in Europe. The project is due for completion in Spring 2015.

Medication in pregnancy

A NEW DATA COLLECTION PROGRAMME IN THE CZECH REPUBLIC PROMISES TO MAKE A TOUGH DECISION EASIER FOR DOCTOR AND PATIENT

NIMH
NATIONAL INSTITUTE OF MENTAL HEALTH

A pregnant woman and her doctor's dilemma – to treat or withdraw medication during pregnancy and lactation- remains one of medicine's twilight zones. Physicians have few resources with which to guide pregnant or lactating patients with mental illness through this decision, but new data springing from the Czech Republic may help to demystify an issue that is both complex and emotionally-charged.

In conversation with EBCnews, Pavel Mohr, Head of the Clinical Division of the Prague Psychiatric Centre, the Czech National Institute of Mental Health and Chairman of the Czech National Brain Council, discussed the need for better information for both physicians and the general public to inform and facilitate decision-making by doctor and patient over whether to continue drug treatment during pregnancy and lactation.

Data are sparse in this field, with no existing randomised controlled studies, for one simple reason. "Pregnancy is an exclusion criterion in any drug trial," explained Professor Mohr. "So we must get data retrospectively from databases or large epidemiological studies, a couple of which were published in Scandinavia. But generally, we have a very limited knowledge on this topic."

Hoping to increase this shallow data pool, Professor Mohr looked to his clinic, which specialises in the drug treatment of pregnant and lactating women who are currently being treated for mental disorders, or who develop a mental disorder during the postpartum period of pregnancy. By analysis of these patients' physical and mental development, it will be possible to quantify the risks that are posed to both baby and mother from either ceasing or continuing treatment – risks that are influenced by factors such as the type of mental illness, its severity, patient history, and drug profile.

Describing the dilemma that is faced by a pregnant woman that has undergone long-term treatment for a mental disorder, Professor Mohr continued: "The risk concerns what would happen if we stopped treatment. There is a risk associated with untreated mental illness during pregnancy. There is also the risk of the developmental onset throughout the pregnancy of new illnesses – bipolar disorder, depression or anxiety disorder – or relapse or recurrence. We know that, especially if it is a serious mental illness such as schizophrenia or bipolar disorder, it is more harmful to simply stop medication or treatment."

The maintenance of drug treatment can be critical to the health and stability of the mother, yet she may natu-

> "What we try to do is to discuss the options with the patient and make a qualified decision."
>
> Pavel Mohr

rally fear the effects her medication may be having on the baby. "What people are afraid of are the teratogenic effects and the withdrawal symptoms in neonates after delivery, as well as intoxication. We know the risk of the teratogenic effects of many drugs is low. There might be some increased risk with certain medication, but this is mostly a relative increase and the absolute numbers remain low."

Exposure to drugs in utero can have long-term neurobehavioral consequences as well. Some drugs are even associated with cognitive impairments. "We know that the children of our patients with mental disorders might hit some developmental milestones later throughout their lives, and there is discussion whether or not the medication can contribute to that," said Professor Mohr. These questions are familiar within the arena of childhood medication of, for example, Attention Deficit Hyperactivity Disorder (ADHD). The underlying cause of such developmental delay – be it drugs, the illness itself, or both – can only be answered through years of dedicated longitudinal study.

> *"We know that, especially if it is a serious mental illness such as schizophrenia or bipolar disorder, it is more harmful to simply stop medication or treatment."*
>
> Pavel Mohr

In the meantime, what is the procedure currently taken for physicians' and patients' decision-making at the Prague Psychiatric Centre? "What we try to do is to discuss the options with the patient and make a qualified decision," said Professor Mohr. "We talk to the partner (if there is a partner or spouse), and the obstetrician as well, to make an informed decision."

The new facility of the Czech National Institute of Mental Health (formerly Prague Psychiatric Center), which will open in January 2015.

Professor Pavel Mohr, Head of the Clinical Division of the Prague Psychiatric Centre.

Each case must be considered individually, explained Professor Mohr, as each individual presents different pertinent risk factors, previous history, treatment response, and illness course. Furthermore, while one patient may be in a period of long-term stable remission, such that treatment can be adjusted prior even to conception; another may have an unplanned pregnancy. In any case, fostering cooperation between the mother, her support network, the psychiatrist and obstetrician is essential to minimising complications during pregnancy and lactation.

The Prague Psychiatric Centre also provides other educational services including a reference centre, where doctors and physicians approach the centre with cases where there is uncertainty about how to proceed with treatment during pregnancy. "We monitor the literature, and we also try to educate young doctors and psychiatrists in general. We regularly present at congresses and meetings and we conduct workshops, which are focused on the practical issues associated with drug treatment pharmacotherapy during pregnancy and lactation," he explained.

While Europe-wide guidelines on what can be a very difficult clinical scenario are desperately needed, addressing the paucity of data on particular mental disorders and their various drug treatment options, and indeed non-drug alternatives, may be critical to its fruition.

Caring for the carer

Easing the less-known burden of dementia

According to WHO figures, approximately 35.6 million people around the world have dementia. This trend is set to double by 2030 and triple by 2050, and whilst a cure currently remains a distant hope, increasing efforts to relieve the burden of care on caregivers and families can reap meaningful benefits now.

So much so that following the G8 Summit in 2013, the WHO adopted the slogan: Care today, Cure tomorrow. This message was repeated at June's first Global Dementia Legacy event which drew attention to the need for health and social care systems not only in the delivery of long-term care, "but in doing what needs to be done today,", according to Dr. Tarun Dua, WHO medical officer working on the Program for Neurological Diseases and Neuroscience, Management of Mental and Brain Disorders.

"We need research and cures obviously but right now, today, we need to take care of the carers and families affected by dementia," she stresses. "The key message in this respect is a need for a coordinated, interdisciplinary approach."

The burden of dementia on families and caregivers is a real problem. Families provide the greatest proportion of care, even in high-income countries. With respect to social and healthcare systems, the support provided for caregivers and families needs revision. "We cannot ignore this," she points out, "they often experience stress, or cannot work so support is required for them."

Considering the existing care pathways for dementia, Dr. Dua says the key message is the need for a coordinated, interdisciplinary approach.

"We need to strengthen the health system so they are diagnosed, so support is provided, and so there is coordination between primary and secondary care. At the same time we need community services because people like to live at home."

I-support

In 2013, WHO published a report called Dementia: a public health priority. On the back of this, and in the light of increasing political will to act, the organization is developing an information and communication technology support platform, known as I-support. This is aimed at assisting health systems in developing care plans for carers and families of patients with dementia.

Dr. Dua points out that any model needs to be adapted to a local country-specific scenario. Good country models of care plans exist but she says that one size does not fit all. "We cannot transport fixed models across countries because each country is different – culturally and in approach to family support."

"We are developing a generic programme and each country will be able to adapt it to suit their needs." We are working with a number of G8 countries on the project. The programme should be available in 2015."

Progress requires a change in the perception of dementia

Dr. Dua makes a point that dementia is a global issue and is not just a concern in higher income countries. She stresses that much can be done to improve the lives of patients with dementia as well as their families and carers, and a change in perceptions of the condition would make an excellent starting point.

"In many countries dementia is ignored, it is stigmatized," she points out. "We need improved awareness and understanding in communities. Many people feel dementia is just a normal part of aging but it is a medical condition and we need to actively do something for people with dementia."

In conclusion, Dr. Dua applauds the political will, noting the G8 summit that provided clear evidence of this. "Many countries have dementia strategies, policies or plans. There is the political will but much more needs to be done because the problem is growing. We need to take action today to deal with the increasing burden tomorrow."

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Key dates:

- Registration opens 19 September 2014
- Abstract submission on-line opens 26 September 2014
- Abstract submissions online closes 15 December 2014
- Authors to be notified February 2015

ADHD in prisons: treat the offenders, reduce the crime

THE PRISON POPULATION ACROSS EUROPE HAS A HIGH PROPORTION OF OFFENDERS WITH ADHD, BUT MOST OF THEM ARE UNDIAGNOSED. ACCORDING TO FORENSIC CLINICAL PSYCHOLOGIST PROFESSOR SUSAN YOUNG THE CRISIS LIES IN THE FACT THAT ADHD IS A TREATABLE CONDITION THAT REDUCES THE CRIME RATE AS WELL AS CONFERRING HEALTH GAIN, BUT LITTLE IS BEING DONE TO MANAGE IT.

A few years ago, Susan Young, a forensic clinical psychologist treating patients with attention deficit hyperactivity disorder (ADHD), became puzzled that some of her patients seemed to drop out of clinic only to reappear a couple of years later. As this pattern repeated itself, she discovered that many of these patients had spent the interim in prison, usually for relatively small offences – often opportunistic, impulsive crimes.

Intrigued by the relationship of these patients' mental disorders and their history of repeat offending, the Professor of Forensic Clinical Psychology and Forensic R&D Director at the West London Mental Health Trust began a research endeavour that has revealed a remarkably strong association between ADHD and offending. In fact, as this and other data from similar research groups accumulates, governments around Europe are beginning to sit up and take notice of the implications of this work: that both crime rates and health could benefit from treating offenders with the condition.

ADHD develops in childhood and is characterised by inattention, impulsivity and hyperactivity. For two-thirds of children, the condition persists into adulthood causing a degree of impairment. Frequently, very high rates of comorbidity occur, including conduct disorders, mood disorders, and anxiety. Hyperactivity is often lost with age, but can be replaced by a degree of restlessness. "With adults, emotional lability is more pronounced and many people recognise this as the fourth symptom of ADHD," explained Professor Young.

The prevalence figures speak loud and clear: in the general population, 5% of children have ADHD—roughly equating to a child in every classroom. In adults, the pooled prevalence is 2%. By contrast, in prisons, the proportion of offenders with ADHD is strikingly higher than the general population.

A 2014 meta-analysis conducted by Professor Young and colleagues showed that 30% of youths and 25% of adults in prison had ADHD. "Compared to the general population rate, this is over a 5-fold and 10-fold increase respectively," she emphasised. She also commented on the gender split, in particular highlighting the proportion of females with ADHD. "The ratio we see in the general population of around four males to one female is not represented in prison, where it is 26% male and 18% female. Whatever usually operates to keep females without ADHD out of prison isn't happening for females with ADHD."

Taking action

Professor Young and her colleagues are now taking these findings from the research arena to the political. With the aid of Lord David Ramsbotham, former Chief Inspector of Prisons for England and Wales, and the UK ADHD Partnership [UKAP], Professor Young has lobbied Parliament to change the way ADHD is managed in offenders. Central to her argument is the fact that many cases of ADHD are treatable. "The key message and difference between ADHD and other neurodisabilities is that there is an effective treatment available," said Professor Young.

> *"The key message and difference between ADHD and other neurodisabilities is that there is an effective treatment available."*
>
> Susan Young

Recognition and diagnosis of ADHD as distinct from other mental disorders is essential for progress to be made. "Our studies have found that people with ADHD are associated with a greater number of aggressive incidents in prison. These people get into trouble due to their volatility, they struggle to control their behaviour in the institutional setting, and therefore lose the opportunity of early release," she continued.

"What is so striking to me is that we are the ones actually entering the prison and diagnosing ADHD, because these offenders do not have an existing diagnosis. I've seen this time and time again. Also, many are being misdiagnosed because they are presenting to prison healthcare for mood problems or distress, but it is not recognised as ADHD."

Susan Young, Professor of Forensic Clinical Psychology and Forensic R&D Director at the West London Mental Health Trust want prisoners tested for ADHD

UKAP
THE UK ADHD PARTNERSHIP
Building better futures for children with ADHD

> *"At the moment youths are moving from classroom to courtroom; with the right treatments we can get them out of prison and into gainful employment."*
>
> Susan Young

Standard practice in the UK requires that as offenders enter prison they are screened for health conditions. Working with colleagues in Manchester, Professor Young has developed an ADHD prison reception screen which has been included in the CHAT (Comprehensive Health Assessment Tool) assessment for young people in the youth justice system. The questionnaire is currently being piloted in the UK.

Training of healthcare professionals working with offenders is essential. "Healthcare practitioners and allied professionals working in the criminal justice system need to be trained to develop confidence in recognising and managing offenders with ADHD. The UKAP and the UK Adult ADHD Network [UKAAN] regularly run training courses that will be helpful," Professor Young pointed out. "I think there is some anxiety about the sheer numbers of those with ADHD overwhelming the system, so we need to work on training and supporting with shared care protocols."

One offending behaviour intervention is the Reasoning & Rehabilitation (R&R) programme, which has a follow-up version (R&R2) that Professor Young developed with the original programme author Professor Bob Ross, specifically for youths and adults with ADHD. These programmes have a growing international evidence base from their roll-out in Europe, North America and Asia. "We've seen a significant improvement in symptoms, anger, violent attitudes, locus of control, emotional control and other key factors associated with violent and anti-social behaviours," commented Professor Young.

But she emphasised the need for early recognition and intervention as a way of steering young people towards a more positive pathway, highlighting that research has shown that it is never too late to intervene. However, reflecting the reality of any publicly-funded treatment programme, Professor Young acknowledged that health-economic analyses were essential to determine the costs that could be saved within the criminal justice system.

"Sadly, it seems that services are not motivated to confer health gain for offenders with ADHD, so we need to talk the language of money. The criminal justice system needs to wake up to the huge potential savings that can be made if offenders with ADHD are diagnosed and treated."

One Swedish study reported a reduction in the crime rate of just over one-third when offenders were taking ADHD medications. "At the moment youths are moving from classroom to courtroom; with the right treatments we can get them out of prison and into gainful employment."

Professor Young is in the process of performing these cost analyses. "I estimate that over a decade, the prison system could save around £2 billion by identifying and treating offenders with ADHD."

Social psychiatry makes a comeback

THE **WORLD ASSOCIATION OF SOCIAL PSYCHIATRY** (WASP) AND THE **ROYAL COLLEGE OF PSYCHIATRISTS** HELD A JOINT CONGRESS ON THE THEME OF SOCIAL PSYCHIATRY IN MID-NOVEMBER, BRINGING TOGETHER WORLD LEADERS IN THE FIELD. RESEARCH AND POLICYMAKING IN SOCIAL PSYCHIATRY IS BECOMING INCREASINGLY SIGNIFICANT IN EUROPE AND BEYOND DUE TO HEIGHTENED AWARENESS OF THE IMPACT OF INTERPERSONAL AND CULTURAL FACTORS ON MENTAL WELLBEING.

Speaking to *EBC News*, Driss Moussaoui (DM), immediate past-president of WASP explained the significance of the congress and the urgent need for a global shift in attitude towards mental health – a shift that is already in motion thanks to the concerted efforts of organisations such as these.

How has the place of social psychiatry changed over recent decades?

Social psychiatry is in a better place than ever before. This is the jubilee congress, marking 50 years of WASP's existence. The last two presidents of the WPA have been social psychiatrists, one of them from the US and one from the UK. This means that importantly, social psychiatry is becoming mainstream in psychiatry. Biological psychiatry has been mainstream for many years, but even the most extreme geneticists now recognise that environment is very important for the expression of genes, and that there is no way of escaping these gene-environment interactions. Many geneticists approach me at WASP wanting collaboration reflecting the environmental impacts on gene functioning.

What are the important priorities in the current socio-political and global health climate?

Modern migration is just a part of what I call accelerated globalisation. Globalisation has always existed. In the beginning we had 5,000 Homo sapiens in Ethiopia who decided to migrate to every part of the planet - this was globalisation 45,000 years ago. Now we see an acceleration of this process, an exponential acceleration, which definitely has an impact on psychological functioning, and to some extent also on what may be called the 'epidemic of mental disorders'. For example, in the US general population, there's a prevalence of all mental disorders that has increased steadily from the 1980s to the 1990s and so on. All over the world it is the same. This might be the consequence of urbanisation, especially in developing countries. Globally, about 200,000 people per day move from rural to urban areas. This is huge. Migration itself for some vulnerable people represents a risk factor for some mental disorders.

> *"About 200,000 people per day in the world move from rural to urban areas. This is huge. Migration itself for some vulnerable people represents a risk factor for some mental disorders."*
>
> Driss Moussaoui, immediate past-president of WASP

Then the mean time during which people sleep from the 1970s to now has been reduced by 90 minutes, because of electricity, television, and all the kinds of screens. This makes us vulnerable, because we need more time to sleep. We work more, we are more tired, and we sleep less! Our automatic reaction to this is, 'let's stop', but this causes anxiety and mood disorders and probably bipolar disorders, which is a social rhythm psychopathological process.

All of this is so important in understanding and treating mental disorders.

What initiatives are you currently involved in at WASP?

WASP has a unique public-private partnership programme called FAST (Fight Against Stigma) with Sanofi, to help in access to care for mental patients in low and middle income countries.. I am its scientific director.. We are working in almost 20 different countries for patients with mental disorders and epilepsy and the results are extraordinary. For example, in a city like Nouadhibou in Mauritania, the treatment gap was 98–99%, but this has been reduced to about 56% in 18 months. This has involved training health professionals, educating the community, working with NGOs, going to the media, also sensitising the Ministry of Health about mental disorders and making psychotropic medications available for those in need of them.

A similar situation exists in Armenia, in the Comoros Union, in Madagascar, and Guatemala. I am pleased WASP is championing this, because when the treatment gap for severe mental disorders like schizophrenia and bipolar disorder in the US is 50%, you can imagine how bad it is in poorer countries with all suffering for patients, family and society.

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The WASP Jubilee Congress took place in London between 13 and 15 November. To find out more about the event and the themes covered, please visit www.waspjubilee2014

NERRI Project

opening much-needed dialogue on neuroenhancement

Alexandre Quintanilha, Professor at ICBAS – Abel Salazar Institute of Biomedical Sciences

THE NERRI (NEURO-ENHANCEMENT: RESPONSIBLE RESEARCH AND INNOVATION) PROJECT WORKS TO ORGANISE AND PROMOTE DIALOGUE ON NEUROENHANCEMENT – A FIELD OF SCIENCE THAT ENCOMPASSES EVERYTHING FROM SMART DRUGS TO ELECTRICAL BRAIN STIMULATION AND GENE THERAPY. THE THREE-YEAR PROJECT, SUPPORTED BY THE EU, AIMS TO WORK TOWARDS RESPONSIBLE RESEARCH AND INNOVATION ON NEUROENHANCEMENT THROUGH PUBLIC, CROSS-SECTOR DIALOGUE, AND INFLUENCE ON POLICY-MAKING IN THE FIELD.

EBCnews spoke to NERRI Consortium member Alexandre Quintanilha, a Portuguese scientist, former Director of the Institute of Molecular and Cellular Biology, the University of Porto, Portugal, and Professor at ICBAS – Abel Salazar Institute of Biomedical Sciences. He explained how facing the ethical and social fears and expectations that are bound to neuroenhancement can help society at large to engage in the debate, and engage in the future.

Could you begin by defining neuroenhancement?

I would cite Norm Daniels' definition, that neuroenhancement allows an individual to boost certain capabilities beyond the species-typical level or statistically normal range of functioning for human beings. Applied to the neuro area, this therefore applies to anything that boosts cognitive performance.

Sometimes it is difficult to separate therapy from enhancement, however. For example, eyeglasses are considered to be a therapy for improving vision, but night-vision binoculars can be seen as enhancement. If you were to genetically alter the molecules in the retina to make them sensitive to infra-red radiation, then that would be 'true' enhancement. We are quite a long way from doing that though.

On the other hand, genetic screening is currently used and permitted in many countries to avoid degenerative fatal diseases. The idea of using it for choosing specific characteristics, including enhancement, is being debated in many places.

With relatively little knowledge at hand, how can the public know just how realistic (or fanciful) the various media predictions regarding neuroenhancement are? What would you like the public to be thinking about?

Predicting what will happen in the future is a dangerous game. But over-selling certain possibilities has been part of our culture for eons. Neuroenhancement both frightens and fascinates us; it is the subject of much science fiction literature. Yet how long it will take to become reality is

totally unpredictable.

Much of [the way we see neuroenhancement] has to do with our notions of risk. How we perceive risk depends on many things, namely: how much we know and don't know about a particular subject; to what extent do we trust the sources of information; issues of equity and individual choice, and many other factors.

Most of us, when confronted with questions related to health, energy, or the environment, have mixed feelings regarding what we are being told by scientists, politicians and the media. Neuroenhancement fascinates and frightens many people, and it is important to be as transparent and realistic as possible when describing what is happening in that field.

The expression 'smart drug', for example, is very catchy, and there are indeed exciting things happening in this domain. The same can be said about 'brain-machine interfaces.' The idea of gene therapy or stem cell applications is gaining momentum but, for obvious reasons, this will take much longer to be used for enhancement purposes in humans.

The ethical debate is far from trivial, especially when the boundary between the uses of, say, neuroenhancers such as coffee or sleeping aids, and 'smart drugs' is difficult to delineate. Could you outline your ethical perspectives on neuroenhancement?

One of the major concerns is that neuroenhancement is somehow 'against nature' – that life should be seen as a 'gift'. But from this standpoint, one could reason that, by extension, all of medicine is against nature. Transplantation and medical-assisted reproduction are just two examples of such going against nature, but many of us are thankful that these things are possible.

Education itself is probably the oldest form of enhancement. How much restriction should be enforced? And at what cost? Most of us support as much education as possible, even though the number of jobless graduates seems to be increasing in many parts of the world, in Portugal, for example, many graduates are having to go abroad to find jobs.

Although we are aware that the alteration of thought with certain drugs is possible, this could lead to violations of free will – sometimes called 'brain-washing', we are much more worried about genetic manipulation of cognitive capacities, even if they may be very difficult to achieve. In part, this is because scientists have been telling the public for quite some time now that our genome is our soul, trying to convince us that "we are our genes". Who, then, wouldn´t be afraid to mess with our genes? The fact that more than 90 percent of the genetic information contained in our body is in viruses and micro-organisms should be a sobering fact when we think about who we really are as humans!

Visit the NERRI website at www.nerri.eu, and join the debate via Facebook and Twitter

Tinkering with the Brain (Mexer no Cérebro), a NERRI Science Café held at the Portugese Parliament on 12 March 2014. The discussion focused on the governance of neuroenhancement, and the debate was prompted with flasks containing mock 'smart pills.' Tinkering with the Brain was also held with high school students, who explored neuroenhancement in educational contexts.

Neurodegenerative disease research in Europe gets it together

THE EU JOINT PROGRAMME – NEURODEGENERATIVE DISEASE RESEARCH (JPND) – IS DUE TO LAUNCH A €30 MILLION FUND FOR NEURODEGENERATIVE DISEASE RESEARCH. THIS IS THE FIRST CONCRETE STRATEGY BETWEEN JPND AND HORIZON 2020 DESIGNED TO ADDRESS THE GLOBAL THREAT OF NEURODEGENERATIVE DISEASES.

Professor Philippe Amouyel
Chair of the JPND Management Board
writes for EBCnew

As part of the new initiative, JPND will launch a joint transnational call for proposals in early 2015 aimed at supporting high level, multinational and multi-disciplinary neurodegenerative diseases research. The call sees €30 million made available to JPND member countries as well as a top-up of up to 30% by the European Commission.

Neurodegenerative diseases such as Alzheimer's and Parkinson's are a truly global challenge. Most of these diseases remain incurable and are strongly linked with aging populations. Dementias alone affect more than seven million people in Europe and their care is estimated to cost €130 billion a year. The challenge facing the world of diagnosing, treating and caring for people affected by neurodegenerative diseases is extremely daunting and no single country alone has the expertise or resources necessary to tackle all of the big questions in this area.

The JPND was established in 2009 as the pilot of the Member State-led Joint Programming Initiatives (JPI) to enable participating EU Member States to work together on the challenge of age-related neurodegenerative diseases, in particular Alzheimer's. In the past five years, JPND has become a global initiative with 28 countries now participating. Tremendous progress has been made by JPND in that time in terms of increasing coordination, collaboration and alignment between national research programmes related to neurodegenerative diseases. This has resulted in an unprecedented mobilization of human resources, actions, funding and awareness to tackle this problem which no country can address alone.

The past 12 months in particular have seen JPND countries work together very effectively in a number of priority areas with activities moving forward in parallel, creating the necessary trust and alignment between the 28 participating countries in order to implement our Strategic Research Agenda (SRA). Guided by our Phase One Implementation Plan, these actions include, but are not limited to:

- Action Groups to promote engagement and partnership, including with the European Commission, patient organisations, industry and other international organisations.
- Alignment Actions to determine research needs and opportunities in areas such as Longitudinal Cohort studies, Animal and Cell Models, Assisted Living Technologies, Palliative and End-of-life Care.
- Annual Calls for Proposals – the results of two JPND calls in the areas of 'Preventive strategies' and 'Cross-disease analysis of pathways', will be announced very soon.

These JPND actions are bringing together leading scientific experts, important stakeholders and funding bodies to investigate the key research questions and barriers to progress in these areas. In total, more than €100 million is due to be made available in this phase. Importantly, this funding will be in addition to, not instead of, other neurodegenerative disease funding.

JPND and Horizon 2020

In a significant scale-up of implementation of our Strategic Research Agenda, we recently announced a major new cohesive action with the European Commission, with a call for proposals to be launched in January 2015 in three JPND priority areas: Longitudinal Cohorts, Animal and Cell Models, Risk and Protective Factors. This 'JPcofuND' action will see more than €30 million coming from the JPND member countries with a significant additional European Commission topping-up fund. This unique co-funded initiative is a major step towards the realisation of a so-called European Research Area dedicated to neurodegenerative disease research – an issue central to the joint programming concept.

It is also important to note that JPND is moving far beyond just calls for research proposals. For example, a 'rapid action' was launched in April 2014 to establish a series of community-led working groups to establish 'best practice' guidelines and methodological frameworks to overcome barriers to research in population studies and neurodegenerative disease-related cohorts. Ten international working groups began their work in August 2014 under this action, through the support of ten JPND member countries.

Global Partnerships and Sustainability

Through its strong global dimension, JPND has quickly become the reference for European and global knowledge and innovation in the area of neurodegenerative disease research and is aligned with the recommendations from the 2013 Global Summit on dementia. As the chair of JPND, together with other JPND members of the G7 countries, I was delighted to have been nominated to the World Dementia Council that has since emerged from this initiative. Moreover, several of our JPND members are working with the OECD on the mapping of e-infrastructures and big data for neurodegenerative disease research, using the JPND mapping exercise as a reference point.

The next most important question for JPND in the coming years is how it is going to sustain the progress already being made. We are now preparing scenarios for a sustainable management structure which will see JPND successes in transnational collaboration in neurodegenerative diseases continue into the long-term in order to tackle these chronic and complex diseases.

For more information on JPND and the call can be found at: www.jpnd.eu or follow us on Twitter @JPNDEurope.

The name game

New drug nomenclature unveiled at ECNP congress

The 27th Congress of the European College of Neuropsychopharmacology (ECNP), held in Berlin this October, saw the announcement of a new pharmacology-based nomenclature system designed to help both psychiatrists and patients the world over.

The new system involves shifting drug classification terminology from the symptom-based model established in the 1960s, to a pharmacologically-based one. This means that patients will no longer have the confusion of being prescribed a drug for what appears to be an unrelated condition.

The project is a result of a collaboration between the ECNP, the Collegium Internationale Neuro-Psychopharmacologicum (CINP), the American College of Neuropsychopharmacology (ACNP) and the Asian College of Neuropsychopharmacology (AsCNP).

Joseph Zohar from Chaim Sheba Medical Center, Tel Hashomer, Israel, led The Joint Taskforce on Nomenclature. “As in many fields, what we know about drugs has evolved enormously since the 1960s, but the names we use to describe these drugs have not evolved in 50 years,” he said.

“As an analogy, I mostly use my smartphone to type SMS text messages, yet I would not call it a ‘typewriter’, as I would have in the1960’s; the names need to reflect our contemporary knowledge. If this is true of electronics, it is certainly true of medicines.”

Most drugs have more than one effect, and this can lead to great confusion in patients, explained Professor Zohar. For example, some ‘antipsychotics’ are used to treat depression. The Joint Taskforce on Nomenclature has agreed that the nomenclature of drugs used in mental health need to reflect how the drugs work, rather than any one single use.

Panic attacks linked to fear of daylight

People who experience panic attacks are more likely to show an aversion to bright daylight, the results of a small study presented at the European College of Neuropsychopharmacology (ECNP) congress in Berlin indicate.

If verified, the findings suggest that reducing exposure to bright light could prevent panic attacks from being triggered.

Dr Giulia Campinoti from the University of Siena, Italy led the study. “There have been several hints that photophobia is associated with panic disorder; for example in some people, fluorescent light can induce panic attacks. It had also been noted that people with panic disorder often protect themselves from light, for example by wearing sunglasses,” he explained.

To investigate further, the researchers recruited 24 patients with panic disorder and compared their response to the Photosensitivity Assessment Questionnaire (PAQ) with 33 healthy volunteers.

The team found that healthy participants showed a small, non-significant tendency to be photophilic – to be attracted to bright light. Conversely, patients with panic disorder showed medium to high levels of aversion to bright light.

“We believe that photophobia is one of the elements which may increase the risk of people suffering from panic attacks, but this is a small study, so it needs to be confirmed by a longer-term follow-up trial. For example, we need to understand if the photosensitivity and panic attacks continue to be related over time,” said Dr Campinoti.

He went on: “If we can confirm this, then we may be able to take steps to avoid some of the triggers to panic attacks. It is important to note that our work shows an association, not necessarily a cause and effect. We don’t yet know exactly what the relationship might be, but there is probably some underlying biochemical basis.”

Regulatory Science

Challenging the basis for current regulatory decision making

Regulatory Science is an area of increasing interest across the industry, academia and health authorities – potentially bringing a more transparent and robust regulatory decision-making process.

Merete Schmiegelow

Merete Schmiegelow
Honorary Industrial Ambassador in Regulatory Science, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark

On the 19th May 2014 the Faculty of Health and Medical Sciences of the University of Copenhagen gathered 150 people to discuss the latest trends and opportunities within the field of Regulatory Science, including how Regulatory Science can better direct companies in efficient medicines development.

Among the participants were representatives from the industry, the Danish Health Authority and academia as well as health care professionals and politicians. The list of keynote speakers included the SVP of Novo Nordisk Regulatory Affairs, Robin Paul Evers

LINK:http://globeshare.novonordisk.com/sites/ra/RIDocuments/Shared%20Documents/RPI/MERS/RS%20190514/RS-190514-speakers.docx

What is Regulatory Science?

Regulatory Science is an emerging area of scientific interest within Pharmaceutical Medicine as the shaping and implementation of legislation and guidelines. It has been recognised as having a significant impact on the industry's ability to bring new medicines to patients in need.

A Committee at the University of Copenhagen consisting of representatives from academia, health authority and industry have adapted the US Food and Drug Administration (FDA) definition of Regulatory Science to one with a global perspective:

"Regulatory Science is the science of developing new tools, standards and approaches to evaluate the efficacy, safety, quality and performance of medical products in order to assess benefit/risk and facilitate a sound and transparent regulatory decision making."

Regulatory Science challenges current concepts of benefit/risk assessments, submission and approval strategies, patient's involvement and ethical aspects. It creates the platform for launching new ideas – not only by the pharmaceutical industry and regulatory authorities, but also by academia, who wants to contribute to better use of their research activities within medical aspects.

The Regulatory Science symposium emphasised the potential of Regulatory Science as an enabler for directing companies towards more efficient global medicines development as well as more robust quality decision-making processes.

First ever Danish Regulatory Science PhD engaged in Novo Nordisk

At the symposium, Robin Pauls Evers highlighted the recent engagement of a regulatory science PhD in Novo Nordisk, Global Regulatory Affairs. He elaborated on the expected benefits from the perspective of Novo Nordisk and society: Better scientific methods and tools to support a more transparent and robust regulatory decision making process – for the benefits of the patients.

Key conclusions from the symposium were:

- Regulatory Science is an independent evolving discipline requiring good pre- and post- graduate opportunities at University levels
- Regulatory Science requires a good and trustful collaboration between academia, regulators and industry
- Conflict of Interests in the collaboration between academia, regulators and industry is not a hurdle for not establishing the collaboration. It can easily be overcome through principle agreements between the involved stakeholders

The focus of the PhD thesis is "Benefit-risk assessment of cardiovascular effects of medicines targeting non-cardiovascular diseases".

If you have interest in establishing a PhD project covering your discipline with regulatory science aspects, please do not hesitate to contact Robin Paul Evers or Merete Schmiegelow.

Modulating the Brain: Facts, Fiction, and Future: the 2014 Belgian Brain Congress

Professor Dirk Van Roost, neurosurgeon at Ghent University Hospital, Belgium provides an overview of this year's Belgian Brain Congress held in Ghent, October 2014.

After Genval (2006), Ostend (2008), Brussels (2010), and Liège (2012), it was the turn of the city of Ghent in Belgium to host the 5th Belgian Brain Congress (BBC) in October 2014. While healthcare, science, and industrial applications become increasingly specialised, the Belgian Brain Council continuously aims to bring these various parties together in a biennial congress.

Researchers, clinicians, patients´ organisations, and representatives from companies for pharmaceuticals and medical devices took the opportunity to network during the one-day cross-disciplinary programme. Some 300 participants attended the congress, including specialists from around the world, Belgian clinicians and researchers, patients and patients´ organizations, as well as 13 company exhibitors.

Modulating the Brain: Facts, Fiction, and Future provided the theme of this year's congress. Effectively, the human brain is a networking organ where the balance between excitatory and inhibitory mechanisms controls neuronal connectivity. The latter is influenced by various factors that play a role in everyday life and in brain disorders. Brain activity can thus be modulated by pharmacological, electromagnetic, and behavioral means.

The objective of the Belgian Brain Congress 2014 was to critically review the data about these brain modulators, their mechanisms of action, their therapeutic applications and the medico-social and ethical problems they raise.

A total of 77 posters were presented

The first part of the congress was devoted to electromagnetic neurostimulation and contained two enlightening keynote lectures underpinning basic knowledge of the field. Dr. Georgios Keliris, from the department of Physiology of Cognitive Processes at the Max-Planck Institute for Biological Cybernetics in Tuebingen, Germany, reviewed their recent research that combines state-of-the-art functional imaging and recordings of spiking activity in the monkey visual system. This work has strong implications for our understanding of the complex effects of electrical microstimulation and even of electromagnetic stimulation, such as employed for basic brain research and in clinical practice.

Professor Walter Paulus from Clinical Neurophysiology, University of Göttingen, Germany, discussed the mechanisms and shortcomings of both transcranial magnetic and direct current stimulation in humans, and how these stimulation techniques may be modified by the simultaneous administration of neuropharmacological agents.

Behavioral neuromodulation was the focus of the second part of the congress. The largely publicised ability of neuromodulation methods to enhance cognitive performance in humans, in particular that of transcranial direct current stimulation, was critically reviewed in a keynote lecture by Professor Nicole Wenderoth, from the Neuroscience Center, Zürich, Switzerland. She emphasised the weakness of the electrical currents used, but also demonstrated how transcranial alternating current stimulation can modulate brain connectivity, as measured by functional magnetic resonance imaging (fMRI), if currents are applied properly and take into account the physiological mechanisms of action. In this way, she illustrated how transcranial current stimulation might offer possibilities for neuro-rehabilitation.

A final keynote lecture was given by Professor Wim Vanduffel from the Laboratory for Neuro- and Psychophysiology KU Leuven, Belgium, and Harvard Medical School, US, on optogenetics, a revolutionary method in which genes for photosensitive ion channels are inserted into the genome of neurons, which can then be specifically activated by light as recently demonstrated in non-human primates.

Three industry-sponsored satellite symposia were organised throughout the day, one on the utility of neurotransmitter imaging tools in neurodegenerative disorders, one on the early use of deep brain stimulation in patients with Parkinson´s disease, and another on the various facets of chronic migraine management including the place of pericranial botulinum toxin injections.

Last but not least, a round-table conference on ethics, economics and the quality of life was held, attended by the Belgian Federal Minister of Employment, Mrs. Monica De Coninck, and by Dr. Ri De Ridder, general director of the RIZIV/INAMI, the Belgian Umbrella Institution of Health Insurances, and by Dr. Mary Baker, immediate past President of the EBC.

A total of 77 posters were presented, and on the basis of scientific quality, clinical relevance, and clarity of presentation, a jury composed of representatives of both patients´ organizations and researchers, awarded Best Poster Prizes. The first prize went to Valérie Dormal from UCL, UK, the second to Sarah Chellappa University of Liege, Belgium, and the third to Athena Demertzi also from the University of Liege.

Drs. Wim Fias, Gianni Franco, Roland Pochet, Jean Schoenen and Rufin Vogels,. All contributed to this year's BBC report.

The Global Crisis of Depression

The low of the 21st century

“DEPRESSION IS THE MOST SIGNIFICANT PUBLIC HEALTH PROBLEM FACING THE WORLD IN THE 21ST CENTURY” – DECLARED *THE ECONOMIST* MAGAZINE, WHICH RECENTLY HELD A SPECIAL ONE-DAY SUMMIT ON THE TOPIC, DRAWING TOGETHER EMINENT THINKERS FROM A BROAD SPECTRUM OF MENTAL HEALTH-RELATED DISCIPLINES AND NATIONS.

In an effort not simply to understand the socioeconomic impact of depression but to kindle practical action, leaders from government, academia, medicine, industry, and patient advocacy grappled with the issues and possible solutions to such a complex problem.

Worldwide, around 350 million adults suffer from depression at any one time, it is the world’s leading cause of disability with one in five adults experiencing depression at some point in their life, and it costs the European Union (EU) an estimated €92 billion annually, highlighted John Andrews, Consultant Editor of *The Economist*, to nearly 250 delegates gathered to discuss the *Global Crisis of Depression*.

John Andrews

He began by defining the condition: “Depression comprises feelings of severe despondency and rejection, a mental condition characterised by inadequacy and guilt often associated with lack of energy, and sleep disturbances,” he told the psychiatrists, psychologists, patient organizations and other stakeholders gathered in central London.

Remarking that depression appeared to span a spectrum from the severe suicidal to the mere melancholic, Mr. Andrews made a point that whilst everyone with depression was suffering to different degrees, so too were their families, “and because we are *The Economist*, then their employers and fellow employees are also suffering.”

Focussing on the workplace, Mr. Andrews highlighted that a less known facet of depression was that 50% of the workplace burden was derived from presenteeism, which is when an employee turns up at work whilst sick. “In this situation, the employer suffers from a lack of productivity and colleagues suffer from the extra burden.”

Faced with a complex and multi-dimensional issue, there is no single, easy solution to the challenge of depression in the workplace, recognised Mr. Andrews. “But big companies do have the size and resource to help employees with depression but what about small to medium companies – how well equipped are they?” he asked.

Taking to the podium during the afternoon, Lord Dennis Stevenson, former Chair of HBOS, sufferer with depression and Trustee of the organization MQ: transforming Mental Health, discussed depression in the

Linda Rosenberg; Mary Baker, MBE; George Christodoulou; Christopher Dowrick; and Ulrich Hegerl

business environment. This was accompanied by short talks from Ulrich Birner, Head of Psychosocial Health and Well-being at Siemens, Andreas Tautz, Chief Medical officer at Deutsche Post, and Steve Evison, Chairman of the European Federation of Employers.

Drawing his introduction to a close, Mr. Andrews reflected on the mantle of stigma that continues to undermine efforts to overcome depression. “We think we live in enlightened times but even here in the West we continue to live in times of stigma. I hope that days like today will help lessen this stigma and we can move forward from this.”

Keynote speakers included Kofi Annan, former Secretary-General of the United Nations who provided insight on how conflict and poverty have impact on depression; and Alastair Campbell, former press secretary to British ex-Prime Minister, Tony Blair, who discussed his own personal battles with the condition.

> *“We think we live in enlightened times but even here in the West we continue to live in times of stigma,”*
>
> John Andrews,
> Consultant Editor
> of *The Economist*.

The majority of speakers had medical, governmental or societal specialisms in the field including David Haslam, Chair of the UK’s National Institute for Health and Care Excellence (NICE); David Kinder, economist and patient with depression; psychiatrist Professor David Nutt from Imperial College London; and a line up of other senior people from governments, large businesses and organizations all tackling the case for preventing, controlling and managing the ‘black dog’, Winston Churchill’s pet name for his own affliction.

The Economist summit, ‘The Global Crisis of Depression: The Low of the 21st Century?’ took place on 25 November 2014 in London. Find out more about the event at: www.economistinsights.com/healthcare/event/global-crisis-depression

Sponsored by the pharmaceutical company, Lundbeck, and run by _The Economist_ events.

The Global Crisis of Depression

The low of the 21st century

Keynote opening presentation

Kofi Annan, former UN Secretary-General and
Chair of the Kofi Annan Foundation

> *"WHO member states have already approved the 2013 to 2020 mental health action plan. This calls for a 20% increase in treatment of mental health, including depression, by 2020."*
>
> Kofi Annan, Kofi Annan Foundation.

Former UN Secretary-General Kofi Annan gave the morning's keynote address. He now chairs the Kofi Annan Foundation, which develops initiatives to promote peace and security, sustainable development, and human rights. Depression is a common, but often under-recognised, undercurrent to many of these big issues.

He focussed on the global nature of the current crisis of depression. "Hyperbole is so often employed in reportage, yet it would be inaccurate to call the issue of depression anything but a global crisis. This is a condition from which almost 7% of the world's population, around 400 million people, suffer."

The cost of the condition, estimated by the World Health Organisation (WHO) to be of at least US$800bn globally, is expected to double over the next 20 years – a wake-up call for those nations not yet taking it seriously.

The failure to tackle depression, continued Mr Annan, is not for lack of treatments but of political will: "There has been failure to acknowledge the scale of the problem and to put in place the policies and resources to overcome it. The fight against depression has fallen victim to the worrying tendency to focus on the short- rather than the long-term underlying challenges."

This failure, he went on, reflects a denial of the basic human rights of hundreds of millions of people of access to treatment and support. While the general attitude towards mental health lags behind physical health in richer nations, the situation in some poorer nations is consid-

Kofi Annan

ered nothing but dire, where depression is compounded by natural disasters, conflict and abject poverty.

"But lack of treatment and support is not the only denial that those with depression suffer; too often and in too many societies those with mental health face discrimination and isolation," he remarked. " We have to tackle the lack of both resources and trained providers, which prevent effective universal care. We also have to deal with the social stigma and lack of community understanding associated with mental disorders. This is all the more shocking given that depression can affect all of us. Indeed, there will hardly be an extended family where one member has not suffered from its impact."

Applying the vast knowledge we possess of psychological, pharmaceutical, and social interventions, on a global scale, is crucial, he added, setting out his ideas about how the burden of depression might be tackled on a global scale. "First, as the world is thinking about a development framework to build on the Millennium Development Goals, we need to place mental health in general, and depression in particular, within the post-2015 agenda."

He explained how WHO member states had already approved the 2013 to 2020 mental health action plan. This calls for a 20% increase in treatment of mental health, including depression, by 2020. "We must ensure that these commitments are turned into concrete action on the ground in every country."

Building innovative partnerships across sectors and countries forms a crucial part in delivering impactful solutions quickly, concluded Mr Annan: "I appeal to you to cast your net wide when forging new alliances. I don't underestimate the scale of the challenge. But I have also seen how, through commitment and partnership, progress can be delivered in the most testing circumstances," he finished with a note of encouragement.

> *"The fight against depression has fallen victim to the worrying tendency to focus on the short- rather than the long-term underlying challenges."*
>
> Kofi Annan, Kofi Annan Foundation.

The Global Crisis of Depression
The low of the 21st century

Panel discussion: the patient response

The afternoon session saw a lively panel discussion focussing on how society can 'fight back' against depression and addressing the role of prevention, health promotion, talking therapies and medical solutions.

Dr. Mary Baker, MBE, Immediate Past President, EBC, opened the session by questioning how society interprets depression.

"Physical health [lack of] leads to depression and depression will lead to physical health. Why then have we allowed society to divide the mind and the body?" she asked. "They are intertwined. They stay intertwined and this co-morbidity is a challenge in the future."

Mental health should not be valued through the prism of cost and budget, she added. "Health is an investment and there is a very big difference between costs and investment."

Following Dr. Baker was George Christodoulou, President of the World Federation for Mental Health, and Professor and former Chairman of the Department of Psychiatry of the University of Athens, Greece, who highlighted the value of patient-centric care.

"The point I would like to make is about Hippocrates – the grandfather of Western medicine. He said that we treat people, we don't treat illness," said Professor Christodoulou.

Treating the individual is particularly important in depression because it can cause different symptoms in different people. "It can be expressed as a slight, mild depression, as a burnout syndrome, as sexual dysfunction, as traumatic symptoms, as patients with drugs problems," he explained.

Christopher Dowrick, Professor of Primary Medical Care, University of Liverpool, UK, struck a cautionary note when he discussed depression rates and interventions.

"We need to be careful when we are talking about a global crisis or epidemic," he said. "We shouldn't be implying that rates of depression are getting higher and higher, because the evidence is not there ... rates of depression are staying about the same."

He added that there was good research to show that GPs were around 50% more likely to diagnose depression when it is not present, than to identify a case correctly or to miss a case when it is present.

He also stressed that there was a problem with over medication of depression in the West. "I'm involved in a big study in Australia," he explained. "We found out that most people who get depressed, get so mildly, and that those mild depressions tend to resolve spontaneously, without active intervention."

"It might be hard to accept, but antidepressants don't help most of the people for whom they are prescribed," he remarked. "It's only in severe cases that they're demonstrably better than placebo."

Dr. Dowrick called for physicians to focus on better identifying people with complex depression who experience social economic disadvantage, abuse, physical morbidity or disability.

Professor Ulrich Hegerl, Head, European Alliance Against Depression, ended the session by discussing the many aspects of effective interventions for depression, including clinician training and public messaging campaigns.

"We have the materials, the concept and a certain amount of evidence that we can do something. Therefore my position would be we know how to fight back, so let's fight," he concluded.

> *"Health is an investment and there is a very big difference between costs and investment."*
>
> Mary Baker, MBE


Linda Rosenberg;
Mary Baker, MBE; and
George Christodoulou

Beating workplace stress

A new EU healthy workplaces initiative

Brenda O'Brien

THIS SUMMER THE EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK (EU-OSHA) ANNOUNCED A WAVE OF NEW PARTNERS FOR ITS CAMPAIGN 'HEALTH WORKPLACES MANAGE STRESS'.

The partners come from a variety of sectors across Europe, including employers' and workers' federations, technology platforms, non-governmental organisations and multinational companies. The EBC itself has already signed up as an official campaign partner.

The initiative, which is running across 30 different countries in the European Union (EU), is designed to help organisations both large and small create a healthy environment that minimises stress and its associated psychosocial risks in the workplace.

Brenda O'Brien, who is coordinating the campaign, spoke to EBCnews about what the project hopes to achieve, and why it is so important for workers in the EU.

"There are many factors that contribute to workers' mental health and wellbeing, and we know that the workplace environment can make a significant contribution to this," she said. "We also know that, across Europe, there is a growing awareness of the role psychosocial risks are playing in absenteeism rates and days lost."

The decision for their 'Healthy Workplaces' campaign to focus on stress was an obvious one after EU-OSHA held discussions between governments, trade unions and employers, said Mrs O'Brien.

"There was a lot of agreement that, looking at the statistics from across Europe, this was an issue that needs to

> *"The key messages of our campaign are that you can manage stress, and you can manage psycho-social risk so that stress doesn't occur, just like you can manage any other risk in a work environment."*

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Beating workplace stress

A new EU healthy workplaces initiative

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be tackled, because more and more workers are reporting having suffered stress at work, and there's a lot of research out there suggesting that they feel unwilling to manage it," she said.

The 'Enterprise survey on new and emerging risks', carried out by EU-OSHA in 2010, revealed that 79% of managers in Europe are concerned about stress. At the same time, fewer than 30% of organisations had procedures in place for dealing with workplace stress, harassment or third party violence.

Part of the problem is that employees often feel that they don't have the skills to raise stress in the workplace as a problem.

The 'Healthy Workplaces Manage Stress' aims to put that right, explained Mrs O'Brien, by providing partners with them a range of practical tools and resources to help manage stress in the workplace. Topics include how to assess psychosocial risk and how to implement the best actions to eliminate them. Partners are also encouraged to use the campaign materials and to run seminars and workshops on workplace stress for their employees.

> "Unchecked, workplace stress can lead to host of physical and mental problems and increased absenteeism in employees. The total cost of mental health disorders in Europe, both work and non-work related, is estimated at €240 billion per year. In 2002, the European commission estimated that work-related stress cost the EU-15 countries €20 billion a year. But stress at work can be beaten," said Mrs O'Brien.

"There is a lot of misunderstanding and sensitivity around psychosocial risks in the workplace. And there can be a stigma around mental health," she said. "We want to improve understanding of the issue and bridge the gap by providing support and guidance for workers and employers."

For employees, the message is that work related stress is an organisational issue, and they shouldn't be afraid of reporting it, nor should they be concerned that it could be perceived as a sign of individual weakness, Mrs O'Brien added.

"Very often once you start looking for psychosocial risks in your workplace you will find that it's not just an individual, it's not just one persons set of life circumstances. You will find that there is certainly some organizational causal factor here, in creating stress in people," she explained.

To encourage organisations to get involved, the campaign features a 'Good Practice' award for partners who can demonstrate they have successfully tackled the issue.

"Companies apply and have to demonstrate that they have effective management combined with worker participation that promotes the theme of healthy workplaces manage stress," explained Mrs O'Brien.

She went on: "They should be able to demonstrate the successful implementation of interventions aimed at improving workplace safety and health. They should also be able to demonstrate outcomes, in terms of an improvement."

"Really we want to demystify it. And we want to assure employers that there is a way of putting in place principles of prevention. Awareness of the problem is already a huge step in managing stress and psycho-social risks in the workplace."

She added: "The key messages of our campaign are that you can manage stress, and you can manage psycho-social risk so that stress doesn't occur, just like you can manage any other risk in a work environment."

For more information on how to get involved in Healthy Workplaces Manage Stress, visit www.healthy-workplaces.eu

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IF YOU CAN’T CUT IT OUT THEN CUT IT DOWN

A new approach for alcohol dependency

EUROPE IS THE HEAVIEST DRINKING REGION IN THE WORLD, WITH THE AVERAGE EUROPEAN CONSUMPTION ACCOUNTING FOR TWICE THAT OF THE GLOBAL ALCOHOL INTAKE, ACCORDING TO EUROCARE, THE EUROPEAN ALCOHOL POLICY ALLIANCE. THIS CRISIS IS UNDER-RECOGNISED BUT NOW A NEW DRUG COMBINED WITH GREATER FOCUS ON COUNSELLING, EDUCATION AND PUBLIC HEALTH MESSAGING MIGHT TRIGGER A MUCH-NEEDED CHANGE.

Rainer Spanagel

It has long been thought that the only way to treat alcohol dependency is to abstain, but a new drug produced by Lundbeck (nalmefene, Selincro) and approved for use in Europe in 2013 takes a whole new tack, reducing the urge to drink rather than requiring complete abstinence. It is approved for use in patients with alcohol problems alongside appropriate counselling support.

Nalmefene is a tablet taken one to two hours prior to drinking that blocks opiate receptors in the brain reducing cravings for alcohol and in this way reducing consumption. It is suitable for anyone who regularly drinks high amounts of alcohol, which is defined by the World Health Organisation (WHO) as 7.5 units a day for men and five units a day for women.

The typical patient for this medication might drink between a half to a bottle of wine a night after work, or a mum who looks forward to a glass of wine when the children have gone to bed, but one glass quickly becomes a bottle while cooking and eating with her husband, and then she opens a second. This might happen on a few evenings a week.

This points up the importance of understanding and education related to identifying individuals who have an alcohol problem. Clear public health messages as well as effective national and EU-wide policy are essential to manage the problem. Against this backdrop, a conference marking during the Awareness Week on Alcohol-Related Harm (AWARH) was held in November 2014. AWARH takes an integrated approach to alcohol-related harm (combining measures on prevention, education, screening, treatment and adequate services) and a number of organizations endorsed the AWARH approach including the European Alcohol Policy Alliance (EUROCARE), the European Association for the Study of the Liver (EASL), Lundbeck, and the European Brain Council (EBC). The discussions high-

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IF YOU CAN’T CUT IT OUT THEN CUT IT DOWN

A new approach for alcohol dependency

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lighted the need to tackle the significant barriers to a comprehensive and cost-effective policy intervention.

Improvement in political regulation and secondary preventative measures to reduce the health burden of harmful alcohol consumption– which has been estimated to cause up to 60 different diseases - were also identified as priority areas. Moreover, the social burden to both society and the families of those suffering from an alcohol-use-disorder is immense.

Jonathan Chick and Philip Gorwood

Abstinence is unfair and ineffective for many

Along with the principle of harm reduction, nalmefene is the figurehead for another important change in attitude – that relapse is part of the core of addiction, and that the best way to approach problem drinking may simply be by cutting down.

Rainer Spanagel of the University of Heidelberg, Mannheim, Germany, explained the unfairness of expecting total abstinence: “This goal of abstinence has been almost impossible for most patients to achieve. It would be like giving treatment to a primary cancer patient and then telling them, ‘OK, now you will not show any metastasis in the next couple of years.’ But we all know it may happen, so how can you give a stigma to this?”

Alcohol statistics

- 14.6 million people within the EU are affected by alcohol dependence
- 195,000 premature deaths per year caused by excessive use of alcohol
- Over 1/5 of the European population aged 15 and older binge drink at least once a week
- Alcohol is the third leading risk factor for disease and death after tobacco use and high blood pressure
- Globally, the European Region has the highest proportion of ill health (7%) and early death due to alcohol

“Yes, it is better to be completely abstinent, and we should all still aim for it, but always trying to reach it is impossible,” added Dr. Spanagel.

But reduction of drinking comes with its own challenges, explained Jonathan Chick, Medical Director of the Castle Craig Clinic, Scotland. Professor Chick discussed the recent clinical trials in nalmefene that led to its wider clinical use: “A large proportion of people who drink to excess find difficulty in stopping their drinking at the point at which other drinkers find no difficulty.”

In the studies conducted by Lundbeck during development of nalmefene, the patient was instructed to take the medication at least one hour before they started to drink, or if they were in a situation where they might have been at risk of drinking.

“Nalmefene was associated with a reduction of heavy drinking days and a reduction of overall alcohol consumption compared to placebo, and a greater improvement in mental health symptoms in the quality of life questionnaire, plus a greater improvement in liver enzymes than the placebo group,” explained Professor Chick.

Help is needed before dependency kicks in

But the challenge within this lies in helping heavy drinkers before the problem gets any worse. Philip Gorwood of Hospital Sainte-Anne, Paris Descartes University, France, stressed that the transition between ‘social’ drinking, harmful drinking and alcoholism is difficult to define: “Patients, before getting to dependence, do have harmful consumption for a certain period of time, and this is usually followed by their GPs. When they have severe dependence or any type of complication, then they get to specialised centres.”

Here, the importance of education is crucial, both in schools and communities, to bringing a deeper understanding to the potential impacts that drinking can have, with a focus on families in which problem drinking already occurs. But this can be easier said than done, especially given that it remains such a big part of our culture: “For example in France, nobody will ever touch the selling of alcohol because it is such a strong love, not only in terms of politics but it is also about money,” he said.

Some interviewee comments were drawn from an interview with EPA (European Congress of Psychiatry) Congress News 2014 and 2013. Statistics sourced from http://www.eurocare.org