Module:
Mental health in the community

Week 3
The epidemiology and burdens of mental disorder

Topic 3
The societal burden of mental ill health

Dr Frank Holloway
Emeritus Consultant Psychiatrist SLaMNHSFT

Lecture transcript

Slide 3
So, in my previous talk, I discussed the burden of mental illness on the individual, and also introduced concepts such as the disability adjusted life year (DALY). In this talk, I'm going to talk about the burden of mental illness from the societal perspective. I'm going to introduce the World Health Organization (WHO) Global Burden of Disease (GBD) work, in particular the headlines in relation to mental health problems. I'll revisit the epidemiology of mental disorder, talk a bit about the economic impact of mental disorder, and then go back to the Global Burden of Disease, in particular, in relation to mental health.

Slide 4
So the headlines from the Global Burden of Disease data is that mental disorders are a leading cause of disability across the world. They tend not to be fatal, people often live for many years with long term disability. WHO uses the Disability Adjusted Life Year as index of disability. I've already introduced the DALY and I'll do so again in a moment.

The most disabling mental disorder is depression. That's because it's both common and disabling. Actually, it's the single most disabling disorder of all. As the population ages, dementia will become an ever larger source of disability. Schizophrenia and bipolar disorder are important and have a greater impact on health budgets than the GBD reports at knowledge. Burden of disease varies across countries, particularly in relation to the age structure of the population.

Slide 5
So, as we've seen, mental disorders are common. Epidemiological studies suggest a one-year period prevalence in the region of 30 per cent. And I've already mentioned the Wittchen and Jacobi 2005 report. Wittchen and colleagues updated this in 2011, and they provide estimates for the prevalence, and hence, the absolute numbers of people suffering from mental disorders in a year in the European Union and Switzerland.

Slide 6
Their estimates went up between 2005 and 2011, because they widened the age range considered and the scope of disorders. And the headline figure is a one-year period prevalence of 38.2 per cent. This takes into account childhood disorders, personality disorders, and dementia. And that's in fact, a total of 164.8 million European unions with citizens being affected by mental disorders directly in a year.

Slide 7
In their detailed paper, they provide very detailed data on the percent and absolute numbers of

Transcripts by 3Playmedia

people suffering from mental disorders. Obviously, this is all taken as estimates, best estimates, from the available epidemiological data. So again, the headlines of 2011, psychosis, prevalence of 1.2 per cent. Bipolar disorder, prevalence of 0.8 per cent. Major depression, prevalence of 6.9 per cent. The anxiety disorders, lumped together, in the region of 15 per cent. Dementia, prevalence of 1.2 per cent of the total population. Autism, pervasive developmental disorder, prevalence of 0.6 per cent. And mental retardation, prevalence of 1 per cent.

Slide 8
Another approach to burden apart from merely counting the numbers is looking at the economic impact of mental disorder. When you think about the costs of mental disorder, these can be seen as the treatment care costs, social security costs, costs due to lost productivity, costs experience by carers, and then hidden costs, in terms of pain and suffering, which are generally not accounted for in economic analyses.

Slide 9
The economic impact of mental disorder was considered in a publication by the World Economic Forum on the Global Economic Burden of Non-communicable Diseases. And the report estimated that the global cost of mental illness was nearly $2.5 trillion US dollars, 2/3 of which was in indirect costs in 2010, which was projected to increase to over $6 trillion by 2030.

Insel, in a blog, the former Director of the National Institute of Mental Health, posed the question: what does $2.5 trillion, or even $6 trillion actually mean? Now, the entire global health spend in 2009 was $5.1 trillion. The annual GDP, for low income countries, is less than $1 trillion. The entire overseas development aid over the past 20 years of the US was less than $2 trillion. So that puts it in something of a perspective.

Slide 10
So we've got a number of studies estimating the burden of mental disorder by different working groups using subtly different methodologies. Broadly speaking, you estimate the prevalence of disorder, you weight disorders by disability, and possibly with gradings for severity of a particular disorder, and also try and take account of the impact of premature mortality.

Slide 11
Remember, the disability adjusted life year (DALY), which is the common currency for this discussion calculated by adding the years lived with disability and the years of lost life. So the 'years lived with disability' is the prevalence of disorder x the disability weighting for the condition, and 'years lost of life' being that impact of premature mortality.

Slide 12
WHO data quoted in the World Economic Forum provides counts of numbers of disability adjusted life years lost due to neuropsychiatric disorders. In absolute numbers, top of the tree, comes unipolar depressive disorders. Next in importance is alcohol use disorders, followed by schizophrenia, and bipolar affective disorders. And then other disorders, progressively less significant in terms of burden. Incidentally, the actual neurological disorders have lesser impact than the psychiatric disorders, epilepsy being the most significant neurological disorder in terms of disability adjusted life years.

This is a paper by Harvey Whiteford on neuropsychiatric datas worldwide. At the top, major depression, 24.5 per cent of neuropsychiatric disorders; bipolar disorder, 5 per cent; schizophrenia, 5.3 per cent; and Alzheimer's/dementia, 4.4 per cent. But of course, as the age structure of the population changes, we have more older people and more old older people, and Alzheimer's/dementia becomes progressively ever more significant as a cause of neuropsychiatric disability.

Slide 13
There's data from both high income and low income countries in terms of the rank order of the Global

Burden of Disease so that for high income countries: top comes depression, then Alzheimer's, then alcohol, then drug use, then schizophrenia, then bipolar disorder. For low income countries: again, unipolar disorder, then alcohol, then schizophrenia, then bipolar, and then epilepsy and Alzheimer's. Again, this relates to the age structure of the population.

Slide 14
So Wittchen and colleagues have provided a European context for the global burden of disorder, and in Europe, again, the biggies-- unipolar depression, dementia, followed by schizophrenia, bipolar disorder.

Slide 15
Their conclusions are, 'The DALY analysis presented in this report provide considerably improved measures that are specific for the EU, which should be used as a future standard reference'. 'The new estimates', they say, 'confirm that disorders of the brain are the major contributor to the total EU disease burden... Reveal that depression - in contrast to previous projections - is already now the most important single contributor to the total disease burden... Show that there are tremendous diagnosis-specific differences, and highlight that even seeing the 'less serious' disorders are associated with a substantial degree of disability,' and '...Confirm the existence of substantially different disability differences between females and males,' something I haven't, in fact, emphasised, but that's there in the data.

Slide 16
For me, the GBD data is important because it helps policy-makers understand the impact of mental disorder at a population level. It shows us that mental disorders constitute the most important category of non-communicable disease, in terms of burden of disease, and provides an argument for investment in mental health research and mental health services.

Slide 17
And to quote the World Economic Forum report 2011, 'Economic policy-makers are naturally concerned about economic growth. The evidence presented in this report indicates that it would be illogical and irresponsible to care about economic growth and simultaneously ignore non-communicable diseases,' of which the most important, as we mentioned, are mental disorders. 'Interventions in this area will undeniably be costly. But inaction is likely to be far more costly.' In other words, a call to arms to invest in both provision, and services for mental neurological disorders. But also, for further research, to make that intervention more effective and more cost effective.

Slide 18
Now in the face of the combination of individual suffering and societal burden, what do we do? There needs to be a research agenda, a policy agenda, and indeed, a practice agenda.

Slide 19
And here, I thing called the grand challenges in global mental health is potentially helpful. This is a consortium of researches, advocates, and clinicians, which announced in 2011 in a paper published in Nature, research priorities for improving the lives of people with mental illness around the world, and it calls for urgent action and investment. And it sets out a set of challenges, a set of detailed research issues, but most importantly, a set of goals.

Slide 20
The goals are to identify the root causes disorder, risk factors, and protective factors, advance prevention and implementation of early interventions for disorders, improve treatments and expand access to care, raise awareness of the global burden of disorder-- and that's essentially a political issue-- they say, build human resource capacity, (so having people who can actually deliver effective interventions), and finally, transform health system and policy responses.

Slide 21

So, what's the way forward for mental health services? This is a personal and entirely partial view. There are some things we can be very confident about, so it's undoubtedly the case that mental illness and mental health problems are important at a global level. I'm reasonably confident that relatively simple interventions can have a very positive impact on mental health outcomes. Although, one has to say the jury's still out on the real world efficacy of initiatives, such as the English increasing access to psychological therapies model, which promises psychological therapy for all.

I'm also clear that some people experience severe and enduring mental health problems, that, for whatever reason, don't respond well to simple interventions. This group of individuals is important, because generally, they do best when treated by specialist services. Despite the policy emphasis towards prevention and early intervention-- which we've just discussed, which is having a profound effect on Child and Adolescent Mental Health Service in England-- there's actually rather little evidence, at the moment, for specific interventions that will be preventative.

I'm personally very interested in looking at potentially modifiable risk factors. We already know some of these for a handful of mental disorder. So that for example, exposure to childhood sexual abuse is an obvious one, and so is substance misuse. More complicatedly, we have very good evidence that unemployment has a devastating impact on mental health, and is certainly a significant precipitant of suicide. So we begin to see some potentials for policy intervention of these underlying factors. Well, in terms of conclusions I think it's probably time for you to draw your own.

Transcripts by 3Playmedia