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#373: Ongoing symptoms: Why isn't treatment for depression and anxiety leading to lower prevalence?

VOICEOVER

This is Up Close, the research talk show from the University of Melbourne, Australia.

ERIC VAN BEMMEL

I'm Eric van Bemmel. Thanks for joining us. We've been taking mental health more seriously over the past few decades. In the developed world at least we've seen scaled up policy commitment and unprecedented levels of funding poured into treatment for people suffering from conditions like depression and anxiety. We know a lot more than we did 25 years ago about why people encounter mental health problems, about brain chemistry, about genetic predepositions to mental illness and about the power of life events to create conditions for bad or good mental health. We've also developed or improved therapeutic responses to mental health issues, whether drug or talk based, and understand better how to prevent onset of symptoms. But with all the evidence based policy-driven, well intentioned treatment being made available are we making a dent in the numbers of sufferers?

Our guest on this episode, one of Australia's leading population health researchers isn't convinced. Professor Tony Jorm says the numbers collected by him and colleagues in North America, Australia and elsewhere just don't add up. Tony Jorm leads the Population Mental Health Group within the Centre for Mental Health at the Melbourne School of Population and Global Health. He's also a co-founder of Mental Health First Aid and focuses his research on building community capacity to take action on mental health. Tony, welcome.

TONY JORM

A pleasure to be here.

ERIC VAN BEMMEL

Tony, mental health problems are too often a source of tragedy for individuals of course and the people around them. There is the misery that springs from it, the poor health outcomes and also the lost economic output. But what's the burden of mental health problems for entire societies or nations?

TONY JORM

It's very large and I don't think we realised how large it was until the 1990s. The reason is that the traditional way that we judged whether a disease or a health problem had a major impact on society was to look at whether it killed people. So in Australia for example, and it would be true of many other countries, we've had mortality data from what doctors write on death certificates for well over a century. These are compiled annually and you can look at all of the major health problems that kill people and in countries like Australia, high income countries, it is cancer and heart disease. But what doesn't take account is the health problems that disable people. That is that they make it difficult for people to fulfil their life goals, difficult to work, to carry on relationships, to study and so on.

In the 1990s we got a lot of interest in what's called burden of disease which is looking at the impact of populations not only in terms of like reducing a person's life expectancy, but also in terms of disrupting their life so that they cannot fulfil their life goals. So it's called disability burden. When that was done mental health problems or mental disorders turned out to be the major source of disability burden in populations. When you looked at the various class of mental disorders depression in particular and also anxiety disorders, which are closely linked to them, turned out to be major sources of disability burden. So in Australia for example depression anxiety disorders are the biggest single source of disability burden in the population. One of the reasons that they are is because they tend to start young.

So when you look at cancer and heart disease they tend to be like older people's diseases. So they tend to have onset in old age and shorten people's lives. They can occur in younger people of course. But when you look at mental health problems they often start in adolescence or early adulthood and at that age people are completing their education, getting into occupational roles, forming key relationships, forming health habits like whether they smoke or drink alcohol and all of these things can be disrupted. So what happens with a mental disorder is people can have an onset in adolescence or early adulthood. They tend to get better over time but they'll have other episodes throughout life. So because there's early onset and a recurring pattern that often occurs over the lifespan you're getting quite a lot of accumulation of disability and over a whole population it's a major source of disability burden.

ERIC VAN BEMMEL

When we talk about anxiety and depression, which I know is the focus of your research here and we'll talk about that in more detail in a moment, that itself is an umbrella term is it not? I mean there is different types of anxiety and depression.

TONY JORM

Yeah. People distinguish different types but there's high comorbidity. That is they tend to go together. So there are various types of anxiety disorders, like people might have heard of things like post-traumatic stress disorder or panic disorder of agoraphobia. We get different types of depressive orders. The main one you hear about is major depressive disorder but they tend to go together. So if people have high levels of anxiety that disrupt their life over a long period they will tend to develop depression for example. Also you get comorbidity with other mental health problems. So if people have levels of anxiety, high levels of depression, they'll sometimes try and manage those through using alcohol or using illicit drugs and so they may develop a drug or alcohol problem.

So you find all sorts of mental health problems have comorbidity but it is particularly strong between anxiety and depression. So people often refer to them for example as the common mental disorders or distress disorders or internalising disorders. Covers these as an umbrella group because of the strong comorbidity and the common risk factors between the disorders in this group.

ERIC VAN BEMMEL

Would mood disorders be another name for the same thing?

TONY JORM

Mood disorders is a broader term that includes major depression. It also includes bipolar disorder which is really different in its causation and its risk factors. So really we're looking at a unipolar depression where you don't have mania, whereas in bipolar disorder you're looking at unipolar depression and the various types of anxiety disorders. So when you look in the population people with these disorders aren't distinct from the rest of the population. What you see is a continuum. So anxiety is a normal thing. It's a very adaptive thing. It helps us avoid danger and it helps us prepare for various tasks that we can perform better. But when it gets to the stage that we can't perform and we can't do things because it's so debilitating then we call it an anxiety disorder.
So it's not a fixed point. It's sort of an arbitrary point where it begins to disrupt the person's life. People can also have mild depressive mood. They can have a few hours or a day where they're not feeling so great but you only call it a depressive disorder when it goes on for a matter of weeks and really disrupts the person's functioning. So intrinsic to the notion of one of these common mental disorders is

that you're getting these negative emotions but they're disrupting your life. They're causing disability and that?s what really defines them as a disorder.

ERIC VAN BEMMEL

The risk factor is - I know that individual disorders will have individual sets of risk factors but broadly speaking are we talking about life events or genetics?

TONY JORM

Yes, all of those things. So you're right, you can't say in an individual case this caused an anxiety disorder or this caused an episode of depression because it's usually complex. But if you look at a whole population you can say certain types of experiences make you a greater risk. So there are genetic familial factors like if someone in your close relative, one of your parents, had like an anxiety disorder you would be more prone to one yourself. There are early childhood factors. So a childhood adversity, things like child abuse, receiving harsh parenting, being a victim of bullying, those things can predispose you throughout life to anxiety and depressive orders. There are immediate life events. So if people have something very bad happen to them, like they're a victim of crime, they suddenly become unemployed, you know, involved in some sort of war or conflict situation or they great a break up of relationship, these can also increase their risk.

We also know that physical health problems, so people that have very serious physical health problems like cancer and heart disease, can be at greater risk of depression for example. Finally there are protective factors like in particular their social support. So people who have very close supportive relationships can protect them against these ill effects of various life events.

ERIC VAN BEMMEL

What about gender breakdown?

TONY JORM

Well what you tend to find is that anxiety and depression is more common in women than in men. When you deal with other types of mental health problems like alcohol and drug use disorders you get more of them in men than in women. There seems to be quite a rise particularly in depression in adolescence. So both boys and girls around puberty begin to show a rise in depression and anxiety but it gets particularly strong in girls. It's around that time from puberty onwards that women get a higher prevalence of these disorders than men.

ERIC VAN BEMMEL

Now going back to that notion of a burden for a society or for a nation. What do we know about sort of the cost of this mental health burden?

TONY JORM

Well you can look at the effects of employment and so on and look at the dollar cost. I prefer not to do that. I mean in terms of the economics I would rather say okay, we have certain dollars, certain resources available to us as a society. We want to increase the health and wellbeing of our citizens. How can we spend that money in a way that maximises the health outcomes of people, including the mental health outcomes? I think if you talk about how many dollars it costs, which I know is often done, you're looking at these things as a liability [otherwise] and I think we've got to see the resources of the economy as something we're putting in for people's wellbeing rather than seeing people as some sort of economic liability. But that being said, if we look at the health system costs there are substantial health system costs across all high income countries for anxiety and depressive disorders. Those costs have been tending to go up as we're getting more people into treatment over time.

ERIC VAN BEMMEL

Let's talk about the treatment for a moment, and again I know that each disorder will have its own specific set of treatments, but again broadly we're looking at what, talk and pharmaceuticals, correct?

TONY JORM

Yes and also potentially sort of self-help and lifestyle. So when you're looking at pharmaceuticals for these common mental disorders antidepressant medications would be the main class, there are different types of those, and we certainly have randomised controlled trial evidence that they work. As far as depression is concerned they seem to work best at more severe levels of depression but not at mild levels of depression. We have a range of psychological therapies that work. The most researched are cognitive behaviour therapies but there are others as well that seem to work. There are various lifestyle things that seem to be important as well, for example physical activity seems to have a protective effect as far as depression is concerned. There are also various social things like having good supportive relationships helps people recover. So it isn't always about professional treatment. It's also about what people do themselves, self-help things, and also about support they receive from others around them that can help their recovery.

ERIC VAN BEMMEL

Then there are those who go untreated. The so called treatment gap. Tell us about that.

TONY JORM

That's right. So during the 1990s in particular we got a large number of national surveys in mental health. In Australia we had one in 1997 but other high income countries had them as well. What these revealed was very high prevalence rates of anxiety and depressive disorders in particular, but quite a percentage of the people in all the countries that were investigated didn't receive any treatment. So it varied from country to country. In Australia for example most people with anxiety disorders were not receiving treatment. With depression more than 50 per cent were but there were substantial minority, quite a sizable minority that were not getting treatment. Of those people that are getting treatment a lot of them are getting under-treatment. So this led to this notion globally that we had a treatment gap.

In high income countries that was substantial. In low income countries it was absolutely enormous. Hardly anybody was getting treatment. This led to a notion that I think has dominated mental health policy across the world, that if we could reduce this treatment gap we would get a population health gain. This notion of reducing the treatment gap became such a dominant notion that in 2001 we had a World Health Report from the World Health Organisation and it made 10 recommendations to address the treatment gap globally.

So it involved making various types of treatments more widely available and increase in the uptake of treatment. Simulations were done including a very good one in Australia. What this did was to look at randomised controlled trial data, so we have good evidence from randomised controlled trials that various pharmacological and psychological treatments work. Then we can say use that to estimate well, if we could get more people into evidence based treatment and we get more people into treatment in general, could we reduce this disease burden? The answer was yes we could. However in actual practice that does not seem to have occurred and that has been the issue that has interested me in recent times.

ERIC VAN BEMMEL

On Up Close we're speaking with Population Mental Health Researcher Professor Tony Jorm who asks whether increases in providing evidence based mental health treatment across much of the developed world have actually had an effect on the prevalence of disorders. I'm Eric van Bemmel.

Now Tony, some of those recommendations about the treatment gap all those years ago by the World Health Organisation in the World Health Report, you mentioned in brief basically it's about creating greater access to mental health services as well as

education campaigns. Looking at it it's all very sound advice.

TONY JORM

Absolutely.

ERIC VAN BEMMEL

There are those who would argue, and we're speaking now in mid-2016 there is a new paper out in The Lancet Psychiatry that argues that the global modelling says there is a return on investment in treatment of anxiety depression, and again we're focusing on anxiety depression disorders here. There's return on investment in investing in these things in lower prevalence. Now you've got doubts about this as you've mentioned. How did you go about investigating it?

TONY JORM

Well I was interested in the situation in Australia because in Australia we've had big increases in provision of mental health services. For example from 1992 up to 2010 we had 178 per cent increase in real expenditure, this is corrected for inflation, on mental health services. When we look at the number of mental health practitioners around the workforce per capita, so this is a real increase corrected per capita, it went up from 80 practitioners per 100,000 in 1992 up to 108 in 2010. That's a 35 per cent real increase. When we look at pharmacological treatments, antidepressants in particular, absolutely massive increase from 1990 up to the present. Australia is now one of the highest countries in the world on antidepressant use per capita.

When you look at psychological treatments we had big increases with changes in Medicare that occurred early this century, we had the Better Access scheme which allowed psychological services to be funded under Medicare and we had big increases in the number of people receiving those services. So you think okay, if the modelling is correct then the number of people affected should go down because we're getting more people into treatment. But when you looked at the data that was available in Australia, and we looked at a number of different sources, we could not see any decrease in anxiety and depressive disorders or in symptoms of those disorders. If anything the trend seemed to be towards a slight increase.

So then I wondered well, this is just Australia. What happens in other countries? So I wrote to academic colleagues in three other countries, in Canada, the United States and the United Kingdom and I said this is what I think is the situation in Australia. Could you have a look at the data in your country, you know it better than I do, and what is happening? So we did that and we compared the four countries. Australia probably stands out as showing the most consistent increase in treatment across pharmacological, psychological and also e-therapy treatments

across the countries.

Canada has also shown big increases in antidepressants which have levelled out more recently but also in psychological treatment. United States is sort of interesting. It's shown big increases in the number of people getting treatment but it's been partly a substitution of antidepressants for psychological treatment. In the UK also big increases in antidepressant use. They don't really have any data on psychological therapy so we don't know one way or the other. But in all the countries there has been no decrease in the prevalence of anxiety and depressive disorders. If there are any trends it's towards a slight increase. So we're not seeing the gains that one would expect from the economic modelling and the paper that you mentioned in Lancet Psychiatry that came out, the analysis is quite correct if you believe that the effects that we get in randomised controlled trials can be translated into actual practice.

But the question is, is what people get in randomised control trials in the ideal circumstances, is that what people get in every day practice in mental health treatment in Australia and these other high income countries? So then we looked at well why hasn't increasing treatment, particularly antidepressant treatment, why hasn't it produced the expected benefits. We looked at a couple of artefacts that could do it. It could be that there have been other social changes that have gone on in these countries that have masked it. So if we got an increase in risk factors for example over time that could be pushing prevalence up.

ERIC VAN BEMMEL

Sorry, what you're saying here is that the treatment is in fact effective but there's more people at risk.

TONY JORM

That's right. Let's say there were more risk factor exposure, more people had adverse life events, that could be pushing prevalence up but at the same time treatment is pushing it down and we don't see any change.

ERIC VAN BEMMEL

Any way to investigate that?

TONY JORM

Well we looked at it in all four countries and like, I'll give you the example, Australia we've had bushfires, we've had floods, we've had some economic recession and so

on but these things have all been located in particular areas of the country in particular periods of time. There's no broad increase we can see over the period that we have data that can easily account for it in terms of non-risk factors. Similarly in the other countries, the authors in the other countries, all came to that same conclusion. We cannot see any clear pattern in known risk factors. There could be an unknown risk factor but in known risk factors we cannot see any clear pattern that could account for it. What might account for it could be that people are more willing to report symptoms.

So for example when we carry out these surveys a lay interviewer, like in Australia an Australian Bureau Statistics interviewer, goes out to somebody's house and interviews them about all their symptoms of mental health problems and that's put into a computer program which gives a likely diagnosis. Now if people become more willing to report their symptoms to a lay interviewer you could get an artificial increase in prevalence that is counteracting the reduction that is occurring through treatment.

ERIC VAN BEMMEL

Isn't that conceivable given that part of the recommendations from the WHO was more public education around these issues. So wouldn't you expect then a change of culture that allows, permits people to more freely admit to symptoms?

TONY JORM

It is quite possible and certainly I think in all the countries there has been a change in culture. In Australia it's been quite a dramatic change in culture, we have data about it. But whether it's led to increases in reporting it's very hard to say. I mean I've been involved for example with Mental Health First Aid training which is widely available in Australia and we have done trials on Mental Health First Aid training. We know it reduces stigma. It reduces people's willingness to be open about mental health problems. So we've looked at people's reporting of symptoms who have done that course. So if you thought okay, people being more open should make people more likely to report symptoms, then doing that course they should report worse mental health but they don't. It doesn't happen. So there is a sort of clear test where it doesn't seem to be occurring but we don't have very good data on it and it's something that we need to explore more.

ERIC VAN BEMMEL

We can't draw the connection between public education and increased reporting of symptoms in other words.

TONY JORM

Not directly. Hypothetically it is possible but there is no direct evidence that that is the case but there is no objective test. It's like pain. The only way to know if somebody has got pain is to ask them and with the sort of distress we're dealing with, these anxiety and depressive disorders and the disability, the only way is to ask them. There is no objective test you can do.

ERIC VAN BEMMEL

You're assuming of course that the answer is a truthful one.

TONY JORM

Correct, yes, absolutely.

ERIC VAN BEMMEL

So just to sum up, it's possible then that all this investment of time and money into increasing treatment for anxiety and depression is in fact having an effect that is to say that prevalence of these things is going down but that's being masked by things such as possibly an increase in risk factors or an increase of willingness to report symptoms. Is that correct?

TONY JORM

That is correct. They are the possible masking effects that could go on.

ERIC VAN BEMMEL

Population Mental Health Researcher Professor Tony Jorm is our guest on Up Close and we're discussing the sustained prevalence of mental health disorders such as anxiety and depression despite increase in provision of treatment. Tony, you and your colleagues suggest that rather than a masking of reduced prevalence in anxiety and depression there could be an actual lack of reduced prevalence. That is the numbers of sufferers are not in fact going down. What reasons could there be after all the resources allocated and the evidence based treatment being carried out that prevalence of anxiety and depression has not decreased?

TONY JORM

Yes. What you're coming to is one of the other hypothesis we have that there is actually a quality gap. For example, the trial data shows that antidepressants work for severe depression but not for mild depression. When we look at their use in Australia for example, and I think it's true in some of the other countries as well, we find that often they're prescribed by GPs for mild depressive cases. Often the concentration tends to be in the older aged section of the population whereas when you look at who is most at risk for these disorders it tends to be younger adults. So although in theory these treatments should be working they may not be going to the right people or done in the right way.

Similarly with psychological treatment there is some evidence for example in Australia that people are getting too few sessions of treatment to be therapeutic. So there have been some statistics in Australia about whether people get minimally adequate treatment. So they see say a GP, they get an antidepressant or other medication that should work if given the right way or they're getting a psychological treatment for the minimum number of sessions. Then what we find is that there are only 16 per cent of people with anxiety and depressive disorders in Australia, that's 16, one six, who get minimally adequate treatment. So that's minimally adequately, it's not optimal treatment.

ERIC VAN BEMMEL

That's in Australia. Can we?

TONY JORM

That's in Australia and the indications are in the other countries that may be the case as well. Although more people are getting treatment it may not be very good treatment. All of the economic modelling that has gone on has made the assumption that we are getting effects, maybe not quite as good as you would get in randomised controlled trials, but in that direction whereas maybe what we're getting are things that are much, much weaker than seen in randomised controlled trials. So what we need to do is focus less on the treatment gap, that is getting more people into treatment, and much more on the quality gap. Getting more people into high quality evidence based treatment.

The other explanation is what we call the prevention gap. So with chronic physical diseases like cancer and heart disease societies like Australia and other high income countries put a lot of emphasis on preventive efforts. So if I said to listeners tell me 10 things you could do to reduce your risk of cancer or your risk of heart disease or your children's risk of cancer or heart disease, I think with a bit of thought people would come up with quite a list. If I said tell me 10 things you can do to reduce your risk of anxiety and depression or children's risk people might find that a bit harder. We put very little resources into prevention of anxiety and depression even though we do have evidence that they are preventable. So we're putting all our eggs into the

treatment basket.

So if you have any sort of health problem there are two ways you can reduce the prevalence. One is you can try and give people shorter duration of the disorder. So if people develop depression you can try and get them better quickly so they have fewer months or years lived with depression. Or you can try and stop them developing in the first place which is prevention. What we're doing is trying to get people better quicker. We're doing virtually nothing about trying to stop them developing these problems in the first place. So that may be the other thing that we need to do more of. Not only get better quality treatment, reduce the quality gap, but also more on prevention, reduce the prevention gap. So we focus so narrowly on this issue of the treatment gap and we've neglected other areas where we're not perhaps putting in the effort that we ought to.

ERIC VAN BEMMEL

Just on this prevention gap, how much of it is preventing exposure to risk factors for say public education about those risk factors?

TONY JORM

Well people can do various things that can reduce their own risk. There's good evidence for example that parents who show more affection and care to their children, those children when they grow up have a lower risk of depression and parents do show various degrees of care to their children. But if we could move the average level of care up that parents show their children we would have a preventative effect on the whole population. That is an example. Another example is that we know that if there is conflict in the home between the parents that increases a child's risk later in life of developing anxiety and depressive problems. So parents do have conflict but if they know that okay, if we're going to have a fight we're not going to do it in front of the kids and we're particularly not going to involve the children taking sides, one side or the other, they could have a protective effect.

So if we can get whole populations acting in certain ways that reduce risk we could potentially have a protective effect. Another area is school bullying. That's a well-known one. Like if schools had consistent programs to reduce the incidents of bullying that would produce a reduction in the prevalence of depression. So there a whole lot of things that could be done potentially that aren't necessarily being done because the community is not empowered with the knowledge of what they could do for prevention. So it's not all about health services. It's really about - if you want to get a prevention the whole of community can play a role.

ERIC VAN BEMMEL

So if I say where to from here I guess the answer is in this prevention gap, in shortening this gap.

TONY JORM

Well I think there are three things we've got to do. First of all we've got to focus much more on getting quality treatments. I'm not bagging Mental Health Services at all. I think we need them. They can, if the modelling is correct, we can reduce prevalence through better services but we're not getting the quality that's there. We've got to have better use of the treatments we have, they've got to have better targeting and they've got to be a better dose of treatment if psychological treatments is going to have an effect. Secondly we do need to do more on prevention. We've totally neglected it in contrast to what we do with problems like cancer and heart disease.

The third thing is we do need population health monitoring in this area.
The only way we're going to find out whether these things work and whether our populations are getting more mentally healthy is to do these population surveys repeatedly with a common methodology. It's really only been in recent decades we've had the data where we can answer this at all and we need to keep doing it if we are to monitor these changes and see whether we're getting the gains that we want to get.

ERIC VAN BEMMEL

Tony, what about countries that have lower incomes? Lower and middle income countries.

TONY JORM

That's a very good question. The analysis we've done is from four high income countries, all English speaking countries who have a cultural similarity, and we've had reasonably consistent results. With low and middle income countries where there's much lower rates of treatment it could be quite different. It could be that providing basic mental health care would produce a population benefit. We just don't know. We just don't know. But as there gets more scale up of treatment in these countries I think we need to focus more on the quality gap, not just getting more people into treatment. I mean a lot of these countries people come along to see a general practitioner for a very brief consultation and go away with a prescription. If we're getting more of that I think it's very unlikely that that's going to produce a population mental health benefit. I think we're going to have to do much better to produce the benefits. If we haven't been able to do it in these high income countries I don't think the sort of very brief low quality treatments are going to work in lower middle income countries either.

ERIC VAN BEMMEL

You mentioned the cultural similarities among the four countries of course, Canada, the USA, the UK and Australia. What about countries that have a different cultural view of mental health and mental health problems? I mean can we speculate about that?

TONY JORM

It would be pure speculation. We don't have data from a lot of those countries. Again, this is what I was alluding to, we need to have these regular surveys of mental health using common methodology in order to monitor what is going on and to monitor the uptake of treatment. We don't know. If I had to guess I would say that the situation would be similar in other high income countries in the world as it is in the four countries we've looked at.

ERIC VAN BEMMEL

Tony, given the importance of preventative measures in reducing exposure to risk factors as you mentioned, what proportion of the investment in this grappling with mental health problems do they represent?

TONY JORM

It's very hard to get a precise figure on that but you can say in all the countries it's absolutely minuscule. In many countries including Australia there have been reports that have come out saying we need to do more in prevention. People acknowledge it but it just doesn't occur. It's very difficult to compete against treatment services because treatment services people have an immediate problem and there is naturally a press to try and solve that problem. When you're talking about preventing future problems that don't yet exist it is very difficult to compete with that. But I think until we really come up with a national prevention plan in Australia and other countries and implement that systematically to do the sorts of approaches that have been successful for chronic physical diseases, I think that we're not going to be doing all that we could possibly do to reduce the burden of these disorders.

ERIC VAN BEMMEL

Tony Jorm, thanks for being our guest on Up Close.

TONY JORM

It's been a pleasure.

ERIC VAN BEMMEL

I've been speaking with Tony Jorm who is a Senior Principal Research Fellow at Australia's National Health and Medical Research Council as well as leader of the Population Mental Health Group within the Centre for Mental Health at the Melbourne School of Population and Global Health.

You'll find links and more details on the Up Close website together with a full transcript of this and all our other programmes. Up Close is a production of the University of Melbourne Australia. This episode was recorded on 7 July 2016 and was produced by me, Eric van Bemmel, with audio engineering by Gavin Nebauer. Thanks for listening. I hope you can join us again soon.

VOICEOVER

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