### Notes for Remarks by Bill Wilkerson, LL. D. (Hon), Executive Chairman, Mental Health International Launching The Rotary Club of Cobourg Series 'FOUR FRIDAYS IN FEBRUARY' A Conversation on Mental Health February 7, 2020

(This text is for the public record and may not conform entirely with the actual delivery of these remarks)

I am really the warm-up act for the Four Fridays in February.

As such, I will review various facts concerning mental health and mental illness and provide some context for Fridays 2 and 3, which are the real heartbeat of the series.

Next Friday and the Friday after that - February 14 and February 21 – we will hear about, and learn from the real stories of courage, suffering and hope –

This, through the first-hand experiences of families and the heroes of first response and service delivery to individuals in need and in crisis.

So, for today, I thought I would first discuss the generic terms mental health and mental illness and some of the questions I often get along the way.

The sources of those questions are wide and varied -- professional groups, business audiences, students, military personnel, law enforcement leaders, students, labor unions, teachers and other sectors right across the board ....

And they come from right across this country, the United States, Europe (20 capitals in 36 months) hosted by Canadian ambassadors and diplomats – and even South America and the Middle East.

Eight hundred million people across the world – rich and poor – young and old – big cities and tiny hamlets – all skin colors – live with mental disorders not of their making.

#### So, let me begin: question one:

What is mental health? This refers to the stable, collective functions of the human brain. How we adapt, build our lives and perceive the future, how we relate to others, how we deal with adversity and opportunity alike.

Our mental life relates to the process of thinking, deciding, choosing, understanding, hoping, fearing and other cognitive and emotional activities. It is our capacity to recognize objective reality but it does not mean a perfect balance with nature, our friends, families, ourselves.

We are imperfect creatures who cannot always control our thoughts or our feelings. That does not make us unwell or at risk of becoming so.

#### **Question two: What is mental illness?**

This term – and others such as mental disorders, psychiatric conditions – refer to sources of authentic discomfort, distress, illness, injury, disablement, and even premature death.

More than 300 diagnostic categories fall within these general references – enough to fill a book. THIS BOOK! (Holds up Diagnostic and Statistics Manual for Mental Disorders – V)

I will discuss a few of these conditions quite specifically in a moment or two – labels you have probably heard but may not have a clear picture of. First though, let's contend with the generic terms - mental disorders or mental illnesses.

The American Psychiatric Association reminds us there is much that is physical about mental disorders and much that is mental about physical disorders.

The distinction we otherwise tend to draw between 'mental' and physical' health problems is unhelpful and confusing.

It implies that the physical can sometimes be seen, that we can't fake it, that it bleeds, that it can mend, that it is – in the final analysis – real.

The distinction also implies that 'mental health problems' are hard to pin down because, well, they aren't physical, can't be seen, no X-Ray, no blood test, one's mind is not tangible – so are they really real?

That question is answerable. And we will answer it today.

Via brain imaging technology, mental disorder is visible to the trained naked eye. Genetics has produced what Dr. Daniel Weinberger, Johns Hopkins University, the leading authority on schizophrenia, describes as "the first clear evidence of the molecular basis of mental illness."

Very recent studies of schizophrenia involving tens of thousands of people have established a number of specific neurons or brain cells that help explain why this invasive condition happens among young people. (Refers to "binding problem")

The brain has as many cells and operating connections as a rain forest has plants and trees, leaves on those trees and jungles as dense as an actuarial table. Brain cells are, of course, physical elements of the body. A molecular basis for mental illness are among its physical properties.

Mental disorders constitute problems in the way our brain is functioning. Essentially, mental disorders can be construed as communications problems within the communications centre of the human body – the brain.

Our brain, by the way, is not hard-wired. It is plastic, changeable, always changing due to – and through – our experiences in life.

Mental illness has physical effects: it can raise skin temperature, influence heart and glandular functioning, our metabolism, and it can alter the course of other major chronic conditions.

It is important to note that chronic, non-communicable health problems are the world's number one public health challenge – which is hard to grasp when we hear and read about a scary new virus that we can transmit to one another.

One of the underlying reasons that the dawn of this new era of chronicity is significant is that chronic disorders are heavily influenced by social and economic factors and other sources of severe stress.

In fact, stress is the "leading, predominant cause of mental disorders," according to leading epigeneticist at Johns Hopkins University.

Diet is important to brain functioning and appears to be implicated in mental illness. Researchers have reported that ensuing generations of families who went through mass starvation in Mao's China had disproportionately higher rates of schizophrenia.

### Turning to a next question: mental illnesses: what are they not?

These conditions are not some kind of defective person, not personal weakness, not a curse, not invisible, not fixed by pulling up your bootstraps, not well understood by watching the news.

#### And, so, that said, what causes mental illnesses?

Science does not know exactly although, generally, we know that there is an "epigenetic basis" for mental illnesses. And this is big news. Let me explain why.

Epigenetics is the branch of science which explains how and why the pre and post-natal environments we are born through and into, and in which we live and work, trigger some individual cells to activate our vulnerability to disease.

This proves something we have known very generally for some time.

- 1. Genes do not, by themselves, explain the development and onset of mental illness. Yes, heredity is a factor but not on its own.
- 2. Genes plus the effects of our experiences and environments of life can account for the dynamic that can produce the symptoms of mental disorders.
- 3. The human brain itself where these symptoms materialize does not operate outside the influence of the environments in which we find ourselves or the environments of which we are deprived.
- 4. The brain must have external stimulus to function. When it does not have that stimulus, it can invent its own.

One immediate implication of the lack of brain stimulus is the rising rates of loneliness. Young people and older are especially vulnerable, unconnected in a connected world – or – connected only through an electronic device.

Loneliness – over time – increases the risk of suicide because it raises the risk of rumination which predicts depression, the leading cause of suicide. Dr. Roger McIntyre, chief of psychopharmacology at the University Health Network, calls loneliness a "modern epidemic."

**Next question: who is vulnerable to mental illness?** We all are. No exceptions.

**When people are mentally ill, are they insane?** Very, very rarely, in fact - In percentage or statistical terms - almost never.

In certain rare cases, a person suffering a particular form of mental illness, or isolated for long periods of time, or under the heavy influence of alcohol or drugs, may develop what is called psychosis.

Once, that was called insanity. Psychosis means hearing things, seeing things, thinking things that are not in tune with objective reality. In clinical terms, the word insanity has all but disappeared although it still crops up in court cases occasionally.

On top of that, the treatment of psychosis including paranoia is much improved, incidents are less frequent, less severe and shorter. The actual fact is that most of the crazy or insane things that are done in this world are done by sane people.

Let me discuss for a moment something that most everyone is concerned about, unclear about, afraid of or holds a prejudicial viewpoint.

## Are people with mental illness prone to violence? There is one yes and two no's in answering that question.

Yes, when that violence is turned inward. Death by despair is an phrase to capture the reasons for a 30-year-high-spike in suicides in the US. Not just the loss of employment, but one's prospects wiped out, one's security and hope for the future gone. (Kingston Pen tour)

Suicide is reducing life expectancy in the US, that plus the opioid crisis. The casualties are mostly men in their 40s and 50s. In fact, across the world, women try the most but men die the most.

The often unanswerable question is why, why now. We will hear about this during the Four Friday series.

Suicide – not war, not natural disasters, not gun violence – is the leading cause of violent death in the world today.

Do we, Canadians, even know how many lives we are losing as people reject tomorrow because they despair of today.

Among children, suicide deaths equate to the number of kids aboard a jumbo jet that falls out of the sky once a year, year in and year out. Among all age groups, that is one jumbo jet a month falling out of the sky, year in and year out.

An enormous toll, can it be reduced? We will discuss that on Friday Four.

So, yes, mental illness is tied that form of violence - suicide. Beyond that, the answer is no. Those who live with mental illness are more likely to be victims of violence than its perpetrator.

Some who suffer psychosis may reach a breaking point. But these cases – in frequency - barely move the needle when examining the causes of violence in the world today.

But when one considers why violence happens frequently, the question is still why. Let's consider the mass shootings in the US.

I consulted the US authorities and found that they have recorded just one shooting as the result of mental illness. These mass shooters aren't "normal," but neither are they suffering a diagnosable illness.

Rather, these young men – all were young men – are largely alienated, malignantly angry and resentful, craving to "even the odds" of the hand they believe they have been dealt by an unfair society which they blame on categories of people, racial and religious groups, and women.

These become deep-seated, depraved, disturbing traits as personal as the color of their eyes or their height, formed probably between childhood and adulthood with some early life influences

Often a term" psycho" makes it way into the parlance of mental health, referring to what? Well, in factual terms, there are two 'psycho's' - one referring to psychotic linked to certain rare displays of severe violence and there is 'psychopath' often used to describe serial killers.

Psychosis is a mind state with specific treatable causes and psychopath is a human trait which is expressed in both benign and hurtful, sometimes violent ways.

The shooter on the Danforth in Toronto had some history of depression. But the most powerful influence in that case was layers of anger – not the depression – anger through which resentment builds both at the source of that anger – society and groups – and within the individual's own self-loathing for being so angry so much of the time,

So, the final, overall answer to the question: are those living with mental illness prone to violence, the answer is no except in rare and self-imposed tragic circumstances.

President Trump's solution to gun violence – more mental health hospitals – mental illness pulls the triggers – is uniformed and preposterous.

### How does everyday life affect mental health?

Not all the issues associated with or indicative of mental distress and disorder are high-octane and dramatic. Some of the contributory stressors are quite benign but they pile-up.

For example, certain kinds of stress in the workplace will, over time, become risk factors for depression or anxiety, maybe both.

For example, serious stress and frustration near the end of the day is as b ig a risk to one's heart as is smoking (Ontario Institute of Work and Health). That's because we take it home and ruminate.

There are daily stressors that are problematic for one's mental health if they become chronic, such never having enough time and resources to get your job done; rules-bound people behaving in bureaucratic ways; unfairness day after day; embedded frustration and exhaustion;

There is a progression to these things. When we are stressed-out, everything matters – we struggle to juggle; we hurry and worry; we hope to cope; but it's hard, really hard.

When we pass the stressor milestone, we slip into burn-out – there, nothing matters; there lifting a finger is a weight too great; rising in the morning feels like a warning; being optimistic is hard, really hard.

We are then on the road to depression, a burden of disease that the world now recognizes as the most disabling for men and women in their prime years of work.

### So, at the heart of both these phrases – mental health and mental illness – is the fact that the 'mental' part of us is what makes us human

In our vulnerability to mental illness – or mental injury – risk factors are both inherited and encountered. Mental disorders are effectively a communications breakdown between one part of our brain and another.

As a result, it is now generally agreed by scientists that mental illnesses are a brain circuit problem of varying degrees, complexity and effect – the circuit representing the flow of information from one brain cell to another that produce the mental functions of the brain.

New science is now turning to how risks are elevated among young and developing brains. The NIMH reports on recent findings pointing to weaker brain circuit connections among some newborns as a result of inherited inflammation, leading to reduced working memory by age two.

This factor – deficient working memory – marks several mental disorders. And it can alter certain executive brain functions that affect inhibition and impulse control.

Knowing this is disturbing but its also useful. For the first time, we will benefit from what the NIMH describes as "predictors of later brain function and early identification of inflammation markers (as a basis) for steps to prevent onset of a mental health problem in the child".

One of the rarest and most debilitating forms of mental illness – schizophrenia (1 to 2% of pop.) - is heavily concentrated among young people and is usually life-long It is chronic, severe, affects how a person thinks, feels and acts and possibly out of touch with objective reality;

Symptoms usually appear between ages 16 and 30. The fact is, though, science is beginning to pry open schizophrenia and peer inside. This work has produced new knowledge about the biological mechanisms of schizophrenia.

Scientists have found a specific vulnerability in teenage brains. This discovery means, according to the NIMH "we can finally see the potential for clinical test, early detection, new treatments, even prevention."

This is important progress. As there is in the management of another rarer form of mental illness that is also serious and potentially disabling. Bipolar disorder. This condition is becoming more manageable and one big stride are current efforts to strengthen self-management techniques especially among young people.

Bipolar disorder used to be called manic depression and psychiatry has now divided this condition into different types relevant to the severity, frequency and length of manic episodes. Turning to one half of bipolar disorder, we find depression.

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Depression, for one person, felt like grief – deep and gnawing - except why one is grieving is a mystery. To another, it is a hollowing-out, a profound emptiness, a fear of looking into a mirror lest there be no reflection.

For 20 years, clinical studies and brain imaging have demonstrated – time and time again – the significant physical effects of this condition we call depression. When depression co-occurs with heart disease, it increases the risk of sudden death.

This is especially the case among those living with diabetes, helping to explain some of the reasons why the cause of death in this population is frequently related to cardiovascular disease.

Depression also touches young mothers pursuant to giving birth. A risk that can be anticipated and tragedy prevented through family education, open conversation and staying close in the pre and post-partum weeks to come.

So, there we have it: schizophrenia, rare and serious. Bipolar disorder less rare, just as serious. Both likely lifelong.

There is, of course, depression - more common, can be disabling and deadly, and anxiety, most common of all these conditions, ranging from serious to 'not very.'

One form of anxiety involves excessive worry. Another is panic-laden and can mimic a heart attack. A third revolves around obsession and compulsion.

Trauma-based disorders can reach across one's life flowing from a single event or the conditions of life one endures. Child abuse and sexual assault are especially penetrating.

One who suffers post-traumatic stress or traumatic brain injury are going through a normal brain's response to a severe and abnormal event or experience. Trauma disorders can afflict a child, a soldier, a police officer, a firefighter, a first responder, 911 operators, those who serve.

# A grim picture all this? Troubling, painful, crying out for answers. With that in mind, permit me to remind us that those who suffer –

Be they irritable,

Be they self-destructive,

Be they unable to douse their craving for drugs and alcohol,

Be they quick to anger,

Be they afraid and fight angry beasts others do not see, hear or perceive,

Be they hurting from the inside out and from the outside in,

Our brains mediate all pain, everywhere we find it – everywhere we find mental distress.

Be they any or all of these, for those who suffer, THIS IS NOT THEIR CHOICE.

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On Friday Four, I will attempt ro substantiate my claim hope is on the way. For today, let me suggest that the actual defeat of mental illness – the prevention of its effects – will only happen if we deploy by the mightiest human attribute of all.

### Love: one unto the other of us.

In 2015, I had the great privilege of addressing the Convocation of McMaster University. I was made aware that three families were in the audience whose children – students – had taken their own lives in the academic year then concluding.

It prompted me to say what I really believe: that this and the next graduating class represents the first generation which will prevent the effects of mental illness including suicide.

I said then – and I say now – that is because Generation One will re-learn how we can love each other in the course of the daily human exchange.

I asked those students – and now I ask you – to hear the lyrics of a song sung by an enduring voice of yesteryear – the late, great Louis Armstrong.

These lyrics are aspirational, helping us to see – even through clouds – the value of certain timeless truths.

I will not sing them – thankfully - but I will say them for you and ask you to take them away and remember the context in which you were re-acquainted with them today:

I see trees of green, red roses too, I see them bloom for me and you. And I think to myself, what a wonderful world.

I see skies of blue, and clouds of white, the bright blessed day, the dark sacred night. And I think to myself, what a wonderful world.

The colors of the rainbow, so pretty in the sky, are also on the faces of people going by.

I see friends shaking hands, saying how do you do, but they're really saying I love you. And I think to myself, what a wonderful world.

Let us agree that for those who suffer – those in this room who suffer, often alone – there is yet a wonderful world that we can share – and that when we reach out – to shake your hand – like the Great Satchmo said -- we are really saying 'WE LOVE YOU.'

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