Defining a Population Mental Health Framework for Public Health

Briefing Note

For up-to-date knowledge relating to healthy public policy

With the release of Canada's mental health strategy, "Changing Directions, Changing Lives," the Canadian Mental Health Commission marked "a significant milestone in the journey to bring mental health 'out of the shadows' and to recognize, in both words and deeds, the truth of the saying that there can be no health without mental health" (Mental Health Commission of Canada, 2012, p. 6). This strategy document points toward a renewed perspective in order to keep people from becoming mentally ill and to improve the mental health status of the whole population.

This renewed perspective towards a holistic intervention agenda for the improvement of mental health is gaining momentum and finding its way onto the public health agenda. The momentum is based on the recognition that mental health is fundamental to health. It acknowledges the disproportionately greater burden of mental health problems and disorders among those who are socially and economically disadvantaged. Finally, it recognizes the importance of improving mental health status across the whole population, including those with a mental disorder.

Such a perspective concerns public health practitioners at every level. As all public health interventions have the potential to target the well-being of individuals and communities, it is evident that all public health actors, whether they work in clinical prevention and treatment, promotion, protection, or surveillance are working on mental health topics with various clienteles and communities.

Hence, what would the role of public health be in advancing population mental health? How could we define a population mental health framework for public health? This briefing note responds to these questions and proposes a framework for population mental health (Figure 1).

Section one of this note discusses the concepts of public mental health and population health in order to set the stage for a population mental health framework. Section two discusses the mental health outcomes which can be monitored through the framework. In order to do so, we use two models that frame the links that exist between mental health and mental disorders. In section three, we summarize what we know about the determinants of mental health, the risk factors and protective factors, and the dual relationship that characterizes mental health outcomes and social inequalities. In section four, we propose different interventions and policies that can be used to link the determinants of mental health with mental health outcomes. Finally, in section 5, we discuss some of the roles that public health actors, at varying levels of practice, may play within such a framework.

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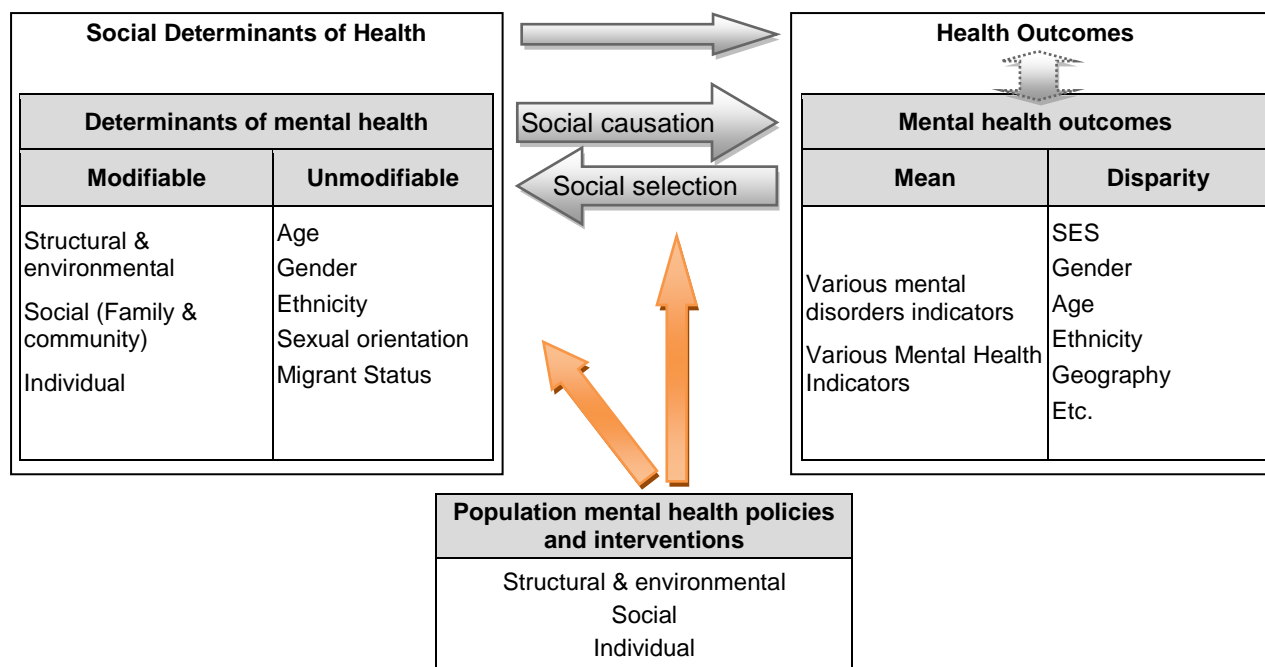*Institut national de santé publique*
Québec

Social Determinants of Health		Social causation	Health Outcomes	
Determinants of mental health		Social selection	**Mental health outcomes**	
Modifiable	**Unmodifiable**		**Mean**	**Disparity**
Structural & environmental Social (Family & community) Individual	Age Gender Ethnicity Sexual orientation Migrant Status		Various mental disorders indicators Various Mental Health Indicators	SES Gender Age Ethnicity Geography Etc.

Population mental health policies and interventions
Structural & environmental
Social
Individual

Figure 1   Framework for population mental health

Adapted from Kindig & Stoddart, 2003 and David Kindig's blog:
http://www.improvingpopulationhealth.org/blog/about-this-blog.html, consulted online on December 8, 2013.

Section 1   Setting the stage for a population mental health framework: using public mental health and population health

Public mental health is an emerging field that broadly follows the contours of public health and has been described as "the art, science and politics of creating a mentally healthy society" (Mental Health Foundation, 2005, p. 1). It generally concerns maintaining and enhancing mental health, preventing mental health problems, as well as improving opportunities for recovery and quality of life for people with mental health problems (Mental Health Foundation, 2005).

Some authors in public mental health put more emphasis on population-level descriptions of psychopathology and service delivery for mental disorders (Eaton, 2012; Saraceno, Freeman, & Funk, 2009). In those instances, they are more concerned with reducing the incidence, prevalence, and impacts of mental disorders, while still maintaining the goal of improving the mental health status of populations.

Many others, however, (Friedli, 2009a; 2009b; Huppert, 2005; 2009; Knifton & Quinn, 2013; Lavikainen, Lahtinen, & Lehtinen, 2000; National Institute for Mental Health in England, 2005; Herrman, Saxena, & Moodie, 2005; World Health Organization [WHO], 2002; 2004; 2013a; 2013b) more explicitly aim to improve mental health and prevent mental disorders in the entire population, mainly through mental health promotion and prevention interventions. In this context, mental health promotion "is an umbrella term that includes action to promote mental well-being, to prevent mental health problems and to improve quality of life for people with a mental illness diagnosis" (Friedli, 2005, p. 7).

In Canada, the overarching paradigm guiding public health is a population health approach. A population health approach is a perspective which includes preoccupation for the health outcomes of a group of individuals, the patterns of health determinants, and the policies and interventions that link these two (Kindig & Stoddart, 2003).

Drawing from the literature in public mental health, and the definition of population health, we propose a population mental health framework for public health. This framework, inspired by Kindig and Stoddart's (2003) framework, comprises three general sections (Figure 2): 1. It considers the mental health outcomes of the population, and also their distribution within subgroups of the population. 2. It considers the determinants of mental health and their distribution across the population. 3. It focuses on the policies and interventions that link mental health outcomes and mental health determinants, in order to promote mental wellbeing in the population and equity in mental health outcomes.
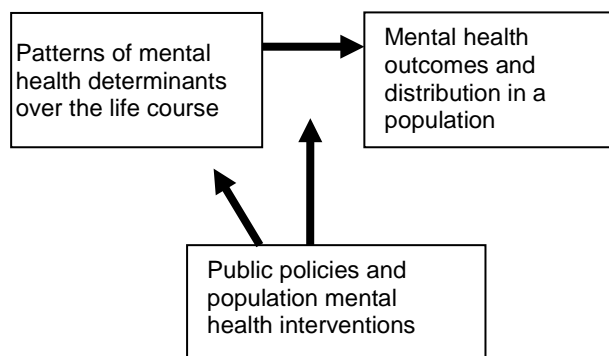

Figure 2   Population mental health (Inspired by Kindig & Stoddart, 2003)

Section 2   What does it mean to consider the mental health outcomes of the whole population?

When considering outcomes to be monitored in a population with regards to mental health, it is first necessary to clearly state what we mean by mental health, as opposed to mental disorders.

Although there is no clear consensus on the definition of mental disorders, in this note we will refer to a range of mental and behavioural disorders that fall within the International Statistical Classification of Diseases and Related Health Problems of the WHO or the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association (APA). "These include disorders that cause a high burden of disease such as depression, bipolar affective disorder, schizophrenia, anxiety disorders, dementia, substance use disorders, intellectual disabilities, and developmental and behavioural disorders with onset usually occurring in childhood and adolescence,

including autism" (WHO, 2013a, p. 6). Mental disorders "can arise due to the genetic, biological and psychological make-up of individuals as well as adverse social conditions and environmental factors" (WHO, 2013b, p. 9)

In a similar way, while there is ongoing debate about what constitutes mental health, there is also general agreement that it is "broader than a lack of mental disorders" (WHO, 2001, p. 5). The World Health Organization (WHO) defines it as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (Herrman et al., 2005, p. 2).

There are two principal conceptualizations depicting the link between mental health and mental disorder; the single-continuum model and the two-continuum model. We will present their differences and discuss how they are complementary for a population mental health framework.

SINGLE-CONTINUUM MODEL

In the single-continuum model, mental health is on the same spectrum as mental disorder. In this model, mental health *is* the absence of mental disorder, and the implication is that someone with a mental disorder cannot simultaneously experience mental health.

TWO-CONTINUUM MODEL

In the two-continuum model, mental health and mental disorder belong to separate continuums. The two-continuum model suggests that both can coexist at the same time in one person. It acknowledges that mental health goes beyond the absence of disease, and that it can fluctuate in degrees. The implication here is that the absence of mental disorder does not mean good mental health; *and* that the presence of good mental health is compatible with the presence of a mental disorder. Canadians were pioneers when in 1988, in a seminal discussion paper *Mental Health for Canadians: Striking a Balance (*Health and Welfare Canada, 1988)*,* they indicated the conceptual difference between mental health and mental disorder.

Corey Keyes (2002) was, however, one of the first, followed by others (Gilleard et al., 2004; Huppert & Whittington, 2003), to empirically demonstrate that individuals who fit the criteria for a DSM mental

disorder may live with a mental disorder and simultaneously experience varying degrees of mental health.

Keyes characterized the mental health continuum as going from a poor state of mental health, which he termed a 'languishing' state, to a moderate state of mental health, and on to a flourishing state. In parallel, he characterized having or not having a mental disorder as being along the mental disorder continuum.

Keyes showed that some people may have the presence of a mental disorder plus poor mental health (languishing) or, in some cases, experience moderate mental health or be flourishing. Similarly, people without a diagnosed mental disorder may situate themselves as languishing, as moderately mentally healthy or as flourishing.

Flourishing people are in a state in which they are free of depression and filled with high levels of emotional, psychological and social well-being (Keyes, 2004). However, people who are languishing are in "a state of emptiness in which individuals are devoid of emotional, psychological, and social well-being, but they are not depressed" (Keyes, 2004, p. 266). These individuals suffer from a variety of negative consequences on social, emotional and cognitive functioning, physical health, and quality of life.

A POPULATION PERSPECTIVE FOR THE SINGLE AND TWO-CONTINUUM MODELS

Figure 3 illustrates a population distribution of mental health and disorder. It shows that mental disorder represents the left extreme, or tail, of the distribution, followed by languishing mental health (L), moderate mental health (M), and flourishing mental health (F).

The distinction between the languishing (L) mental health state and mental disorder (MD) is a demarcation point beyond which symptoms are sufficiently present that a diagnosis can be made. Languishing individuals have symptoms which impact on their daily life, yet do not meet any diagnostic criteria. They may eventually become diagnosed and cross the line to MD section of the distribution curve (Huppert, 2009; Rose, 1992).
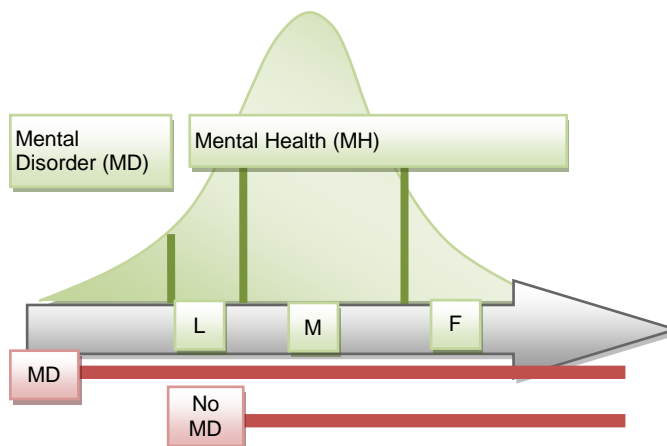

Figure 3 **The single and two-continuum models and a population distribution of mental health**

The two long, horizontal lines in Figure 3 (labelled MD and No MD) illustrate the addition of the two-continuum model perspective upon the population distribution of mental health. Indeed, the population distribution of mental health could give the impression that people with a mental disorder cannot also have a certain degree of mental health. By integrating these lines into the model we can see that whether a mental disorder is present (MD) or absent (No MD), one may experience varying levels of mental health, going from languishing to flourishing.

In a following section, we will illustrate, using this population distribution, how promoting higher levels of mental health in the population offers the potential to shift the curve to the right, thereby:

• Decreasing the prevalence of mental disorders in the population,

• Increasing the level of flourishing in the population, as well as,

• Providing the advantages of improved mental health for all, both for those with a mental disorder, and those without.

A population mental health framework which considers both mental health outcomes as well as mental disorder outcomes reflects the consideration of a complete state approach. This approach consists "of the presence of a positive state of human capacities and functioning as well as the absence of disease or infirmity" (Keyes, 2007, p. 96).

The literature discusses many conceptualizations and associated measurements of mental health. It is not the object of this note to discuss them here. However, to illustrate one way of characterizing mental health, Keyes (2007) uses a three-dimensional scale which explores positive emotions, positive psychological functioning and positive social functioning. These dimensions are expressed via thirteen measures or indicators which distinguish whether a person is languishing, moderately mentally healthy or flourishing.

> In sum, this population mental health framework proposes monitoring both measurements of mental disorder and of positive mental health, in terms of population averages, and in different population subgroups (Figure 1).

Section 3   Determinants of mental health

INTERACTION BETWEEN INDIVIDUALS, GROUPS, AND THE BROADER ENVIRONMENT

As McCubbin et al. explain in a Discussion Paper Prepared for the Federal/Provincial/Territorial Advisory Network on Mental Health in 2003: "Population mental health goes beyond adding up the sum of individual parts. We cannot explain why some communities are healthier than others just by looking at the individuals in them" (as cited in Lakaski, 2008, p. 5). "Communities have unique characteristics and dynamics that enable, constrain and condition the mental health of people. As such, when considering the conditions that define a mentally healthy community, it is to these features we must look" (Lakaski, 2008, p. 5).

> Mental health is produced through dynamic interaction between individuals, groups, and the broader environment, throughout the lifespan. In this sense, it can be viewed in the same way as physical health and illness in general (Herrman & Jané-Llopis, 2005).

The factors that are associated with mental health are known as risk factors and protective factors.[1]

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[1]   The literature provides many listings of such factors (Coggins et al., 2007; Keleher & Armstrong, 2005; Lalani, 2011; Lavikainen et al., 2000; Marshall Williams, Saxena, & McQueen, 2005; Public Health Agency of Canada, 2006;

These factors operate at many levels, and throughout the life course. Although there are other ways to categorize these factors (Barry & Friedli, 2008; Barry & Jenkins, 2007b; Herrman & Jané-Llopis, 2005; VicHealth, Clifford Beers Foundation, World Federation for Mental Health, & The Carter Center, 2008; Keleher & Armstrong, 2005), in this note, we will refer to individual, social and, structural levels of influence on mental health (Herrman & Jané-Llopis, 2012).

"Mostly, it is the cumulative effect of the presence of multiple risk factors, the lack of protective factors and the interplay of risk and protective situations that predisposes individuals to move from a mentally healthy condition to increased vulnerability, then to a mental health problem and finally to a full-blown disorder" (WHO, 2004, p. 20).

Risk factors increase the probability that mental health problems and disorders develop, and are usually associated with reduced mental health and mental disorders (Barry, 2009; Keleher & Armstrong, 2005). They also can increase the duration and severity of mental disorder when it occurs (Barry & Jenkins, 2007b). Exposure to multiple risk factors over time can have a cumulative effect.

Protective factors contribute to enhanced positive mental health and reduce the likelihood that a disorder will develop (Barry, 2009; Barry & Jenkins, 2007b). Protective factors enhance people's capacity to successfully cope with and enjoy life and mitigate the effects of negative events.

There are varied and complex interactions between the factors that protect or increase risk, the behaviours that they may encourage (that are themselves protective or risk factors for mental health) and mental health outcomes. As such, identifying a direction of causality is rarely straightforward (Barry & Friedli, 2008).

For example, bullying among adolescents or lack/loss of employment may be associated with lost self esteem, eventually depression, as well as alcohol and drug use; these may result in road trauma, physical disability and significantly modified capabilities for regular schooling or work, which continue to contribute to reduced mental health outcomes (Herrman & Jané-Llopis, 2005).

VicHealth, Clifford Beers Foundation, World Federation for Mental Health, & The Carter Center, 2008).

Table 1 below summarizes, using the individual, social and structural levels of influence, some of the most important determinants of mental health, including protective and risk factors.

Among these, categories of determinants are identified as having a particular influence on mental health. For example, for Keleher and Armstrong (2005), these are social inclusion (supportive relationships, involvement in community and group activities, civic engagement); freedom from discrimination and violence (valuing diversity, physical security, self determination, control of one's life); and access to economic resources (work, education, housing, money). For Cooke et al. (2011), it is control, resilience and community assets,

participation, and inclusion that are considered to be most relevant for protecting mental health.

Age, gender, ethnicity, sexual orientation, and migrant status are also determinants of mental health, and are associated with varied exposure to risk and protective factors. Of course, these are not modifiable through intervention (Figure 1). Nonetheless, they influence how poor mental health is expressed in terms of its prevalence and incidence (Barry & Friedli, 2008). Depending on the norms, values and laws in a given local context, certain individuals and groups in society may be placed at a significantly higher risk of experiencing mental health problems.

Table 1   Determinants of mental health

LEVEL	PROTECTIVE FACTORS	RISK FACTORS
Individual (psychological make-up, behaviours & physical health)	**Cognition:** ability to problem solve; manage one's thoughts; learn from experience; tolerate life's unpredictability; a flexible cognitive style; etc. **Emotion:** feeling empowered; sense of control or efficacy; positive emotions; positive sense of self; etc. **Social:** good social skills (communication, trusting, etc.); sense of belonging, etc. Resilience; good physical health; healthy behaviours, etc.	**Cognition:** weak problem solving skills; inability to tolerate life's unpredictability; rigid cognitive style; negative temperament; etc. **Emotion:** low self esteem; feeling a lack of control of one's life; negative emotions; etc. **Social:** isolation; weak social skills; etc. Certain behaviours such as absence of physical activity, alcohol and drug abuse, poor physical health. Adverse life events, including adverse very early life experiences; etc.
Social (family & community)	Strong emotional attachment; positive, warm, and supportive parent-child relationships throughout childhood and adolescence; secure and satisfying relationships; giving support; high levels of social capital (including reciprocity, social cohesion, sense of belonging, and ability to participate), etc.	Poor attachment in childhood; lack of warm/affectionate parenting and positive relationships throughout childhood and adolescence; insecure or no relationships; isolation; low levels of social capital and belonging; social exclusion; inability to participate socially; domestic abuse and violence, etc.
Structural & environmental	Socio-economic advantage (i.e., higher levels of education, good standards of living, including housing, income, good working conditions); economic security; freedom from discrimination and oppression; low social inequalities; legal recognition of rights; social inclusion; public safety; access to adequate transport; safe urban design and access to green spaces and recreation facilities, etc.	Socio-economic disadvantage (i.e., low education, low material standard of living, including inadequate housing, homelessness, unemployment, inadequate working conditions); economic insecurity and debt; social and cultural oppression and discrimination; war; poverty and social inequalities; exclusion; neighbourhood violence and crime; lack of accessible or safe transport; poor urban design; lack of leisure areas, green spaces, etc.

THE LINK WITH PHYSICAL HEALTH

As an integral part of overall health, mental health is profoundly linked to, and inseparable from, physical health.

> Mental health and physical health have long been considered separately in traditional public health practice. However, the proposition that there should be "no health without mental health" (Department of Health - UK, 2011) reminds us that they have an intertwined relationship and are both part and parcel of a holistic conception of health.

Physical health and mental health and disorder often influence one another in a bidirectional relationship (this relationship is represented in Figure 1 by the dotted arrow between mental health outcomes and health outcomes).

On the one hand, poor physical health has been shown to be a determinant of suboptimal mental health and disorder. Many people living with HIV/AIDS, as well as their families, experience stigma and discrimination, depression, anxiety or other mental illnesses. Persistent pain is also linked with suffering and lost productivity. Other conditions such as heart disease, cancers, or diabetes are known to increase the probability of poor mental health and depression (Keyes, 2004; WHO, 2001; Herrman et al., 2005).

On the other hand, poor mental health and mental disorders are also associated with increased physical disease. Depression is a risk factor for heart disease (Keyes, 2004). Stress is related to the development of the common cold and delays wound healing. Poor mental health plays a significant role in diminished immune functioning, the development of certain illnesses, unhealthy and risky behaviours, and premature death (Herrman et al., 2005).

Also, poor mental health is associated with risk behaviours at all stages of life. At young ages, depression is associated with smoking, drinking, eating disorders and unsafe sex. At older ages, it is associated with isolation, smoking, alcohol and drug abuse (Herrman & Jané-Llopis, 2005). The association between physical and mental health is also of primary importance among the elderly.

Finally, an absence of positive mental health increases the probability of all-cause mortality for men and women at all ages (Keyes & Simoes, 2012).

Furthermore, independently of poor mental health or disorder, emotional well-being is recognized as a predictor of physical health at all ages. It has a beneficial effect on health and survival (Danner, Snowdon, & Friesen, 2001; Huppert & Whittington, 2003). A positive emotional style or disposition (Cohen, Alper, Doyle, Treanor, & Turner, 2006; Cohen, Doyle, Turner, Alper, & Skoner, 2003b) and sociability (Cohen, Doyle, Turner, Alper, & Skoner, 2003a) have been associated with resistance to the common cold, to antibody response to the hepatitis B vaccine (Marsland, Cohen, Rabin, & Manuck, 2006) and to a quicker cardiovascular response to stress. Furthermore, positive emotions have the potential to reduce the lingering psychological and physiological reactions that negative emotions produce (Fredrickson, Mancuso, Branigan, & Tugade, 2000).

> This overview on protective and risk factors associated with mental health illustrates that mental health is fundamentally linked to the general social determinants of health. It reveals, however, the particular importance of some of these determinants for mental health. Consequently, just as the unequal distribution of the determinants of health in society produces inequalities in health (Commission on Social Determinants of Health, 2008), the unequal distribution of the determinants of mental health is also associated with inequalities in mental health outcomes. Furthermore, mental health outcomes and inequalities reinforce one another.

INEQUALITIES AND MENTAL HEALTH

> *"How society works at every level influences the way people feel about themselves. And how people feel influences how well society functions."* (Public Mental Health Project, Scottish Development Centre for Mental Health Services,1999, cited in Department of Health - UK, 2001, p. 15).

> Poor mental health and disorders are both a cause and a consequence of inequalities. They reflect deprivation and contribute to it (Barry & Friedli, 2008).

Two theories of inequalities can serve to support the dual relationship that characterizes mental health outcomes and social inequalities (Figure 1). The first

is social causation, where mental health problems are socially produced, and therefore more prevalent among those who are lower on the social ladder. The second is social selection, where mental health problems contribute to social and health inequalities by pushing people down the social ladder.

Social causation

Social inequalities imply that the people who are less favoured on the social ladder are more likely to suffer from the chronic stresses that are associated with impoverishment.

In that sense, mental health outcomes, like health outcomes (Commission on Social Determinants of Health, 2008), reflect deprivation and oppression (McGibbon, 2012). In other words:

- Disadvantaged groups are much more exposed to the risks that are associated with developing a mental health problem or disorder;
- Quite a significant portion of mental health problems and disorders can be attributable to high stress levels and lack of resources.

In that sense, mental health represents an intermediary determinant between the social determinants of health and health outcomes. It is a key to understanding the impact of inequalities on health and also on other outcomes in different fields (Friedli, 2009b).

In addition, affluent nations with higher national levels of income inequality have been associated with poor mental health and a higher prevalence of mental disorders (Pickett, James, & Wilkinson, 2006; Pickett & Wilkinson, 2010). Unequal societies have been known to heighten status competition and status insecurity across all groups and among both adults and children (Friedli, 2009b; Pickett & Wilkinson, 2010), which is detrimental to mental health.

Hence, when thinking in terms of social causation, a population mental health approach will attempt to intervene on the social inequalities that impact on mental health outcomes; i.e., on the unequal distribution of the social determinants of mental health in the population (Figure 1).

Social selection

Compromised mental health and disorders affect individual functioning. They reduce chances for success in readiness for school and education, employability and employment, and positive social functioning. They increase risks for physical health (e.g., heart disease), and the consequences of illness. They impact negatively on one's relationship to health services and use of services, including uptake and treatment, and they affect capacity and motivation for healthy behaviours, etc. (Friedli, 2011).

In other words:

- Poor mental health and mental disorders push people down the social ladder;
- Their socio-economic positions diminish as their mental health decreases.

When thinking in terms of social selection, a population mental health approach will attempt to limit the vicious circle of social and economic impoverishment that results from mental disorders and poor mental health (Figure 1).

Section 4   Public health interventions to improve the mental health of the population

As we have seen, mental health is an integral part of health. Also, mental health and disorders are overlapping and interrelated concepts. On this basis, this section will illustrate that promoting mental health in the population has indeed become an integral part of improving population health and well-being, as well as a means to reduce the growing burden of mental health problems (Barry, 2007; Fledderus, Bohlmeijer, Smit, & Westerhof, 2010). As such, promoting mental health at population level integrates public health as a fundamental component of policy and practice because it may:

- serve to reduce the prevalence and incidence of some mental disorders,
- increase the prevalence of flourishing in the population, and
- foster higher levels of mental health for all.

Higher levels of mental health are associated with improved general functioning - emotional, social and physical - of the whole population, including those living with a mental disorder.

In this section, we will first illustrate the benefits of improving overall levels of mental health in the population through a known public health model. Secondly, we will clarify the means to improve the levels of mental health in the population using population mental health promotion. In a third section, we will identify different interventions for promoting population mental health and priority areas for action. A fourth section proposes caveats for population approaches to promote mental health. The fifth and final section discusses interventions and policies not aiming directly at improving mental health.

A KNOWN PUBLIC HEALTH MODEL

To illustrate the benefits of improving the mental health of the whole population, a known public health model is used (Huppert, 2005; 2009), which is based on the work of Geoffrey Rose (1992). This model uses Keyes' 'languishing to flourishing' terminology.

According to Rose's population approach, individuals in the disorder tail of a population distribution (that is, the left extreme of the distribution curve in Figure 4) reflect the characteristics of the general population in which they live. In other words, there is a relationship between the average number of symptoms in a population and the number of diagnosable cases. Evidence of this relationship has been found for many physical and mental conditions (Huppert, 2005; 2009).

Using the population distribution of mental health and disorder, Huppert demonstrates how one can shift the population mental health curve in a positive direction by increasing the level of mental health in the population (Figure 4) (Huppert, 2005; 2009).

A small improvement in the average population mental health (i.e., by shifting the curve slightly to the right) will decrease the number of people who are in the mental disorder and languishing tail of the distribution (left extreme), and increase the number of people who are in the flourishing tail of the distribution (right extreme).

> Put simply, if there are less psychological symptoms in the population (symptoms of poor mental health) the number of mental disorders in the population will diminish and the number of mentally healthy people will increase.
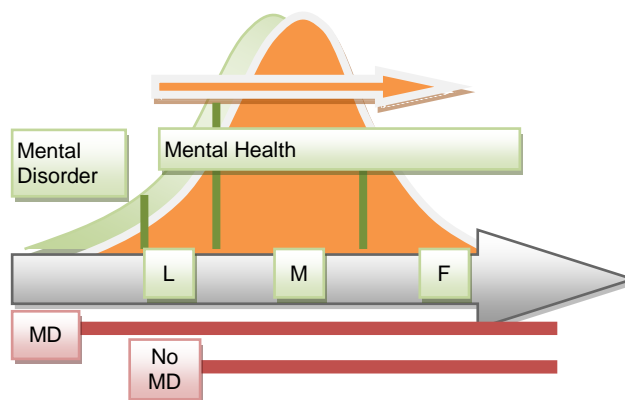

Figure 4   **A public health model for population mental health (adapted from Huppert, 2005)**

According to this model, improving mental health states in the general population may be more useful for reducing common mental health problems and behavioural problems than can be achieved by focusing exclusively on strategies that target treatment and prevention of mental disorders (Huppert, 2005; 2009).

Indeed, by using only individual (treatment) or targeted (prevention) approaches (see Figure 5), there would be little effect on eventually reducing the overall number with disorders, as they would continue to be renewed. Also, there would be no impact at all on the mental health of individuals in the general population, nor on the potential to improve social, physical, emotional, and cognitive functioning, each type of which is associated with mental health states.

A small improvement in population-wide levels of mental health would benefit everyone (Friedli, 2009b; Keyes, 2007).

Some people may shift from living with a mental disorder and languishing mental health, to living with a mental disorder and flourishing mental health. For those who have a mental disorder, flourishing improves the outlook for living a satisfying and productive life.

Flourishing for those without a mental disorder, i.e., for mentally healthy individuals, implies superior functioning. This translates into fewest days of work missed, a minimal level of health limitations impeding the activities of daily living, the fewest chronic physical diseases and conditions, the lowest health care system use, and the highest levels of psychological functioning.

Finally, gains in mental health decrease the risks of future mental disorders (Keyes, Dhingra, & Simoes, 2010), and of suicides in youth (Keyes et al., 2012). Increasing flourishing in a population has been associated with diminished social problems, delinquency, child abuse, school dropouts, lost days of work, etc. (Keyes, 2007).

> Therefore, for both clinical (diagnosed with a mental disorder) and non-clinical populations (not diagnosed), even small improvements in the levels of mental health contribute to improved physical health, productivity and quality of life, and reduce the risks for mental disorders and suicides (National Institute for Mental Health in England, 2005; Keyes et al., 2010; Keyes et al., 2012).

POPULATION MENTAL HEALTH PROMOTION

Promoting mental health in the population involves "actions to create living conditions and environments that support mental health and allow people to adopt and maintain healthy lifestyles. These include a range of actions to increase the chances of more people experiencing better mental health. A climate that respects and protects basic civil, political, socio-economic and cultural rights is fundamental to mental health promotion. Without the security and freedom provided by these rights, it is very difficult to maintain a high level of mental health" (WHO, 2014).

Mental health promotion recognizes the interdependence of individuals, families, communities and society in general in fostering or hindering mental health, and therefore considers influencing the broader determinants of mental health as an appropriate objective for action (Barry, 2009).

However, as population mental health promotion is also, as we have discussed earlier in this note, "an umbrella term that includes action to promote mental well-being, to prevent mental health problems and to improve quality of life for people with a mental illness diagnosis" (Friedli, 2005, p. 7), therefore health promotion *and* prevention strategies will be applied to all people and communities. This includes at-risk individuals, people with symptoms and no diagnosis, and people living with a mental disorder (Barry & Jenkins, 2007b; Canadian Institute for Health Information, 2009; Joubert, 2009; Marshall Williams et al., 2005).

In Figure 5, we superimpose some of public health's usual target populations (populations with disorders, with symptoms, at risk, and healthy) and intervention strategies (treatment, prevention, and promotion) to the population mental health/mental disorder continuum.
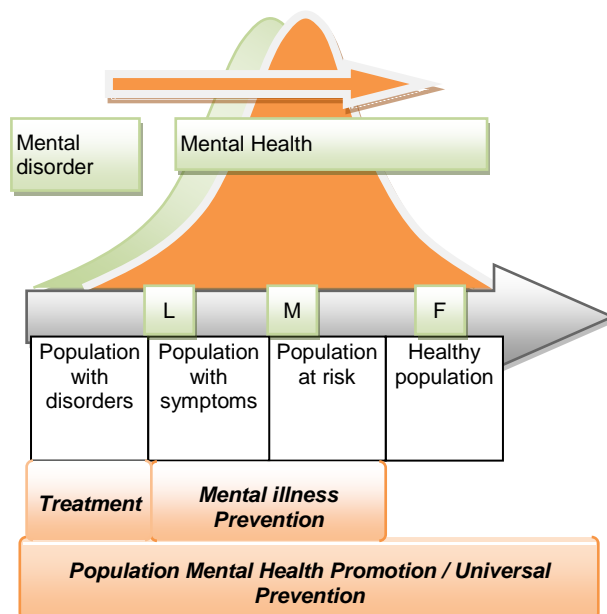

Figure 5   Population mental health promotion (inspired by Barry, 2001)

This illustration helps to associate intervention strategies with population groups, and more importantly, it explicitly shows how mental health promotion concerns all population groups. Instead of a risk reduction model, which typically serves as the basis of prevention activities, mental health promotion rather endorses a competence enhancement perspective targeting the whole population (Barry & Jenkins, 2007b).

In sum, the population mental health framework for public health discussed in this note is influenced by the core principles of mental health promotion or health promotion in general. It conveys the values of health promotion and develops an intervention practice following the set of values and ideas emerging from the *Ottawa Charter for Health Promotion* (World Health Organization – Regional Office for Europe, 1986). These values and ideas are reintegrated and complemented in the Melbourne *Charter for Promoting Mental Health and Preventing Mental and Behavioural Disorders* (VicHealth et al., 2008), and in the *Perth Charter for the Promotion of Mental Health and Wellbeing* (Clifford Beers

Foundation & Mentally Healthy Western Australia, 2012).

There is sufficient evidence today to support the application of policy and practice interventions to promote the mental health of the population at different levels. These result in improved physical and mental health, better educational performance, reduced school dropout rates, greater productivity of workers and increased earnings, improved relationships within families, improved circumstances for child development, safer communities and reduced crime (Herrman et al., 2005). They contribute as well to the reduction of risk behaviours such as tobacco use, the misuse of alcohol and drugs and unsafe sex (Moodie & Jenkins, 2005). They also potentially lower rates of some mental disorders and suicides. These outcomes are not just a consequence of the absence of mental disorder, but are associated with the presence of increased positive mental health (Friedli, 2009a).

POPULATION INTERVENTIONS TO PROMOTE MENTAL HEALTH

Just as the determinants of mental health may be clustered into three levels of influence on mental health outcomes, so too may interventions, including policies, be directed at varying levels. They may indeed aim at the individual level, at the social level, and at the structural and environmental level (Barry & Friedli, 2008; Department of Health – Victoria, Aus., 2012; Huppert, 2005).

Interventions aimed at the Individual level are oriented towards promoting self-esteem, self-efficacy, life/coping skills and resilience, positive thought processes, social competencies, etc. They also favour lifestyles that enhance and protect mental health, such as physical activity, diet, drinking in moderation, maintaining social networks, etc.

Interventions aimed at the social level increase the quality of relationships at both the community and family levels. They include the interventions and policies that improve relationships between parents and their children from early infancy through adolescence. Parenting has been identified as one of the most important factors contributing to a healthy start in life, and therefore to mental health and health throughout life (Barry & Friedli, 2008; Barry, 2009; Herrman & Jané-Llopis, 2012). Social-level interventions also favour social support, self-

help networks, enhanced connections, volunteering, social inclusion and participation, etc.

Interventions aimed at the structural and environmental levels favour good living environments and political structures, systems, cultures and norms that are supportive of mental health.

Some interventions which improve settings and living conditions are associated with improvements in mental health, such as those aiming to improve nutrition, food security, access to education, work safety and conditions, housing quality, schools and child care safety and quality, etc. (Hosman & Jané-Llopis, 2005).

The school is seen as a central community resource to promote mental health through whole-school approaches (approaches focusing not only on academic success, but on the broader aims of education such as social and emotional competencies enabling young people to flourish). Evidence suggests that comprehensive programs in schools, if applied efficiently and completely (Weare & Nind, 2011), are the most consistently effective approach in influencing children's development and behaviour (Jané-Llopis, Barry, Hosman, & Patel, 2005).

Work environments are another area of intensive activity for mental health promotion (Barry & Friedli, 2008; Barry, 2009; Herrman & Jané-Llopis, 2012; McDaid, 2008).

Many community interventions which have focused on strengthening community capacity, and building a sense of ownership and social responsibility have also shown positive mental health and social outcomes (Jané-Llopis et al., 2005; Mathieson, Ashton, Church, & Quinn, 2013).

In most cases there is a reasonable degree of evidence linking some structural level determinants and mental health outcomes, which suggests plausible policy effectiveness in those areas. For example, evidence indicates that higher levels of education, improved standards of living, freedom from discrimination, reduced poverty, and reduced inequalities, for example, are associated with higher levels of mental health.

Based on these, there are many policy interventions that can be expected to have positive impacts on

mental health, and be considered as "healthy public policies favouring mental health (HPP-FMH)" (Mantoura, 2014). Examples of these are policies that favour income supplements, education, employment, building new roads, improved transport, area-based regeneration, urban planning. Policies seeking to influence culture and norms towards increased acceptance and tolerance. Policies seeking to reduce income inequalities, etc.

However, more work is needed to provide further evidence on the effectiveness, benefits, harms and costs of such policies in relation to mental health (Barry, 2009; Petticrew, Chisholm, Thomson, & Jané-Llopis, 2005).

Priority areas for action

We have seen that population mental health interventions concern everyone, they aim at many levels of influence, and they also need to be developed according to a life course approach.

There are some specific settings and life stages for which the scientific evidence has shown increased benefits. These include:

- The early years, parenting interventions for mothers during pregnancy and perinatally;
- Children, adolescents and young adults, using home visiting, family, and school-based or college/university-based interventions;
- Adults and the elderly in work settings and through community interventions favouring connectedness and an active lifestyle.

Also, the Internet is more and more seen as a setting for promoting mental health among young people, and the general population. It is also, with other communication devices (e.g., cell phones), to be considered as a means for diffusing information and techniques for enhancing well-being for the general public (Huppert, 2005), as well as a venue for providing many support and intervention techniques (such as virtual therapies for anxiety and depression, support programs for young people in difficult situations and for parents, etc.) (Jacka et al., 2013; Herrman & Jané-Llopis, 2012; Mental Health Commission of Canada, 2014).

Priorities for action in the upcoming years summarized in the literature include:

- "social, cultural and economic conditions that support family and community life

- education that equips children to flourish both economically and emotionally
- employment opportunities and workplace pay and conditions that promote and protect mental health
- partnerships between health and other sectors to address social and economic problems that are a catalyst for psychological distress [and]
- reducing policy and environmental barriers to social contact"
(Friedli, 2009b, p. iv).

CAVEATS FOR POPULATION APPROACHES TO PROMOTE MENTAL HEALTH: CONSIDERING EQUITY IN MENTAL HEALTH

The field of mental health has been described as a wicked problem (Hannigan & Coffey, 2011). Wicked problems are particularly complex, associated with multiple causal factors, and are often related to other wicked problems. They have no clear or unique definition, and no clear or unique solution (Morrison, 2013). For this type of problem, it is very likely that any one solution that is proposed to tackle it may have unintended and negative consequences on other associated problems. As such, population approaches to promote mental health, just like other population approaches aiming at health in general (Frolich & Potvin, 2008), may inadvertently increase inequalities in mental health. Even though population mental health interventions may have numerous advantages for the average level of mental health in the population, they may also produce results more quickly and effectively upon those who have more resources, and therefore improve some groups' levels of mental health more efficiently and at quicker rates than others.

Population interventions aimed at promoting mental health must therefore apply an equity lens, a "metaphorical pair of glasses that ensures people ask 'who will benefit?'" (Lalani, 2011, p. 3). This equity lens will be applied to the entire spectrum of interventions, from planning, through to implementation and evaluation.

Considering equity in population interventions aimed at promoting mental health also involves focusing extensively on those fundamental determinants that put people "at higher risk of risks" (Frohlich & Potvin, 2008, p. 218) for poor mental health outcomes throughout their life courses. That means paying particular attention to those who make up vulnerable populations who, because of their social positions, may face concentrated exposure to mental health

risk factors, and limited exposure to protective factors throughout their lives. In Canada, some characteristics of vulnerable populations include low socioeconomic position, being of Aboriginal descent, having a lower level of education, etc. (Frohlich & Potvin, 2008).

Finally, it is also important to bear in mind the possible intersections of population-linked vulnerabilities and the inequalities that they create (Canadian Mental Health Association Ontario, 2014; Bowleg, 2012). For example, consider someone living with a mental health problem that is also socioeconomically disadvantaged, and is a woman of Aboriginal descent. All these characteristics in one individual expose her to vulnerabilities, which are socially produced and maintained, and which tangle into a beam of effects during the entire life course. Embracing those complexities is an additional challenge for population mental health.

> A population mental health approach therefore implies:
>
> - Approaching with the life course perspective,
> - the objective of promoting mental health in the entire population, and
> - a deliberate intention to address inequalities in mental health: both those that affect the development of mental health problems, and those that result from mental health problems and disorders.

INTERVENTIONS AND POLICIES NOT AIMING DIRECTLY AT IMPROVING MENTAL HEALTH

Mental health can also be indirectly supported through a range of activities in a multitude of domains; in those cases, mental health is improved as a side benefit.

Many activities and programs may promote mental health indirectly, such as those that are designed to reduce the misuse of tobacco, alcohol and other drugs, to reduce harm from unsafe sex, to improve teacher-student relationships, to alleviate social problems such as crime or intimate partner violence, to prevent violence in general, to increase participation in physical activity, to improve educational outcomes, etc. (Department of Health – Victoria, Aus., 2012; Herrman & Jané-Llopis, 2012).

In addition, many initiatives that have an impact on mental health are often not evaluated on those terms. Examples include improved housing, child support, social assistance income, increased access to childcare, or transport, etc. Considering these interventions and evaluating their impacts upon mental health is an integral component of a comprehensive and integrated approach to promoting mental health at the population level (Barry & Jenkins, 2007b). One way to incorporate this kind of thinking is through the adoption of mental health or well-being impact assessments (Lalani, 2011; Cooke et al., 2011).

Section 5 What are the roles of different public health actors?

The emerging momentum around mental health is progressively pushing factors that influence mental health into mainstream public health preoccupations (Friedli, 2009a). As such, population mental health is becoming a concern for all public health practitioners. It challenges health promoters who may not be explicitly working in the field of mental health. It touches health and mental health practitioners who may not be involved in mental health promotion. It rallies mainstream public health practitioners as well as policy makers in all areas, although they may not be habitually challenged or concerned by the promotion of population mental health. Finally, there is growing evidence of grassroots mobilization to reverse trends that are seen to be toxic to well-being, such as a difficult work-life balance, environmental degradation, the neglect of children and older people and poverty (Friedli, 2005).

HEALTH PROMOTERS

Many health promoters are already having a deep, but not always acknowledged impact on well-being. Indeed, they are already working to improve the everyday contexts (home, schools, hospitals, communities, workplaces) that are essential to mental health. They are also already supporting the vital individual characteristics that favour mental health, or attempting to sustain the lifestyles which have an established positive association with mental health. For them, paying explicit attention to the impacts of their activities, on *both* physical health *and* mental health, or adding an explicit concern for the determinants of mental health within their practice settings, ought to be an easy and natural shift.

This natural shift is very likely to become more common as we have seen that the intervention tools for advancing population mental health rely on the same set of common core principles as mental health promotion, and health promotion in general. However, as the implementation of health promotion has largely been confined to areas pertaining to physical health and injury prevention, further capacity development and more resources (in terms of additional competencies and knowledge) may be needed for health promoters (or other practitioners) to engage with a more explicit focus on the promotion of mental health, and on the prevention of poor mental health and disorders.

MENTAL HEALTH PRACTITIONERS

For mental health practitioners, promoting mental health represents a key intervention for alleviating mental disorders and for recovery. It involves enabling the development and sustaining the presence of mental health for people living with a mental disorder. People with a mental disorder consistently identify stigmatization, discrimination, isolation, and exclusion as barriers to their mental health, overall health and quality of life. These exclusions can relate to, among others, employment, education, quality housing, social participation and potential for control and influence on how services are designed and delivered. These affect people's ability to fulfil their roles and identities as community members.

Mental health promotion takes into account the whole individual and addresses people's mental, spiritual, social, emotional, and physical needs in order to improve health and quality of life. Furthermore, it appears that people with a mental disorder are less likely to be offered annual health checks, have sufficient access to a family doctor, or be supported by health promotion interventions despite their relative need for these interventions and services. Research shows that nurses in clinical health practice, for example, often do not consider mental health promotion as an important task, or in some cases are not aware of their role in actively strengthening the positive aspects of the patient's mental health. They rather focus on reducing and alleviating disease.

Adopting a mental health promotion approach therefore involves a more comprehensive approach to service delivery which addresses the global needs of service users and their families (Barry & Jenkins,

2007a; Svedberg, Hansson, & Svensson, 2009; Funk, Gale, Grigg, Minoletti, & Yasamy, 2004). This includes for example:

- Integrating mental health services, *and* mental health promoting individual interventions, into general health and social services;
- Focusing interventions in and upon living environments,
- Supporting education, employment and other forms of empowerment and social insertion,
- Providing support for activities of daily living,
- Involving and supporting families of people living with a mental health problem, and
- Putting the person at the centre as a partner in the recovery process, and including peers as support in the process of recovery.

Community organisations represent a considerable partner for practitioners in the promotion of population mental health. They are an indispensable workforce for mental health promotion as they provide multiple sources of support within living environments both for people living with a mental health problem *and* for their families. They contribute in many ways to facilitate recovery and mental health.

OTHER PUBLIC HEALTH PRACTITIONERS

"It has been argued that an effective mental health system requires an investment in both promotion and treatment" and that "mental health promotion needs to be integrated as an important part of policy to give it the status and strategic direction required for it to be implemented successfully" (Funk et al., 2004, p. 216). Both treatment of mental disorder and promotion of mental health are complementary components of the spectrum of strategies needed to improve population mental health (Funk et al., 2004).

However, as the activities to promote the mental health of the population are not the sole responsibility of the mental health sector, and as most of the determining factors for population mental health lie outside the realm of health, public health practitioners do not always have the means to induce many of the necessary changes to improve mental health. However, they have the information necessary to inform authorities outside of the health sector, and they carry a responsibility to communicate and persuade officials to take mental health impacts into consideration (Saraceno et al., 2007). "A mental health policy could have a role in

advising other sectors on how to promote mental health" (Funk et al., 2004, p. 216). For example, increasing the price of alcohol through taxation may reduce the risk of liver cirrhosis, alcoholic psychosis, and suicide (Edwards et al., 1994, as cited in Herrman & Jané-Llopis, 2005).

As such, public health practitioners have an important role as advocates and advisers (Herrman & Jané-Llopis, 2012). In fact, a common objective of local mental health promotion strategies is to integrate mental health into local policy, creating healthy public policy favouring mental health (Coggins et al., 2007)

As a concern that is the responsibility of many sectors of public policy, population mental health is achieved by developing partnerships among and between a range of agencies, organizations and sectors (World Health Organization – Regional Office for Europe, 2005). It is favoured by intersectoral, whole of government and whole of society approaches. Responsibility extends across all disciplines and government departments. Furthermore, there is a need to engage public participation in moving the policy agenda forward to include mental health in all policies.

Conclusion

In this note we have presented a population mental health framework for public health. Our conceptual framework is underpinned by a population health approach and influenced by the principles of public mental health. It proposes interventions and policies that aim to promote mental health and well-being in the population and prevent mental disorders. It also focuses on reducing the social inequalities that *lead to* and/or *result from* mental health problems. These interventions and policies focus on the social determinants that influence mental health at the individual, social, and environmental and structural levels. In this framework, we consider mental health holistically, i.e., as an intrinsic and inseparable element of health. Furthermore, the framework points to the inclusion of indicators for both mental health and for mental disorders. Consequently mental health enters the realm of public health priorities and implies a concern at all levels of policy and practice.

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