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# Public mental health: required actions to address implementation failure in the context of COVID-19

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Mental disorders account for at least 18% of global disease burden, and the associated annual global costs are projected to be US\$6 trillion by 2030. Evidence-based, cost-effective public mental health (PMH) interventions exist to prevent mental disorders from arising, prevent associated impacts of mental disorders (including through treatment), and promote mental wellbeing and resilience. However, only a small proportion of people with mental disorders receive minimally adequate treatment. Compared with treatment, there is even less coverage of interventions to prevent the associated impacts of mental disorders, prevent mental disorders from arising, or promote mental wellbeing and resilience. This implementation failure breaches the right to health, has increased during the COVID-19 pandemic, and results in preventable suffering, broad impacts, and associated economic costs. In this Health Policy paper, we outline specific actions to improve the coverage of PMH interventions, including PMH needs assessments, collaborative advocacy and leadership, PMH practice to inform policy and implementation, training and improvement of population literacy, settings-based and integrated approaches, use of digital technology, maximising existing resources, focus on high-return interventions, human rights approaches, legislation, and implementation research. Increased interest in PMH in populations and governments since the onset of the COVID-19 pandemic supports these actions. Improved implementation of PMH interventions can result in broad health, social, and economic impacts, even in the short-term, which support the achievement of a range of policy objectives, sustainable economic development, and recovery.

## Introduction

Public mental health (PMH) interventions exist to prevent mental disorders from arising, prevent the associated impacts of mental disorders (including through treatment), and promote mental wellbeing and resilience. PMH practice takes a population approach to mental health to improve coverage, outcomes, and coordination of PMH interventions. Such practice supports efficient, equitable, and sustainable reduction of mental disorders and promotion of mental wellbeing of populations. PMH practice is more relevant than ever during the COVID-19 pandemic, which has brought unprecedented challenges but also opportunities for a stronger PMH approach.

Literature for this paper was identified through searches of databases, including PubMed, for highest-level evidence and relevant reports and policy documents published before Dec 30, 2020. More recent relevant papers were also included.

## Impact of mental disorders

At least 18% of the proportion of the global burden of disease is due to mental disorders and self-harm, as measured by years lived with disability,<sup>1</sup> although even this proportion is an underestimate by more than a third.<sup>2</sup> The large impact of mental disorders occurs for four reasons: the prevalence of mental disorders is high;<sup>3-5</sup> most lifetime mental disorders arise before adulthood, with 50% of lifetime mental disorders occurring by age 14 years<sup>6</sup> and 45% of global disease burden for people aged 10–24 years being due to mental disorders;<sup>7</sup> mental disorders result in a broad range of health, social, and economic consequences relevant to different sectors (including health, education, employment, and criminal

justice) and policy objectives; and there is very low population coverage of effective PMH interventions.

The impacts of mental disorders can occur across different stages of the lifecourse. During pregnancy, maternal mental disorders, including substance use (eg, alcohol, tobacco, and cannabis), are associated with an increased risk of child mental disorders.<sup>8</sup> Perinatal depression is associated with low birthweight and preterm birth,<sup>9</sup> which also increase risk of child mental disorders.<sup>10</sup>

During childhood and adolescence, health impacts of mental disorders include increased health risk behaviour (eg, self-harm and use of tobacco, alcohol, and drugs), mortality, and suicide, whereas broader impacts include reduced educational outcomes, increased school exclusion and dropout, reduced social functioning,<sup>11</sup> increased antisocial behaviour, and increased crime and violence.<sup>8</sup> Mental disorders arising during childhood and adolescence subsequently result in impacts across adulthood, including higher risk of adult mental disorders,<sup>12-14</sup> obesity, premature mortality, unemployment, reduced earnings, criminal conviction, violence, and poorer social relationships.<sup>8</sup>

During adulthood, health impacts of mental disorders include increased health risk behaviour, including use of tobacco, alcohol, and drugs, self-harm, physical inactivity, and poor diet.<sup>8</sup> In particular, smoking is the largest single cause of preventable death and is responsible for 11.5% of deaths globally,<sup>15</sup> which disproportionately occurs in people with mental disorders (eg, 42% of adult tobacco consumption in England was by people with mental disorders).<sup>16</sup> Mental disorders are associated with increased risk of physical illness (communicable and non-communicable).<sup>8,17,18</sup> Globally, 14.3% of all deaths

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(8 million deaths) are attributable to mental disorders each year, with 67·3% of these deaths due to associated physical illness, 17·5% of deaths due to unnatural causes such as suicide, and the remainder due to other or unknown causes.<sup>19</sup> People with mental disorders are also at greater risk of SARS-CoV-2 infection and associated mortality compared with those without mental disorders.<sup>20,21</sup> Furthermore, mental disorders are associated with substantially increased risk of suicide<sup>22–24</sup> and are responsible for 62% of global disability-adjusted life years allocated to suicide.<sup>25</sup> The wider impacts of mental disorders during adulthood include employment-associated presenteeism and absenteeism, unemployment, poverty, debt, violence (victimisation and perpetration), homelessness, and reduced quality of life and wellbeing.<sup>8</sup> Associated stigma and discrimination compound many of these impacts.

The impacts of mental disorders resulted in global economic costs of US\$2·5 trillion in 2010 (\$823 billion direct costs and \$1671 billion indirect costs), which are projected to increase to annual costs of \$6·0 trillion by 2030.<sup>26</sup>

### Mental wellbeing and resilience

Mental wellbeing has health and wider benefits relevant to different sector policy objectives.<sup>8</sup> As such, mental wellbeing is a global public good that should be accessible to all.<sup>27</sup> Different conceptualisations of wellbeing include affective wellbeing, which refers to present state satisfaction, pleasure, and mood, and evaluative wellbeing, which refers to global, longer-term aspects, including meaning and development. However, definitions of mental wellbeing vary by culture.<sup>28</sup> Resilience involves the capacity to manage and adapt to different types of adversity, including stress, trauma, abuse, and poverty, and is important in maintenance of mental wellbeing and prevention of and recovery from mental disorders.

Mental health can be viewed on a continuum between mental disorders and wellbeing, and individuals can be at different points on this continuum at different times. The dual continuum model describes mental disorders and mental wellbeing on two related yet distinct continua, as having a mental disorder does not preclude mental wellbeing and vice versa. Similarly, good mental wellbeing is associated with reduced risk of mental disorders, whereas mental disorders are associated with increased risk of poor mental wellbeing.<sup>8,29</sup>

### Risk and protective factors

Various genetic, biological, and social factors are associated with mental disorders and wellbeing.<sup>8,13,30–32</sup> The prevalences of mental disorders and wellbeing are determined by the prevalence and impact of each factor and the interaction between different factors. Such factors are important to identify and address to prevent mental disorders and promote mental wellbeing. Addressing social determinants

is also aligned with other development targets, including the Sustainable Development Goals (SDGs).<sup>32</sup>

Particular factors increase risk of mental disorders and are also important in perpetuation of mental disorders. Risk factors during pregnancy, childhood, and adolescence are particularly important to address given that the majority of lifetime mental disorders arise before adulthood.<sup>6</sup> Child adversity, including maltreatment, abuse, and bullying,<sup>8,33</sup> accounts for 30% of adult mental disorders.<sup>34</sup> Furthermore, child adversity is common and more than half of all children aged 2–17 years (1 billion children globally) experienced emotional, physical, or sexual violence in the previous year.<sup>35</sup> Mental disorders during childhood and adolescence are also associated with increased risk of mental disorders during adulthood.<sup>12–14</sup>

Other factors have overarching impacts on several risk factors for mental disorders and poor mental wellbeing. For instance, socioeconomic inequalities underlie many other risk factors,<sup>8,18,36,37</sup> and include low household income, income inequality,<sup>38</sup> poverty,<sup>39</sup> food insecurity,<sup>40</sup> debt, financial difficulties, job insecurity, unemployment, economic inactivity, and economic recession.<sup>8</sup> Resulting mental disorders amplify socioeconomic inequalities,<sup>36</sup> which implicates mental disorders in the inter-generational transmission of poverty.<sup>27</sup> Similarly, stigma and exclusion in all walks of life experienced by people with mental disorders amplify the impact of several risk factors that prevent recovery. Other overarching factors include conflict and humanitarian emergencies,<sup>41</sup> whereas particular environmental factors affecting several risk factors include pandemics (eg, COVID-19),<sup>42–44</sup> disasters,<sup>45</sup> and climate change.<sup>46</sup>

Particular groups are at higher risk of mental disorders and poor mental wellbeing than the general population due to clustering of risk factors.<sup>8,47</sup> Examples of children and adolescents in higher-risk groups include those with special educational needs, those who are homeless, those who are looked after by the state, and those who are young offenders. Examples of adults in higher-risk groups include people in some minority ethnic groups, carers, people who are homeless, those who have learning disabilities, those who identify as lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ), new mothers, those who are offenders, older people in care homes, people caught in humanitarian emergencies, refugees, those with sensory impairment, those who are unemployed, and young women. Higher-risk groups in low-income and middle-income countries (LMICs) need to be considered in the context of increased levels of inequality and poverty, scarcity of social protection mechanisms, and exploitative labour practices.

### PMH interventions

PMH interventions can be classified at primary, secondary, and tertiary levels (panel 1), with interventions at each level requiring targeted approaches to

**Panel 1: Public mental health interventions\*****Mental disorder prevention**

- Primary prevention: interventions that prevent mental disorders from arising
- Secondary level: early intervention for mental disorders and the associated impacts to minimise their effects
- Tertiary level: intervention for people with established mental disorders to prevent relapse and the associated impacts to minimise disability

**Mental wellbeing promotion**

- Primary level: promotion of protective factors for mental wellbeing
- Secondary level: early promotion in people with recent deterioration in mental wellbeing
- Tertiary level: promotion in people with longstanding poor mental wellbeing

**Resilience promotion**

- Primary level: promotion of resilience
- Secondary level: early promotion of resilience in people with recent adversity
- Tertiary level: promotion of resilience in people with previous or longstanding adversity

\*Information from Campion.<sup>8</sup>

higher-risk groups to prevent widening of inequalities.<sup>8</sup> Other ways of classifying prevention include universal prevention to the whole population, selective prevention targeted to higher-risk groups, and indicated prevention targeted to individuals identified with early symptoms of mental disorders.

Mental wellbeing promotion focuses on wellbeing rather than disorder and acknowledges that mental health is more than just the absence of mental disorder. However, promotion and prevention are inter-related and mental disorders can be prevented through mental wellbeing promotion (see the section on mental wellbeing promotion).<sup>8</sup>

PMH interventions are delivered by different organisations from various sectors, including primary care, secondary mental health care, public health, social care, education, employers, housing, criminal justice, the voluntary sector, non-government organisations, humanitarian agencies, and the private sector.

**Mental disorder prevention**

Prevention can be considered at primary, secondary, and tertiary levels (panel 1). Childhood is a key prevention opportunity for primary and secondary prevention, since the majority of lifetime mental disorders arise before adulthood<sup>6</sup> and childhood mental disorders are also risk factors for adult mental disorders.<sup>12–14</sup> However, the evidence base is less robust for interventions in LMICs.<sup>48</sup>

Primary prevention includes interventions that address various risk factors and causes to prevent mental

**Panel 2: Primary prevention of mental disorder\***

- Action to address inequalities,<sup>49</sup> poverty,<sup>39,50</sup> debt, financial capability, fuel poverty, and food insecurity, and increase active labour markets and welfare programmes, particularly during economic recession or crises
- Parental interventions
  - Perinatal parental interventions to address alcohol, tobacco, and drug use, mental disorders, poor diet (including low vitamin D), prenatal infection, pre-eclampsia, prematurity, and low birthweight
  - Parental mental disorder prevention and treatment<sup>51</sup>
  - Parenting interventions,<sup>52</sup> including in LMICs<sup>53</sup>
  - Interventions to address poor child and parent attachment
- Preschool social and emotional learning interventions<sup>54</sup> and enhancement programmes<sup>55</sup>
- School-based interventions, including social and emotional learning programmes, psychosocial interventions, early child education, academic support, life skills training,<sup>56</sup> and training to prevent tobacco, alcohol, and drug use
- Child adversity prevention, including through parenting interventions, school-based interventions, early safeguarding, and prevention of domestic violence and alcohol use
- Violence and abuse prevention
- Social isolation prevention
- Employment-related stress and mental disorder prevention
- Health risk behaviour cessation and reduction, including for tobacco, alcohol, and drug use, physical inactivity, poor diet, screen time, and insufficient sleep
- Insomnia prevention
- Physical illness prevention and treatment
- Environmental factors, such as interventions to prevent and mitigate pandemics, including COVID-19,<sup>42–44</sup> climate change, flooding and natural disasters, and air pollution
- Conflict and humanitarian emergency mitigation
- Prevention of specific mental disorders, including dementia

\*Information from Campion<sup>8</sup> unless indicated.

disorders from arising (panel 2).<sup>8</sup> The importance of primary prevention is highlighted by research that shows that provision of best available treatment only averts 28% of disease burden, even if delivered to all who would benefit.<sup>57</sup> A population approach takes account of the size of impact that different factors have on the population, the proportion of the population affected by such factors, and the coverage and outcomes of effective interventions to address factors that can be assessed in a structured way.<sup>8,58,59</sup>

Secondary prevention involves early identification and treatment of mental disorders and their associated impacts to minimise their effects. Effective treatment

**Panel 3: Tertiary prevention of mental disorder\***

- Evidence-based treatments for mental disorders
- Addressing associated health risk behaviours, including tobacco, alcohol, and drug use, poor nutrition and diet, physical inactivity, poor dental health, and sexual risk behaviours
- Physical health conditions: prevention (including through vaccination for flu and COVID-19), monitoring, and optimising treatment
- Interventions to address the socioeconomic impacts of mental disorders, such as poverty, debt, unemployment, and homelessness
- Prevention of stigma and discrimination
- Suicide prevention; people with mental disorders have substantially increased risk of suicide<sup>22-24</sup> and therefore require targeted approaches, including through optimising treatment and coverage, reducing access to lethal means, and responsible media reporting
- Prevention of violence and abuse (both victimisation and perpetration)

\*Information from Campion<sup>8</sup> unless indicated.

exists for mental disorders, including in LMICs.<sup>60</sup> Knowledge about the age of onset of mental disorders<sup>6</sup> enables the planning of appropriate interventions at the earliest opportunity in the life course.

Since the majority of lifetime mental disorders arise before adulthood, the greatest opportunity for early treatment occurs during childhood and adolescence through evidence-based non-pharmacological interventions. In particular, parenting interventions are effective for a large proportion of child mental disorders<sup>8,52,53</sup> and can be delivered online.<sup>61,62</sup> Substantial evidence highlights improved outcomes from early intervention for psychosis.<sup>63</sup> Early intervention is also important in particular groups, such as those affected by disasters and humanitarian emergencies.<sup>64</sup> Most mental disorders begin as subthreshold disorders, so early intervention at this stage can prevent the development of mental disorders.<sup>65,66</sup>

Tertiary prevention of mental disorder involves intervention for people with established mental disorder to prevent relapse and associated impacts of mental disorder, which should start as early as possible to minimise disability (panel 3).

**Mental wellbeing promotion**

Interventions to promote mental wellbeing address the determinants of mental wellbeing rather than the risk factors for mental disorders. Mental wellbeing promotion can be considered at primary, secondary, and tertiary levels (panel 1), but can also be considered across different stages of the life course (as outlined in panel 4). Promotion also involves increasing the value that individuals and societies attribute to mental

**Panel 4: Mental wellbeing promotion interventions across the lifecourse\*****Starting well**

- Parenting programmes
- Promotion of infant attachment
- Addressing parental tobacco, alcohol, and drug use

**Developing well**

- Preschool interventions, including social and emotional learning interventions,<sup>54,67</sup> enhancement programmes,<sup>55</sup> and parents reading to their children<sup>68</sup>
- School-based interventions, including social and emotional learning programmes, self-regulation promotion, play therapy, academic interventions, physical activity promotion,<sup>8</sup> mindfulness,<sup>69,70</sup> mentoring,<sup>71</sup> and family linked programmes<sup>72</sup>
- Interventions to promote interpersonal skills, emotional regulation, and alcohol and drug education<sup>48</sup>

**Living well**

- Social interaction promotion, including volunteering, community engagement, leisure, sport, kindness to others, gratitude, and peer support for parents
- Physical activity promotion
- Diet
- Financial capability
- Neighbourhood interventions, including design, functionality, walkability, safety, and facilities
- Housing interventions
- Access to green space
- Arts, creativity, and music
- Positive psychology interventions
- Mindfulness, meditation, yoga, qigong, compassion, forgiveness, and religious and spiritual interventions

**Working well**

- Increased employee control, including flexible working
- Training
- Shared activities between employees
- Online interventions
- Mindfulness interventions
- Workplace resources

**Ageing well (see also living well interventions)**

- Psychosocial interventions
- Volunteering
- Physical activity
- Life review, reminiscence, and reablement
- Cognitive activities<sup>73,74</sup>
- Addressing hearing loss

\*Information from Campion<sup>8</sup> unless indicated.

health and wellbeing.<sup>43</sup> Interventions to promote mental wellbeing overlap with interventions to treat mental disorders since treatment also addresses a major determinant of poor wellbeing.



**Panel 5: Causes of public mental health intervention implementation failure\*****Insufficient public mental health knowledge**

- Insufficient knowledge among professionals and trainees in health, public health, and policy, including how genetic risk is mediated by social and environmental influences; this is reflected by insufficient use of evidence in population health policies and programmes<sup>85</sup> or by decision makers<sup>86</sup>
- Insufficient knowledge about mental health programme coverage<sup>87,88</sup> with mental health-specific data regularly (eg, every 2 years) compiled in at least the public sector by only 31% of WHO member states<sup>83</sup>
- Insufficient knowledge about size, impacts, and cost of public mental health (PMH) intervention unmet need at either local or national levels;<sup>59,76</sup> only 39% of countries reported that human resources had been allocated for implementation according to an assessment of need<sup>83</sup>
- Insufficient knowledge about the national impacts of improved PMH intervention coverage (including on existing policy objectives) and the associated economic benefits<sup>76</sup>

**Insufficient mental health policy or policy implementation**

- 75% of WHO member states globally had a stand-alone mental health policy or plan for mental health in 2020;<sup>83</sup> however, only 31% WHO member states in 2020 had a national mental health policy that was being implemented, 21% had a policy that was being implemented and was in line with international human rights instruments, and 23% had indicators or targets to monitor most or all of policy implementation
- Insufficient transparency about policy decisions regarding levels of acceptable coverage of different PMH interventions and required resources

**Insufficient resources**

- Only 2% of global government health expenditure was allocated to mental health in 2020, with far less allocated in lower-income countries, which spend 70% of mental health funding on psychiatric hospitals<sup>83</sup>
- More than 80% of countries allocated less than 20% of mental health expenditure to primary care, mental disorder prevention, or promotion in 2020<sup>83</sup>
- Global proportion of mental health staff in 2020 was 31 per 100 000 population, and was less than 2 per 100 000 population in low-income countries<sup>83</sup>
- Proportion of developmental assistance allocation was 0.3% for mental health<sup>89</sup> and 0.1% for child and adolescent mental health between 2008 and 2015;<sup>90</sup>

**Insufficient political will**

- Insufficient political will from people who allocate resources<sup>91</sup> due to limited knowledge about the importance of mental health, other competing policy interests, and stigma and discrimination towards mental health

**Political nature of some PMH activities**

- PMH involves highlighting implementation failure, which governments might find challenging
- The opportunity to address risk factors, such as socioeconomic inequalities and poverty or the needs of particular higher-risk groups, might be limited by the political views of governments
- It is important that PMH practitioners take a clear stance in favour of social justice and more equitable social and economic systems to protect and promote the mental health of populations

**Insufficient appreciation of cultural differences**

- Cultural differences influence understanding of mental health, associated causes, the value of different types of PMH interventions, including more upstream approaches, help-seeking, and intervention uptake
- Understanding of local cultural practices and explanatory models are vital for effective PMH approaches in diverse cultural contexts

**Causes of mental disorder treatment gap**

- Shortage of staff and required clinical skills
- Only 15% of countries met all criteria for integrating mental health into primary care in 2020<sup>83</sup>
- Insufficient perceived need<sup>79,80,82,93</sup> and population mental health literacy<sup>92</sup>
- Stigma and discrimination, which reduce help-seeking<sup>94</sup>
- Poor quality treatment<sup>79-82</sup>
- Poor adherence with and negative attitude towards treatment<sup>93,95</sup>
- Insufficient evidence about effective scale implementation of treatment<sup>96-98</sup>
- Insufficient involvement of service users and families in treatment<sup>83,99,100</sup> and setting policy at local and government level<sup>101</sup>

\*Information from Campion<sup>8</sup> unless indicated.

Secondary promotion of mental wellbeing involves early intervention for those with a recent reduction in wellbeing through interventions outlined in panel 4. Tertiary promotion of mental wellbeing involves targeted approaches to those with poor mental wellbeing that is longstanding. Since people with mental disorders are several times more likely to experience poor mental wellbeing than those

without mental disorders,<sup>8,29</sup> mental wellbeing promotion is an important intervention to promote recovery from mental disorders and can occur through psychosocial interventions, social skills training, physical activity promotion, supported employment and skills-based training, supported housing, positive psychology interventions, and mindfulness.<sup>8</sup>

### Resilience promotion

Resilience promotion can also promote mental wellbeing, recovery from mental disorders, and prevent mental disorders from arising. Effective interventions include school and work-based programmes.<sup>8</sup>

### Economics of PMH interventions

The broad impacts of mental disorders and poor mental wellbeing have associated annual global economic costs that are projected to increase from US\$2493 billion in 2010 to US\$6046 billion by 2030.<sup>26</sup> Many effective PMH interventions have a cost–benefit evaluation estimating the associated economic benefits, which often occur within short time frames across health and other sectors<sup>8</sup> and can be estimated at local and national levels.<sup>75,76</sup> Other effective PMH interventions have no cost–benefit evaluation, although they are also likely to result in economic benefits.

### PMH relevant policy

PMH has become increasingly prominent in international health policy. For instance, WHO's Mental Health Action Plan emphasises prevention of mental disorders, promotion of mental wellbeing, and treatment of mental disorders.<sup>47</sup> The UN SDGs also include treatment and prevention of mental disorders and wellbeing promotion in the universal health coverage target by 2030.<sup>77</sup> The World Psychiatric Association made PMH a central part of its 2020–23 action plan to support the implementation of PMH interventions, including through PMH needs assessments.<sup>78</sup>

### PMH implementation gap

Despite the existence of evidence-based PMH interventions, only a minority of people with mental disorders receive treatment.<sup>79–83</sup> This treatment is usually of poor quality with coverage that is far lower in LMICs than in high-income countries (HICs). Globally, 10% of people with anxiety disorders received possibly adequate treatment, varying from 2% in LMICs to 14% in HICs;<sup>79</sup> 17% with major depressive disorder received minimally adequate treatment, varying from 4% in LMICs to 22% in HICs;<sup>82</sup> 29% with psychosis received treatment from mental health services, varying from 12% in low-income countries to 70% in HICs;<sup>83</sup> and 7% with substance use disorders received minimally adequate treatment, varying from 1% in low-income countries to 10% in HICs.<sup>80</sup> Coverage of interventions to prevent mental disorders and associated impacts, or to promote mental wellbeing and resilience, is far less than coverage of treatment, even in HICs. The COVID-19 pandemic has widened this implementation failure, due to the associated impacts on population mental health,<sup>42–44</sup> the reduced capacity of PMH services,<sup>83,84</sup> and the little extra funding allocated for mental health (with only 17% of countries committing additional mental health funding during COVID-19).<sup>84</sup> The impact of the COVID-19 pandemic was compounded by only 28% of WHO

member states having a system in place for mental health and psychological preparedness during emergencies or disasters.<sup>83</sup>

This failure of PMH implementation results in population-scale preventable suffering of individuals and their families, a broad range of impacts (outlined previously), and large economic costs. The failure also represents a breach of values and the right to health.<sup>76</sup> Several reasons contribute to the PMH intervention implementation failure,<sup>8</sup> which are important to identify to improve coverage (panel 5).

### Required actions to address the PMH implementation gap

The population impact of any intervention depends on both its outcome and population coverage. Effective PMH interventions at the population level require implementation according to population need. Furthermore, an appropriate balance of different levels of mental disorder prevention and mental wellbeing promotion is required since treatment alone is insufficient to sustainably reduce the disease burden due to mental disorders.<sup>57</sup> The six actions described in this section can help address the implementation gap: (1) making the PMH case (assessment of PMH unmet need, estimation of impact and associated economic benefits from improved coverage, and collaborative PMH advocacy and leadership); (2) PMH practice; (3) PMH training and knowledge; (4) particular opportunities to improve coverage of PMH interventions (settings-based approaches, integrated approaches, digital technology, maximising existing resources, and focus on high-return interventions); (5) a rights approach, legislation, and regulation; and (6) PMH research.

Plans and priorities for action need to take account of the country and local context, including socioeconomic, environmental, and cultural factors and the views of different stakeholders.

### Six actions to address the implementation gap

#### *Making the PMH case*

Ways of making the PMH case include assessment of PMH unmet need, estimation of impact and associated economic benefits from improved coverage, and collaborative advocacy and leadership.

The size of PMH unmet need varies by country and locality. Therefore, it is important to first assess the size, impact, and cost of the current and future gaps in the implementation of PMH interventions,<sup>8</sup> considering issues such as COVID-19<sup>42–44,84</sup> and other humanitarian emergencies. Since PMH intervention implementation gaps at the local level are related to the gaps at the national level, assessment of the gaps in PMH intervention implementation should first occur at the national level to inform policy and resourcing decisions, which then influence coverage at the local level.

Such assessments include appropriate information about prevalence of mental disorders and wellbeing; impacts of mental disorders and poor mental wellbeing; proportion affected by different risk and protective factors and proportion affected from higher-risk groups; coverage and outcomes of evidence-based PMH interventions (panels 1–4) provided by various sectors including for higher-risk groups; the size, impact, and cost of gaps in the provision of PMH interventions across various sectors; and expenditure on different types of PMH interventions by various sectors outlined at the end of the section titled PMH interventions.<sup>8,59</sup>

To support clarity for providers of different types of PMH interventions, it can be helpful to divide PMH needs assessments into sections covering secondary and tertiary mental disorder prevention, primary mental disorder prevention, and promotion of mental wellbeing and resilience.

Assessments of PMH unmet need require best available data. However, mental health-specific data are regularly (ie, every 2 years) compiled by only 31% of WHO member states,<sup>83</sup> whereas information about mental health programme coverage is usually absent.<sup>87,88</sup> Therefore, PMH-relevant, high quality data need to be routinely collected and integrated into existing health, public health, social, and other sector information systems.<sup>47</sup> More robust and standardised measures and data are also required for coverage and outcomes of PMH interventions, including for higher-risk groups, particularly in LMICs. In countries where such PMH data are absent, regional surveys or estimates can be used.

A second way of making the PMH case is by estimation of impact and associated economic benefits from improved coverage. The overall impact of different PMH interventions and the associated economic benefit depend on their effectiveness, economic evaluation, and level of population coverage. The impact of PMH interventions can also be estimated across a range of existing and potential future policy objectives in different sectors. Impact and associated economic benefits of PMH interventions across various sectors can be estimated for different levels of coverage.<sup>8,102</sup> An example highlighting the size of economic impact from improved implementation nationally is the comprehensive coverage of nine PMH interventions across England, outlined as part of a previous mental health strategy, which was estimated to result in net economic savings of £43·8 billion over different time frames.<sup>76</sup> Another example is the scaling up of effective treatments for anxiety and depression across 36 countries between 2016 and 2030, which was estimated to result in net savings of US\$310 billion from health benefits and net savings of \$399 billion from improved productivity.<sup>75</sup> In Australia, the introduction of reforms in prevention and early help, improved experiences of mental health services, improved services beyond health (eg, housing

and justice), promotion of mentally healthy workplaces, and accountability and service provider incentives to reform were estimated to result in net benefits of AU\$16·8 billion.<sup>103</sup>

Collaborative PMH advocacy and leadership is a third way of making the PMH case. This advocacy is supported by clear mechanisms and resources to facilitate collaborative and coordinated approaches between stakeholders from different sectors (outlined in the PMH interventions section) as well as policy makers, civil society, non-government organisations, and organisations of people living with mental disorders and their carers.<sup>47</sup> These collaborative and coordinated approaches are supported by promoting the value of mental health as a public health benefit that should be accessible to all.<sup>27</sup> PMH needs assessments that outline the work of different sectors, estimation of the impacts and associated economic benefits from improved coverage, and a rights approach. Coordinated approaches need to be directed to people who allocate resources (eg, politicians and policy makers) to ensure the required financial commitment from governments. For this reason, it is also important that PMH practitioners take a clear stance in favour of social justice and more equitable social and economic systems to protect and promote the mental health of populations.

Such a collaborative approach is supported by leadership from different sectors. For instance, the World Psychiatric Association has made PMH a central part of its 2020–2023 Action Plan,<sup>78</sup> supporting a PMH approach with its membership of 250 000 psychiatrists across 121 countries, and the Royal College of Psychiatrists in the UK is about to launch a Public Mental Health Implementation Centre. Collaboration is supported by funded national and local PMH lead roles for primary care, secondary mental health care, public health, social care, education, child and youth services, employment, housing, criminal justice, voluntary sector, development agencies, policy, and finance ministries.

#### *PMH practice*

PMH practice occurs in the following steps:<sup>8,76,104</sup> PMH needs assessment; identification of ways to improve implementation of different types of PMH intervention (panels 1–4) by various sectors, including for higher-risk groups; estimation of impact (including on policy objectives) and associated economic benefits resulting from improved coverage of different PMH interventions; use of this information to inform four key related areas (outlined in the next paragraph); operationalisation of national and local PMH intervention implementation through coordinated planning by different sectors to achieve agreed coverage; and monitoring of implementation through regular evaluation of coverage, outcomes, and budget expenditure on PMH interventions by different sectors (including for higher-risk groups), which can be achieved through regular PMH needs assessments.

For more on the **Public Mental Health Implementation Centre** see [www.rcpsych.ac.uk/publicMH](http://www.rcpsych.ac.uk/publicMH)



Information from the PMH needs assessment, identification of ways to improve implementation, and estimation of impacts and associated economic benefits from improved PMH intervention coverage can inform four key areas. The first is national and local PMH strategy and policy development by different sectors to mainstream mental health and support integrated approaches. The second key related area is transparent agreement about national minimum acceptable levels of coverage for PMH interventions between stakeholders (outlined in the PMH interventions section), including providers from different sectors, policy makers, community members, people with experience of mental disorders, and carers. This agreement should take account of parity between mental and physical health, the universal right to mental health and the associated SDG of universal coverage of PMH interventions by 2030,<sup>77</sup> the widening of the PMH implementation gap during the COVID-19 pandemic,<sup>42,43,83,84</sup> and the impacts of PMH interventions and associated economic benefits. Such agreement also needs to be considered against how continued implementation failure breaches the right to health, causes population suffering, and results in broad impacts across different sectors and associated economic costs. The third key related area is the required resources for the implementation of agreed PMH intervention coverage; global mental health targets for 2030 can only be reached through a collective global commitment during the next 10 years to make a massive investment at the country level.<sup>83</sup> Governments have the lead responsibility for their population's mental health, although they can also engage with organisations such as the World Bank, regional banks, UN, academic institutions, the private sector (including technology companies), and other agencies regarding the required level of resources.<sup>27,47</sup> This funding can be supported by the integration of mental health into reimbursement and health insurance schemes, including financial protection for people in low socioeconomic and vulnerable groups.<sup>27,47,83</sup> Considering the amount of economic return outlined previously, appropriate investment in PMH interventions is an important part of sustainable economic development. PMH planners and policy makers are required in key intersectoral roles in government to mobilise the required resource for different sectors. The fourth key related area is the coordination between providers of different PMH interventions outlined earlier and supported by PMH needs assessments.

#### *PMH training and literacy*

Given that mental disorders and the implementation failure of effective PMH interventions contribute to a large proportion of global disease burden, appropriate PMH training is required for leaders, professionals, and trainees in mental health secondary care, primary care, public health, social care, commissioning, and policy. Such training should be included in undergraduate and postgraduate curricula and can be delivered online<sup>105</sup> and

in different settings. This training would include education on the impacts of mental disorders and wellbeing,<sup>8,105</sup> including on social and economic development<sup>27</sup> and on other priority areas (eg, non-communicable disease, women and child health, and HIV); the prevalence of mental disorders and wellbeing; risk factors, protective factors, and higher-risk groups; effective PMH interventions, including cost-effectiveness and returns on investment to different sectors; PMH needs assessment; PMH practice; and communication and leadership skills.

As a large proportion of the population have mental disorders,<sup>3-5</sup> appropriate PMH knowledge and literacy is important among the general population and in higher-risk groups to support timely treatment, prevent mental disorders, and promote wellbeing and resilience. Insufficient mental health literacy amplifies impacts and social exclusion among people who have mental disorders, their families, and their carers, who require appropriate information about mental disorders, treatment, prevention of associated impacts, and promotion of mental wellbeing and resilience. Such information should also be part of training for health,<sup>60</sup> social care, and other professionals, such as school staff and employers.

Information to improve early help-seeking is also important. Interventions to increase help-seeking include mental health literacy promotion, destigmatisation, and motivational enhancement; however, evidence suggests that these are only effective for people with or at risk of mental disorders, but not for children or adolescents with mental disorders or the general public.<sup>106</sup> Although digitally delivered interventions improved mental health literacy about mental disorders and reduced stigma, they did not improve help-seeking.<sup>107</sup> Stigma and discrimination reduce help-seeking<sup>94</sup> and are important to address.<sup>108</sup> Addressing stigma associated with COVID-19 can also reduce associated distress.<sup>109</sup>

#### *Particular opportunities to improve coverage of PMH interventions*

Five opportunities to improve coverage of PMH interventions are settings-based approaches, integrated approaches, use of digital technology, maximising existing resources, and a focus on high-return interventions.

Settings-based approaches offer ways to deliver one or more PMH interventions to some sections of the population in particular places. Examples of settings include antenatal and postnatal clinics, preschools and schools, workplaces, neighbourhoods, primary care, refugee camps, prisons, and care homes.<sup>8</sup> A coordinated approach between different sectors can support the implementation of more than one intervention in a particular setting.

Integrated approaches are a second way to support improved coverage. The broad impacts of mental disorders and poor mental wellbeing extend across all sectors,

government departmental areas, and priority health programmes, including for other non-communicable diseases, women and child health, and HIV. Furthermore, PMH interventions that result in broad impacts are delivered by multiple sectors, including health, public health, social care, education, child and youth services, employers, housing, criminal justice, voluntary sector, private sector, and humanitarian assistance. Therefore, more integrated and collaborative approaches, between and within sectors, represent practical ways to improve coverage and coordination of PMH interventions. For example, targeted interventions within one sector, such as early childhood development in preschools, could result in multiple potential benefits, whereas coordination of multiple interventions between different sectors is likely to be required to address gender-based violence or improve youth employment within a community. Integration is supported by PMH needs assessments, careful consideration of the evidence for different PMH interventions, and efforts to highlight the value of improved coordination of different levels of mental disorder prevention and mental wellbeing promotion.

Treatment of mental disorders and physical health comorbidities is supported by collaborative, stepped care that is coordinated by primary care and supported by secondary care, which is more effective than usual care.<sup>110,111</sup> Such integration is facilitated by assessment of goals and resources, identifying shared and achievable objectives, assigning responsibilities (including to non-specialist health workers [task-sharing]), monitoring, and appropriate training and skills.<sup>27,112–114</sup> Recovery from mental disorders is facilitated by routine integrated approaches with other sectors, such as education and employment. Within the health sector, integration, or at least clearly defined connections, and transition procedures are required between mental health services for children, adolescents, adults, and older adults. Similarly, prevention of mental disorders and the subsequent impacts of mental disorders, including health risk behaviour and physical illness, is facilitated by integration with sectors addressing different risk factors and impacts but requires appropriate training of the workforce. Integration with school-based services represents a particularly important opportunity to prevent mental disorders, facilitate early intervention, and promote mental wellbeing and resilience.

Digital technology is a third way to support improved coverage given many PMH interventions can be effectively delivered by internet and phone,<sup>8</sup> including in LMICs.<sup>115,116</sup> Digitally delivered PMH interventions can improve mental health literacy,<sup>107</sup> facilitate detection, improve diagnosis and monitoring of mental disorders, improve adherence,<sup>115</sup> treat mental disorders, reduce stigma and suicidal ideation, prevent mental disorders, and promote mental wellbeing.<sup>8</sup> Digital interventions are effective for particular settings, such as schools<sup>117</sup> and the workplace,<sup>118,119</sup> and for particular groups, such as carers<sup>120</sup>

and parents through parenting interventions.<sup>61,62</sup> Digital technology can also support collaborative care,<sup>121</sup> supervision, and PMH training.<sup>104,105</sup> However, the potential harms of digital technology should be taken into account, particularly for children and adolescents,<sup>8</sup> and provisions for those without access to such technology should be made.<sup>44</sup>

Maximising existing resources represents a fourth opportunity to improve coverage and can occur in several ways outlined in panel 6.

A focus on high-return interventions offers a fifth opportunity to improve coverage since some interventions have particularly large population impacts and can be applied at multiple points across the lifespan.<sup>8</sup> Given that most lifetime mental disorders arise before adulthood, interventions during pregnancy, childhood, and adolescence are important, including in antenatal settings, preschools, and schools. These interventions include action to prevent and address child adversity, which accounts for 30% of adult mental disorders.<sup>34</sup> Parenting interventions treat and prevent child mental disorders and improve child behaviour, parenting practice, and parental mental health.<sup>8</sup> Parenting interventions,<sup>32</sup> which are also effective in LMICs,<sup>53</sup> can be delivered online<sup>61,62</sup> and as brief<sup>27</sup> and self-directed interventions.<sup>128</sup> Treatment of parental mental disorders can prevent 40% of offspring mental disorders.<sup>51</sup> Increased physical activity improves mental health during childhood, adulthood, and older age.<sup>8</sup>

Large population impacts also occur through action to address overarching factors, such as socioeconomic inequalities and poverty (panel 2), which underlie many other risk factors for mental disorders, particularly during economic recessions,<sup>36–38</sup> and which are also preventable consequences of mental disorders. Similarly, action to address pandemics such as COVID-19 is important to prevent a range of impacts on different risk factors for mental disorders.

#### *A rights approach, legislation, and regulation*

The right to health includes the universal right to mental health,<sup>129</sup> and adopting a human rights approach to mental health is an important way to advocate for improved access to PMH interventions, which is supported by the UN.<sup>130,131</sup> Furthermore, the SDG of universal health coverage by 2030 includes PMH interventions.<sup>77</sup> Mental health strategies, actions, legislation, and population coverage of PMH intervention provision should be compliant with international and regional human rights standards, including the UN Convention on the Rights of Children and the Convention on the Rights of Persons with Disabilities,<sup>47,130</sup> although specific actions are required to ensure their implementation.<sup>27</sup>

Legislation is an important oversight mechanism to ensure access to PMH interventions. Regulation and legislation can support improved coverage of PMH

**Panel 6: Maximising existing resources\***

**Public mental health needs assessment**

- Public mental health (PMH) needs assessment outlines existing assets and resources across sectors, which can then be maximised

**Stepped care approach**

- Self-delivered interventions, including self-help (for common mental disorders, psychosis, smoking, and insomnia), use of digital interventions, and support from family, carers, and friends
- Liaison between less experienced and more experienced health professionals

**Integrated approaches**

- Integration of mental health into: primary care, which is supported by task-sharing;<sup>77</sup> work of health-care and other relevant sectors to address issues such as poverty, education, employment, and housing, which are impacts of and risk factors for mental disorders; and existing delivery structures

**Treatment quality**

- Supporting improved quality of and concordance with treatment

**Task-sharing**

- Task-sharing involves transfer of some mental health-care responsibilities from more to less specialised staff, which requires appropriate training, supervision, and engagement with more specialised staff<sup>77</sup>
- Stepped care, integrated approaches, and improved treatment quality are supported by task-sharing

**Recovery approach**

- Adopting a recovery approach to support people with mental disorders to achieve their own aspirations and goals,<sup>122</sup> which promotes drawing on community and personal resources

**Service user involvement**

- Involvement of mental health service users in mental health advocacy, policy, planning, legislation, service provision,

and evaluation,<sup>47,83,123</sup> which is supported by the creation and strengthening of organisations of people with mental disorders

- Codesign of health services that engage patients and health-care staff in partnership to develop and improve health services or care pathways<sup>124</sup>

**Resource shift to community services**

- Moving expenditure from large hospitals to local hospitals and community services, including those run by non-governmental organisations, faith-based organisations, and other community groups<sup>47,83</sup>

**Complementary and alternative approaches**

- Some approaches with review-level evidence, such as mindfulness, yoga, compassion, and forgiveness, are rarely included in health services of industrialised countries; however, these and other approaches, including naturopathy, homeopathy, Ayurvedic and traditional Chinese medicine, and religious or faith healing and support, are accessed in many countries
- Traditional healers form a major part of the global mental health workforce, are commonly consulted by people with mental disorders, and can provide an effective psychosocial intervention for people with mild symptoms of mental disorders; however, they do not appear to change the course of more severe mental illness<sup>125</sup> and can risk the delay of effective treatment
- Traditional healers and allopathic practitioners recognise that patients can benefit from a combination of both practices and demonstrate a willingness to work together;<sup>126</sup> an integrated approach would facilitate training of traditional healers to support referral to mainstream care if required

\*Information from Campion<sup>4</sup> unless indicated.

interventions, such as through reducing access to alcohol and means of suicide, reducing child adversity, and promoting safe environments at work. Legislation also promotes the rights of people with mental disorders, establishes oversight mechanisms for monitoring alignment with international human rights standards, and limits coercive practices and treatments.<sup>83</sup>

*PMH research*

More PMH research is required, particularly in LMICs since the majority of PMH research is done in HICs.<sup>48</sup> A focus on research to improve the use of evidence in mental health policy<sup>132</sup> and coverage of PMH interventions is particularly important.

**Conclusion**

Evidence-based, cost-effective PMH interventions exist to prevent mental disorders from arising, prevent the impacts of mental disorders (including through treatment), and promote mental wellbeing and resilience. These interventions have broad health, social, and economic impacts that also support the achievement of a range of policy objectives. Implementation failure of PMH interventions represents a breach of the right to health and results in population-scale human suffering with a range of associated impacts and economic costs. The COVID-19 pandemic has widened the implementation gap but has also increased mental health awareness and highlighted the need for a PMH approach. In this Health Policy paper,

we recommend a set of actions to improve coverage of PMH interventions that result in broad health, social, and economic benefits. Such actions are even more important during the COVID-19 crisis, which represents a key opportunity to build on the increased interest of people and governments in the mental health of the population. The economic benefits of PMH interventions also make PMH practice a key part of sustainable economic development.

#### Contributors

JC drafted and edited the article; AJ, NS, MM, and PU contributed to the drafting and editing of the article; CL contributed to critical review, drafting, and editing of the manuscript; SS contributed to the conceptualisation of the paper and edited two drafts; and JA reviewed the manuscript and made additional contributions.

#### Declaration of interests

AJ, MM, PU, CL, SS, JC, and JA are members of the Public Mental Health Working Group for the World Psychiatric Association's 2020–2023 Action Plan. JC has contributed to national policy in England, has done mental health needs assessments for local authorities in England (for which his employer received payment); is strategic and clinical director of the Royal College of Psychiatrists' Public Mental Health Implementation Centre; and is a public mental health advisor to WHO Europe. CL has received research funding from the UK Department for International Development, UK National Institute for Health Research, US National Institute of Mental Health, UK Economic and Social Research Council, European Commission, the Wellcome Trust, and Prudential Africa. NS has received honoraria for lectures from the Lundbeck company and from several universities. JA has contributed to national and state policy and service development in his role as a senior public servant.

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