



## The COVID-19 Pandemic and Mental Health 2

# Policy and public health implications for mental health after the COVID-19 pandemic

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The COVID-19 pandemic revealed essential weaknesses in mental health systems and intensified existing inequities, highlighting the need for a comprehensive assessment of policy responses and strategies for future resilience. Guided by four questions relating to system adaptations, approaches to inequities, financing strategies, and evidence gaps, we synthesised evidence from a structured literature search (2020–24), expert consultation, and lived experience. We found that public health systems embedded infodemic management, expanded digital services, and mobilised community workforces, but responses varied in equity and effectiveness. Although gender, age, socioeconomic, and racial disparities worsened during the COVID-19 pandemic, social protection, gender-sensitive policies, school-based services, and culturally adapted interventions showed promise. High-income countries buffered shocks with welfare measures while low-income and middle-income countries faced sharp fiscal constraints. Few studies evaluated cost-effectiveness or equity impacts of psychosocial interventions. Building resilient, equitable mental health systems requires integrated policies spanning communication, digital and community care, gender-responsive and youth-responsive strategies, and sustainable financing, alongside investment in longitudinal and cross-national research.

### Introduction

The COVID-19 pandemic magnified mental health problems and exacerbated pre-existing mental health inequities.<sup>1</sup> It disproportionately affected groups who were more exposed to adverse social, economic, and environmental conditions, such as those living in deprived areas,<sup>2</sup> those shielding from any social contact because other health problems made them susceptible to SARS-CoV-2,<sup>3</sup> and those in minoritised ethnic groups,<sup>4</sup> as well as individuals with pre-existing mental health problems.<sup>5</sup> These disparities highlight the need for inclusive and accessible health care for all, requiring holistic approaches that integrate knowledge management,<sup>6</sup> intersectoral collaboration,<sup>7</sup> and an understanding of positive socioeconomic determinants,<sup>8</sup> resilience,<sup>9</sup> and prevention mechanisms<sup>10</sup> in a total mental health strategy.

A notable feature of the COVID-19 pandemic was the management of knowledge and information through the prism of public health messaging.<sup>11</sup> Social media emerged as an accelerant for disseminating information and spreading disinformation. The complex interactions between social media use and mental health via diverse mechanisms indicate a need for more research.<sup>12</sup> Post-pandemic recovery efforts must prioritise mental health through a balanced approach that addresses both socioeconomic inequalities and the direct needs of those with mental disorders.<sup>13</sup> For example, the rise in the use of digital mental health interventions during the COVID-19 pandemic highlighted the problem of digital exclusion, leading to inequities in accessing these services.<sup>14</sup>

During the COVID-19 pandemic, governments and health systems were pressed to strengthen mental health

funding, adapt policies, and address social determinants alongside clinical needs.<sup>15</sup> Policy debates often focused on how to prevent further marginalisation of vulnerable groups and ensure equitable access to services.<sup>16</sup> Public policy was recognised as a crucial factor in shaping the social, economic, and environmental conditions that influence mental wellbeing.<sup>17</sup> In addition, effective public health strategies depended on engaging individuals as active community participants instead of treating them solely as passive service recipients.<sup>18</sup>

Within this context, in April, 2020, The Academy of Medical Sciences, *The Lancet Psychiatry*, and the charity MQ Mental Health Research convened 24 mental health and neuroscience experts, mainly from the UK and Europe, to establish research priorities in response to the COVID-19 pandemic. This initiative resulted in a Position Paper that identified immediate and long-term priorities for mental health research related to the pandemic, with a focus on vulnerable populations.<sup>19</sup> Building on this paper, a standing commission was established to review the effects on mental health of the ongoing pandemic and the emerging post-pandemic situation. This standing commission expanded to 50 members from diverse regions, disciplines, and lived experiences, with the aim of identifying key areas for pandemic-related mental health research, assessing progress on the original priorities, and updating the agenda as the situation evolved. A virtual launch meeting was held to develop a methodology for guiding the standing commission, which is led by two co-chairs—one from a low-income country and one from a high-income country—who provide scientific oversight, editorial review, and

guidance (panel 1). The first paper by the standing commission focuses on clinical mental health delivery;<sup>20</sup> this second paper focuses on policy and public health, and the third, still under development, will focus on neuropsychiatric sequelae of SARS-CoV-2 infection.

In this paper, we evaluate the public mental health and policy dimensions of the COVID-19 pandemic by asking four interlinked questions. First, how did public health policy and systems adapt to protect population mental health? Second, which policy approaches have proven most effective in reducing the structural inequities in mental health that were exposed or exacerbated by the COVID-19 pandemic, particularly across socioeconomic groups, genders, and geographical regions? Third, which policy investments and financing strategies were most effective in addressing the economic consequences of mental health during and after the COVID-19 pandemic? Fourth, what are the essential research gaps in public mental health and policy that must be addressed to guide future policy formulation and preparedness? By addressing these questions, this paper translates lessons from the COVID-19 pandemic into concrete policy directions for future preparedness, equity-driven investment, and population mental health promotion.

### Policy and public health system adaptations for mental health

During the COVID-19 pandemic, governments, public health agencies, and communities mounted a broad range of responses to protect population mental health. These responses reflected multiple levels of action—from national communications and regulatory measures to service delivery and community-led adaptations—with variable effectiveness. Understanding how systems adapted is crucial because these efforts shaped both immediate wellbeing and longer-term resilience. This section examines how countries combined information management, service reorganisation, and community mobilisation to mitigate distress, highlighting lessons on communication resilience, system flexibility, and equity in mental health care.

### Information and communication resilience

During the COVID-19 pandemic, public health campaigns promoted safety using social and traditional media, but infodemics (overabundant and often misleading information) threatened mental health.<sup>21,22</sup> A meta-analysis found that high social media exposure was linked to psychological distress,<sup>23</sup> whereas reliance on trusted sources (eg, WHO, health departments, and medical institutions) was protective.<sup>24</sup> Although messages such as flatten the curve supported disease control, they also fuelled fear and anxiety,<sup>25</sup> whereas communications about vaccine rollout provided hope and restored agency.<sup>26</sup> Social media played a dual role in disseminating accurate health information<sup>27</sup> and amplifying misinformation,<sup>28</sup> with consumer-generated

### Panel 1: Methods

Within the standing commission, multidisciplinary writing groups, including lived-experience contributors, were formed to lead each section of this paper according to topic expertise. Contributors met online once every 2 weeks over 3 months to scope evidence, review emerging findings, and prepare draft sections. During the writing process, joint working meetings were held to unify insights and advance the production and editorial work of the paper. A first draft was then consolidated, reviewed, and complemented by all members of the standing commission.

A structured search of the literature (published from Jan 1, 2020, to Dec 31, 2024) was undertaken to complement expert consultation. Three databases (PubMed, Embase, and PsycINFO) were searched for relevant English-language studies using controlled vocabulary and free-text keywords for COVID-19, mental disorders, interventions, and study designs. Full search terms are available in the appendix. Papers were screened by title, abstract, and full text using the Covidence Systematic Reviews Production Tool to remove duplicates and organise eligible studies for review by the working groups. Studies were purposively selected based on policy relevance and methodological robustness, with particular emphasis on systematic reviews, longitudinal studies, multicountry analyses, and reports with direct implications for public health and policy.

Although the review process followed a systematic design, the rapidly evolving nature of the evidence base necessitated incorporation of emerging studies throughout writing and revision phases. Individual working groups re-ran searches when drafting their sections, and additions were discussed collaboratively to ensure accuracy and cohesion across sections. Throughout the process, MQ Mental Health Research served as the secretariat and project manager, coordinating meetings, tracking timelines, and liaising with section leads.

videos often outcompeting official content.<sup>29</sup> Positive messages buffered distress,<sup>30</sup> yet exposure to alarming or false information worsened depression and anxiety.<sup>31</sup>

The effects of social media on mental health varied by age. A population-based study of adults in Hong Kong found that social media use was associated with different risks for younger and older adults during the COVID-19 pandemic, with people aged 18–55 years more vulnerable to negative mental health outcomes than older people.<sup>32</sup> Digital and health literacy also emerged as protective factors: students with higher health literacy or mental health literacy reported lower stress, anxiety, and depressive symptoms than students with lower literacy.<sup>33–35</sup> Evidence further suggests that reducing social media or digital screen use can improve wellbeing, mood, and even biological stress markers, reinforcing the potential of behavioural interventions.<sup>36,37</sup>

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See Online for appendix

For the WHO Early Artificial Intelligence-Supported Response with Social listening tool see <https://www.who-ears.com>

For the Africa Infodemic Response Alliance see <https://www.afro.who.int/aira>

Health systems adapted during the COVID-19 pandemic by embedding infodemic management into public health functions, including social listening, rumour tracking, and myth busting, often led by WHO, UNICEF, and the Africa Centres for Disease Control and Prevention.<sup>38</sup> WHO institutionalised infodemic management as a core public health function through competency frameworks and tools, such as the Early AI-supported Response with Social Listening platform.<sup>39</sup> UNICEF and partners operationalised rumour management (the process of preventing, tracking, or responding to unverified information to improve its accuracy) and community-level social listening, which refers to the monitoring, analysis, and synthesis of selected communication channels (eg, social media) to understand community concerns or beliefs to guide risk communication and community engagement strategies.<sup>40,41</sup> Regionally, the Africa Infodemic Response Alliance coordinated efforts to counter misinformation across countries in Africa during the COVID-19 pandemic.<sup>42</sup>

Regulatory measures also evolved. The EU's Digital Services Act mandated platform accountability, requiring systemic risk assessments and mitigation of disinformation.<sup>43,44</sup> In the USA, the Surgeon General's Advisory on Health Misinformation explicitly called for a whole-of-society response on mitigating disinformation, involving government, technology companies, media, health professionals, and civil society.<sup>45</sup> Together, these policies show how governments and global health actors integrated information management, digital regulation, and community engagement to protect population mental health during the COVID-19 pandemic.

### Service and system resilience

Health systems showed varied resilience in maintaining mental health care during the COVID-19 pandemic. In Italy, distress rose under lockdown, but supportive online communities helped to buffer isolation and protect wellbeing.<sup>46</sup> Resilience is defined as the capacity of health systems to absorb shocks while sustaining essential services.<sup>47</sup> The COVID-19 pandemic revealed the limits of resilience, highlighting the need for transilience: the capacity to adapt and transform systems to address structural vulnerabilities.<sup>48</sup>

Governments responded by deploying hotlines, tele-psychiatry services, and cross-sector collaborations.<sup>49,50</sup> New Zealand's and Taiwan's daily briefings combined empathy with scientific clarity to maintain public trust<sup>51,52</sup> and Nigeria's #TakeResponsibility campaign mobilised citizens through social media.<sup>53</sup> Where communication was opaque, misinformation and fear thrived.<sup>54</sup> Evidence shows that countries integrating communication with service delivery through telehealth, blended models, and continuity of psychosocial care were more effective in reducing distress than countries whose communications did not integrate with service delivery.<sup>55,56</sup>

### Community and individual resilience

Policies also targeted resilience at individual and community levels.<sup>57,58</sup> Protective factors, such as structured routines, hobbies, physical activity, and family organisation reduced distress, although studies were largely observational and cross-sectional.<sup>59-61</sup> In a clinical study from Spain, patients with higher resilience who were receiving care from psychiatry services for a variety of mental health conditions had fewer severe depressive symptoms than those with lower resilience,<sup>62</sup> and studies across five countries showed that resilience-building behaviours mitigated paranoia and distress.<sup>63</sup> In addition, occupational health policies supporting peer networks and self-care helped frontline workers to adapt.<sup>64</sup>

Digital interventions, including Canada's Wellness Together platform and crisis text lines, scaled access to support. Brief online programmes for health-care workers reduced distress and promoted self-compassion.<sup>65</sup> These responses highlight how digital tools can extend the reach of mental health-care services if paired with strategies to overcome digital exclusion. Resilience also fostered post-traumatic growth, with some individuals reporting improved wellbeing and deeper relationships.<sup>66-68</sup>

Policies promoting collective solidarity—such as gratitude campaigns for health workers and community-based mutual aid—helped nurture post-traumatic growth.<sup>69,70</sup> Service innovations further supported resilience: Italy shifted 75% of outpatient consultations to virtual care<sup>71</sup> and Canada's largest psychiatric hospital reported a seven times increase in the number of virtual care visits during the early phase of the COVID-19 pandemic compared with pre-pandemic levels.<sup>72</sup> Helplines such as India's Kiran provided multilingual support 24 h a day, seven days a week,<sup>73</sup> and France's Chèque Psy programme funded student therapy sessions.<sup>74</sup> Cross-sector initiatives, including Thailand's mobilisation of 1 million community health workers, expanded psychosocial care at scale.<sup>75,76</sup>

### Comparability of resilience across countries

Cross-national evidence underscores the importance of policy design. A meta-analysis of 226 studies across 44 countries found that stringent government policies were associated with lower depressive symptoms in 33 countries,<sup>77</sup> although in England, strict lockdowns worsened mental health where support was insufficient.<sup>78</sup> Across 22 European countries, pandemic mortality modified the effects of lockdown stringency on mental health and wellbeing: whereas lockdowns were generally associated with increased depression and anxiety, at times of high mortality they were not associated with poorer mental wellbeing, which is consistent with the welcomed lockdown hypothesis.<sup>79</sup> Data from the Organisation for Economic Co-operation and Development indicate that wage subsidies and

unemployment benefits alleviated financial fears, reducing psychological distress.<sup>80</sup> Yet inequities persisted: In a 17-country study, several countries in south Asia and Latin America reported some of the highest levels of psychological distress associated with resource scarcity.<sup>81</sup> Low-income and middle-income countries (LMICs) also reported widespread income loss and food insecurity, which are known to exacerbate psychological distress.<sup>82</sup> Adaptation of services varied: high-income countries transitioned more smoothly to telepsychiatry,<sup>83,84</sup> whereas LMICs struggled with digital divides. Despite these issues, innovations such as India's helplines and Australia's large-scale telehealth services showed scalable models. Evidence consistently showed that transparent communication, accessible services, and social protection policies buffered mental distress. Future crises will demand system-wide strategies that integrate communication, service delivery, and social protection—with equity at the centre—to prevent widening disparities in mental health outcomes.

### Policy approaches to address structural inequities in mental health

The COVID-19 pandemic exacerbated pre-existing mental health inequities and disproportionately affected individuals and communities exposed to social, economic, and environmental disadvantage. Paper 1 of the standing commission explored the different effects of the COVID-19 pandemic on mental health across these groups, including variations by age, gender, socioeconomic status, and pre-existing vulnerability.<sup>20</sup> Building on that work, this section examines policy approaches that sought to address these structural inequities and mitigate their impact on population mental health.

Before the COVID-19 pandemic, mental ill health burdens were unevenly distributed, disproportionately affecting individuals exposed to adverse socioeconomic and environmental conditions from prenatal stages through to later life.<sup>85</sup> The COVID-19 pandemic exacerbated these inequities. Containment measures, such as lockdowns, physical distancing, and quarantining, intensified existing disparities linked to social class, ethnicity, gender, disability, education, and working conditions.<sup>86</sup> Children and adolescents, women, people with low incomes, and those with chronic conditions or pre-existing mental disorders were particularly vulnerable.<sup>87,88</sup> In the UK, people living in deprived neighbourhoods, those shielding for health reasons, individuals from Black, Asian, and other minoritised ethnic backgrounds, and those with histories of mental illness were disproportionately affected.<sup>20,89,90</sup> Overall, these findings support that intersectional actions during the COVID-19 pandemic might have had very long-term negative economic effects similar to the double disadvantage faced by young people with mental disorders who come from low socioeconomic backgrounds.<sup>91</sup>

### Gender and mental health inequities

The COVID-19 pandemic reinforced and reshaped gendered patterns of mental health, with many differences linked to the social and economic effects of public health measures and policy responses during the crisis. Paper 1 of the standing commission explored the differential impacts of the COVID-19 pandemic on mental health across genders and other population groups;<sup>20</sup> this section focuses on how pandemic policies and subsequent government responses influenced gender-related mental health outcomes and examines policy approaches that sought to address these inequities and mitigate their impacts on population wellbeing.

Globally, women consistently reported higher levels of anxiety and depression than men,<sup>92</sup> and were disproportionately affected by economic insecurity,<sup>93</sup> with this pattern further shaped by intersections of gender, ethnicity, and regional factors.<sup>94</sup> Caregiving burdens,<sup>92</sup> unpaid domestic work, and heightened risks of intimate partner violence during lockdowns compounded these challenges for women. Female health-care workers in LMICs, such as Peru, reported worse outcomes than their male counterparts.<sup>95</sup> More broadly, women were disproportionately exposed to burnout compared with men, while shouldering more unpaid domestic labour and caregiving responsibilities.<sup>95</sup>

Concurrently, men reported increased depression, aggression, and anxiety, particularly in the context of job loss and economic hardship, as reported in Germany<sup>96</sup> and the Middle East.<sup>97</sup> Evidence suggests that compliance with distancing measures reduced anxiety and depression among women but had little effect on men.<sup>98</sup> These gender-specific responses underscore the need for intentional policy design. Gender-responsive strategies, including expanded paid parental leave,<sup>99</sup> investment in intimate partner violence shelters,<sup>100</sup> and the scaling up of perinatal mental health services,<sup>101</sup> have proven effective in mitigating the higher risk of mental ill health in women than men. Evidence shows that peer-delivered and task-shared models of perinatal mental health care are both effective and cost-efficient.<sup>102</sup> Together, these policies strengthen resilience and reduce long-term inequities in mental health outcomes.

### Age-specific inequities

Adults aged 65 years and older bore the highest mortality risk in the COVID-19 pandemic, but tended to report lower levels of anxiety and depression than younger groups,<sup>103</sup> consistent with pre-pandemic resilience linked to life experience and coping resources.<sup>104</sup> This finding did not apply to older people with dementia, regardless of whether they lived in the community and were often isolated or lived in care homes that were closed to visitors: they had worse mental health outcomes than those without dementia.<sup>105</sup> By contrast, children, adolescents, and young adults reported steep increases in depression, anxiety, and suicidal ideation, possibly driven by disrupted

### Panel 2: Expert-by-experience commentary on Nigeria during the COVID-19 pandemic

The COVID-19 pandemic placed significant strain on Nigeria's fragile mental health system, amplifying pre-existing service gaps as demand surged. In the first year of the pandemic (January, 2020, to January, 2021), global anxiety and depression levels rose by an estimated 25%,<sup>116</sup> but Nigeria's response was constrained by limited health-care resources. The Government introduced a 24-h mental health counselling hotline as a lifeline,<sup>117</sup> yet awareness of it was low and the country faced a shortage of trained professionals to meet the needs of an estimated 60 million people with mental health conditions.

Civil society actors filled some of these gaps in mental health care. For example, the LEAD Community Foundation provided free psychosocial services and training to those living in urban slums.<sup>118</sup> However, outreach rarely reached rural areas, where digital divides and weak infrastructure exacerbated isolation. Strict containment measures, including lockdowns and distancing, conflicted with cultural norms of close-knit communal living, leading to heightened social anxiety, depression, and post-traumatic stress disorder.<sup>119</sup> Repurposing of mental health facilities as isolation centres further reduced service availability and mask-wearing mandates increased distress for individuals with respiratory conditions.

Underlying poverty, weak health systems, and stigma around mental illness compounded these challenges, deterring many from seeking support.<sup>120</sup> Addressing these gaps requires more inclusive digital outreach, expanded awareness campaigns, and culturally sensitive interventions that extend beyond urban centres to reach rural communities.

education, social isolation, and uncertainty about the future.<sup>106</sup> Cross-national policy responses reflected this divide. For example, France's Chèque Psy programme provided university students with free therapy sessions,<sup>107</sup> and at least 26 US states expanded school-based mental health provision, legislating for additional counsellors, telemental health services, and social-emotional learning curricula.<sup>108</sup> These examples show the potential of embedding mental health services within schools and higher education institutions as a strategy to buffer the impact of crises on youth mental health.

#### Socioeconomic inequities and social protection

Paper 1 of the standing commission showed that socioeconomic disadvantage heightened vulnerability to psychological distress during the COVID-19 pandemic.<sup>20</sup> Here, we examine how social protection policies mitigated these effects across different contexts. Within high-income settings, member states of the Organisation for Economic Co-operation and Development, such as the USA, UK, and Australia, introduced social and occupational protection policies early in the COVID-19

pandemic.<sup>109</sup> In the UK, the Coronavirus Job Retention Scheme—a national furlough programme providing wage subsidies to preserve employment—helped mitigate mental health harms.<sup>110</sup> In Australia, the JobKeeper wage subsidy and enhanced income support programmes helped to cushion the mental health impacts of job and income losses.<sup>111</sup> In the USA, states with stronger and longer eviction moratorium protection (temporary legal measures to prevent landlords from evicting tenants unable to pay their rent) had lower psychological distress among adults during the COVID-19 pandemic than states without these measures,<sup>112</sup> and temporary expansion of the Child Tax Credit reduced child poverty to historic lows and alleviated parental stress.<sup>113</sup> In LMICs, cash transfers in Kenya<sup>114</sup> and Latin America were associated with reduced stress and intimate partner violence.<sup>115</sup> These findings affirm that income support, housing stability, and food security function as upstream mental health interventions and should be regarded as essential elements of equitable public health policy.

#### Racial, ethnic, and geographical inequities

The COVID-19 pandemic magnified racial and ethnic disparities in mental health. Panel 2 presents the perspective of an expert-by-experience from Nigeria, contributed through the standing commission's process of including voices of people with lived experience. It highlights how the COVID-19 pandemic strained an already fragile mental health system, revealing both service gaps and opportunities for innovation. Situating Nigeria's experiences illustrates how the intersection of structural disadvantage, digital divides, and cultural norms shaped mental health outcomes. It also underscores the urgent need for innovative, equity-driven, digital and community-based solutions.

In high-income countries, non-White communities had greater exposure to SARS-CoV-2, higher mortality rates, and fewer opportunities to access culturally responsive care than White communities.<sup>121</sup> Digital care models provided partial mitigation: Black and Latinx populations in the USA increased their engagement with telemental health services during the COVID-19 pandemic, suggesting there is potential to reduce disparities in mental health if digital divides are addressed.<sup>122</sup> Culturally grounded, community-led initiatives, such as Uganda's Group Support Psychotherapy,<sup>123</sup> Zimbabwe's Friendship Bench,<sup>124</sup> and India's national Kiran helpline,<sup>125</sup> highlighted scalable, low-cost models to expand access mental health care in resource-constrained settings.

#### Digital and blended mental health services

The COVID-19 pandemic accelerated the use of digital technologies in mental health care. National platforms, such as Canada's Wellness Together portal<sup>126</sup> (which no longer exists), Australia's large-scale telehealth expansion,<sup>127</sup> and the USA's relaxation of telepsychiatry

regulations,<sup>128</sup> illustrated how high-income countries rapidly adapted systems to sustain access. Across Africa, innovative models also emerged. In rural South Africa, youth engaged with mobile-based psychosocial support and health workers via social media, despite persistent barriers of cost and digital literacy.<sup>129</sup> Nigeria scaled up telepsychiatry to ease service backlogs<sup>130</sup> and, in Angola, a provider-focused telemedicine programme identified both enabling factors (ie, training and ethical frameworks) and constraints (ie, legal and infrastructural gaps) for blended care.<sup>131</sup> In Uganda, telesupport psychotherapy delivered by mobile phone to young people with depression showed feasibility and acceptability as a culturally adapted digital psychotherapy in a low-resource setting.<sup>132</sup>

At the global level, the WHO Guideline on Digital Interventions (2019)<sup>133</sup> and the WHO Global Strategy on Digital Health (2020–25)<sup>134</sup> provide evidence-based recommendations and governance frameworks for scaling SMS, app-based, and telemedicine tools, underpinning investment in mobile and remote mental health services. Importantly, both policies also address digital exclusion, whereby some individuals or communities have limited access to the digital resources necessary to access e-mental health care, as well as low digital literacy, both of which are more common in LMICs. The policies promote equity-focused design, inter-operability, and workforce capacity-building to maximise inclusion and the number of people who can benefit from these services. These matters highlight both the potential and limitations of digital care, as reliance on online platforms risks deepening inequities in access to devices, connectivity, and digital literacy.<sup>135</sup> Evidence indicates that the most effective solutions were blended models that combined digital and in-person support tailored to user needs.<sup>136</sup> To ensure equity, sustained investments in broadband infrastructure, subsidised device costs, and digital skills training are crucial.

### Policy investments and financing strategies

The relationship between mental health and economic wellbeing is bidirectional: poor mental health can limit employment opportunities and increase dependence on social services, while economic instability worsens mental health challenges, creating a cycle of disadvantage.<sup>137</sup> The COVID-19 pandemic intensified these dynamics because rising infection rates and lockdowns disrupted employment and income stability, leading to widespread financial insecurity with the effects of lockdowns being nuanced.<sup>138</sup> This negative cycle reduced overall economic wellbeing, undermined financial stability, and weakened the ability to meet essential needs.

### Variation between countries

In the USA, within the context of decreased employment and economic uncertainty, the prevalence of common

mental disorders doubled during the COVID-19 pandemic<sup>139</sup> and health care spending and service use increased significantly among adults with health insurance.<sup>140,141</sup> By contrast, in Hong Kong, higher rates of depression were observed but were accompanied by a reduction in mental health service use, reflecting access barriers even in strong health care systems in high-income countries.<sup>142</sup> These contrasting trends show how health system capacity and social protection mechanisms mediated the economic and mental health consequences of the COVID-19 pandemic.

Globally, the pandemic reshaped economies and exposed deep vulnerabilities.<sup>143</sup> Case studies from Germany, Brazil, and India indicated that stimulus packages, robust welfare systems, and sovereign wealth reserves buffered economic shocks.<sup>144</sup> These measures helped to stabilise income, employment, and health-care access, thereby limiting the rise in poverty and inequality. By contrast, LMICs that were constrained by limited fiscal space had sharp increases in poverty, unemployment, and food insecurity.<sup>145,146</sup> Consumer behaviour shifted universally towards higher savings and reduced discretionary spending.<sup>147</sup> Yet while wealthier countries maintained buffers, LMICs struggled to meet essential needs, reinforcing global inequalities. These disparities highlight the essential role of fiscal capacity and social protection mechanisms in mitigating the mental health impacts of economic crises.

### Population-level interventions for COVID-19 control

Economic modelling and evaluations consistently indicated that active public health measures against COVID-19, such as stay-at-home orders, wearing masks, social distancing, testing for SARS-CoV-2 infection, isolation of those testing positive, and quarantining of people with COVID-19, were generally cost-effective or cost-saving compared with inaction or minimal mitigations.<sup>148–150</sup> However, effectiveness was contingent on the prevalence of infection and transmission rates: economic advantages of public efforts were greater when the prevalence of infection and transmission rates were high.<sup>151,152</sup> Microsimulation studies from China similarly suggested that early, combined interventions (specifically testing, isolation, contact tracing, and social distancing) produced large health gains and were often cost-saving compared with later, less intensive responses.<sup>152,149</sup>

Studies of vaccine allocation showed that prioritising groups at high risk and those with greatest transmission potential maximised net health benefits under budget constraints, supporting targeted instead of purely age-based roll-out when supply was limited.<sup>153,154</sup> Broader frameworks highlighted that cost-effectiveness assessments should have included indirect health effects, such as disruption of routine care, mental health, and socioeconomic harms, which might have altered the value of strict versus moderate measures.<sup>150,154</sup>

Key policy strategies and examples	
<b>Structural inequities (socioeconomic, gender, age, racial, ethnic, and geographical)</b>	
Worsening poverty, unemployment, housing, and food insecurity during shocks	Expand social protection: wage subsidies, <sup>113</sup> child tax credits, <sup>114</sup> cash transfers, <sup>115</sup> and housing and food support <sup>173</sup>
Increased burden on women, higher anxiety and depression, increased caregiving duties, and increased intimate partner violence	Gender-sensitive policies: paid family leave, <sup>99</sup> intimate partner violence shelters, <sup>100</sup> and expansion of perinatal mental health services <sup>101</sup>
Youth affected by school closures, social isolation, and uncertainty about future	Embed school-based and university-based mental health programmes into policy (eg, France's Chèque Psy programme-funded student therapy sessions <sup>74</sup> )
Disproportionate impact on minoritised racial and ethnic groups and in underserved areas	Group support psychotherapy has been included in the Ugandan HIV Treatment Guidelines <sup>158</sup>
<b>Digital and blended services</b>	
Rapid digitisation excluding those without devices, connectivity, or digital literacy	National digital mental health platforms (eg, Canada's Wellness Together expansion <sup>126</sup> )
Uneven uptake in rural and low-resource settings	The US relaxation of telepsychiatry regulations <sup>128</sup> and Australia's large-scale telehealth expansion <sup>127</sup>
Digital tools often poorly adapted to local culture or context	Uganda's Tele-Support Psychotherapy programme <sup>132</sup> and Nigeria's telepsychiatry programme <sup>130</sup>
Uncertain sustainability and integration of digital-only care	Promote blended care models combining online and in-person services <sup>131</sup>
<b>Public health policy systems</b>	
Infodemics, misinformation, and erosion of trust	Institutionalise infodemic management systems via WHO, UNICEF, and the Africa Centres for Disease Control and Prevention <sup>38</sup>
Fragmented or opaque health communication during crises	Regulatory frameworks to hold platforms accountable (eg, the EU Digital Services Act <sup>44</sup> and Confronting health misinformation: the US Surgeon General's Advisory on building a healthy information environment <sup>45</sup> )
Disruption of services due to lockdowns and mobility restrictions	At least 26 US states have expanded school-based mental health provision, legislating for additional counsellors, telemental health services, and socioemotional learning curricula <sup>108</sup>
<b>Investments and financing strategies</b>	
Increased unemployment, financial insecurity, and reduced government fiscal capacity	High-income countries were able to buffer shocks through stimulus packages, robust welfare systems, and sovereign wealth reserves <sup>144</sup>
Mental wellbeing undermined by economic stress	Cash transfer programmes in low-income and middle-income countries (eg, Kenya and countries in Latin America) introduced to buffer stress and reduce intimate partner violence <sup>115</sup>
Very few cost-effectiveness or equity-sensitive studies specific to mental health interventions	Wellcome Trust and the National Institute of Mental Health are investing in economic evaluation and implementation research of psychosocial interventions <sup>177,178</sup>
<b>Table: Key challenges exposed by the COVID-19 pandemic and policy strategies to strengthen equitable and resilient mental health systems</b>	

Comparative analyses across European countries linked earlier and more stringent mitigation policies (eg, closures and gathering limits) with lower COVID-19-associated mortality, reinforcing modelled findings that non-pharmaceutical interventions could be highly efficient when timed promptly.<sup>149,155</sup> Systematic reviews of modelling studies and economic evaluations concluded that combinations of non-pharmaceutical interventions, vaccination, and testing were more cost-effective than single measures but optimal strategies depended strongly on epidemic phase, health-care capacity, and willingness-to-pay thresholds.<sup>148–150</sup>

Despite rising mental health needs, few studies have rigorously evaluated the cost-effectiveness of mental

health interventions.<sup>19</sup> Moreover, existing analyses rarely incorporate distributional equity, even though disproportionate effects between higher and lower income countries and on marginalised populations within a country are well documented.<sup>156,157</sup> Economic evaluations during the COVID-19 pandemic have remained heavily concentrated on non-pharmaceutical interventions, leaving limited evidence on the comparative value of scaling psychosocial interventions, digital mental health services, or integrated social protection measures.

### Preparedness for future crises

Addressing these shortcomings requires research and investment agendas that focus on the future. Several governments and international bodies have already acted to strengthen preparedness for future crises. For example, Group Support Psychotherapy in Uganda was included in Uganda's national HIV treatment guidelines,<sup>158</sup> the USA launched the 988 Suicide & Crisis Lifeline in 2022,<sup>159</sup> the EU introduced its Mental Health Initiative in 2023,<sup>160</sup> and WHO updated its Mental Health Action Plan (2021–30) to incorporate lessons from the COVID-19 pandemic.<sup>161</sup> Likewise, Canada<sup>162</sup> and Australia<sup>163</sup> have embedded mental health supports within their national recovery strategies.

The relevance of these post-pandemic mental health initiatives is heightened by mounting global health financing pressures. Political shifts and funding cuts have eroded multilateral support and strained health systems worldwide.<sup>164</sup> For example, abrupt reductions in US funding have impeded WHO's ability to maintain essential child health programmes<sup>165</sup> and disrupted service continuity in LMICs.<sup>166</sup> Global health funding has hit a 15-year low, with drastic cuts affecting aid for mental health programmes.<sup>167</sup> These developments highlight the urgent need for sustainable financing mechanisms and protected investments in mental health to ensure that gains achieved during the COVID-19 pandemic are not lost amid future global shocks.

### Priority evidence gaps for public mental health policy post-COVID-19 pandemic

The COVID-19 pandemic exposed substantial evidence gaps that constrain governments' capacities to design and implement effective, equitable mental health policies. These gaps span data systems, intervention research, and international policy learning, limiting the evidence base needed for sustained mental health recovery. Strengthening research across these domains will be essential to build resilient, evidence-informed mental health systems for future crises.

### Long-term data and mechanisms

An important gap is the scarcity of longitudinal data capturing the long-term trajectories of mental health across diverse populations.<sup>168</sup> Research is especially needed on the delayed and prolonged effects of social

isolation and the vulnerabilities of groups such as health-care workers, children, and older adults.<sup>169</sup> Equally important is the limited understanding of the mechanisms by which social isolation, financial hardship, and disrupted family dynamics affect mental health across cultural and socioeconomic contexts.<sup>170</sup> Social isolation has been consistently associated with worsening anxiety and depression, particularly among older adults and marginalised groups,<sup>171</sup> and economic insecurity and job loss have been linked to depressive symptoms and suicidal ideation.<sup>172</sup> Yet the causal pathways, whether neurobiological, psychological, or social, remain poorly defined. Evidence in this area is crucial for policies that expand social protection, strengthen unemployment and housing support, and promote age-sensitive and culture-sensitive interventions.<sup>173</sup>

### Interventions and media

Another major gap concerns the effectiveness, scalability, and cultural appropriateness of interventions. Although peer support models, resilience training, and digital platforms have shown promise, rigorous evaluations are needed to establish which interventions work best, for whom, and in which settings.<sup>174</sup> Policy makers must therefore prioritise investment in implementation research and comparative effectiveness trials to guide the integration of mental health services into health and social care systems, particularly in LMICs.

Evidence on the impact of media, misinformation, and infodemics on mental health remains limited. Although studies suggest associations between high media exposure and anxiety, findings are inconsistent and the potential benefits of digital engagement are underexplored.<sup>21,175</sup> Research in this area is vital to inform policies on responsible public health communication, regulation of misinformation, and promotion of digital literacy. Without such knowledge, efforts to build trust and resilience in future crises will remain fragmented.

### National comparisons

Another important evidence gap is the limited use of cross-national comparative research and diverse data sources to examine how different pandemic responses influenced mental health outcomes. Comparative analyses across countries using harmonised data from longitudinal cohorts, administrative systems, and digital health platforms are essential to identify which policy and service strategies were most effective and equitable. Without such evidence, opportunities to draw lessons across contexts and to design transferable policy solutions will be missed.<sup>176</sup> Together, these gaps highlight the urgency of a coordinated research agenda that integrates longitudinal studies, mechanistic analyses, and intervention trials. The table summarises the key domains in which gaps are identified, the challenges exposed by the COVID-19 pandemic, and key policy strategies to strengthen equitable and resilient mental health systems.

## Conclusion

The COVID-19 pandemic exposed deep mental health challenges and disparities and underscored the need for post-pandemic policies that are inclusive, adaptive, and evidence-driven. This paper argues for strengthening social connectedness, socioeconomic safety nets, and clear communication as foundational strategies. It highlights cost-effective digital and community-based interventions that can reach vulnerable groups and emphasises targeted support for high-risk groups, such as health-care workers, to reduce burnout and facilitate recovery. We call for rigorous research into the long-term effects of digital media, economic stress, and structural inequity, advocating inclusive, longitudinal studies to guide policy making. In sum, this work charts a pathway towards resilient, equitable mental health systems built to protect population wellbeing in future crises.

### The MQ Mental Health Research and *Lancet Psychiatry* Standing Commission on the COVID-19 Pandemic and Mental Health

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### Contributors

All Commission members contributed to the conceptualisation of the study and participated in drafting sections of the original manuscript. Commission co-chairs EN-M and PBJ led the rewriting and editing of the manuscript. All authors contributed to the final review and approved the decision to submit the manuscript for publication.

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