

## PAPER 2: POLICY AND PUBLIC HEALTH

### TITLE: MENTAL HEALTH AFTER THE COVID-19 PANDEMIC: POLICY AND PUBLIC HEALTH

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### Summary

The COVID-19 pandemic revealed critical weaknesses in mental health systems and intensified existing inequities, highlighting the need for a comprehensive assessment of policy responses and strategies for future resilience. We synthesised evidence from a structured literature search (2020–2024), expert consultation, and lived-experience contributions, guided by four questions on system adaptations, approaches to inequities, financing strategies, and evidence gaps. Public health systems embedded infodemic management, expanded digital services, and mobilised community workforces, but responses varied in equity and effectiveness. Gender, age, socioeconomic, and racial disparities worsened, though social protection, gender-sensitive policies, school-based services, and culturally adapted interventions showed promise. High-income countries buffered shocks with welfare measures, while low- 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 require integrated policies spanning communication, digital and community care, gender- 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 are more exposed to adverse social, economic, and environmental conditions, such as those living in deprived areas<sup>2</sup>, those shielding for health reasons<sup>3</sup>, ethnic minority groups<sup>4</sup>, and individuals with pre-existing mental health problems<sup>5</sup>. This highlighted the need for inclusive and accessible healthcare for all, requiring holistic approaches that integrate knowledge management<sup>6</sup>, inter-sectoral collaboration<sup>7</sup>, and an understanding of positive socio-economic determinants<sup>8</sup>, resilience<sup>9</sup>, and prevention mechanisms<sup>10</sup>. These components should be integrated to form a total mental health strategy.

Moreover, the pandemic was also notable for managing knowledge and information through the prism of public health messaging<sup>11</sup>. Social media emerged as an accelerator for disseminating rapid 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 prioritize mental health through a balanced approach that addresses both socio-economic 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 pandemic highlighted the problem of digital exclusion, leading to inequities in accessing these services<sup>14</sup>.

During the pandemic, governments and health systems were pressed to strengthen mental health funding, adapt policies, and address social determinants alongside clinical needs (15). 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 critical factor in shaping the social, economic, and environmental conditions that influence mental well-being<sup>17</sup>. In addition, effective public health strategies were understood to depend on engaging individuals as active community participants, rather than treating them solely as passive service recipients<sup>18</sup>.

In April 2020, The Academy of Medical Sciences and MQ Mental Health Research convened 24 mental health and neuroscience experts to establish research priorities in response to the COVID-19 pandemic. This resulted in a position paper in *The Lancet Psychiatry*, which identified immediate and long-term priorities for mental health research related to the pandemic, with a focus on vulnerable populations<sup>13</sup>. Building on this, the MQ Mental Health Research and *Lancet Psychiatry* Standing Commission on the COVID-19 Pandemic and Mental Health was established to review the effects of the ongoing pandemic and the emerging post-pandemic situation. The 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 Commission. It was agreed that three complementary papers would be produced: one focusing on clinical mental health delivery, another on policy and public health and another on neuropsychiatric sequelae of SARS-CoV-2 infection. Sections for each paper were defined, working groups were formed, and roles and responsibilities were assigned. The Commission was led by two

Co-Chairs—one from a low-income country and one from a high-income country, who provided scientific oversight, editorial review, and guidance. MQ Mental Health Research acted as the secretariat and project manager, coordinating activities, liaising with section leads, and serving as the central communication hub.

This paper complements Paper 1 of the MQ Mental Health Research and Lancet Psychiatry Standing Commission on the COVID-19 Pandemic and Mental Health, which examined the effects of the pandemic on mental health as well as on the delivery of clinical mental health care, and Paper 3, which will examine the neuropsychiatric sequelae of SARS-CoV-2 infection. Our specific contribution in Paper 2 is to evaluate the public mental health and policy dimensions of the pandemic. We ask four interlinked questions: How did public health policy and systems adapt to protect population mental health? 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 geographic regions? Which policy investments and financing strategies were most effective in addressing the economic consequences of mental health during and after COVID-19? What are the overall critical 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 offers a distinct contribution: to translate pandemic lessons 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 communication and regulatory measures to service delivery and community-led adaptations, with highly variable effectiveness. Understanding how systems adapted is critical, as 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 COVID-19, public health campaigns promoted safety through social and traditional media, but infodemics, the overabundant and often misleading information, threatened mental health.<sup>19,20</sup> A meta-analysis found that high social media exposure was linked to psychological distress,<sup>21</sup> whereas reliance on trusted sources (WHO, health departments, medical institutions) was protective.<sup>22</sup> While messages such as “flatten the curve” supported disease control, they also fueled fear and anxiety,<sup>23</sup> whereas communication about vaccine rollout provided hope and restored agency.<sup>24</sup> Social media played a dual role: disseminating accurate health information<sup>25</sup> but also amplifying misinformation,<sup>26</sup> with consumer-generated videos often outcompeting official content.<sup>27</sup> Positive messages buffered distress,<sup>28</sup> yet exposure to alarming or false information worsened depression and anxiety<sup>29</sup>.

The impacts of social media on mental health varied by age. A population-based study in Hong Kong found that social media use was associated with different risks for younger and older adults during COVID-19, with younger people more vulnerable to negative mental

health outcomes<sup>30</sup>. Digital and health literacy also emerged as protective factors: students with higher levels of health or mental health literacy reported lower stress, anxiety, and depressive symptoms<sup>31-33</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>34,35</sup>.

Health systems adapted by embedding “infodemic management” into public health functions, including social listening, rumor tracking, and myth-busting, often led by WHO, UNICEF, and Africa CDC<sup>36,37</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 (EARS) platform<sup>38</sup>, while UNICEF and partners operationalised rumor management and community-level social listening to guide risk communication and community engagement (RCCE) strategies<sup>39,40</sup>. Regionally, the Africa Infodemic Response Alliance (AIRA) coordinated efforts to counter misinformation across the continent<sup>41,42</sup>.

Regulatory measures also evolved: the European Union’s Digital Services Act mandated platform accountability, requiring systemic risk assessments and mitigation of disinformation<sup>43,44</sup>. In the United States, the Surgeon General’s Advisory on Health Misinformation explicitly called for a whole-of-society response, involving government, technology companies, media, health professionals, and civil society<sup>45</sup>. Together, these policies demonstrate 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 pandemic. In Italy, distress rose under lockdown, but supportive online communities helped to buffer isolation and protect wellbeing<sup>46</sup>. More broadly, resilience is defined as the capacity of health systems to absorb shocks while sustaining essential services<sup>47</sup>. Yet COVID-19 also revealed the limits of resilience, highlighting the need for “transilience”—the capacity not only to adapt but to transform systems to address structural vulnerabilities<sup>48</sup>.

Governments responded by deploying hotlines, telepsychiatry, and cross-sector collaborations<sup>49,50</sup>. New Zealand and Taiwan’s daily briefings combined empathy with scientific clarity, maintaining public trust<sup>51,52</sup>, while Nigeria’s #TakeResponsibility campaign mobilized 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<sup>55,56</sup>.

### *Community and Individual Resilience*

Policies also targeted resilience at individual and community levels. Protective factors such as structured routines, hobbies, physical activity, and family organization reduced distress<sup>57-59</sup>. In Spain, psychiatric patients with higher resilience experienced fewer severe depressive symptoms,<sup>60</sup> while studies across five countries showed that resilience-building behaviors mitigated paranoia and distress<sup>61</sup>. Occupational health policies supporting peer networks and self-care helped frontline workers adapt.<sup>62</sup>

Digital interventions, including Canada’s Wellness Together platform and crisis text lines, scaled access to support. Brief online programs for healthcare workers reduced distress and promoted self-compassion.<sup>63</sup> These responses highlight how digital tools can extend reach if

paired with strategies to overcome digital exclusion. Resilience also fostered post-traumatic growth (PTG), with individuals reporting improved wellbeing and deeper relationships.<sup>64-66</sup>

Policies promoting collective solidarity—such as gratitude campaigns for health workers and community-based mutual aid—helped nurture post-traumatic growth (PTG)<sup>67,68</sup>. Service innovations further supported resilience: Italy shifted 75% of outpatient consultations to virtual care<sup>69</sup>, while Canada's largest psychiatric hospital expanded virtual visits sevenfold<sup>70</sup>. Helplines such as India's Kiran provided 24/7 multilingual support<sup>71</sup>, and Chèque Psy program funded student therapy sessions<sup>72</sup>. Cross-sector initiatives, France's including Thailand's mobilization of one million community health workers, expanded psychosocial care at scale<sup>73,74</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 stringent government policies associated with lower depressive symptoms in 33 countries,<sup>75</sup> though in England strict lockdowns worsened mental health where support was insufficient.<sup>76</sup> OECD data show that wage subsidies and unemployment benefits alleviated financial fears, reducing distress<sup>77</sup>. Yet inequities persisted: South Asia and Latin America experienced the highest burden due to resource scarcity,<sup>78</sup> while LMICs reported widespread income loss and food insecurity, amplifying distress.<sup>79</sup> Adaptation of services varied: high-income countries transitioned more smoothly to telepsychiatry,<sup>80,81</sup> whereas LMICs struggled with digital divides. Still, innovations such as India's helplines and Australia's large-scale telehealth demonstrated scalable models. Evidence consistently shows that transparent communication, accessible services, and social protection policies buffered mental distress. Future crises demand system-wide strategies that integrate communication, service delivery, and social protection, with equity at the center, 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, disproportionately affecting individuals and communities exposed to social, economic, and environmental disadvantage. Paper 1 of the Commission explored the different effects of the pandemic on mental health across these groups, including variations by age, gender, socioeconomic status, and pre-existing vulnerability. 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 pandemic, mental health burdens were unevenly distributed, disproportionately affecting individuals exposed to adverse socio-economic and environmental conditions from pre-natal stages through to later life<sup>82</sup>. The COVID-19 pandemic exacerbated these inequities. Containment measures such as lockdowns, physical distancing, and quarantine intensified existing disparities linked to social class, ethnicity, gender, disability, education, and working conditions<sup>83</sup>. Youth, women, people of lower socio-economic status, and those with chronic conditions or pre-existing mental health issues were particularly vulnerable<sup>84,85</sup>. In the UK, people living in deprived neighbourhoods, those shielding for health reasons, individuals from Black, Asian, and other minority ethnic backgrounds, and those with prior histories of mental illness were disproportionately affected<sup>86,87</sup>.

## *Gender and Mental Health Inequities*

The COVID-19 pandemic reinforced and reshaped gendered patterns of mental health, with many of these differences linked to the social and economic effects of public-health measures and policy responses during the crisis. Paper 1 of the Commission explored the differential impacts of the pandemic on mental health across genders and other population groups. Building on that work, this section focuses specifically 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 impact on population wellbeing.

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Women consistently reported higher levels of anxiety and depression<sup>88</sup>, alongside economic insecurity<sup>89</sup>, and the interplay of ethnicity and regional factors<sup>90</sup>. Increased caregiving burdens<sup>88</sup>, unpaid domestic work, and heightened risks of intimate partner violence during lockdowns compounded these challenges. Female healthcare workers, in low- and middle-income settings such as Peru, reported worse outcomes than their male counterparts<sup>91</sup>. More broadly, women were disproportionately exposed to burnout while simultaneously shouldering unpaid domestic labour and caregiving responsibilities<sup>91</sup>.

At the same time, men experienced increased depression, aggression, and anxiety, particularly in the context of job loss and economic hardship, as reported in Germany<sup>92</sup> and the Middle East<sup>93</sup>. Interestingly, evidence suggests that compliance with distancing measures reduced anxiety and depression among women but had little effect on men<sup>94</sup>. These gender-specific responses underscore the need for intentional policy design. Gender-responsive strategies, including expanded paid parental leave<sup>95</sup>, investment in IPV shelters<sup>96</sup>, and the scaling up of perinatal mental health services<sup>97</sup>, have proven effective in buffering gendered risks. Evidence shows that peer-delivered and task-shared models of perinatal mental health care are both effective and cost-efficient<sup>98</sup>. Together, these policies strengthen resilience and reduce long-term inequities in mental health outcomes.

## *Age-Specific Inequities*

Although older adults bore the highest mortality risk, they often reported lower levels of anxiety and depression than younger groups<sup>99</sup>, consistent with pre-pandemic resilience linked to life experience and coping resources<sup>100</sup>. By contrast, children, adolescents, and young adults experienced steep increases in depression, anxiety, and suicidal ideation, driven by disrupted education, social isolation, and uncertainty about the future<sup>101</sup>. Cross-national policy responses reflected this divide. For example, France's Chèque Psy programme provided university students with free therapy sessions<sup>102</sup>, while at least 26 U.S. states expanded school-based mental health provision, legislating for additional counselors,

tele-mental health services, and social-emotional learning curricula<sup>103</sup>. These examples demonstrate the value 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*

Building on findings from Paper 1 of the Commission, which showed that socioeconomic disadvantage heightened vulnerability to psychological distress during the pandemic, this section examines how social-protection policies mitigated these effects across different contexts. Across high-income settings, OECD member states, such as the United States, the United Kingdom, and Australia introduced social protection policies<sup>104</sup>. In the United Kingdom, the Coronavirus Job Retention Scheme (CJRS)—a national furlough programme providing wage subsidies to preserve employment—helped mitigate mental health harms<sup>105</sup>. In Australia, the JobKeeper wage-subsidy and enhanced income-support programmes helped cushion the mental health impact of job and income loss<sup>106</sup>. In the U.S., States with stronger and longer eviction moratorium protections had lower psychological distress among adults during the pandemic<sup>107</sup> and temporary expansion of the Child Tax Credit reduced child poverty to historic lows and alleviated parental stress<sup>108</sup>.

In Low and Middle Income Countries (LMICs), cash transfers in Kenya<sup>109</sup> and Latin America reduced stress and intimate partner violence<sup>110</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 Geographic Inequities*

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

In high-income countries, communities of colour experienced greater exposure to COVID-19, higher mortality, and fewer opportunities to access culturally responsive care<sup>111</sup>. Digital care models provided partial mitigation: Black and Latinx populations in the U.S. increased their engagement with tele-mental health services during the pandemic, suggesting potential to reduce disparities if digital divides are addressed<sup>112</sup>. Culturally grounded, community-led initiatives such as Uganda's Group Support Psychotherapy<sup>113</sup>, Zimbabwe's Friendship Bench<sup>114</sup> and India's national Kiran helpline<sup>115</sup> highlighted scalable, low-cost models to expand access 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>121</sup>, Australia's large-scale telehealth expansion<sup>122</sup>, and the U.S. relaxation of telepsychiatry regulations<sup>123</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>124</sup>. Nigeria scaled up telepsychiatry to ease service backlogs<sup>125</sup>, while in Angola, a provider-focused telemedicine programme identified both enabling factors (training, ethical frameworks) and constraints (legal and infrastructural gaps) for blended care<sup>126</sup>. In Uganda, Tele-Support Psychotherapy (TSP), delivered by mobile phone to young people with depression, demonstrated the feasibility and acceptability of culturally adapted digital psychotherapy in a low resource setting<sup>127</sup>.

At the global level, the WHO Guideline on Digital Interventions (2019)<sup>128</sup> and the WHO Global Strategy on Digital Health (2020–2025)<sup>129</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 by promoting equity-focused design, interoperability, and workforce capacity-building to ensure vulnerable populations in low-resource settings can benefit from these services. These experiences highlight both the potential and limitations of digital care, as reliance on online platforms risked deepening inequities in access to devices, connectivity, and digital literacy<sup>130</sup>. Evidence indicates that the most effective solutions were blended models, combining digital and in-person support tailored to user needs<sup>131</sup>. To ensure equity, sustained investments in broadband infrastructure, subsidised devices, and digital skills training will be critical.

## Policy Investments and Financing Strategies

The relationship between mental health and economic well-being 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>132</sup>. The pandemic intensified these dynamics, as rising infections and lockdowns disrupted employment and income stability, leading to widespread financial insecurity<sup>133</sup>. This negative cycle reduced overall economic well-being, undermined financial stability, and weakened the ability to meet essential needs.

## *Variation Between Countries*

In the United States, decreased employment and economic uncertainty doubled the prevalence of common mental disorders<sup>134</sup>, while spending and service utilization increased significantly among insured adults<sup>135 136</sup>. By contrast, in Hong Kong, higher rates of depression were observed but accompanied by a reduction in mental health service use, reflecting access barriers even in well-resourced settings<sup>137</sup>. These contrasting trends demonstrate how health system capacity and social protection mechanisms mediate the economic and mental health consequences of the pandemic.

Globally, the pandemic reshaped economies and exposed deep vulnerabilities<sup>138</sup>. High-income countries (HICs), including the United States, Germany, and Norway, were able to buffer shocks through stimulus packages, robust welfare systems, and sovereign wealth reserves<sup>139</sup>. These measures helped stabilize income levels, employment, and healthcare access, thereby limiting the rise in poverty and inequality. By contrast, low- and middle-income countries (LMICs), constrained by limited fiscal space, experienced sharp increases in poverty, unemployment, and food insecurity<sup>140</sup>. Consumer behaviour shifted universally toward higher savings and reduced discretionary spending. Yet while wealthier nations maintained buffers, LMICs struggled to meet essential needs, reinforcing global inequalities. These disparities highlight the critical role of fiscal capacity and social protection mechanisms in mitigating the mental health impact of economic crises.

### *Interventions*

Pharmaceutical and non-pharmaceutical interventions (NPIs) also shaped both economic and mental health outcomes. In high-transmission settings such as the United States, frequent screening and testing proved cost-effective<sup>141</sup>, while vaccination strategies that prioritized high-risk groups maximized monetary benefits and demonstrated particularly strong returns in contexts where weekly testing reduced spread<sup>142</sup>. Although therapeutic treatments remain essential for severe cases, they are less clearly cost-effective compared with preventive approaches, though combining strategies may enhance both economic and health outcomes. In China, strict NPIs such as isolation and quarantine were shown to be optimal for controlling transmission<sup>143-145</sup>, but also generated indirect economic and mental health costs<sup>147,148</sup>. Policies prioritizing layered NPIs, screening, vaccination, and personal protection, provided the highest net benefits and inform future strategies<sup>149</sup>.

Despite rising mental health needs, few studies have rigorously evaluated the cost-effectiveness of mental health interventions<sup>150</sup>, particularly for vulnerable groups<sup>151</sup>. Moreover, existing analyses rarely incorporate distributional equity, even though disproportionate impacts on marginalized populations are well documented<sup>152</sup>. Economic evaluations during the pandemic have remained heavily concentrated on NPIs, 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 a forward-looking research and investment agenda. 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>153</sup>; the United States launched the 988 Suicide & Crisis Lifeline in 2022<sup>154</sup>; the European Union introduced its Mental Health Initiative in 2023<sup>155</sup>; and WHO updated its Mental Health Action Plan (2021–2030) to incorporate pandemic lessons<sup>156</sup>. Likewise, Canada<sup>157</sup> and Australia<sup>158</sup> and 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>159</sup>. For example, abrupt reductions in U.S. funding have impeded WHO's ability to maintain essential child health programmes<sup>160</sup> and disrupted service continuity in low-resource settings<sup>161</sup>. Global health funding has hit a 15-

year low, with drastic cuts affecting aid for mental health programs<sup>162</sup>. These developments highlight the urgent need for sustainable financing mechanisms and protected investments in mental health to ensure that gains achieved during COVID-19 are not lost amid future global shocks.

### **Priority Evidence Gaps for Public Mental Health Policy Post-Covid-19**

The pandemic has exposed substantial evidence gaps that constrain governments' capacity 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**

A critical gap is the lack of longitudinal data capturing the long-term trajectories of mental health across diverse populations<sup>163</sup>. Research is especially needed on delayed and prolonged impacts of social isolation and the vulnerabilities of groups such as healthcare workers, children, and older adults<sup>164</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>165</sup>. Social isolation has been consistently associated with worsening anxiety and depression, particularly among older adults and marginalized groups<sup>166</sup>, while economic insecurity and job loss have been linked to depressive symptoms and suicidal ideation<sup>167</sup>. Yet the causal pathways, whether neurobiological, psychological, or social, remain poorly defined. Evidence in this area is critical for policies that expand social protection, strengthen unemployment and housing support, and promote age- and culture-sensitive interventions<sup>168</sup>.

#### *Interventions and Media*

Another major gap concerns the effectiveness, scalability, and cultural appropriateness of interventions. While peer-support models, resilience training, and digital platforms have shown promise, rigorous evaluations are needed to determine which interventions work best, for whom, and in which settings<sup>169</sup>. Policymakers must therefore prioritize investment in implementation research and comparative effectiveness trials to guide the integration of mental health services into health and social care systems, particularly in low- and middle-income countries.

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 potential benefits of digital engagement are underexplored<sup>170,171</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 harmonized 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>172</sup>.

Together, these gaps highlight the urgency of a coordinated research agenda that integrates longitudinal studies, mechanistic analyses, and intervention trials. Table 1 summarises the key domains where gaps are identified, the challenges exposed by COVID-19, and the key policy strategies to strengthen equitable and resilient mental health systems.

## **Conclusion**

The COVID-19 pandemic exposed deep mental health challenges and disparities, underscoring 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 able to reach vulnerable groups, while also emphasizing targeted support for high-risk groups such as healthcare workers to reduce burnout and facilitate recovery. The review calls for rigorous research into the long-term impacts of digital media, economic stress, and structural inequity, advocating inclusive, longitudinal studies to guide policymaking. In sum, this work charts a pathway toward resilient, equitable mental health systems built to protect population well-being in future crises.

## **Competing interests**

The authors declare no competing interests.

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## Panel 1: Methods

Multi-disciplinary writing groups, including lived-experience contributors, were formed to lead each section according to topic expertise. Contributors met biweekly online over three 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 Commission members.

A structured search of the literature (January 2020–December 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 Appendix 1. 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, multi-country analyses, and reports with direct implications for public health and policy.

While 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, while the Lancet Psychiatry editorial team provided advice on structure and integration of findings.

## **Panel 2: Expert-by-experience commentary on Nigeria**

COVID-19 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 resources. The government introduced a 24-hour mental health counselling hotline as a lifeline<sup>117</sup>, yet awareness 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. For example, the LEAD Community Foundation provided free psychosocial services and training to urban slum dwellers<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 PTSD<sup>119</sup>. Repurposing of mental health facilities as isolation centres further reduced service availability, while mask 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.

