



## **ISSUE BRIEF: ACCESSIBLE VERSION FOR PERSONS WITH PRINT DISABILITIES**

# **MENTAL HEALTH CONDITIONS AND TOBACCO USE**

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**Addressing the interconnected health burdens with disproportionate  
impacts on the vulnerable**

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### **Key messages:**

- Mental health conditions and tobacco use are closely linked, with a disproportionate impact on vulnerable populations. However, the two issues have often been addressed separately and without considering their intersectionality.
- Recognizing the link between mental health conditions and tobacco use creates opportunities for integrated, multisectoral approaches to address these two global human development issues of significant socioeconomic consequences. Collaborative efforts between tobacco control and mental health responses are necessary to address these complex issues effectively.
- Evidence has demonstrated that raising tobacco taxes contributes to an increase in government revenue. Additional revenues from increasing tobacco taxes could be allocated to specific tobacco prevention and cessation programmes dedicated to people with and vulnerable to mental health conditions.
- This issue brief emphasizes the significance of addressing tobacco use in preventing and improving mental health conditions, and vice versa.

## 1. Introduction

The relationship between mental health conditions and tobacco use is bi-directional and mutually reinforcing. Individuals with mental health conditions are more likely to smoke and less likely to quit. Conversely, tobacco use is linked to increased vulnerability to mental health conditions, exacerbated symptoms and suboptimal treatment outcomes.<sup>1,2</sup>

The world faces a concurrent or simultaneous burden of mental health conditions and tobacco use, especially among vulnerable populations. The concurrence of mental health conditions and tobacco use grew in scale and impact during the COVID-19 pandemic. However, the links and interactions between mental health conditions and tobacco use are often overlooked and underestimated, leaving vulnerable people behind.<sup>3</sup> This Issue Brief aims to shed light on the interconnectedness of mental health conditions and tobacco use. It also explores strategies for addressing the mental health-tobacco concurrence within and beyond the health sector.

## 2. Mental health

The World Health Organization's (WHO) *Mental Health Report 2022* shows that nearly 1 billion people suffer from mental health conditions.<sup>4</sup> Mental health conditions and associated disability, disease or death result from psychiatric disorders such as depression, anxiety, post-traumatic stress disorder, attention deficit-hyperactivity disorder, as well as from substance disorders such as addiction to tobacco, alcohol or drugs.<sup>5,6</sup>

Depression is a leading cause of disability, representing over 4 percent of the global disease burden.<sup>7</sup> By 2030, depression is projected to become the leading cause of disability worldwide.<sup>8</sup> People with severe mental health conditions such as major depression and schizophrenia are 40 to 60 percent more likely to die prematurely (before age 70), and die up to 20 years earlier compared to people without mental health conditions.<sup>9</sup>

Depression and anxiety disorder, the two most common mental health conditions, cost the world US\$1 trillion annually due to lost productivity alone.<sup>10</sup> *Prevention and Management of Mental Health Conditions in the*

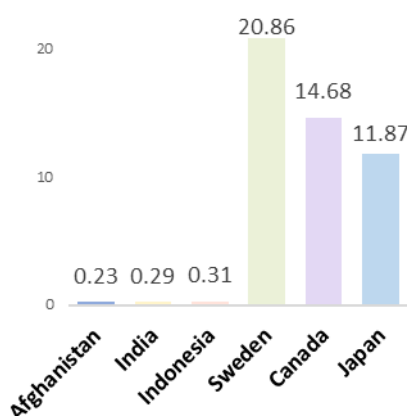
*Philippines: The Case for Investment*, published by WHO and UNDP, estimated the economic burden of mental health conditions in 2019 to be US\$1.37 billion a year, or 0.41 percent of the Philippines' GDP in 2018, due to health care expenditures and reduced productivity.<sup>11</sup> Another study examining mental health investment cases in seven low- and middle-income countries (LMICs) (Bangladesh, Kenya, Nepal, the Philippines, Uganda, Uzbekistan and Zimbabwe) estimated the economic impact of mental health conditions to be between 0.5 to 1.0 percent of GDP.<sup>12</sup>

The frequency and intensity of crises, such as the COVID-19 pandemic, as well as those caused by climate change or conflicts, are on the rise. They may increase mental health risks<sup>13</sup> and stress-induced vulnerability to tobacco and other substance use.<sup>14,15</sup>

The COVID-19 pandemic had a significant impact on global mental health in 2020. It caused an estimated 53.2 million additional cases of major depressive disorder and 76.2 million additional cases of anxiety disorders worldwide.<sup>16</sup>

Despite the high prevalence of mental health conditions that impose severe socioeconomic consequences, access to mental health treatment is severely limited, particularly in LMICs.<sup>17</sup> The number of psychiatrists is 0.23 per 100,000 population in Afghanistan, 0.29 in India, and 0.31 in Indonesia, compared to 20.86 in Sweden, 14.68 in Canada, and 11.87 in Japan (Figure 1).<sup>18</sup>

Figure 1. Number of psychiatrists per 100,000 population



Furthermore, many national health insurance schemes in LMICs do not cover mental health conditions adequately or at all. As a result, 43 and 40 percent of mental health services in the WHO Africa and South-East Asia regions, respectively, are financed by out-of-pocket payments,<sup>19</sup> potentially excluding vulnerable populations, such as poor people and youth, from accessing treatment.

### 3. Tobacco use

**TABLE 1. MENTAL HEALTH CONDITIONS AND TOBACCO USE**

	<b>MENTAL HEALTH</b> 	<b>TOBACCO USE</b> 
<b>DIRECTLY AFFECTED POPULATION</b>	<b>1</b> BILLION	<b>1.3</b> BILLION
<b>EARLY DEATH</b>	UP TO <b>20</b> YEARS	UP TO <b>10</b> YEARS
<b>LMIC PROPORTION</b>	<b>80</b> %	<b>80</b> %
<b>YEARLY ECONOMIC COST</b>	<b>1</b> TRILLION	<b>1.4</b> TRILLION
<b>SDG TARGET</b>	<b>3.4</b>	<b>3.A</b>

Tobacco use resembles mental health conditions in terms of its prevalence and impact (**Table 1**). Globally, 1.3 billion people use tobacco, including 13 percent of young people aged 15-24, or an estimated 155 million youths.<sup>20</sup>

Although the percentage of tobacco users in the global population has decreased in recent years, the number of tobacco users has increased due to population growth.<sup>21</sup>

Nearly 70 percent of the global population does not have access to comprehensive tobacco cessation treatment,<sup>22</sup> with even lesser access and affordability in LMICs.<sup>23</sup> For example, among the 15 WHO Eastern Mediterranean Region countries with legal access to nicotine replacement therapy (NRT) (Box 1),<sup>24</sup> only six countries, primarily

### BOX 1: WHAT IS NICOTINE REPLACEMENT THERAPY?

“Nicotine replacement therapy (NRT) is a medicine that is available as skin patches, chewing gum, nasal and oral sprays, inhalers, lozenges and tablets that deliver nicotine to the brain. The aim of NRT is to replace the nicotine that people who smoke usually get from cigarettes, so the urge to smoke is reduced and they can stop smoking altogether.”

high-income countries such as Bahrain and Saudi Arabia, fully cover the NRT cost by the national health insurance scheme.<sup>25</sup> In comparison, six other countries, including Afghanistan and Pakistan, do not cover the cost at all. This is despite NRT being included in the WHO Model Lists of Essential Medicines (EML), which serves as a reference for the National EML and the universal health coverage (UHC) benefit package.<sup>26</sup>

Tobacco use costs the world economy US\$1.4 trillion annually due to tobacco-related health expenditures and productivity losses.<sup>27</sup> *Investment Case for Tobacco Control in Myanmar: The Case for Investing in WHO FCTC Implementation* estimated the cost of tobacco use to reach US\$1.4 billion a year, or 3.3 percent of Myanmar’s 2016 GDP.<sup>28</sup>

## 4. Mental health conditions and tobacco use

In recognition of their extensive development impacts, world leaders included mental health (SDG 3.4) and tobacco (SDG 3.a) in the targets of the Sustainable Development Goals (SDGs). (Box 2)

### BOX 2: SDG 3.4 AND 3.A

**SDG 3.4:** By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

**SDG 3.a:** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in all countries, as appropriate

Apart from health and well-being (SDG 3), both mental health and tobacco relate to the SDGs broadly:<sup>29</sup> SDG 1 (reducing poverty); SDG 2 (improved nutrition); SDG 4 (inclusive and equitable quality education); SDG 5 (gender equality); SDG 8 (economic growth and decent work for all); SDG 10 (reducing inequality); SDG 13 (climate action); SDG 16 (peaceful and inclusive societies), among others. (For more details, see *The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development*.<sup>30</sup>)

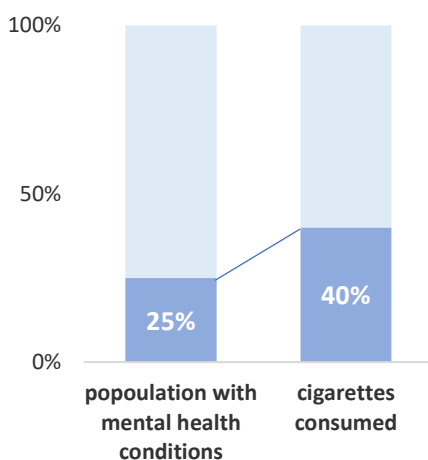
The 2018 Political Declaration of the third high-level meeting of the UN General Assembly on the prevention and control of non-communicable diseases (NCDs) expanded the scope of the global NCD agenda to include mental health conditions.<sup>31</sup> This was a positive step towards addressing mental health conditions and tobacco use. However, the document did not explicitly highlight their interconnections nor recommend an integrated approach.

According to the *Diagnostic and Statistical Manual of Mental Disorders, fifth edition* (DSM-5), tobacco addiction is defined as a “tobacco use disorder,” a mental health condition “assigned to individuals who are dependent on the

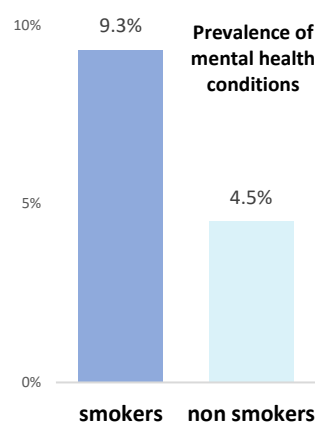
drug nicotine due to use of tobacco products.” People with mental health conditions are up to five times more likely to smoke.<sup>32</sup> They also smoke in larger quantities than those without mental health conditions.<sup>33,34</sup> Research found a 2.5-fold higher likelihood of cigarette use among adolescents aged 12-17 years who had experienced depression in the past year compared to their peers without mental health conditions.<sup>35</sup>

WHO estimates that smoking is mainly responsible for an up to 20-year shorter lifespan of people with severe mental health conditions, as smoking causes NCDs such as cancer and cardiovascular diseases.<sup>36</sup> Smoking prevalence is 70-85 percent among people with schizophrenia and 50-70 percent among people with bipolar disorders.<sup>37</sup> In the US, while people with mental health conditions only account for 25 percent as a share of the total population, they smoke 40 percent of cigarettes sold.<sup>38</sup> **(Figure 2)**

**Figure 2. Disproportionate cigarette consumption by people with mental health**



**Figure 3. Higher prevalence of mental health conditions among smokers than non-smokers in Australia**



On the other hand, research in Australia found that, compared to non-smokers, as a share of the total population, smokers were more than twice as likely to experience mental health conditions, including anxiety (9.3 percent for smokers and 4.5 percent for non-smokers) **(Figure 3)**.<sup>39</sup> Tobacco use also interferes with certain psychiatric medicines and reduces their effectiveness.<sup>40</sup>

Furthermore, exposure to second-hand smoke, often suffered by non-smoking women, co-workers and children, increases the risk of depressive symptoms.<sup>41</sup> There is growing evidence of a causal relationship (i.e., cause

and effect) between smoking and certain mental health conditions. On the one hand, smoking can act as a catalyst for conditions such as depression, while on the other, people with mental health conditions may find themselves drawn to tobacco use.<sup>42,43,44,45,46</sup> However, the causality is not yet conclusive due to conflicting findings.<sup>47,48</sup>

Smoking and mental health conditions are also closely associated in the context of sleep. A systematic assessment of results from multiple studies (or ‘meta-analysis’)<sup>49</sup> has demonstrated that smokers are almost 50 percent more likely than non-smokers to experience sleep disturbances such as insomnia, a symptom of nicotine withdrawal<sup>50</sup> that can make it difficult to fall or stay asleep. People with insomnia were 2.8 and 3.2 times more likely to develop depression and anxiety, respectively, according to another meta-analysis.<sup>51</sup> Moreover, exposure to second-hand smoke also increased an individual’s risk of sleep disturbances<sup>52</sup> and mental health conditions.<sup>53,54</sup>

Mental health conditions and tobacco use became even more interconnected during the COVID-19 pandemic – both mental health conditions and smoking can increase the risk of severe COVID-19 outcomes. Research on nearly 1.5 million people with COVID-19 found that pre-existing mental health conditions could double the risk of death and hospitalization.<sup>55</sup> Similarly, WHO estimates that smoking can increase the risk of severe COVID-19 disease and death by 40 to 50 percent.<sup>56</sup> **(Table 1)**

The COVID-19 pandemic and associated lockdowns led to an increase in the prevalence of mental health conditions<sup>57</sup> and an upsurge in tobacco use, with people starting, relapsing or increasing tobacco consumption.<sup>58,59,60</sup> According to a United Kingdom study that examined the links between smoking and its effects on mental health during the COVID-19 pandemic, 25.2 percent of smokers were found to have increased the number of cigarettes they smoked, while 20.2 percent smoked less.<sup>61</sup>



## 5. Impacts of tobacco use and cessation on mental health

The mood-elevating effect of nicotine in tobacco makes people with mental health conditions highly vulnerable to tobacco use. Many people, including youth, initiate tobacco use as a perceived means to relieve stress, anxiety or other mental health and substance use symptoms.<sup>62</sup> The tobacco industry has effectively cultivated and perpetuated the association between tobacco use and stress management.<sup>63,64</sup>

However, nicotine's mood-elevating effect is short-lived.<sup>65</sup> Repeated tobacco use eventually causes nicotine addiction. Once addicted, tobacco users mistakenly attribute the elevated mood and released stress to tobacco use, as tobacco can temporarily alleviate withdrawal symptoms, such as irritation and anxiety.<sup>66</sup>

Continued tobacco use aggravates mental health conditions, potentially triggering severe depression, worsening treatment outcomes,<sup>67</sup> and increasing the risk of psychiatric hospitalization, suicidal ideation<sup>68</sup> and relapse into drug and alcohol use.<sup>69</sup> Research in the United States of America reported that men who smoked for more than 40 years were 2.3 times more likely to commit suicide than those who smoked for less than 10 years, independent of age and other characteristics.<sup>70</sup> Mental health conditions also reduce the likelihood of successful tobacco cessation,<sup>71</sup> as does insomnia.<sup>72</sup>

On the other hand, evidence indicates that quitting smoking can lead to positive outcomes in psychiatric and substance use treatment and improved mental health conditions.<sup>73,74</sup> The benefits of smoking cessation include reduced anxiety, depression and stress;<sup>75,76</sup> reduced risk of suicide<sup>77</sup> and relapse to alcohol, drug and other substance use;<sup>78,79</sup> and improved quality of life.<sup>80</sup> As an illustration, a meta-analysis of 26 studies has shown that successfully quitting smoking can lead to a 37 percent reduction in anxiety, a 25 percent reduction in depression and a 27 percent reduction in stress, compared to continuing smokers.<sup>81</sup> Research has also found that smoking

cessation can be as effective or even more effective than antidepressants in reducing symptoms of depression and anxiety.<sup>82</sup>

Despite the evidence, there remains limited awareness regarding the influence of tobacco on mental health conditions. In a 2022 survey in the UK, less than 30 percent of the respondents knew smoking could cause depression and anxiety.<sup>83</sup>

## 6. Commonalities between mental health conditions and tobacco use

Mental health conditions and tobacco use share many characteristics.

### 6.1 Poverty

Mental health conditions and tobacco use are linked to higher poverty risks. Mental health conditions are more common among people with multidimensional poverty (**Box 3**),<sup>84</sup> characterized by low income, food insecurity, debts, poor housing and unemployment.<sup>85,86</sup>

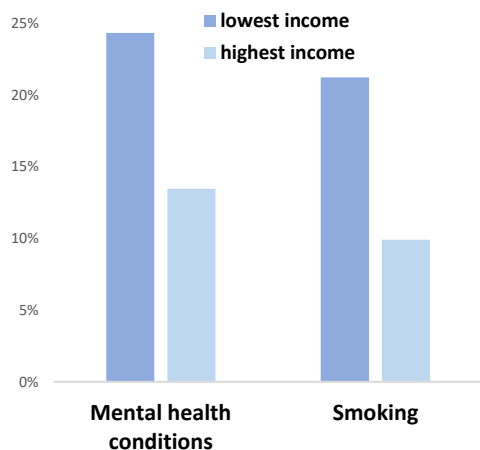
#### BOX 3: WHAT IS MULTIDIMENSIONAL POVERTY?

Multidimensional poverty considers “various deprivations experienced by people in their daily lives, including poor health, insufficient education and a low standard of living.”

Among the Organisation for Economic Co-operation and Development countries, individuals with mental health conditions experience unemployment rates up to seven times higher than those without.<sup>87</sup> A 2009 household survey conducted in the UK found that men in the lowest income quintile, or the poorest 20 percent, were 2.7 times more likely to experience mental health conditions than those in the highest income quintile.<sup>88</sup>

Similarly, people in the lowest income sextile, or the bottom 17 percent, were twice as likely to smoke cigarettes as those in the highest income sextile<sup>89</sup> (Figure 4).<sup>i</sup> Many

Figure 4. Highest mental health conditions and smoking in the lowest income group in England



other countries, including LMICs,<sup>90,91</sup> have observed similar relationships between lower socioeconomic status and higher co-occurrence of tobacco use and mental health conditions.<sup>92,93,94</sup>

High tobacco expenditures can divert limited resources away from investments that could keep or lift poor people out of poverty, such as for education, health, savings or nutrition.<sup>95,96,97</sup> In the UK, tobacco expenditure impoverishes half a million households every year.<sup>98</sup> Tobacco may account for up to 10 percent of the monthly household income among low-income people in some LMICs.<sup>99, 100, 101</sup> Median cigarette expenditure among smokers with schizophrenia was nearly 30 percent of their monthly income.<sup>102</sup> Moreover, research has shown a strong independent correlation between mental health conditions, including suicide attempts and tobacco use, and the risk of homelessness.<sup>103</sup>

These findings suggest that mental health conditions and tobacco use heighten poverty risks. People with lower income are more likely to suffer from both mental health conditions and tobacco use, often concurrently. On

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<sup>i</sup> This study used six income gradients. The smoking figures are for 2019, while the mental health figures are for 2007. See the references for more information.

the other hand, evidence demonstrates the effectiveness of mental health and tobacco control measures for preventing and mitigating poverty.

*The Bill China Cannot Afford: Health, Economic and Social Costs of China's Tobacco Epidemic*, published by WHO and UNDP, estimated that a 50 percent cigarette tax increase, one of the most effective tobacco reduction measures, could avert 8 million cases of impoverishment in China over 50 years.<sup>104</sup>

Similarly, the *Investment Case for Tobacco Control in Cambodia* projected that a cigarette tax increase (a 28 percent increase in the retail price) could avert nearly 17,000 annual cases of catastrophic health expenditures, with 53 percent occurring among the bottom 40 percent of the population.<sup>105</sup> Tobacco tax increases also bring the most significant decrease in tobacco use among the poorest population,<sup>106</sup> likely leading to improved mental health, financial, equity and other development benefits.

These findings underscore the importance of including both mental health and tobacco control measures in poverty mitigation strategies and integrating them into national anti-poverty, SDG and other development frameworks.

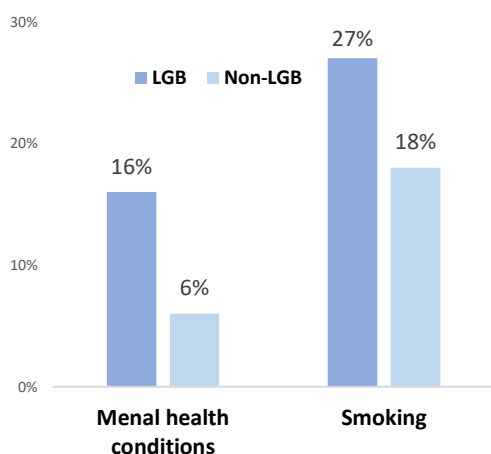
Poverty reduction can also be effective in reducing tobacco use. A study on child cash benefits and family expenditures found a significant drop in tobacco (and alcohol) consumption when child benefits were increased:<sup>107</sup> “It’s hard to say why an extra dollar would lead households to spend 6 and 7 cents less on cigarettes and booze, but one obvious possibility is that reducing a household’s financial stress reduces its need for stress relief.”<sup>108</sup> These findings highlight the interconnected nature of poverty, tobacco use and mental health, underscoring the need for an integrated approach.

## **6.2 Marginalized populations**

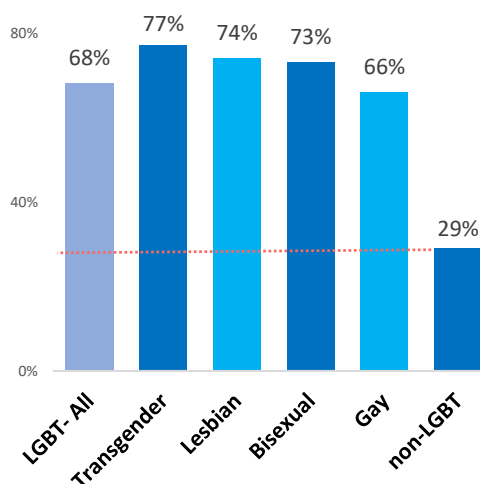
Mental health conditions and tobacco use are disproportionately prevalent among marginalized populations, including lesbian, gay, bisexual, transgender and intersex (LGBTI+) people<sup>109</sup> and persons with disabilities. A 2021 study in England found long-term mental health conditions in 16

percent of lesbian, gay and bisexual (LGB)<sup>ii</sup> adults compared to 6 percent in heterosexual adults (**Figure 5**).<sup>110</sup> LGBT adolescents presented a much higher level of suicidal thoughts (68 percent on average, up to 77 percent for transgender people) than heterosexual adolescents (29 percent) (**Figure 6**).<sup>111</sup>

**Figure 5. Higher mental health conditions and smoking in LGBT people**



**Figure 6. Higher suicidal thoughts in LGBT people than non-LGBT**



Attempted suicide was more than twice as common in gay and bisexual adolescents than in heterosexual adolescents in the US.<sup>112</sup> LGB adults also reported a higher prevalence of smoking compared to heterosexual adults (27 vs. 18 percent) (**Figure 5**) as well as hazardous alcohol use (32 vs. 24 percent).<sup>113</sup> Furthermore, transgender adolescents were four and three times more likely to use cigarettes and e-cigarettes, respectively, than their cisgender<sup>iii</sup> peers.<sup>114</sup>

Similarly, a 2020 study in Australia showed that adults with disabilities were four times more likely than those without disabilities to experience mental health conditions.<sup>115</sup> Persons with disabilities in England<sup>116</sup> and the US were 4 and 2.5 times more likely to report attempted suicide than those without disabilities. In the US, 27.8 percent of persons with disabilities smoked

<sup>ii</sup> This study only examined lesbian, gay and bisexual individuals.

<sup>iii</sup> “Cisgender is a term used to describe people whose sense of their own gender is aligned with the sex that they were assigned at birth.”. For more information, see UN Free & Equal, Definitions: <https://www.unfe.org/definitions/>

cigarettes, more than double the rate for persons without disabilities (13.4 percent).<sup>117</sup>

#### BOX 4: WHAT IS 'MINORITY STRESS'?

“People who are members of a group that is stigmatized by mainstream society may be more vulnerable to psychological distress known as minority stress... [P]eople experience minority stress in response to being treated with discrimination and prejudice. Many studies have shown that members of minority groups experience a high level of discrimination which causes physiological stress responses including symptoms like high blood pressure and anxiety.”

Persistent and intense stress, commonly referred to as 'minority stress' (**Box 4**),<sup>118</sup> can arise from various sources such as stigma, discrimination, social exclusion, poverty, violence and a lack of access to health care and other essential services. Such factors can stem from inequities, injustice and human rights violations and may increase the concurrent risk of mental health issues and tobacco use in marginalized populations. Additionally, individuals belonging to more than one marginalized communities such as LGBTI+ people with mental health conditions face compounding discrimination and exacerbating inequalities.

These hostile environments, in turn, drive or trap people in poverty through unemployment, under-employment, disability, illness or high spending on tobacco, alcohol or other harmful substances. Without interventions, the vicious cycle can continue throughout life, with a risk of intergenerational impacts such as maternal depression affecting a child's development.<sup>119,120,121</sup>

### **6.3 Tobacco industry interference**

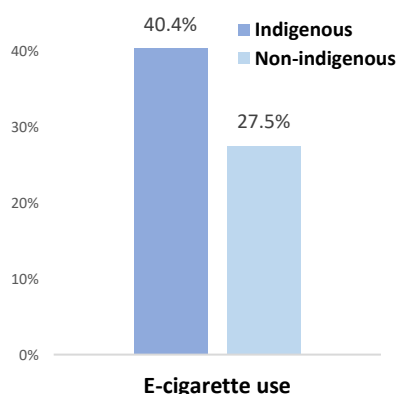
The tobacco industry uses targeted promotional strategies and has obstructed tobacco prevention and cessation efforts.<sup>122,123</sup> In particular, the industry has taken advantage of the high vulnerability of marginalized

communities, including poor people, LGBTI+ individuals, indigenous populations and people with mental health conditions.

For example, the tobacco industry has given free or discounted cigarettes to psychiatric hospitals as 'self-medication' for patients. It has funded research to promote the myth that tobacco cessation will exacerbate mental health conditions and blocked the adoption of smoke-free policies at psychiatric facilities.<sup>124,125,126,127</sup> In the US, the tobacco industry has also donated money, cigarettes or goods such as blankets with tobacco brand names to shelters for homeless people,<sup>128</sup> where 70 to 80 percent of residents smoke.<sup>129</sup>

The tobacco industry has targeted the LGBTI+ community by promoting their products as stress relievers, exploiting their experiences of 'minority stress' (Box 4).<sup>130</sup> LGBTI+ people are more likely to be exposed to tobacco industry marketing. For instance, e-cigarette advertisements on social media are twice as likely to be seen by LGBTI+ individuals compared to non-LGBTI+ individuals.<sup>131</sup>

**Figure 7. Higher e-cigarette use in indigenous high school students**



The tobacco industry has also taken advantage of the cultural heritage of indigenous populations, as well as the less regulated tobacco sales and lower tobacco tax rates on their reservations.<sup>132,133</sup> As a result, in 2020, American Indian and Alaska Native adults had the highest smoking rate of 27.1 percent, compared to the average rate of 12.6 percent for other ethnic and racial groups.<sup>134</sup> Additionally, e-cigarette use is much higher in American Indian/Alaska Native high school students (40.4 percent) compared to the average rate for high schoolers (27.5 percent) (Figure 7).<sup>135</sup>

## 7. Current responses to the global concurrence of mental health conditions and tobacco use

Despite the close association between mental health conditions and tobacco use, there has been a lack of integration in responses to these concurrent issues. Their interconnectedness has not been sufficiently addressed in the global and national policy arena. The lack of attention has hindered progress in effectively addressing the health and socioeconomic burdens associated with the concurrence of mental health conditions and tobacco use. About half of mental health and two-thirds of substance use treatment facilities in the US allow smoking on the premises, and less than half offer tobacco cessation treatments.<sup>136</sup> Several European countries exempt mental health facilities from smoke-free laws.<sup>137</sup> Despite the high concurrent presence of mental health conditions and tobacco use disorder, adolescent smokers who undergo mental health treatment hardly receive smoking cessation support.<sup>138</sup>

A lack of policy coherence, tobacco industry interference, and cessation challenges have contributed to the persistently high rates of tobacco use among people with mental health conditions, which have remained essentially unchanged for the last few decades.<sup>139</sup> In contrast, as more countries intensify implementing the WHO Framework Convention on Tobacco Control (WHO FCTC), tobacco use has continuously declined among people without mental health conditions.<sup>140,141</sup>

The growing discrepancy between the success of global tobacco control and the lack of progress in tobacco control among people with mental health conditions calls for greater policy attention and investments in tobacco prevention and cessation in people with mental health conditions. These individuals have been left behind and continue to be vulnerable.

WHO reports that only 23 countries (including 7 LMICs) offered comprehensive tobacco cessation services in 2018, covering just 32 percent of the world population.<sup>142</sup> Where tobacco cessation services exist, they are designed for the general population, often not reaching marginalized



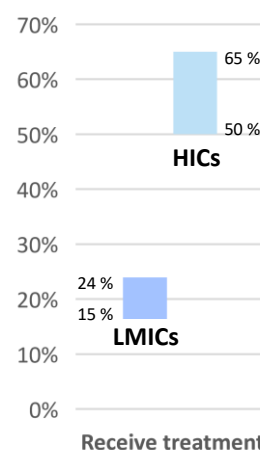
communities.<sup>143</sup> People with mental health conditions are often excluded from clinical trials on medicines for smoking cessation.<sup>144</sup>

Like other tobacco control measures of the WHO FCTC, tobacco cessation interventions are cost-effective. *Investment Case for Tobacco Control in Lao PDR: The Case for Scaling up WHO FCTC Implementation* found that the government would yield 11 times its investment in cessation interventions over 15 years.<sup>145</sup> Similarly, WHO estimated that an additional investment of just US\$1.68 per person in tobacco cessation over 10 years (2021-30) would achieve 152 million successful quitters and avert almost 3 million deaths globally.<sup>146</sup> Returns on investments in tobacco cessation would likely be considerably higher when taking into account the positive effects on mental health conditions and the associated socioeconomic benefits.

Mental health also receives a low priority despite its high and growing socioeconomic and health burdens. Globally, on average, only 2 percent of government health budgets are spent on mental health.<sup>147</sup> Low-income and high-income countries allocate less than 1 percent of the government health budget and health official development assistance (ODA), respectively, to mental health.<sup>148, 149, 150</sup> Under such circumstances, the proportion of mental health conditions in the global disability-adjusted life years increased from 3.1 percent in 1990 to 4.9 percent in 2019.<sup>151</sup>

As a result, only between 15 and 24 percent of people with severe mental health conditions in LMICs receive treatment (between 50 and 65 percent for high-income countries - HICs)<sup>152</sup> (Figure 8). In China, less than 10 percent of people with depression receive treatment.<sup>153</sup> These low treatment levels are not commensurate with the cost-effectiveness of mental health interventions. For example, basic psychosocial support with medication for depression can provide one year of healthy life with an investment as low as US\$100 in developing countries.<sup>154</sup>

Figure 8. Only small proportions of people with mental health conditions receive treatment in LMICs



There have been efforts to address the intersection of smoking and mental health in an integrated manner. Australia's state- and local-level initiatives, such as the Addressing Smoking in Mental Health Project,<sup>155</sup> Smoke Free Mental Health Project<sup>156</sup> and Tackling Tobacco Mental Health Project,<sup>157</sup> provide health professionals and community stakeholders with training and tools to support smoking cessation among people with mental health conditions. The UK has made progress in establishing tobacco cessation support for people with mental health conditions at both institutional and community settings.<sup>158</sup> There is a lack of comprehensive data regarding the existence and scope of integrated tobacco control and mental health responses in LMICs. More examples of integrated approaches should be developed, documented and shared to improve awareness, support and replication.

## **8. Recommendations**

### ***8.1 Integrate mental health and tobacco control***

The close relationship between mental health conditions and tobacco use demands an integrated approach that prioritizes prevention at the primary health care level. Such an approach could unlock new possibilities and broaden the scope of partners and entry points for addressing both as a development issue.

For example, tobacco prevention education in schools, policy advocacy and health warnings on cigarette packs typically focus on the physical health risks of tobacco use. However, these efforts should also incorporate lesser-known mental health risks associated with tobacco use and second-hand smoke exposure.<sup>159</sup> Mental health professionals could also be informed of WHO FCTC priority actions. Similarly, stakeholders in tobacco control could gain valuable insights by understanding the distinct vulnerabilities and obstacles that individuals with mental health conditions encounter in relation to tobacco use and cessation.

The prevention and treatment of mental health conditions should incorporate assessments for tobacco use and evidence-informed education highlighting the advantages of quitting tobacco to enhance treatment

outcomes and reduce relapse risks.<sup>160</sup> Proactive referrals to tobacco cessation support should be a key component of these efforts.<sup>161</sup> Clinical trials on pharmacotherapy treatments for tobacco cessation should actively involve people with mental health conditions who use tobacco, as they would be among the primary beneficiaries of such treatments.

Professionals in mental health, tobacco control and development need to be aware of the interrelated impacts of mental health conditions, tobacco use and poverty/vulnerabilities. Collaborative efforts across disciplines are essential at the policy, operational and community levels. To foster collaboration, it is essential to engage mental health professionals in tobacco control dialogue and tobacco control specialists in mental health dialogue. A national task force comprised of representatives from tobacco control, mental health, poverty reduction and respective community representatives could foster a multisectoral platform for dialogue and collaboration.

Integrated responses to co-occurring diseases such as tuberculosis and diabetes,<sup>162</sup> as well as HIV and NCDs,<sup>163,164</sup> have already demonstrated positive results, including greater efficiency. Given the close association between tobacco use and mental health conditions, an integrated approach holds high potential for synergistic success. In the UK, psychiatrists are urging the government to address the link between smoking and mental health.<sup>165</sup>

## ***8.2 Increase tobacco excise taxes***

Research indicates that a significant increase in tobacco excise tax is the most effective measure for reducing tobacco use.<sup>166,167</sup> Due to the well-established link between tobacco cessation and enhanced mental health, raising tobacco excise taxes is likely to benefit not only individuals with mental health conditions who use tobacco but also their families, friends and coworkers exposed to second-hand smoke.

Including the additional benefits of improved mental health in projections of tobacco excise tax increases could further enhance cost-effectiveness, value and public support for such policies. Policy advocacy supporting

tobacco excise tax increases should emphasize these often overlooked yet substantial mental health advantages, in addition to improvements in physical health, government revenue, economic equity and sustainable development.

A portion of the increased tobacco tax revenue could be allocated to incorporating tobacco cessation, mental health prevention and treatment as part of overall public health promotion. The public, including tobacco users, is more likely to support tobacco tax increases when they learn that the tax revenue will be used transparently to improve health.<sup>168,169</sup>

### ***8.3 Position mental health and tobacco control measures as anti-poverty strategies***

Mental health conditions and tobacco use are strongly associated with poverty. As discussed earlier, implementing mental health and tobacco control measures can help prevent and reduce poverty. Lower-income individuals are more likely to experience mental health conditions and tobacco use, often concurrently. As a result, implementing mental health and tobacco control measures can disproportionately benefit the lives of people living in poverty or near poverty.

Given these and other related findings, it is important to position both mental health and tobacco control measures as integral components of broader poverty mitigation strategies and integrate them into national anti-poverty and sustainable development efforts. Additionally, further research is needed to explore the impact of poverty reduction measures, such as cash transfers, on mental health conditions and tobacco use.

### ***8.4 Empower and engage affected and vulnerable communities***

The design and implementation of interventions should involve active participation from tobacco users with mental health conditions and vulnerable and marginalized communities impacted by both challenges. To ensure interventions align with each community's unique needs, circumstances and culture, community-specific interventions should be led by affected community members.

Article 4.2c of the WHO FCTC recognizes:

*“the need to take measures to promote the participation of indigenous individuals and communities in the development, implementation and evaluation of tobacco control programmes that are socially and culturally appropriate to their needs and perspectives.”*

The same principle should apply to other marginalized and vulnerable populations, including people with mental health conditions.

### **8.5 Include treatment of mental health conditions and tobacco use disorder in the basic benefit package of UHC**

Providing free or affordable mental health and tobacco cessation treatment as part of the basic UHC benefit package would benefit millions. This rights-based approach would disproportionately benefit disadvantaged communities. It would also contribute to positive SDG outcomes, including enhanced labour productivity, economic growth, reduced preventable expenditures at national, local and household levels, poverty alleviation, environmental protection, women's empowerment and an improved quality of life for millions.

As many countries pursue UHC as part of the SDGs effort, it is vital to proactively include these two cost-effective and essential interventions into UHC. The strategic use of increased government revenues from increased tobacco taxes could provide a sustainable financing source<sup>170</sup> for mental health and tobacco cessation services, which are often underfunded. Additionally, this could incentivize the growth of health professionals in these fields, especially in LMICs where they are lacking.

### **8.6 Prevent tobacco industry interference**

Countries need robust governance systems to prevent tobacco industry interference. The tobacco industry has consistently and significantly invested in associating tobacco use with mental well-being and stress relief.<sup>171</sup> They target vulnerable communities, including those with low incomes, ethnic/racial minorities, and the LGBTI+ community, while also obstructing tobacco control efforts. To address this issue, the WHO FCTC

mandates the protection of tobacco control policies from industry interference (Article 5. 3) **(Box 5)**.

### **BOX 5: WHO FCTC ARTICLE 5.3**

“In setting and implementing their public health policies with respect to tobacco control, Parties shall act to protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law.”

Some countries, such as Australia<sup>172</sup> and the Philippines,<sup>173</sup> have established a robust system with a code of conduct to prevent non-transparent and unnecessary interactions between public servants across all government sectors and the tobacco industry. With this system in place, the Philippines has increased tobacco taxes successfully<sup>174,175</sup> and substantially over the past decade despite intense opposition from the tobacco industry. The Philippine government has leveraged the additional tobacco revenues to fund and expand its universal health coverage and enroll poor and vulnerable people. This move has reduced tobacco use and significant socioeconomic losses for years to come,<sup>176</sup> which might have contributed to improving mental health conditions among tobacco users. The pro-poor policies have shown considerable positive impact.<sup>177</sup>

UNDP and the Secretariat of the WHO FCTC developed a model code of conduct against tobacco industry interference covering all government sectors.<sup>178</sup>

### **8.7 Strengthen data**

Data are scarce on the concomitant impact of and interplay among mental health conditions, tobacco use and economic and development effects, particularly regarding LMICs and marginalized communities.<sup>179</sup> To improve health equity and provide greater policy attention and resources to marginalized communities, it is essential to have robust evidence, including the cost-effectiveness of interventions and the returns on investments. This will allow for informed responses that are backed by data.

Integrating questions related to mental health and tobacco use into research and surveys on tobacco use and mental health, respectively, as well as on vulnerable populations, presents a strategic approach to enhancing data availability. As both mental health and tobacco use are part of the SDGs, the scope of SDG monitoring on both issues should include indicators disaggregated by the marginalized community where appropriate. Community engagement is also vital to ensure sensitivity, acceptability and ownership of such research and data.

### ***8.8 De-stigmatize and empower people with mental health conditions and tobacco use***

Individuals with mental health conditions, tobacco use or other substance use disorders, particularly those in marginalized communities, often encounter pervasive stigma. Some may even face double- or multiple-stigmatization due to comorbidities, socioeconomic status, sexual orientation and gender identity, race, ethnicity or disability, exacerbating their challenges. Stigma disempowers and isolates individuals, hindering them from seeking help and making it challenging for policy action to achieve its intended effects.

While some tobacco users may react to stigma as a motivation for cessation,<sup>180</sup> stigma can also make quitting difficult or unlikely for others.<sup>181, 182</sup> “[S]tigmatizing smoking will not ultimately help to reduce smoking prevalence amongst disadvantaged smokers – who now represent the majority of tobacco users. Rather, it is likely to exacerbate health-related inequalities by limiting smokers’ access to health care and inhibiting smoking cessation efforts in primary care settings.”<sup>183</sup>

The 2022 Lancet Commission on ending stigma and discrimination in mental health highlighted the pressing need to address the issue of stigma and discrimination in mental health:

“It is time to end all forms of stigma and discrimination against people with mental health conditions, for whom there is a double jeopardy: the impact of the primary condition itself and the severe consequences of stigma.”<sup>184</sup>

The 2020 UN Human Rights Council resolution on mental health and human rights also highlighted the issue:

*“Deeply concerned* that persons with mental health conditions or psychosocial disabilities, including persons using mental health services, continue to be subject to, inter alia, widespread, multiple, intersecting and aggravated discrimination, stigma, stereotypes, prejudice, violence, abuse, social exclusion and segregation, unlawful and arbitrary deprivation of liberty and institutionalization, overmedicalization and treatment practices that fail to respect their autonomy, will and preferences.”<sup>185</sup>

Thus, it is essential to give priority to the principle of 'do no harm' and provide care and support that empower individuals dealing with comorbidities of mental health conditions and tobacco use. These individuals frequently grapple with multiple mental health challenges simultaneously, which are often beyond their control and can impose substantial socioeconomic hardships.

A good starting point may be to use appropriate language in policy and public discussions, including social and news media, to demonstrate respect and recognize individuals as holders of all human rights and agents of change. For example, terms such as 'people with mental health conditions' should be used instead of stigmatizing language such as 'mentally ill,' 'mental,' or 'psycho.' Similarly, the terms 'cigarette smokers' or 'tobacco users' should be used instead of stigmatizing terms such as 'nicotine addicts' or 'lepers,'<sup>186</sup> among others.

Another approach is to convey messages opposing tobacco products, pro-tobacco policies and industry interference without stigmatizing individuals who use these harmful products due to their highly addictive nature and industry tactics. Engaging affected populations in direct dialogues and policy discussions can also help to dispel misconceptions and inform policymakers about their realities, needs and practical solutions.

It is essential to simultaneously address other social drivers of stigma and discrimination against marginalized communities to reduce socioeconomic



inequities and minority stress. For instance, this may include revising laws and policies that criminalize same-sex relationships, endorse discriminatory health care or employment practices against tobacco users or persons with disabilities. It may also involve addressing the commercial exploitation of less-stringent tobacco regulatory environments and indigenous tribal cultures.

## 9. Conclusion

Mental health conditions and tobacco use are closely linked and mutually reinforcing in many ways, sharing similar causes, attributes and consequences for human development. Each affecting over a billion people globally, the combination of mental health conditions and tobacco use imposes enormous health, economic and development costs on individuals, families and countries. Discriminatory social norms and practices further compound the impact of mental health conditions and tobacco use on vulnerable populations, who are often targeted by the tobacco industry.

The concurrence of mental health conditions and tobacco use is a growing global concern that causes heightened anxiety and insecurity, hampering sustainable human development. It is imperative that greater political, policy and public attention and action be given to this issue. This Issue Brief aims to contribute to this call.

An integrated, multi-sectoral approach is essential to effectively address the complex and intertwined issues of mental health conditions and tobacco use. This approach should involve multiple stakeholders, including health and mental health services, tobacco control programmes, community-based organizations, civil society and individuals affected by these issues.

Furthermore, sustainable and rights-based responses should be central to this approach. This involves ensuring that interventions are not only effective in addressing mental health and tobacco use but also promote human rights, social justice and equity. Investment in mental health and tobacco cessation resources, including ODA, UHC and human resources, which could be bolstered by increased tobacco tax revenue, is also critical to support and sustain these efforts.

The approach taken by countries in addressing the concurrence of mental health conditions and tobacco use will significantly impact their advancement toward achieving the SDGs and the principles of ‘leaving no one behind’ and ‘reaching the furthest behind first.’

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