

## Further Analysis of Mental Health Data from Nepal Demographic and Health Survey 2022

According to the World Health Organization, mental health is a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community. Throughout our lives, multiple individual, social and structural determinants may combine to protect or undermine our mental health and shift our position on the mental health continuum. To measure these determinants, the Nepal Demographic and Health Survey 2022 included a module on mental health. The module comprised of two commonly used tools to screen for symptoms of anxiety and depression, along with questions on care seeking and treatment. Symptoms of anxiety were assessed using the Generalized Anxiety Disorder 7 (GAD-7) scale, and symptoms of depression were assessed using nine items from the Patient Health Questionnaire (PHQ-9).

HERD International used this data, as well as comparison of related literature, to prepare these Insights. The concentration curve below was created using the R software, with wealth index as a ranking variable and mental health as the outcome. The odds ratio was derived using a Multivariable Binary Logistic Regression model for a binary anxiety or depression outcome.



### Determinants of mental well-being

#### Social and Environmental Factors

- Inequality, and violence
- Environmental deprivation
- Safe neighbourhoods and community cohesion

#### Lifestage and Development Factors

- Early childhood experiences (e.g., harsh parenting, physical punishment)
- Bullying and social interactions
- Access to quality education

#### Individual Factors

- Psychological traits (e.g., emotional skills)
- Biological influences (e.g., genetics)
- Substance use

#### Global and Crisis-related Factors

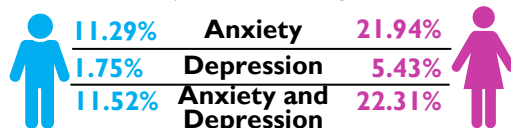
- Disease outbreaks and humanitarian emergencies
- Forced displacement and geopolitical instability
- Climate change and environmental threats

#### Structural and Economic Factors

- Poverty, employment and decent work opportunities
- Economic downturns and financial instability
- Healthcare and social support systems

### Distribution of anxiety and/or depression by gender

About one in ten men and one in five women suffer from mental health problems. Both anxiety and depression are more prevalent among women than men



#### Anxiety or depression in men and women:

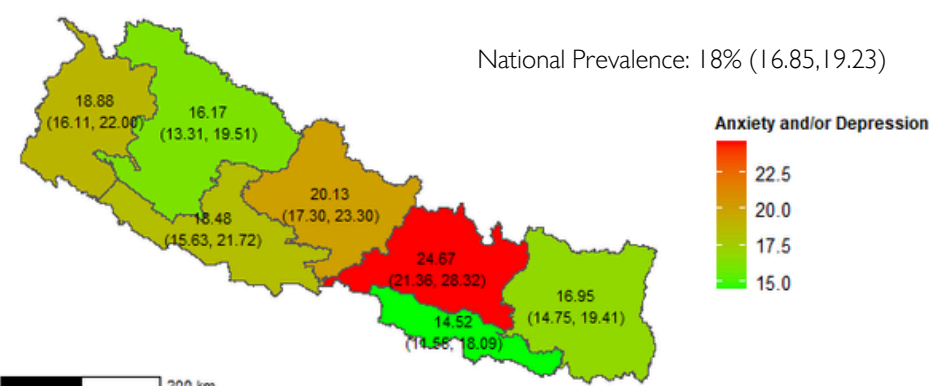
Adolescent girls aged 15-19 years (18%) report anxiety more than adolescent boys (10%). The same is true for depression (5% vs 2%). Similar trends persist in adult women and men aged 20 or above (23% vs. 12% for anxiety, 6% vs. 2% for depression).

**Diagnosis and care seeking:** Only 4% women and 1% men self-reported anxiety while 3% women and 1.5% men self-reported depression. Just 19% of women and 13% of men with recent symptoms of anxiety or depression sought help.

**Treatment uptake:** Among women who had a score of 6 or more on GAD-7, 3% took medicine and 4% received counseling in the 2 weeks preceding the survey. Seven percent of women who had a score of 10 or more on the PHQ-9 took medicine and 9% received counseling in the 2 weeks preceding the survey. Similarly, 3% each of men with a GAD-7 score of 6 or more took medicine and received counseling, while 9% with a PHQ-9 score of 10 or more took medicine and 6% received counseling.

### Province-wise prevalence of anxiety and/or depression

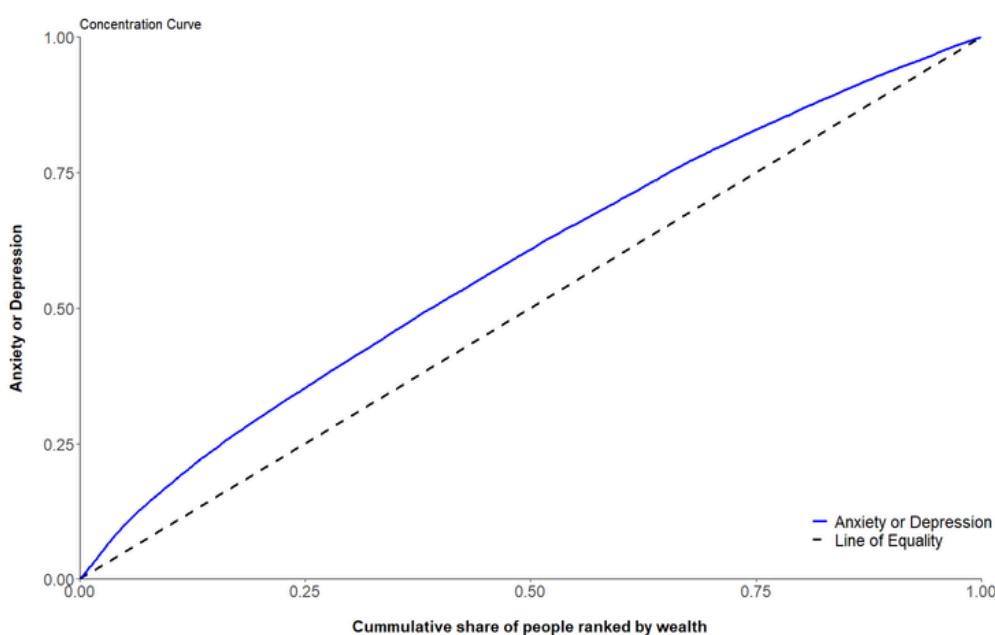
percent of total population (with Confidence Interval at 95%)



### Equity analysis of mental health outcomes

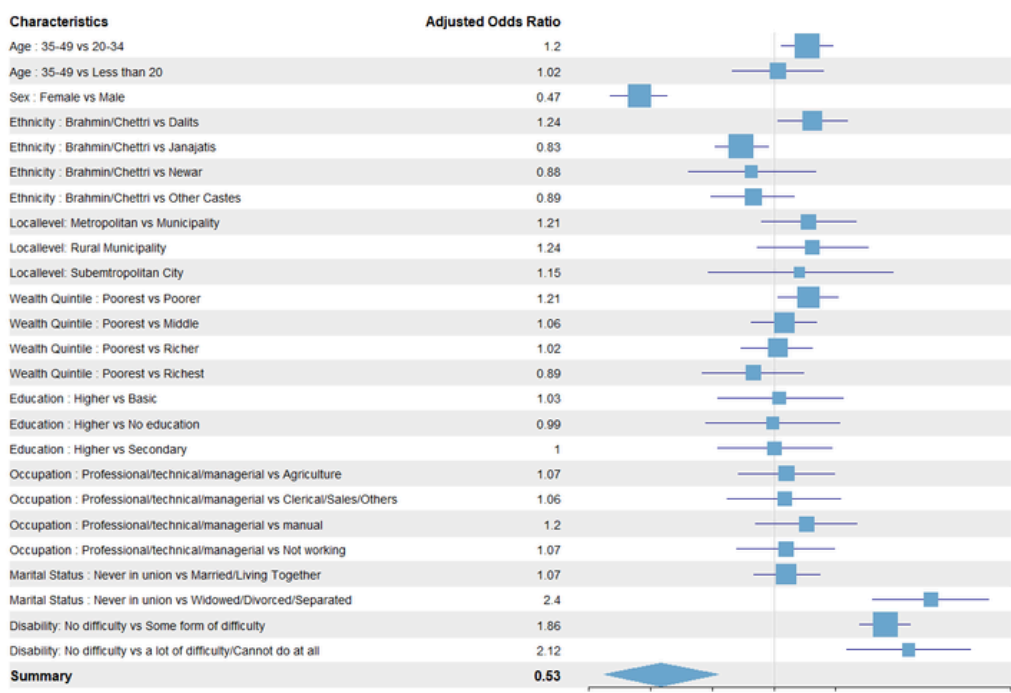
A **concentration curve** is a graphical representation used in economics and public health to assess inequality in resource or outcome distribution. It plots the cumulative percentage of a population ranked by wealth (x-axis) against the cumulative percentage of mental health outcomes (y-axis).

- Line of equality (45° line):** A perfectly equal distribution follows this diagonal line, where each percentage of the population by wealth holds an equal percentage of the outcomes.
- Deviations from equality:** The further the curve is from the diagonal, the greater the inequality. A highly curved line in above the line of equity indicates concentration among a poorer portion of the population.
- Concentration index:** The area between the concentration curve and the line of equality quantifies inequality.



- **Distribution of mental health outcomes:** the blue curve representing anxiety and/or depression lies above the line of equality, indicating that mental health issues are more prevalent among lower-income individuals.

### Factors associated with anxiety and/or depression



#### Association between sex, marital status, and mental health outcomes:

Males have significantly lower chances of ever showing symptoms of anxiety or depression when compared to females, while widowed, divorced, or separated individuals have much higher chances of displaying symptoms compared to those never in union.

**Association with disability:** Individuals with some difficulty and those with a lot of difficulty or inability have significantly higher chances of showing symptoms when compared to those with no difficulty.

#### Association with ethnicity and wealth:

Dalits have a higher chance of showing symptoms when compared to the Brahmin/Chettri group, while Janajatis have lower chances. Additionally, poorer individuals are more likely to show symptoms that those belonging to the poorest quintile.

### Key Messages

- Depression or anxiety disorders are among the most common mental health conditions. These conditions tend to affect women more than men, and the poorest more than the richest populations.
- Despite having the most readily available resources for mental health care, Bagmati Province has the highest rates of anxiety and/or depression.
- Mental health issues are often stigmatized, leading to under-reporting, reluctance to seek professional help, and low rates of adherence to treatment. It is quite likely that actual rates of anxiety or depression are much higher than those reported in the Nepal Demographic and Health Survey 2022.
- Mental health disorders can be debilitating and can lead to a range of other health issues. It is necessary to further analyze the burden of mental health conditions to continually highlight the need for increased investment to strengthen the mental health services in Nepal.