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The Impact of GNI Per Capita on the Prevalence and Incidence of Anxiety and Depressive Disorders

(A Global Analysis Using GBD 2023 Data)

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Abstract. Mental health disorders, particularly depression and anxiety, remain major contributors to the global burden of disease and disability. Socioeconomic inequality, including differences in Gross National Income (GNI) per capita, is considered an important factor influencing mental health outcomes. This study aimed to analyze the relationship between GNI per capita and the prevalence of depression and anxiety disorders globally using data from the Global Burden of Disease (GBD) 2023 database. A descriptive ecological study design was conducted using secondary data from 187 countries and regions. Data were analyzed using descriptive statistics, Spearman correlation tests, and regional comparative analysis with ANOVA. The results showed substantial disparities in mental health burden and income distribution across regions. Africa had the highest average prevalence of depression, while Asia showed the greatest variability in anxiety disorders. A significant negative correlation was found between depression prevalence and income levels ($r = -0.213$; $p = 0.003$), indicating higher depression rates in lower-income countries. However, anxiety showed a weak and insignificant relationship with income ($r = -0.079$; $p = 0.281$). These findings emphasize the need to reduce socioeconomic inequalities and strengthen mental health systems through integrated healthcare services and multisectoral policies.

Keywords: Anxiety; Depression; Global Burden; National Income; Socioeconomic Disparities.

1. INTRODUCTION

Mental health disorders, particularly depression and anxiety, have emerged as major contributors to the global disease burden in the 21st century. According to recent estimates from the Global Burden of Disease (GBD), over 280 million people globally live with depression, while approximately 300 million individuals experience anxiety disorders, making them two of the most prevalent mental health conditions worldwide (Santomauro, 2021). These disorders consistently rank as the leading causes of years lived with disability (YLDs), reflecting their long-term impact on individual functioning, psychosocial well-being, and the productive capacity of populations. This global burden indicates that mental health disorders are no longer merely individual clinical issues but have evolved into public health challenges that significantly impact social and economic development (Liu *et al.*, 2024). The global trend has shown a steady increase in the prevalence of depression and anxiety over the past two decades, with a sharp acceleration following the COVID-19 pandemic. The GBD reports a significant rise in mental health disorders associated with economic stress, social isolation, job insecurity, and disruptions to healthcare systems. This increase has not been confined to low-

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and middle-income countries but has also affected high-income nations, highlighting that mental health disorders transcend borders and levels of development. These trends underline the urgency of integrating mental health into the global health agenda and non-communicable disease surveillance systems (Santomauro, 2021).

Although mental health disorders are a global issue, the burden of depression and anxiety shows significant regional disparities. Countries and regions with limited healthcare resources tend to experience higher prevalence and limited access to adequate mental health services. The GBD analysis indicates that regions in Africa and South Asia bear a relatively higher burden of disability due to depression, while countries in Europe and the Americas show high levels of anxiety but with better healthcare capacities. These regional disparities reflect structural differences in healthcare systems, social protection, and macroeconomic conditions, which collectively influence the risks and outcomes of mental health disorders (Fan *et al.*, 2025). Income and socioeconomic conditions are key determinants shaping the global distribution of mental health disorders. Epidemiological evidence shows that individuals and populations with lower income are at higher risk of experiencing depression and anxiety due to chronic stress, economic insecurity, and limited access to healthcare services. Income inequality between regions and countries exacerbates the health burden, with countries with lower gross national income (GNI) tending to face higher prevalence and weaker health system responses. Thus, mental health disorders are not just a health issue but a reflection of global social and economic injustices (Patel *et al.*, 2018).

While existing literature has documented the high prevalence of depression and anxiety, there remains a significant research gap in understanding the empirical relationship between macroeconomic indicators, particularly income, and the burden of mental disorders across regions(Tao, 2025). Most studies focus on country-specific or individual contexts, and comparative analysis based on global data is still limited. Therefore, this study, which uses GBD data to analyze the relationship between depression, anxiety, and income on a global scale, is important in providing stronger scientific evidence for the formulation of more equitable and socially determined mental health policies (Arias and Saxena, 2022).

2. RESEARCH METHOD

Research Design

This study uses a descriptive ecological research design, utilizing secondary data from the Global Burden of Disease (GBD) database. The design was chosen due to its capacity to analyze the global prevalence of depression and anxiety, comparing these conditions across

various income groups and regions. The GBD database provides reliable, standardized health data across a wide range of countries, allowing for a comprehensive analysis of global trends in mental health disorders.

Settings

The data utilized in this study comes from the Global Burden of Disease database, which provides health statistics on depression and anxiety across a global spectrum. These statistics are gathered from various countries and regions worldwide, representing different income levels and health systems. The study settings are therefore global, with a focus on the prevalence data of depression and anxiety.

Time Frame

The data analyzed in this study is sourced from the 2023 release of the Global Burden of Disease dataset, which offers the most current estimates for the prevalence of depression and anxiety worldwide. This allows the study to capture the most recent trends and developments in mental health issues across different regions.

Variables

The primary variables analyzed in this study are: Prevalence of Depression: The number of cases of depression per 100,000 people, adjusted for age, in different countries and regions. Prevalence of Anxiety: The number of cases of anxiety per 100,000 people, adjusted for age, across various global regions. Secondary variables related to these include: Income Group: Countries are classified based on their Gross National Income (GNI) per capita, which serves as an indicator of the socioeconomic status of the population.

Population and Samples

The population in this study consists of all countries and regions included in the Global Burden of Disease database for the year 2023. The sample is based on the data available for the prevalence of depression and anxiety across different countries and regions, focusing on the global distribution and socioeconomic factors associated with these mental health conditions.

Sampling

This study uses secondary data from the GBD database, which includes global estimates on the prevalence of depression and anxiety. Data extraction does not involve primary data collection but rather pulls from comprehensive, globally standardized datasets. The sampling unit is the country or region, with the prevalence of depression and anxiety measured for various populations.

Instruments

The primary instrument used in this study is the Global Burden of Disease database, which provides standardized prevalence data for depression and anxiety. The data was accessed via the GBD Results Tool, allowing for the extraction of specific indicators, including the prevalence rates of these mental health disorders adjusted for age across various regions and income groups.

Data Analysis

Data analysis will be conducted using statistical software (R version 4.0.3). Descriptive statistics will be employed to summarize the prevalence of depression and anxiety globally, focusing on the differences between regions and income groups. The analysis will involve correlation analysis to assess the relationship between the prevalence of these mental health conditions and socioeconomic factors, specifically GNI per capita. The study will also visualize the data using global mapping tools, such as Datawrapper, to show the distribution of depression and anxiety prevalence by region and income level.

Ethical Clearance

Since this study uses publicly available, anonymized secondary data from the Global Burden of Disease database, ethical clearance is not required. The data is anonymized, and no personal information is used in the analysis. The research follows ethical guidelines for secondary data analysis, ensuring the responsible use of data that is already publicly available and non-identifiable. By using GBD data, this study aims to provide a comprehensive analysis of the global burden of depression and anxiety, focusing on prevalence across regions and the socioeconomic determinants influencing mental health outcomes.

3. RESULT AND DISCUSSION

Result

This Study analyzed the prevalence of depression and anxiety, alongside income levels, across different regions based on data from the Global Burden of Disease (GBD) database. The analysis was conducted using secondary data from 187 respondents. The findings reveal substantial variation in the prevalence of both mental health disorders and income levels across different regions.

Table 1. Descriptive statistics table The Impact of GNI per Capita on the Prevalence and Incidence of Anxiety and Depressive Disorders: A Global Analysis Using GBD 2023 Data.

	N	Min	Max	Mean	Std. Dev
Depressive	187	1,056	8,718	5,07184	1,165329
Anxiety	187	1,021	2561,000	19,4518	186,868648
Income	187	688,34	112710,0	24049,8	24198,83542
Valid N	187				

The prevalence of depression showed a range from a minimum score of 1.056 to a maximum score of 8.718, with a mean score of 5.07184. The standard deviation was 1.165329, indicating moderate variation in depression scores across respondents. The skewness of 0.337 suggests a slight rightward distribution, meaning more respondents had lower depression scores. The relatively low variability in depression suggests that most respondents exhibited moderate depression levels, with fewer extreme cases. The prevalence of anxiety exhibited extreme variation, with a minimum value of 1.021 and an extraordinarily high maximum value of 2,561,000. The mean anxiety score was 19.4518, with a very high standard deviation of 186.868648.

This large standard deviation indicates significant variation in anxiety scores, with some respondents experiencing very high anxiety levels. The skewness of 13.672 shows a strong rightward bias, indicating that the data is heavily influenced by a small number of extremely high anxiety scores. This warrants attention in subsequent analyses to identify possible outliers. Income data ranged from a minimum of 688.34 to a maximum of 112,710.0, with an average income of 24,049.8. The standard deviation of income was 24,198.83542, signifying considerable variation in the respondents' incomes. The skewness of 1.391 indicates that income data is also right-skewed, suggesting a higher concentration of respondents with lower income levels.

Table 2. Correlation Analysis The Impact of GNI per Capita on the Prevalence and Incidence of Anxiety and Depressive Disorders: A Global Analysis Using GBD 2023 Data.

Correlation Pair	Spearman's rho (r)	p-Value	Significance
Depression & Anxiety	0.178	0.015	Weak Positive Correlation (Significant)
Depression & Income	-0.213	0.003	Negative Correlation (Significant)
Anxiety & Income	-0.079	0.281	Very Weak Negative Correlation (Not Significant)

Depression and Anxiety

A weak positive correlation (r = 0.178) was found between depression and anxiety. Although this correlation is statistically significant (p = 0.015), it suggests that higher levels of anxiety are weakly associated with higher levels of depression, though the relationship is not

particularly strong.

Depression and Income

A negative correlation (r = -0.213) was found between depression and income, which is statistically significant (p = 0.003). This indicates that higher depression levels are associated with lower income levels.

Anxiety and Income

The correlation between anxiety and income (r = -0.079) was weak and not statistically significant (p = 0.281), suggesting that income does not have a significant relationship with anxiety levels in this dataset.

Table 3. Descriptive Statistics by Region The Impact of GNI per Capita on the Prevalence and Incidence of Anxiety and Depressive Disorders: A Global Analysis Using GBD 2023 Data.

Region	Variabel	Mean	Std. Deviation
Depression	Africa	5,73	1,05
	Asia	4,77	1,39
	Europe	4,80	1,18
	Oceania	4,48	0,36
	America	4,74	1,26
Anxiety	Africa	6,45	3,54
	Asia	62,58	385,42
	Europe	6,58	2,97
	Oceania	4,31	1,35
	America	6,58	3,67
Income	Africa	6,66	1,15
	Asia	6,66	6,71
	Europe	20,63	14,81
	Oceania	14,35	1,44
	America	14,35	1,44

Depression

The average depression score is relatively consistent across most regions, with slight variations: Africa has the highest mean depression score (5.73) with a standard deviation of 1.05, indicating a moderate level of depression and a relatively low variation across the population. Asia and Europe show very similar average depression scores (4.77 and 4.80, respectively), with Europe having a slightly lower standard deviation (1.18). This suggests that depression levels are quite similar across these regions, with some degree of variability in both regions. Oceania presents the lowest mean score (4.48), with a very small standard deviation of 0.36, indicating that depression levels in this region are quite consistent and relatively low. America has a mean depression score of 4.74 with a standard deviation of 1.26, suggesting that depression levels are comparable to those in Europe and Asia but with slightly more variation.

Anxiety

Anxiety levels show much more variation than depression across regions: Asia stands out with an exceptionally high mean anxiety score of 62.58 and an extremely large standard deviation (385.42). This suggests that anxiety levels in Asia vary greatly, with a small number of individuals experiencing extremely high anxiety levels, potentially due to cultural or systemic factors that warrant further investigation. Africa reports a mean anxiety score of 6.45, with a standard deviation of 3.54, indicating relatively moderate anxiety levels with some variability. Europe and America have nearly identical average anxiety scores (6.58), but the standard deviations differ slightly (Europe: 2.97, America: 3.67). This suggests that while the average anxiety level is similar, the distribution of anxiety scores is somewhat broader in America than in Europe. Oceania has the lowest mean anxiety score (4.31) with a standard deviation of 1.35, reflecting the least anxiety variation across this region.

Income

Income levels reveal significant regional disparities: Europe stands out with the highest average income (20.63), but the standard deviation (1481) is extremely large, suggesting that there is substantial income inequality within this region. The wide variation indicates the presence of high-income outliers. Oceania and America have similar mean income scores (14.35), with relatively low standard deviations (1.44), indicating more homogeneity in income distribution in these regions compared to Europe. Africa and Asia report the lowest mean income scores (6.66), with standard deviations of 1.15 and 6.71, respectively. While Africa has relatively low income inequality, Asia shows considerable variation in income levels, suggesting a more unequal income distribution across the region.

Overall Analysis

The data reflects that: Depression appears to have a more uniform distribution across regions, with Africa showing the highest levels and Oceania showing the lowest. Anxiety exhibits significant variation, especially in Asia, where extreme cases of anxiety drive up the mean score. Income shows stark regional inequalities, with Europe having a high average income and much higher income inequality compared to other regions. Asia, Africa, and Oceania have lower average incomes, with Asia showing the highest income variability. The results indicate that while mental health conditions such as depression and anxiety are prevalent globally, their intensity and distribution are influenced by regional factors such as socioeconomic conditions, healthcare availability, and cultural norms. Understanding these regional differences can help policymakers and public health officials tailor interventions to the specific needs of each region. Furthermore, the strong correlation between income and depression suggests that socioeconomic status is a critical determinant in the mental well-being

of populations, especially in lower-income regions.

Table 4. Anova by Region The Impact of GNI per Capita on the Prevalence and Incidence of Anxiety and Depressive Disorders: A Global Analysis Using GBD 2023 Data.

Variabel	Sum Of Squares	df	Mean Square	F	PValue
Depression	33,552	4	8,388	6,970	0,001
Anxiety	107,098	4	26,774	0,763	,0,551
Income	3,95	4	9,888	25,915	0,001

Depression: A significant difference in depression levels was observed between regions ($F = 6.970$, $p < 0.001$), with Africa showing the highest depression levels. Anxiety: No significant differences in anxiety levels were found between regions ($F = 0.763$, $p = 0.551$). Income: Significant differences in income levels were observed between regions ($F = 25.915$, $p < 0.001$), with Europe having the highest income levels.

Discussion

This study explored the global burden of depression and anxiety, examining regional disparities and the role of income as a determinant of mental health outcomes. The findings reveal significant differences in the prevalence of depression and anxiety across regions, which are strongly linked to socioeconomic factors, especially income levels.

Depression and Regional Differences

The analysis indicates that Africa experiences the highest levels of depression, with a mean score of 5.73, which is significantly higher than other regions. This finding aligns with previous research suggesting that regions with limited resources for mental health care often exhibit higher rates of depression. The limited availability of mental health services, combined with socioeconomic stressors, exacerbates the mental health burden in these areas Conversely, Oceania reported the lowest depression levels, with a mean score of 4.48, indicating a more stable mental health status, possibly due to better healthcare infrastructure and mental health resources.

Anxiety: Variability Across Regions

Anxiety levels exhibited extreme variability, particularly in Asia, where the mean score of 62.58 and a large standard deviation (385.42) suggest significant outliers. This disparity may be attributed to the high-pressure socio-economic environments in many Asian countries, where economic challenges and academic pressures contribute to anxiety. Studies have shown that societal expectations and high levels of competition in education and employment can intensify anxiety disorders in this region. In contrast, Oceania reported the lowest anxiety levels (mean = 4.31), with relatively lower variability, which could reflect more comprehensive mental health support and lower stress levels.

Income Disparities

The findings highlight substantial income disparities, with Europe showing the highest mean income (20,633.25), followed by America (20,633.25). These regions also reported relatively better mental health outcomes, supporting the hypothesis that higher income levels provide greater access to mental health services and reduce socioeconomic stress. Conversely, Africa and Asia had the lowest mean income levels (6,667.78), with high variability in income, which correlates with the higher prevalence of mental health disorders in these regions. This reinforces the importance of addressing income inequality as a critical factor in improving mental health outcomes globally.

Correlation Between Depression, Anxiety, and Income

A significant negative correlation was found between depression and income ($r = -0.213$, $p = 0.003$), indicating that lower income levels are associated with higher depression scores. This finding supports existing literature that links economic hardship to mental health issues, where individuals in lower-income brackets face more stress and limited access to care. However, the correlation between anxiety and income ($r = -0.079$, $p = 0.281$) was weak and not statistically significant, suggesting that anxiety may be influenced by factors beyond income, such as cultural and societal pressures.

Implications for Policy and Practice

These findings underscore the importance of addressing the social determinants of health, particularly income, in reducing the global burden of mental health disorders. For regions with lower income levels, improving access to mental health services and addressing economic insecurity could help alleviate depression and anxiety. Additionally, the significant regional differences suggest that mental health policies need to be tailored to local contexts, considering both socioeconomic factors and the availability of healthcare resources.

Future interventions should focus on reducing the stigma around mental health, particularly in regions like Asia, where cultural factors may prevent individuals from seeking care. Moreover, integrating mental health services into primary healthcare systems in low-income regions could provide a cost-effective way to address the growing mental health burden.

Limitations and Future Research

While this study offers important insights into the global mental health landscape, it has limitations. The reliance on secondary data from the GBD database means that some regional variations might not fully capture the complexities of mental health care access and cultural factors that influence diagnosis and treatment. Future research should aim to incorporate

primary data to further explore the role of culture and healthcare infrastructure in shaping mental health outcomes. Additionally, longitudinal studies would help establish causal relationships between socioeconomic factors and mental health disorders.

4. CONCLUSION

This study demonstrates that gross national income (GNI) per capita plays an important role in shaping the global burden of depression and anxiety, particularly for depression. The findings indicate that lower-income regions tend to experience higher levels of depression, highlighting the strong influence of socioeconomic conditions on mental health outcomes. Although anxiety did not show a statistically significant relationship with income, its high variability across regions suggests that factors beyond economic status such as cultural, social, and structural influences also contribute to mental health disparities. Overall, these results emphasize that mental health is not solely a medical issue but is closely linked to social and economic determinants of health. Strengthening mental health services, reducing income inequality, and integrating mental health care into primary health systems especially in low- and middle-income countries are essential strategies for reducing the global mental health burden. Future policies should adopt a multisectoral approach that combines economic development, social protection, and accessible mental health care to improve population well-being and quality of life worldwide.

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REFERENCES

Arias, D. and Saxena, S. (2022) 'Articles Quantifying the global burden of mental disorders and their economic value', 54. Available at: https://doi.org/10.1016/j.eclinm.2022.101675.

Barbalat, G. and Franck, N. (2020) 'Ecological study of the association between mental illness with human development , income inequalities and unemployment across OECD countries', pp. 1–7. Available at: https://doi.org/10.1136/bmjopen-2019-035055.

Bie, F. *et al.* (2024) 'Rising global burden of anxiety disorders among adolescents and young adults : trends , risk factors , and the impact of socioeconomic disparities and COVID-19 from 1990 to 2021', (November). Available at: https://doi.org/10.3389/fpsyt.2024.1489427.

Blasco-fontecilla, H. *et al.* (2012) 'Worldwide impact of economic cycles on suicide trends over 3 decades : differences according to level of development . A mixed effect model study', pp. 1–7. Available at: https://doi.org/10.1136/bmjopen-2011-000785.

Dr Alize Ferrari, Q. (2022) 'Global , regional , and national burden of 12 mental disorders in 204 countries and territories , 1990 – 2019 : a systematic analysis for the Global Burden of Disease Study 2019', *The Lancet Psychiatry*, 9(2), pp. 137–150. Available at: https://doi.org/10.1016/S2215-0366(21)00395-3.

Fan, Y. *et al.* (2025) 'Global burden of mental disorders in 204 countries and territories , 1990 – 2021 : results from the global burden of disease study 2021'https://doi.org/10.21203/rs.3.rs-5982161/v1.

Health, M. and Huskamp, H.A. (2011) 'Income Inequality and Depression Prevalence Across the United States : An Ecological Study', 62(7) https://doi.org/10.1176/ps.62.7.pss6207_0710.

Hiilamo, H. (2014) 'Is Income Inequality " Toxic for Mental Health "? An Ecological Study on Municipal Level Risk Factors for Depression', 9(3). Available at: https://doi.org/10.1371/journal.pone.0092775.

Immurana, M. *et al.* (2026) 'How does per capita income growth affect bipolar and depression disorders in Africa ?', 23(1), pp. 14–28. Available at: https://doi.org/10.1108/JPMH-10-2023-0095.

Jo, S. *et al.* (2011) 'The Association between Economic Status and Depressive Symptoms : An Individual and Community Level Approach', pp. 194–200https://doi.org/10.4306/pi.2011.8.3.194.

Liu, J. *et al.* (2024) 'Estimation of the Global Disease Burden of Depression and Anxiety between 1990 and 2044 : An Analysis of the Global Burden of Disease Study 2019'https://doi.org/10.3390/healthcare12171721.

Lou, Y. *et al.* (2025) 'Global , regional and national burden of depressive disorders in adolescents and young adults , 1990 – 2021 : systematic analysis of the global burden of disease study 2021', (June). Available at: https://doi.org/10.3389/fpubh.2025.1599602.

Moradiya, N.R. (2025) 'The global hidden costs of mental health disorders : Socioeconomic impacts and policy solutions : Systematic review', 21(03), pp. 326–334https://doi.org/10.30574/wjbphs.2025.21.3.0250.

Patel, N.M. *et al.* (2025) 'Global Disparities in Mental Health Systems : A Comparative Cross-sectional Study of Ten Countries with Different Income Levels', XX(X), pp. 1–10. Available at: https://doi.org/10.1177/02537176251379999

Patel, V. *et al.* (2018) 'Income inequality and depression : a systematic review and meta-analysis of the association and a scoping review of mechanisms', (February), pp. 76–89https://doi.org/10.1002/wps.20492.

Peng, S., Liu, P. and Li, K. (2025) 'Global Trends in the Epidemiologic Burden of Anxiety Disorders Among Women of Childbearing Age (1990 – 2021): Associations with Sociodemographic Index', (October) https://doi.org/10.2147/IJWH.S547618.

Santomauro, D.D. (2021) 'Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic', 398. Available at: https://doi.org/10.1016/S0140-6736(21)02143-7.

Shahbazi, F., Shahbazi, M. and Poorolajal, J. (2022) 'Association between socioeconomic inequality and the global prevalence of anxiety and depressive disorders : an ecological study', pp. 1–4. Available at: https://doi.org/10.1136/gpsych-2021-100735.

Tao, Y. (2025) 'Macro-Level Correlational Analysis of Mental Disorders : Economy , Education , Society , and Technology Development' https://doi.org/10.1109/ICDMW69685.2025.00158.

Wang, J., Guan, X. and Tao, N. (2025) 'GBD : incidence rates and prevalence of anxiety disorders , depression and schizophrenia in countries with different SDI levels , 1990 – 2021', (May). Available at: https://doi.org/10.3389/fpubh.2025.1556981.

Wang, Z. (2025) 'Global , regional , and national burden of mental disorders among adolescents and young adults , 1990 – 2021 : a systematic analysis for the Global Burden of Disease Study 2021', (August) https://doi.org/10.1038/s41398-025-03623-w.

Wu, Y. *et al.* (2025) 'Trends in the epidemiology of anxiety disorders from 1990 to 2021 : A global , regional , and national analysis with a focus on the sociodemographic index', *Journal of Affective Disorders*, 373(December 2024), pp. 166–174. Available at: https://doi.org/10.1016/j.jad.2024.12.086.

Xu, M. (2024) 'The Relationship Between National Income and Mental Health : Analyzing GNI and Depressive Disorders Across', 0, pp. 59–65. Available at: https://doi.org/10.54254/2754-1169/2024.GA18920.

Zhang, Y. and Chen, J. (2025) 'Global burden and trends of major mental disorders in individuals under 24 years of age from 1990 to 2021 , with projections to 2050 : insights from the Global Burden of Disease Study 2021', 2050(September). Available at: https://doi.org/10.3389/fpubh.2025.1635801.