

Final Report

Assessing Drivers of Anxiety and Depression in Widows: A Data-Driven Analysis (by André Jardim)

Overview

This project investigates the key drivers of anxiety, depression, and suicidal thoughts among widows, focusing on socioeconomic factors such as income sufficiency, food security, number of dependents, and ability to pay for basic needs. Utilizing survey data provided by the **Global Fund for Widows (GFW)** and based on the **World Health Organization (WHO)** methodology, the analysis seeks to uncover correlations between mental health outcomes and baseline socioeconomic conditions. By identifying these relationships, the project aims to inform interventions that promote mental health and financial stability among widows.

Problem Statement

Widows face unique socioeconomic challenges that often result in heightened levels of anxiety, depression, and other mental health issues. Understanding the factors contributing to these mental health outcomes is critical for designing effective interventions. This project analyzes the connections between mental health indicators and socioeconomic conditions, providing actionable insights for GFW to develop targeted programs that address the root causes of anxiety, depression, and suicidal thoughts in widows.

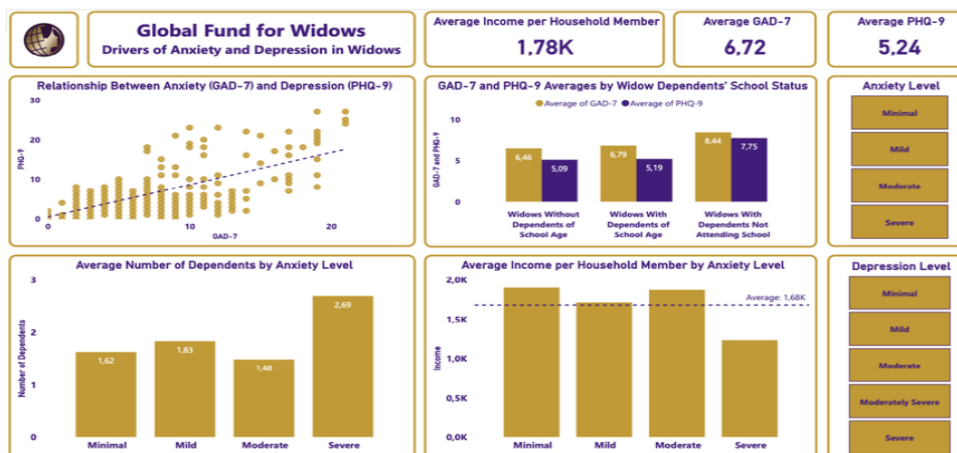
Relevance

Mental health and socioeconomic stability are closely intertwined. By identifying the factors driving anxiety and depression, this project provides valuable insights to GFW for improving their programs and initiatives. These insights will support widows in achieving financial independence and emotional well-being, helping GFW fulfill its mission of empowering widows through targeted, data-driven solutions. Furthermore, the project highlights the importance of integrating mental health support with economic empowerment programs, offering a model for addressing similar challenges in vulnerable populations.

Dataset(s)

The dataset for this project, provided by the Global Fund for Widows (GFW), contains information about over 600 widows, organized into two key categories. The first captures mental health indicators, including anxiety and depression levels measured by the GAD-7 and PHQ-9 scales, as well as reports of suicidal thoughts. The second focuses on socioeconomic conditions, such as income sufficiency, food security, and household dependents. While the data provides valuable insights, potential duplicate entries may affect the exact count of unique individuals.

Key Insights



Relationship Between Anxiety and Depression:

- There is a moderate positive correlation (0.61) between anxiety (GAD-7) and depression (PHQ-9) scores, indicating that individuals with higher anxiety levels are likely to experience higher levels of depression.

Dependents' School Attendance and Mental Health:

- Widows with dependents not attending school report the **highest anxiety and depression scores**:
 - **GAD-7: 8.44**
 - **PHQ-9: 7.75**
- Widows with school-age dependents attending school show significantly **lower scores (GAD-7: 6.79, PHQ-9: 5.19)**.
- Access to education for dependents alleviates some mental health challenges.

Dependents and Anxiety Levels:

- **Widows with more dependents are more likely to experience severe anxiety:**
 - **Minimal Anxiety:** Average of 1.62 dependents
 - **Severe Anxiety:** Average of 2.69 dependents

Income and Anxiety Levels:

- **The average income per household member decreases as anxiety levels increase:**
 - **Minimal Anxiety:** 1,899.85
 - **Mild Anxiety:** 1,711.85
 - **Moderate Anxiety:** 1,871.72
 - **Severe Anxiety:** 1,230.84
- The overall **average income across all anxiety levels is approximately 1,678.56**, and widows with severe anxiety fall significantly below this benchmark, highlighting their heightened financial vulnerability.

Recommendations for GFW

Implement Comprehensive Financial Empowerment Programs:

- Establish microfinance opportunities tailored for widows to support small business creation and entrepreneurship.
- Develop direct cash transfer programs for widows in severe financial distress to address immediate needs and stabilize their financial situations.
- Introduce savings and investment workshops to help widows build long-term financial security.

Strengthen Access to Education:

- Collaborate with schools and NGOs to waive or subsidize tuition fees for widows' dependents, ensuring all children have access to quality education.
- Provide scholarships and mentorship programs for widows' children to promote their academic success and reduce caregiver stress.

Expand Mental Health Support Services:

- Create accessible counseling services, including group therapy sessions and one-on-one consultations, for widows struggling with anxiety and depression.
- Train community-based mental health workers to provide culturally sensitive support tailored to the unique challenges faced by widows.
- Integrate mental health education into existing GFW programs to reduce stigma and encourage widows to seek help.

Introduce Family and Caregiver Support Systems:

- Launch initiatives to provide respite care and assistance for widows with a high number of dependents, reducing caregiving-related stress.
- Establish peer support networks to foster community connections and emotional support among widows.
- Offer parenting workshops to help widows manage caregiving responsibilities more effectively.

Monitor and Evaluate Interventions:

- Implement a robust monitoring and evaluation framework to assess the impact of financial, educational, and mental health interventions.
- Use data-driven approaches to refine and scale successful programs while addressing gaps in existing initiatives.

Conclusion

In conclusion, this analysis highlights the significant impact of socioeconomic factors, such as income sufficiency, education access, and dependents, on the mental health of widows. The findings underscore the need for targeted interventions that address both financial vulnerability and mental health challenges. By implementing financial empowerment programs, enhancing educational opportunities for dependents, and expanding mental health support services, the Global Fund for Widows can help alleviate anxiety, depression, and other related issues. These interventions, informed by data-driven insights, have the potential to significantly improve the well-being and stability of widows, empowering them to lead more fulfilling lives.

Acknowledgments

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