

# Loss To Follow Up from mental health care and associated factors in Neno District, Malawi: A retrospective cohort study

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## Major Findings

Out of the 813 mental health patients, 74.9% (n=609) were females

The majority had mood disorders (80.4%, n=654)

HIV was the most co-morbidity (51.2%, n=416)

LTFU rate was **19.9%**

Factors associated with LTFU were younger age, having a co-morbidity (Asthma, HTN and HIV) and distance to health facility

## BACKGROUND

Mental disorders, also referred to as mental illness or mental health conditions are characterized by major disruptions in a person's behavior, emotional control, or cognitive function<sup>1</sup>.

Globally, 970 million people are affected with a rising burden in low-income countries<sup>2</sup>

In Malawi, the burden of mental illness contributes to the fourth leading cause of disability<sup>3,4</sup>

However, there is a lack of research on how mental health patients interact with care, especially in hard-to-reach areas

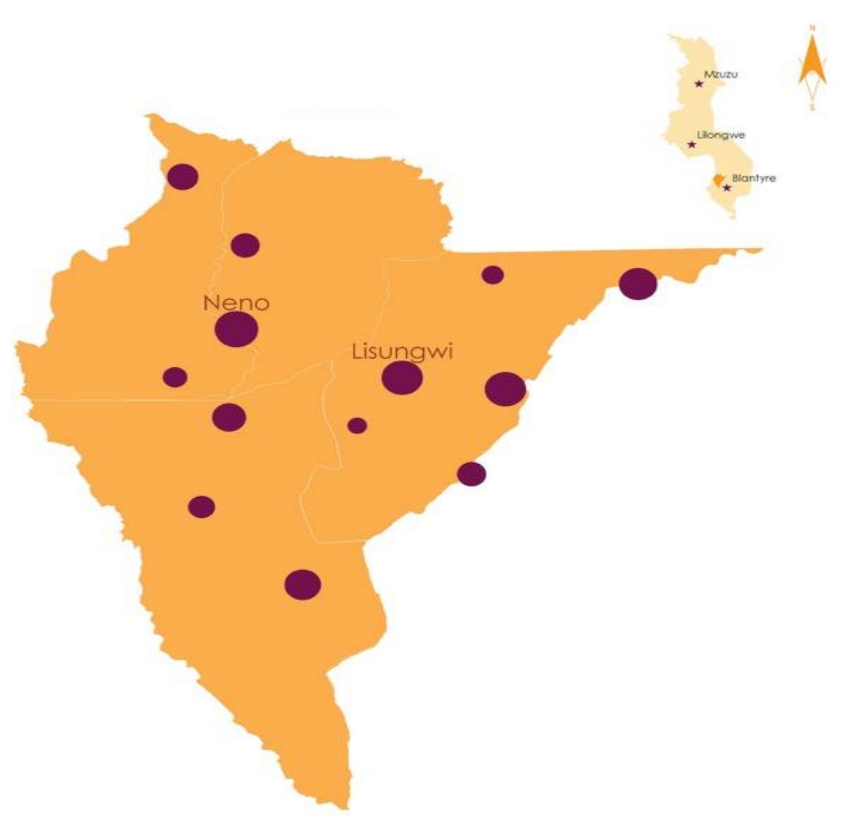
Loss to follow up (LTFU) defined as complete disengagement from the health facility with no further follow-up is not well understood among mental health patients in Neno, Malawi

We determined the proportion of mental health patients in Neno District with LTFU and associated sociodemographic factors

## METHODS

**Design:** Retrospective cohort study design through Electronic Medical Records (EMR)

**Population:** All mental health patients aged ≥18 years enrolled in all 14 health facilities in Neno District from 1 January 2021 to 31 December 2022



**Data extraction:** Socio-demographic data, clinical variables, comorbidities and treatment outcomes

**Data analysis:** Descriptive statistics, univariate and multivariate Cox regression using STATA 14. A Kaplan-Meier curve was drawn for cumulative LTFU rates over the period. We considered a p-value of < 0.05 statistically significant.

## RESULTS

- Total patients:** 813
  - Females: 74.9% (n=609)
  - Median Age : 41 years (IQR 35-51)
- Disorders**
  - Mood disorders: 80.4% (n=654), higher among women (p<0.001)
  - Schizophrenia and other Psychotic disorders: 13.4% (n=109), higher among males (p<0.001)
  - Organic mental disorders: 2.5% (n=20), higher among males (p=0.002)
  - Drug-induced mental disorder: 2% (n=16), higher among males (p<0.001)
- Co-morbidities**
  - HIV 51.2% (n=416)
  - HTN 20.8% (n=169)
  - Asthma 4.7% (n=38)
  - TB 2.5% (n=20)
  - COPD 0.3% (n=2)

**Table 1: Study participants mental health outcomes by gender**

Mental Health Outcome	Male n (%)	Female n (%)	Total n (%)	P-value*
Active in care (retention)	133 (68.2)	480 (78.8)	613 (75.4)	<0.001
LTFU	57 (27.9)	105 (17.2)	162 (19.9)	0.001
Stop treatment	0 (0.0)	1 (0.2)	1 (0.1)	0.563
Transfer out	12 (5.9)	19 (3.1)	31 (3.8)	0.075
Died	2 (1.0)	4 (0.7)	6 (0.7)	0.640

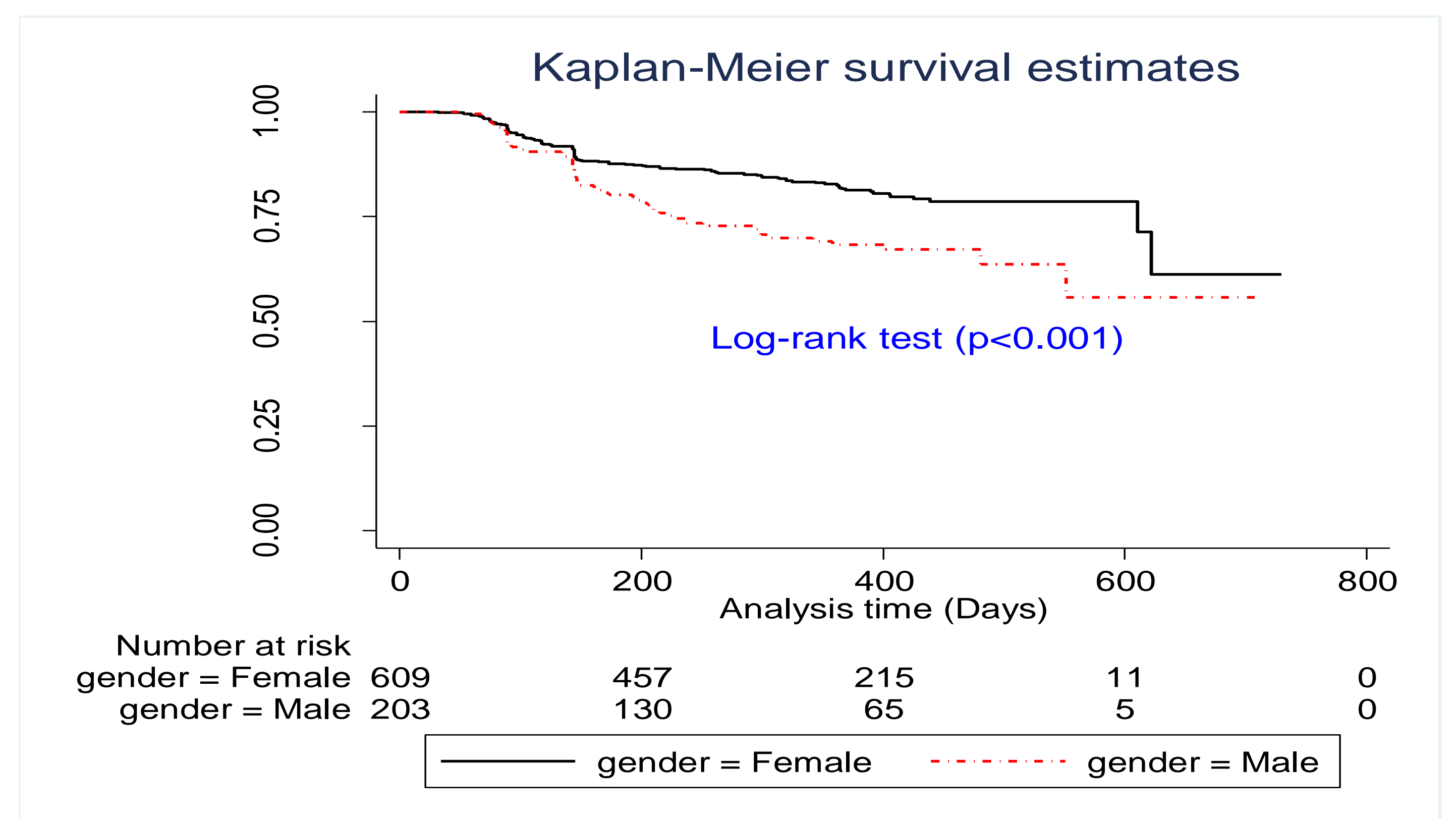
\* Pearson Chi-square test

### Socio-demographic and clinical factors associated with LTFU

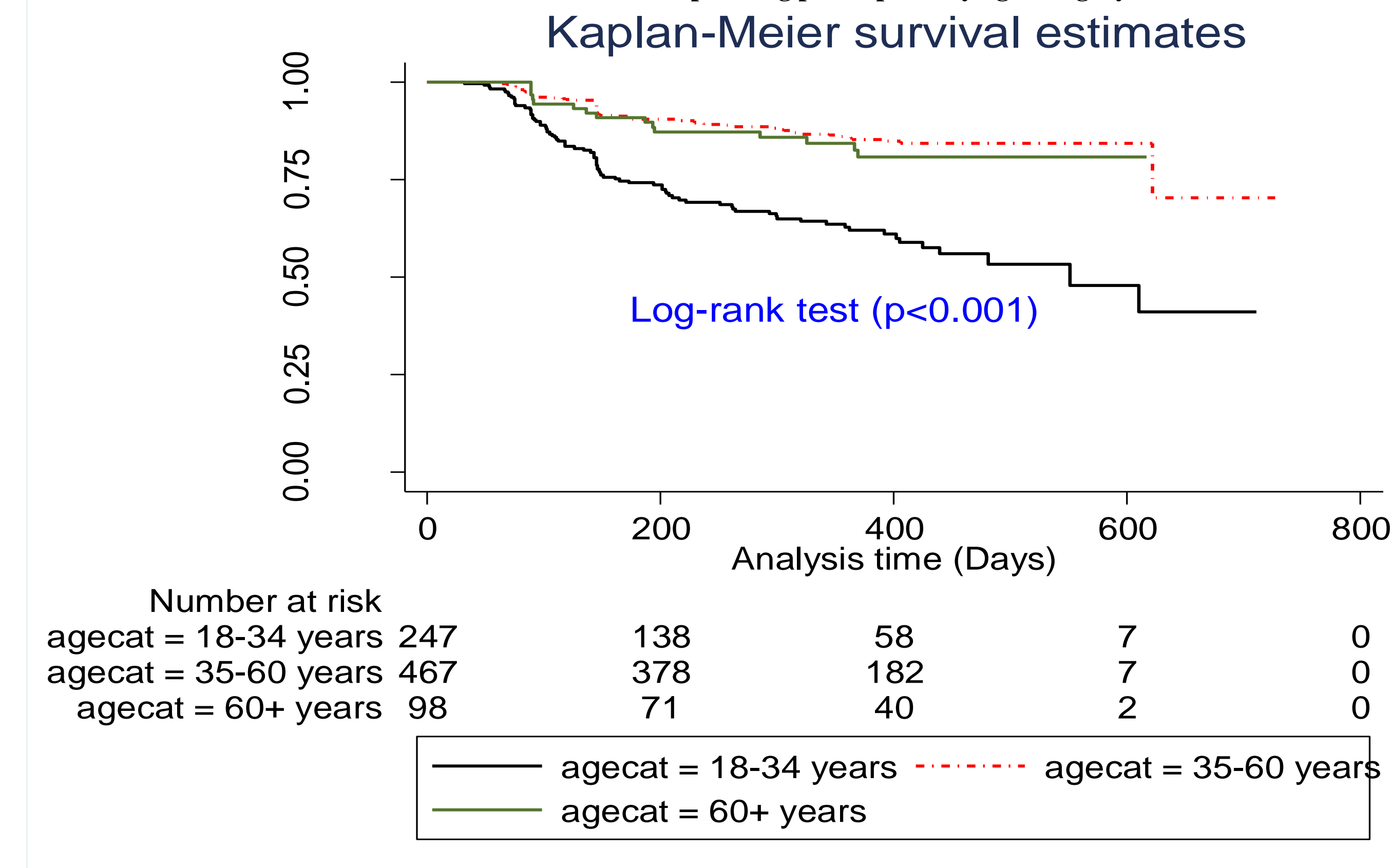
- Younger age group (18-35 years) [aHR 1.49, 95% CI 1.02-2.16; p=0.039]
- Asthma [aHR 0.10, 95% CI 0.01-0.76; p=0.026]
- HTN [aHR 0.17, 95% CI 0.07-0.39; p<0.001]
- HIV [aHR 0.31, 95% CI 0.17-0.57; p<0.001]
- Distance to nearest health facility [aHR 0.29, 95% CI 0.09-0.93; p=0.037]

## RESULTS CONTINUED

**Figure 1: Likelihood of mental health treatment loss to follow-up among participants by gender**



**Figure 2: Likelihood of mental health treatment loss to follow-up among participants by age category**



## CONCLUSIONS

- Overall, the LTFU rate in mental health patients was one out of every five patients.
- We found a higher LTFU rate in men, especially those younger, but having comorbidity and shorter distance to health facilities was protective of LTFU.
- Further research is needed on mental health stigma, patient preferences in receiving care, and protective social structures for care.

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## ADDITIONAL KEY INFORMATION

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**Conflicts of Interest :** Authors declare no conflict of interest

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