Title: Frailty and disability among older adults residing in Rohingya refugee camp in Bangladesh

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Abstract: Background Frailty and disability often emerge with ageing and affect quality of life. Older adults residing in Rohingya refugee camp in Bangladesh are particularly susceptible to frailty and disability due to adverse physical and social environment along with limited health and social care services available in the camp. This study aimed to investigate the prevalence and factors associated with frailty and disability among Rohingya older adults living in Bangladesh.

Methods This cross-sectional study was conducted among older adults aged ≥60 years residing in the Rohingya refugee settlement in Bangladesh. The primary outcomes were frailty and disability, explored using the 'Frail Non-Disabled (FiND) questionnaire. Data were collected face-to-face during November-December 2021, using a semi-structured questionnaire. A multinomial logistic regression model was used to identify the factors associated with frailty and disability.

Results The majority of participants (n = 864) were aged 60–69 years (72.34%), male (56.25%), married (79.05%), and without formal education (89.0%). The study revealed a high prevalence of frailty (36.92%) and disability (55.21%) among the participants. The multinomial regression analysis showed that the likelihood of experiencing disability was significantly higher among participants who were aged 70–79 years (RRR = 2.65, 95% CI: 1.25, 5.66) and ≥80 years (RRR = 8.06, 95% CI: 1.05, 61.80), were female (RRR = 3.93, 95% CI: 1.88, 8.1.9), had no formal education (RRR = 4.34, 95% CI: 2.19, 8.63), were living in a large family (RRR = 1.82, 95% CI: 1.05, 3.18) and were suffering from non-communicable diseases (RRR = 2.36, 95% CI: 1.32, 4.22) compared to their respective counterparts. The regression analysis also revealed that frailty was significantly higher among participants who were female (RRR = 2.82, 95% CI: 1.34, 5.94), were suffering from non-communicable diseases (RRR = 2.28, 95% CI: 1.27, 4.09), and had feeling of loneliness (RRR = 2.16, 95% CI: 1.11, 4.22).

Conclusions The findings underscore the need for long-term care and health promotion activities to alleviate the burden of frailty and disability among older adults in humanitarian settings. Efforts should particularly target the most vulnerable groups- older individuals (≥80 years), women, those without formal education, those living in large families, and those with non-communicable

- **https://doi.org/10.1371/journal.pone.0341499**