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Differences in mental health between younger and older adults in complex humanitarian settings in low-income and middle-income countries: retrospective analysis from Médecins Sans Frontières-supported mental health services, 2019–2024

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ABSTRACT

Background Humanitarian emergencies increase the risk of development or exacerbation of mental health conditions. This study documents how mental health differs between younger and older adults to inform adapted mental health services in humanitarian settings.

Methods This multicountry study includes adults who accessed Médecins Sans Frontières-supported mental health services in humanitarian settings across 20 low-income and middle-income countries between July 2019 and July 2024. Mental health symptoms and precipitating events were compared between younger (20–49 years old) and older adults (50 years or older) adjusting for sex and displacement status using logistic regression analyses.

Findings Data of 177 228 adults were included. Adults most frequently presented at mental health services with anxiety-related (44%; 70 496/158 665) and mood-related symptoms (26%; 41 732/158 665). Older adults had higher odds of reporting symptoms related to ageing (adjusted Odds Ratio (aOR)=4.44; 95% CI 3.84 to 5.14), physical complaints (aOR=2.74; 95% CI 2.65 to 2.83), social functioning (aOR=1.12; 95% CI 1.03 to 1.23) and neuropsychiatry (aOR=1.09; 95% CI 1.02 to 1.17), and lower odds of reporting symptoms related to anxiety (aOR=0.68; 95% CI 0.66 to 0.70), mood (aOR=0.64; 95% CI 0.62 to 0.67) and behaviour (aOR=0.57; 95% CI 0.52 to 0.61), with variation by sex and displacement status. Compared with younger women, older women had higher odds of reporting violence, socioeconomic functioning and displacement, with variation by displacement status. Compared with younger men, older men had higher odds of reporting medical illness.

Interpretation Significant differences in mental health symptoms were identified between younger and older adults, with variations by sex and displacement status.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Older adults affected by humanitarian crises are at increased risk of developing or worsening mental health conditions due to prolonged exposure to conflict, loss of autonomy, isolation, grief and changes in community roles following displacement. While crucial for guiding tailored mental health interventions, differences in mental health-related needs between younger and older adults by sex remain poorly documented, particularly in humanitarian settings.

WHAT THIS STUDY ADDS

⇒ This is the largest known multicountry study comparing mental health symptoms between younger (20–49 years old) and older adults (50 years or older) in humanitarian settings. It reveals critical differences in mental health symptoms by age, sex and displacement status. Younger women report more trauma-related events (sexual abuse, family violence). Compared with younger adults, older adults were more likely to report symptoms related to ageing, physical health and neuropsychiatric conditions. Notably, older women more frequently reported precipitating events related to violence and socioeconomic distress, while older men were more likely to report health-related stressors but not violence as triggers.

Older adults were more likely than younger adults to present symptoms related to ageing. Compared with their younger counterparts, older women were more likely to report experiences of violence, and older men were more likely to report medical illness. These findings underscore

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ This research highlights significant differences in mental health symptoms and precipitating events between younger and older adults, underscoring the heterogeneity of mental health presentation and needs in humanitarian settings. Gender-based violence and symptoms associated with ageing play a critical role, particularly for older women and men. These findings call for strengthened protection measures and the development of gender-sensitive and age-sensitive policies and interventions to ensure that mental health interventions are responsive to the diverse needs of adults in crisis contexts.

⇒ Dedicated, participatory research is urgently needed to better understand these dynamics and inform the development of tailored, evidence-based policies and programmes that effectively address the distinct mental health needs of older adults in crisis contexts.

the need for age-sensitive and sex-sensitive mental health services in humanitarian settings, including staff training on age-related mental health presentations.

BACKGROUND

The continued increase of more complex and protracted humanitarian emergencies caused by conflict, natural disasters, food insecurity or famine and outbreaks will have a profound impact on global public health.[1] In 2022, more than 103 million people were forcibly displaced, and in 2021 alone, conflict and violence caused 14.4 million displacements, the highest figure ever recorded.[1]

Humanitarian emergencies increase the risk of the development or exacerbation of mental health conditions. According to WHO, almost all adults affected by humanitarian emergencies experience psychological distress, which for most adults improves over time.[2] In conflict-affected populations, the prevalence of depression, anxiety, post-traumatic stress disorder (PTSD), bipolar disorder and schizophrenia is estimated at 22.1%.[3] Adults with pre-existing severe mental disorders are especially vulnerable during humanitarian emergencies for exacerbation of their symptoms[2] due to facing a gap in treatment availability and often experience additional severe human rights violations, discrimination, limited access to protection and stigma.[4]

Older adults who experience prolonged exposure to conflict and insecurity, loss of independence and autonomy, isolation, grief and the change in power, authority and role in the community following (forced) displacement are at increased risk of the development or exacerbation of mental health conditions.[5] While crucial to guide tailored mental health interventions, differences in mental health-related needs of younger (aged 20–49) and older adults (aged 50 years and older) remain poorly documented. The few data available show that humanitarian emergencies disproportionately affect the mental health of older adults as they may be exposed to additional challenges, including limited mobility, loss of traditional support networks and comorbid physical conditions.[6] These studies were implemented following environmental disasters such as earthquakes and floods. However, increasingly humanitarian crises are more complex and more protracted, in which different types of crises, such as conflict, epidemics and environmental disasters, collide and present additional challenges that may affect mental health.

In this study, we aimed to compare mental health symptoms and precipitating events associated with these symptoms of younger adults, aged 20–49 years, with older adults, aged 50 years or older, who accessed mental health services in complex humanitarian settings in low-income and middle-income countries (LMICs, according to World Bank classification) that were supported by Médecins Sans Frontières (MSF). Furthermore, we aimed to describe whether these differ by sex and displacement status. The findings of this study could inform gender-adapted and age-adapted mental health interventions for younger and older adults in humanitarian settings, which could include targeted psychosocial programmes, screening and integrated care models.

METHODS

Inclusion criteria

The study population consisted of all adults aged 50 years and older who accessed MSF-supported mental health services between July 2019 and July 2024 in humanitarian settings in 20 LMICs across all World Bank regions. For this study, 'older adult' was defined as a person aged 50 years or older, in line with the definition by HelpAge International and the United Nations High Commissioner for Refugees.[7 8] 'Younger adult' was defined as a person aged 20–49 years.[9] Data were collected in 'complex humanitarian settings' in which a series of events (eg, armed conflict, environmental disaster, epidemic, famine) has resulted in a critical threat to the health, safety and security of a community or other large group of people.[10]

Outcomes and independent variables

Each mental health symptom and precipitating event was considered as a dependent outcome variable. This study included seven categories of mental health symptoms, which were standardised across MSF-supported mental health services: anxiety-related symptoms, mood-related symptoms, physical complaints, behaviour-related symptoms, neuro-psychiatric-related symptoms, problems related with social functioning and age-related problems. Precipitating event was defined as a specific event that causes or triggers the onset of a mental health symptom, for example, events related to violence or displacement. A complete list of definitions of mental health symptoms and precipitating events, which are standardised across MSF-supported mental health services, can be found in online supplemental file 1. Main symptoms and precipitating events were recorded on the client file during their first visit.

Sex, age group and displacement status were considered independent variables. All ages were self-reported and were categorised by 10-year increments (50–59, 60–69, 70–79, 80+). Sex was self-reported and could be male, female or unknown/unspecified. As unknown/unspecified sex occurred for only five older adults, we did not include them in this study. Displacement status was defined as 'displaced' on one hand, which captured adults who identified as an internally displaced person, refugee or asylum seekers, and 'non-displaced'.

Data sources and data collection

MSF provides medical assistance to people affected by conflict, epidemics, disasters or exclusion from healthcare in 75 countries. In many of these humanitarian settings, MSF offers a comprehensive package of Mental Health and Psychosocial Support services (MHPSS), including individual, family and group counselling, psychological care activities and care of patients with severe mental health disorders such as using psychotropic medications.[4] Data were collected as part of the routine monitoring of MSF-supported mental health services. When a person comes to MSF-supported mental health services, they first have a consultation with a mental health counsellor. Topics covered in the initial assessment include presenting complaint, history of mental disorders, family history of mental disorders, general health history, use of alcohol and other substances, social situation and social support, strengths and other resources, personal history and mental state. Screening and monitoring tools that are used include the General Anxiety Disorder (GAD)-7 for anxiety and the Patient Health Questionnaire (PHQ)-9 for depression.[11 12] Since 2019, all data were recorded on the client file by mental health counsellors and subsequently entered in the District Health Information System 2 by data encoders.

Intersectionality lens

Among the adults who were included in this study, we identified different subgroups. We compared the main mental health symptoms and precipitating events between these subgroups. Subgroups were identified based on the sex, age group and displacement status of the older adults. We compared mental health symptoms and precipitating events between younger and older women; younger and older men; younger and older displaced women; and younger and older displaced men.

Statistical methods

All analyses were conducted using RStudio.[13] If independent variables were missing (age group, sex or residential status), the record was removed from data analysis. We did an available case analysis for the main mental health symptoms and precipitating events, where, if a record was missing the main mental health symptom, they would still be included in analyses related to precipitating events and vice versa.

In the descriptive analysis, variables were presented either as proportions or medians with their range. Differences in proportions between sex or displacement status were measured using logistic regression, presenting an OR, 95% CI. For differences in proportions between younger and older adults, we presented an aOR adjusting for sex and displacement status. For differences in proportions between younger and older adults by sex, we presented an aOR adjusting for displacement status. Since this is a descriptive observational study, we present effect size (ORs and aORs) and 95% CIs as a measure of the magnitude of the effect to guide interpretation rather than p values.

Patient and public involvement

It was not appropriate or possible to involve patients or the public in the design, or conduct, or reporting, or dissemination plans of our research.

RESULTS

Demographic characteristics

During the study period, 177 228 adults aged 20 years and older accessed MSF-supported mental health services across humanitarian settings in 20 countries. Among these, 155 302 were aged 20–49 ('younger adults') and 21 926 were aged 50 years or older ('older adults'). Among the younger adults, the median age was 30.0 years (IQR 25.0–35.0). Among the older adults, the median age was 58.0 years (IQR 52.0–65.0). Women were proportionally over-represented in both age groups (younger adults: 75%; 117 207/155 302; older adults: 60%; 13 112/21 926). Most adults reported that they were not displaced, while a minority identified as an internally displaced person (IDP), refugee, asylum seeker or migrant (younger adults: 35%; 53 939/155 302; older adults: 31%; 6715/21 926). Around half of adults accessed MSF-supported health services in sub-Saharan Africa (younger adults: 47%; 73 229/155 302; older adults: 37%; 8011/21 926), followed by South Asia (younger adults: 42%; 65 753/155 302; older adults: 48%; 10 532/21 926) and the Middle East and North Africa (younger adults: 5.2%; 8121/155 302; older adults: 11%; 2414/21 926) (table 1).

Main presenting symptoms and precipitating events in adults by age group

Adults of both age groups most frequently presented at mental health services with anxiety-related symptoms (44%; 70 496/158 665), mood-related symptoms (26%; 41 732/158 665) and physical complaints (17%; 26 868/158 665). They most frequently reported precipitating events related to medical illness (29%; 49 334/169 214), domestic discord and family violence (18%; 29 800/169 214) and sexual trauma or abuse (16%; 26 443/169 214). Compared with younger adults, older adults had higher odds of reporting age-related symptoms (aOR=4.44; 95% CI 3.84 to 5.14), physical complaints (aOR=2.74; 95% CI 2.65 to 2.83), neuro-psychiatric symptoms (aOR=1.09; 95% CI 1.02 to 1.17) and problems

Table 1 Demographic characteristics of adults aged 20 years and older at Médecins Sans Frontières-supported mental health services between July 2019 and July 2024

Characteristic	Total (n=177 228)*	20–49 (n=155 302)*	50+ (n=21 926)*
Age (years)	30.0 (25.0–40.0)	30.0 (24.0–35.0)	58.0 (52.0–65.0)
Sex			
Female	130 319 (74%)	117 207 (75%)	13 112 (60%)
Male	46 909 (26%)	38 095 (25%)	8814 (40%)
Residential status			
Resident	116 574 (66%)	101 363 (65%)	15 211 (69%)
Displaced (internally displaced person/refugee/asylum seeker/migrant)	60 654 (34%)	53 939 (35%)	6715 (31%)
Region			
Sub-Saharan Africa	81 240 (46%)	73 229 (47%)	8011 (37%)
South Asia	76 285 (43%)	65 753 (42%)	10 532 (48%)
Middle East and North Africa	10 535 (5.9%)	8121 (5.2%)	2414 (11%)
Latin America and Caribbean	5867 (3.3%)	5477 (3.5%)	390 (1.8%)
East Asia and Pacific	3167 (1.8%)	2590 (1.7%)	577 (2.6%)
Europe and Central Asia	134 (<0.1%)	132 (<0.1%)	2 (<0.1%)

*Median (25–75%); n (%).

with social functioning (aOR=1.12; 95% CI 1.03 to 1.23). Older adults had lower odds of reporting anxiety-related (aOR=0.68; 95% CI 0.66 to 0.70), mood-related (aOR=0.64; 95% CI 0.62 to 0.67) and behaviour-related symptoms (aOR=0.57; 95% CI 0.52 to 0.61) (table 2).

Main presenting symptoms and precipitating events in adults by age group and sex

Compared with their younger counterparts, both older women and men had higher odds of reporting age-related symptoms (women: aOR=3.99; 95% CI 3.30 to 4.81; men: aOR=5.26; 95% CI 4.14 to 6.72) and physical complaints (women: aOR=2.95; 95% CI 2.83 to 3.08; men: aOR=2.50; 95% CI 2.38 to 2.64). Older women and men had lower odds of presenting with symptoms related to anxiety (women: aOR=0.68; 95% CI 0.65 to 0.71; men: aOR=0.67; 95% CI 0.64 to 0.70), mood (women: aOR=0.61; 95% CI 0.58 to 0.64; men: aOR=0.74; 95% CI 0.69 to 0.79) and behaviour (women: aOR=0.66; 95% CI 0.60 to 0.74; men: aOR=0.47; 95% CI 0.42 to 0.53). Older women had higher odds of reporting neuro-psychiatric-related symptoms and problems related with social functioning compared with younger women, while older men had lower odds of these compared with younger men.

Compared with their younger counterparts, both older women and men had higher odds of reporting medical illness-related events (women: aOR=1.82; 95% CI 1.75 to 1.89; men: aOR=2.15; 95% CI 2.05 to 2.25). They had lower odds of reporting events related to sexual trauma or abuse (women: aOR=0.44; 95% CI 0.41 to 0.46; men: aOR=0.39; 95% CI 0.31 to 0.49) and domestic discord and family violence (women: aOR=0.38; 95% CI 0.36 to 0.41; men: aOR=0.49; 95% CI 0.44 to 0.54).

Compared with younger women, older women had higher odds of reporting precipitating events related with natural disaster (aOR=2.22; 95% CI 1.84 to 2.67), neuro-psychiatry (aOR=1.83; 95% CI 1.70 to 1.98), displacement and migration (aOR=1.59; 95% CI 1.38 to 1.83), violence (aOR=1.58; 95% CI 1.46 to 1.70), socio-economic functioning (aOR=1.46; 95% CI 1.35 to 1.57) and loss or mourning (aOR=1.38; 95% CI 1.29 to 1.48), while compared with younger men, older men experienced lower or similar odds of these precipitating events (tables 3 and 4).

Main presenting symptoms and precipitating events in displaced adults by age group

Displaced adults of both age groups most frequently presented at mental health services with anxiety-related problems (46%; 25 961/56 586), mood-related problems (32%; 18 084/56 586) and physical complaints (9%; 5193/56 586). They most frequently reported precipitating events related to sexual trauma or abuse (25%; 14 314/56 691), domestic discord and family violence (16%; 9341/56 691) and medical illness (16%; 9236/56 691). Compared with younger adults, older adults had higher odds of reporting age related symptoms (aOR=4.54; 95% CI 3.54 to 5.78), physical complaints (aOR=1.67; 95% CI 1.55 to 1.81), neuro-psychiatric symptoms (aOR=1.28; 95% CI 1.16 to 1.42) and problems with social functioning (aOR=1.30; 95% CI 1.12 to 1.51). Older adults had lower odds of reporting anxiety-related (aOR=0.87; 95% CI 0.83 to 0.92), mood-related (aOR=0.82; 95% CI 0.77 to 0.87) and behaviour-related symptoms (aOR=0.76; 95% CI 0.67 to 0.87) (table 5).

Table 2 Main presenting symptoms and precipitating events of adults who accessed Médecins Sans Frontières-supported mental health services between July 2019 and July 2024

Main presenting symptom	Total (n=158 665)	20–49 (n=138023)	≥50 (n=20 642)	OR* (95% CI)	aOR† (95% CI)
Anxiety-related symptoms	70496 (44%)	63096 (46%)	7400 (36%)	0.66 (0.64 to 0.68)	0.68 (0.66 to 0.70)
Mood-related symptoms	41732 (26%)	38023 (28%)	3709 (18%)	0.58 (0.55 to 0.60)	0.64 (0.62 to 0.67)
Physical complaints	26868 (17%)	19977 (14%)	6891 (33%)	2.96 (2.87 to 3.06)	2.74 (2.65 to 2.83)
Behaviour-related symptoms	8268 (5.2%)	7561 (5.5%)	707 (3.4%)	0.61 (0.57 to 0.66)	0.57 (0.52 to 0.61)
Neuro-psychiatric-related symptoms	6561 (4.1%)	5521 (4.0%)	1040 (5.0%)	1.27 (1.19 to 1.36)	1.09 (1.02 to 1.17)
Problems related with social functioning	3961 (2.5%)	3378 (2.4%)	583 (2.8%)	1.16 (1.06 to 1.27)	1.12 (1.03 to 1.23)
Age-related symptoms	779 (0.5%)	467 (0.3%)	312 (1.5%)	4.52 (3.91 to 5.22)	4.44 (3.84 to 5.14)
Precipitating event	**Total (n=169 214)**	**20–49 (n=147 765)**	**≥50 (n=21449)**	**OR* (95% CI)**	**aOR** (95% CI)**
Medical illness-related	49334 (29%)	39961 (27%)	9373 (44%)	2.09 (2.03 to 2.16)	1.97 (1.91 to 2.03)
Domestic discord and family violence	29800 (18%)	28114 (19%)	1686 (7.9%)	0.36 (0.34 to 0.38)	0.41 (0.39 to 0.43)
Sexual trauma or abuse	26443 (16%)	24983 (17%)	1460 (6.8%)	0.36 (0.34 to 0.38)	0.43 (0.41 to 0.46)
Disruption of family and relationships	12854 (7.6%)	11279 (7.6%)	1575 (7.3%)	0.96 (0.91 to 1.01)	1.03 (0.98 to 1.09)
Loss/mourning	8538 (5.0%)	7318 (5.0%)	1220 (5.7%)	1.16 (1.09 to 1.23)	1.22 (1.15 to 1.30)
Socioeconomic functioning	10866 (6.4%)	9255 (6.3%)	1611 (7.5%)	1.22 (1.15 to 1.28)	1.03 (0.98 to 1.09)
Events related to violence	9302 (5.5%)	7933 (5.4%)	1369 (6.4%)	1.2 (1.13 to 1.27)	1.10 (1.04 to 1.17)
Neuro-psychiatric related	10093 (6.0%)	8527 (5.8%)	1566 (7.3%)	1.29 (1.22 to 1.36)	1.10 (1.04 to 1.17)
Displacement, migration and related problems	2774 (1.6%)	2314 (1.6%)	460 (2.1%)	1.38 (1.24 to 1.52)	1.30 (1.17 to 1.44)
Others	2607 (1.5%)	2284 (1.5%)	323 (1.5%)	0.97 (0.86 to 1.09)	0.88 (0.78 to 0.99)
Deprivation and discrimination	2170 (1.3%)	1913 (1.3%)	257 (1.2%)	0.92 (0.81 to 1.05)	0.81 (0.71 to 0.92)
Events related to abuse during detention	2766 (1.6%)	2482 (1.7%)	284 (1.3%)	0.79 (0.69 to 0.89)	0.61 (0.53 to 0.68)
Events related to natural disasters	1667 (1.0%)	1402 (0.9%)	265 (1.2%)	1.31 (1.14 to 1.49)	1.05 (0.91 to 1.19)

*Reference group: younger adults 20–49 years old.
†Adjusted for sex and displacement status.

Table 3 Main presenting symptoms and precipitating events in younger and older women who accessed Médecins Sans Frontières-supported mental health services between 2019 and 2024

Main presenting symptom	Total (n=115 143)	20–49 (n=102 993)	≥50 (n=12 150)	OR* (95% CI)	aOR† (95% CI)
Anxiety-related symptoms	52 297 (45%)	47 799 (46%)	4498 (37%)	0.68 (0.65 to 0.71)	0.68 (0.65 to 0.71)
Mood-related symptoms	34 664 (30%)	32 068 (31%)	2596 (21%)	0.60 (0.57 to 0.63)	0.61 (0.58 to 0.64)
Physical complaints	16 270 (14%)	12 682 (12%)	3588 (30%)	2.98 (2.86 to 3.12)	2.95 (2.83 to 3.08)
Behaviour-related symptoms	5363 (4.7%)	4964 (4.8%)	399 (3.3%)	0.67 (0.60 to 0.74)	0.66 (0.60 to 0.74)
Neuro-psychiatric-related symptoms	3331 (2.9%)	2802 (2.7%)	529 (4.4%)	1.63 (1.48 to 1.79)	1.66 (1.51 to 1.82)
Problems related with social functioning	2707 (2.4%)	2330 (2.3%)	377 (3.1%)	1.38 (1.24 to 1.54)	1.38 (1.23 to 1.54)
Age-related symptoms	511 (0.4%)	348 (0.3%)	163 (1.3%)	4.01 (3.32 to 4.83)	3.99 (3.30 to 4.81)
Precipitating event	**Total (n=123 415)**	**20–49 (n=110 657)**	**≥50 (n=12 758)**	**OR* (95% CI)**	**aOR† (95% CI)**
Medical illness related	31 949 (26%)	27 184 (25%)	4765 (37%)	1.83 (1.76 to 1.90)	1.82 (1.75 to 1.89)
Domestic discord and family violence	26 008 (21%)	24 728 (22%)	1280 (10%)	0.39 (0.36 to 0.41)	0.38 (0.36 to 0.41)
Sexual trauma or abuse	25 369 (21%)	24 001 (22%)	1368 (11%)	0.43 (0.41 to 0.46)	0.44 (0.41 to 0.46)
Disruption of family and relationships	10 402 (8.4%)	9294 (8.4%)	1108 (8.7%)	1.04 (0.97 to 1.11)	1.04 (0.98 to 1.11)
Loss/mourning	6817 (5.5%)	5889 (5.3%)	928 (7.3%)	1.40 (1.30 to 1.50)	1.38 (1.29 to 1.48)
Socioeconomic functioning	5745 (4.7%)	4924 (4.4%)	821 (6.4%)	1.48 (1.37 to 1.59)	1.46 (1.35 to 1.57)
Events related to violence	5644 (4.6%)	4809 (4.3%)	835 (6.5%)	1.54 (1.43 to 1.66)	1.58 (1.46 to 1.70)
Neuro-psychiatric related	5271 (4.3%)	4385 (4.0%)	886 (6.9%)	1.81 (1.68 to 1.95)	1.83 (1.70 to 1.98)
Displacement, migration and related problems	1667 (1.4%)	1424 (1.3%)	243 (1.9%)	1.49 (1.30 to 1.71)	1.59 (1.38 to 1.83)
Others	1592 (1.3%)	1437 (1.3%)	155 (1.2%)	0.93 (0.79 to 1.10)	0.91 (0.77 to 1.07)
Deprivation and discrimination	1194 (1.0%)	1066 (1.0%)	128 (1.0%)	1.04 (0.86 to 1.25)	1.06 (0.87 to 1.27)
Events related to abuse during detention	1052 (0.9%)	953 (0.9%)	99 (0.8%)	0.90 (0.73 to 1.10)	0.91 (0.74 to 1.12)
Events related to natural disasters	705 (0.6%)	563 (0.5%)	142 (1.1%)	2.20 (1.82 to 2.64)	2.22 (1.84 to 2.67)

*Reference group: women 20–49 years old.
†Adjusted for displacement status.

Table 4 Main presenting symptoms and precipitating events in younger and older men who accessed Médecins Sans Frontières-supported mental health services between 2019 and 2024

Main presenting symptom	Total (n=43 522)	20–49 (n=35 030)	≥50 (n=8492)	OR* (95% CI)	aOR† (95% CI)
Anxiety-related symptoms	18 199 (42%)	15 297 (44%)	2902 (34%)	0.67 (0.64 to 0.70)	0.67 (0.64 to 0.70)
Mood-related symptoms	7068 (16%)	5955 (17%)	1113 (13%)	0.74 (0.69 to 0.79)	0.74 (0.69 to 0.79)
Physical complaints	10 598 (24%)	7295 (21%)	3303 (39%)	2.42 (2.30 to 2.55)	2.50 (2.38 to 2.64)
Behaviour-related symptoms	2905 (6.7%)	2597 (7.4%)	308 (3.6%)	0.47 (0.42 to 0.53)	0.47 (0.42 to 0.53)
Neuro-psychiatric-related symptoms	3230 (7.4%)	2719 (7.8%)	511 (6.0%)	0.76 (0.69 to 0.84)	0.76 (0.69 to 0.84)
Problems related with social functioning	1254 (2.9%)	1048 (3.0%)	206 (2.4%)	0.81 (0.69 to 0.94)	0.81 (0.69 to 0.94)
Age-related symptoms	268 (0.6%)	119 (0.3%)	149 (1.8%)	5.24 (4.12 to 6.68)	5.26 (4.14 to 6.72)
Precipitating event	**Total (n=45 799)**	**20–49 (n=37 108)**	**≥50 (n=8691)**	**OR* (95% CI)**	**aOR† (95% CI)**
Medical illness-related	17 385 (38%)	12 777 (34%)	4608 (53%)	2.15 (2.05 to 2.25)	2.22 (2.11 to 2.33)
Domestic discord and family violence	3792 (8.3%)	3386 (9.1%)	406 (4.7%)	0.49 (0.44 to 0.54)	0.49 (0.44 to 0.54)
Sexual trauma or abuse	1074 (2.3%)	982 (2.6%)	92 (1.1%)	0.39 (0.32 to 0.49)	0.39 (0.31 to 0.48)
Disruption of family and relationships	2452 (5.4%)	1985 (5.3%)	467 (5.4%)	1.00 (0.90 to 1.11)	1.00 (0.90 to 1.11)
Loss/mourning	1721 (3.8%)	1429 (3.9%)	292 (3.4%)	0.87 (0.76 to 0.99)	0.87 (0.76 to 0.99)
Socioeconomic functioning	5121 (11%)	4331 (12%)	790 (9.1%)	0.76 (0.70 to 0.82)	0.76 (0.70 to 0.82)
Events related to violence	3658 (8.0%)	3124 (8.4%)	534 (6.1%)	0.71 (0.65 to 0.78)	0.71 (0.65 to 0.78)
Neuro-psychiatric related	4822 (11%)	4142 (11%)	680 (7.8%)	0.68 (0.62 to 0.73)	0.67 (0.62 to 0.73)
Displacement, migration and related problems	1107 (2.4%)	890 (2.4%)	217 (2.5%)	1.04 (0.89 to 1.21)	1.04 (0.89 to 1.21)
Others	1015 (2.2%)	847 (2.3%)	168 (1.9%)	0.84 (0.71 to 1.00)	0.84 (0.71 to 1.00)
Deprivation and discrimination	976 (2.1%)	847 (2.3%)	129 (1.5%)	0.65 (0.53 to 0.77)	0.64 (0.53 to 0.77)
Events related to abuse during detention	1714 (3.7%)	1529 (4.1%)	185 (2.1%)	0.51 (0.43 to 0.59)	0.50 (0.43 to 0.59)
Events related to natural disasters	962 (2.1%)	839 (2.3%)	123 (1.4%)	0.62 (0.51 to 0.75)	0.62 (0.51 to 0.75)

*Reference group: men 20–49 years old.
†Adjusted for displacement status.

Table 5 Main presenting symptoms and precipitating events in displaced adults who accessed Médecins Sans Frontières-supported mental health services between July 2019 and July 2024

Main presenting symptom	Total (n=56 586)	20–49 (n=50 075)	≥50 (n=6511)	OR* (95% CI)	aOR† (95% CI)
Anxiety-related symptoms	25 961 (46%)	23 196 (46%)	2765 (42%)	0.86 (0.81 to 0.90)	0.87 (0.83 to 0.92)
Mood-related symptoms	18 084 (32%)	16 342 (33%)	1742 (27%)	0.75 (0.71 to 0.80)	0.82 (0.77 to 0.87)
Physical complaints	5193 (9.2%)	4288 (8.6%)	905 (14%)	1.72 (1.60 to 1.86)	1.67 (1.55 to 1.81)
Behaviour-related symptoms	2586 (4.6%)	2331 (4.7%)	255 (3.9%)	0.83 (0.73 to 0.95)	0.76 (0.67 to 0.87)
Neuro-psychiatric-related symptoms	3062 (5.4%)	2543 (5.1%)	519 (8.0%)	1.62 (1.47 to 1.78)	1.28 (1.16 to 1.42)
Problems related with social functioning	1417 (2.5%)	1202 (2.4%)	215 (3.3%)	1.39 (1.20 to 1.61)	1.30 (1.12 to 1.51)
Age-related symptoms	283 (0.5%)	173 (0.3%)	110 (1.7%)	4.96 (3.89 to 6.29)	4.54 (3.54 to 5.78)
Precipitating event	**Total (n=56 691)**	**20–49 (n=50 162)**	**≥50 (n=6529)**	**OR* (95% CI)**	**aOR† (95% CI)**
Medical illness related	9236 (16%)	7764 (15%)	1472 (23%)	1.59 (1.49 to 1.69)	1.46 (1.37 to 1.55)
Domestic discord and family violence	9341 (16%)	8951 (18%)	390 (6.0%)	0.29 (0.26 to 0.32)	0.33 (0.30 to 0.37)
Sexual trauma or abuse	14 314 (25%)	13 481 (27%)	833 (13%)	0.40 (0.37 to 0.43)	0.48 (0.44 to 0.51)
Disruption of family and relationships	4913 (8.7%)	4245 (8.5%)	668 (10%)	1.23 (1.13 to 1.34)	1.32 (1.21 to 1.44)
Loss/mourning	2399 (4.2%)	1943 (3.9%)	456 (7.0%)	1.86 (1.68 to 2.07)	1.97 (1.77 to 2.19)
Socioeconomic functioning	2618 (4.6%)	2157 (4.3%)	461 (7.1%)	1.69 (1.52 to 1.87)	1.43 (1.29 to 1.59)
Events related to violence	4184 (7.4%)	3528 (7.0%)	656 (10%)	1.48 (1.35 to 1.61)	1.35 (1.23 to 1.47)
Neuro-psychiatric related	4340 (7.7%)	3577 (7.1%)	763 (12%)	1.72 (1.59 to 1.87)	1.39 (1.28 to 1.51)
Displacement, migration and related problems	2293 (4.0%)	1886 (3.8%)	407 (6.2%)	1.70 (1.52 to 1.90)	1.41 (1.25 to 1.57)
Others	459 (0.8%)	408 (0.8%)	51 (0.8%)	0.96 (0.71 to 1.27)	0.85 (0.62 to 1.12)
Deprivation and discrimination	888 (1.6%)	766 (1.5%)	122 (1.9%)	1.23 (1.01 to 1.48)	1.06 (0.87 to 1.28)
Events related to abuse during detention	1173 (2.1%)	1025 (2.0%)	148 (2.3%)	1.11 (0.93 to 1.32)	0.79 (0.66 to 0.94)
Events related to natural disasters	533 (0.9%)	431 (0.9%)	102 (1.6%)	1.83 (1.47 to 2.27)	1.52 (1.21 to 1.88)

*Reference group: displaced younger adults 20–49 years old.
†Adjusted for sex.

Main presenting symptoms and precipitating events in displaced adults by age group and sex

Compared with their younger counterparts, both older displaced women and men had higher odds of presenting with age-related symptoms (women: OR=5.24; 95% CI 3.84 to 7.08; men: OR=3.60; 95% CI 2.42 to 5.33) and physical complaints (women: OR=1.80; 95% CI 1.64 to 1.98; men: OR=1.44; 95% CI 1.26 to 1.65). Older displaced women and men had lower odds of presenting with anxiety-related symptoms (women: OR=0.86; 95% CI 0.80 to 0.91; men: OR=0.90; 95% CI 0.82 to 0.99). Compared with their younger counterparts, older displaced women had higher odds of reporting problems with social functioning and lower odds of reporting mood-related and neuro-psychiatric symptoms, while older displaced men had lower or similar odds on those symptom categories.

Compared with their younger counterparts, both older displaced women and men had higher odds of reporting medical-illness related events (women: OR=1.44; 95% CI 1.32 to 1.56; men: OR=1.48; 95% CI 1.34 to 1.64) and disruption in family and relationships (women: OR=1.20; 95% CI 1.08 to 1.33; men: OR=1.77; 95% CI 1.49 to 2.09). They had lower odds of reporting events related to sexual trauma or abuse (women: OR=0.48; 95% CI 0.44 to 0.52; men: OR=0.40; 95% CI 0.29 to 0.55) and domestic discord and family violence (women: OR=0.28; 95% CI 0.25 to 0.32; men: OR=0.63; 95% CI 0.51 to 0.78).

Compared with their younger displaced women, older displaced women had higher odds of reporting events related to natural disasters (OR=2.96; 95% CI 2.25 to 3.84), loss and mourning (OR=2.26; 95% CI 2.01 to 2.54), neuro-psychiatry (OR=2.23; 95% CI 2.00 to 2.49), socio-economic functioning (OR=1.95; 95% CI 1.70 to 2.24), displacement and migration (OR=1.84; 95% CI 1.57 to 2.13) and violence (OR=1.79; 95% CI 1.61 to 1.99), while older displaced men had lower or similar odds of reporting those precipitating events (online supplemental Annex tables 1 and 2).

DISCUSSION

This study included data from 155 302 adults aged 20–49 and 21 926 adults aged 50 years or older who accessed MSF-supported mental health services in humanitarian settings in 20 LMICs between 2019 and 2024. To our knowledge, this is the largest multicountry study comparing mental health symptoms and precipitating events between younger and older adults across complex humanitarian settings in LMICs. Most were younger adults, and 74% were female. A minority was displaced, and the majority accessed services in sub-Saharan Africa or South Asia. Overall, the study identified distinct mental health symptoms and precipitating events for younger and older adults, which further differed by sex and displacement status.

The study revealed that younger adults, irrespective of their sex or displacement status, are more likely to experience anxiety-related and mood-related symptoms while older adults are more likely to report physical complaints and age-related issues. Anxiety-related and mood-related problems were proportionally among the main symptoms for which both younger and older adults sought mental health support. While several studies support our findings,[14 15] other studies reported increased risk of PTSD, anxiety and depression among older populations.[16 17] Decreased vulnerability of older adults to anxiety-related or mood-related symptoms could be explained by the maturation theory which states that older adults are more resilient, especially in their emotion regulation-solving and problem-solving abilities, and the inoculation theory, suggesting that older adults have experienced more stressful events in life, and that this increases their resilience and reduces the experienced impact of humanitarian crises.[15] However, chronic health conditions, impaired cognitive abilities and sensory awareness could also lead to increased vulnerability of older adults to anxiety-related or mood-related symptoms.[17]

The higher odds of age-related problems among older adults could indicate cognitive decline such as mild cognitive impairment, dementia or other cognitive disorders.[18] For example, individuals with dementia are particularly vulnerable during crises due to challenges with cognition, mobility and daily functioning; however, little is known about how their (mental) health may be affected by disruptive events.[19] Age-related problems affecting mental health are currently barely considered in humanitarian crises, and the expertise of mental health staff on age-related mental health symptoms is limited and should be strengthened. The higher odds of physical complaints among older adults could be explained by the bidirectional associations between non-communicable diseases (NCDs) such as diabetes mellitus, chronic kidney disease and stroke, which most frequently occur among older adults, and psychological distress, anxiety and depression.[20] Accepting their impaired functioning and chronic ill-health related to NCDs and coping with changes in life habits may lead to an increased need for mental health support[21] and should be considered when setting up integrated mental health services in chronic disease care.

Irrespective of displacement status, younger women were more likely to report trauma-related events, including sexual trauma or abuse and domestic discord or family violence, while older women were more likely to report exposure to natural disaster. Women in humanitarian settings in LMICs are at a higher risk of mental health disorders than men due to shifts in traditional gender dynamics and sexual and gender-based violence.[22] Approximately one in five refugee or displaced women in complex humanitarian settings experienced sexual violence.[23] Over the past decade, research on (gender-based) violence against women and adolescent girls in humanitarian settings in LMICs has predominantly focused on women of reproductive age, leading to limited evidence on the prevalence, patterns and types of violence against women aged 50 years and older.[24] Preventing sexual trauma, abuse and intimate partner

violence would inevitably lead to a decreased burden of mental ill-health among women in humanitarian settings.[25] Our study further indicates that older women, in general, and older displaced women, in particular, had higher odds of reporting events related to natural disaster, which is in line with other studies that have documented that older adults are disproportionately affected by natural disasters compared with younger adults.[15 26 27]

Women were over-represented compared with men in both age groups. In many humanitarian settings, MSF supports sexual and reproductive health services, including sexual and gender-based violence services. These services function as an entry point for mental health support and could explain the over-representation of women included in this study. However, the over-representation of women at mental health services, particularly in the younger age group, has also been identified in population-based studies.[22] Men have been found to be suspicious of mental health practitioners, more fearful of being retraumatised by the clinical encounter than women and distrustful of psychotropic medications used to treat mental health problems.[28] In our study, both younger and older men were more likely to report precipitating events related to medical illness compared with their female counterparts. Due to stigma and hesitation that men experience around mental health support, men may be more likely to seek healthcare at a health facility for physical complaints and are subsequently referred to mental health services, rather than seeking out mental health support directly for other mental health symptoms. This could be an indication that access to mental health services is limited for men, and proactive and conscious efforts should be made by humanitarian actors to address any barriers men may face in accessing mental health services, for example, through the integration of mental health services in chronic disease care.

The proportion of older adults included in this study varied by geographical region. In the Middle East and North Africa, almost 23% of adults accessing MSF-supported mental health services were 50 years or older, while in sub-Saharan Africa only 10% of adults were 50 years or older. There are several factors that might explain the low representation of older adults in mental health services, despite their likely need for such care. In the Middle East, MSF is supporting NCD services in various countries. These services also function as an entry point for MSF-supported mental health and psychosocial support. In sub-Saharan Africa and South Asia, MSF typically supports different services, including inpatient therapeutic feeding programmes for children under five, sexual and gender-based violence services and maternity wards. MSF-supported NCD services and therewith MHPSS support in the Middle East inevitably attract an older demographic than the general outpatient and inpatient departments in sub-Saharan Africa might attract. Additionally, older adults may have lower rates of mental healthcare utilisation than young adults due to barriers to mental healthcare, including attitudes and knowledge; comorbid medical conditions or medication that may cause, mask, interfere, mimic or distract attention from mental disorders such as depression or anxiety; provider-related factors, including ageist attitudes from healthcare providers; other extrinsic barriers, including characteristics of the healthcare system, cost, availability and accessibility of mental health services and dependency on caregivers; and unique and intersecting factors that affect older adults in minority populations.[2 29] Different studies, particularly focusing on child and adolescent mental health, have shown that MHPSS support in humanitarian settings is most inclusive when it is delivered through fixed facilities complemented by community-based services, for example, through community health workers who are trained on psychosocial first aid and MHPSS support.[30]

Considering the under-representation of older adults at MSF-supported mental health services and the age-related symptoms that were reported among those who did access mental health services, it is crucial to closely collaborate with older adults and their caregivers to identify alternative ways in which mental health support can be offered that is accessible, acceptable and appropriate for older adults. This should include the integration of mental health services in chronic disease care in humanitarian settings. Appropriate services could require staff training in mental health symptoms related to age, including dementia and other forms of cognitive decline. Mental health service providers should consider the provision of community-based mental health and mobile clinics providing mental health services closer to the community. For example, in Haiti, mental health mobile clinics have successfully been used to improve access to safe, effective and culturally appropriate mental health support in community settings,[31] and in Zimbabwe, older women, 'grandmothers', were trained to support their communities as lay counsellors.[32] At a more macro level, it is essential that humanitarian actors reflect on whether they systematically include older people in their mental health services and whether these services are culturally responsive.

As with any retrospective analysis of medical data that is collected as a routine activity, this study has its limitations. All included contexts were complex crises, in which different types of emergencies either co-occurred or followed each other rapidly within the 5-year study period. While this study gives an overview of differences in mental health of younger and older adults who sought mental health support in complex emergency settings, regional variations may exist, and the mental health consequences of different types of crises may vary. With the data we have available, we were not able to answer those questions, and further research needs to be done. Local lay workers, who are trained on basic counselling skills, provide mental health support, and the categories of symptoms they assess are broad (eg, mood-related symptoms). Different assessment tools (eg, PHQ-9 and GAD-7) were applied to identify mental health symptoms.

However, studies have shown the limitations of these assessment tools due to a lack of cultural appropriateness of the tools, as many are developed for Western contexts and have not been validated in the contexts where MSF works. While data collection was standardised across MSF-supported mental health services, we cannot be certain that all mental health staff across 20 countries completely and accurately filled out the forms. Age was self-reported, and in some instances may have been an estimation. We only included data from adults who accessed MSF-supported mental health services. These data likely exclude any adults with mental health symptoms for whom MSF-supported mental health services were not accessible due to distance, mobility limitations, dependence on a caregiver or family member to accompany, stigma, generational attitudes that might discourage seeking mental health support or other barriers. This may have led to an under-representation of specific groups of older adults who were more impacted by barriers to mental health services, including those of more advanced age. Data were primarily collected to inform the counselling of patients; therefore, the scope of variables was limited, limiting our ability to adjust our analysis for potential confounders.

CONCLUSION

This research highlights significant differences in mental health symptoms and precipitating events between younger and older adults in humanitarian settings, emphasising the heterogeneity of mental health presentations and needs. Older adults are more likely to experience symptoms related to ageing and physical complaints, while younger adults—particularly younger women—more commonly report anxiety-related and mood-related disorders. Gender-based violence and age-related symptoms play critical roles, especially among older women and men.

These findings underscore the need for tailored mental health interventions that consider age, sex and displacement status. Preventive efforts for younger adults should focus on addressing precipitating events such as sexual violence. For older adults, mental health services must evolve to include community-based support that overcomes access barriers, integration of protection and mental health with chronic disease care, and increased staff expertise on age-related mental health conditions.

Furthermore, these results call for strengthened protection measures and the development of gender-adapted and age-adapted policies to ensure mental health interventions are responsive to the diverse needs of adults in crisis contexts. Dedicated, participatory research is urgently needed to better understand these dynamics and to inform evidence-based policies and programmes that effectively address the distinct mental health needs of older adults in humanitarian crises.

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