



## Impact of Displacement on Mental Health Among Elderly War Victims in Syam

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**Abstract:** This study comprehensively evaluates the impact of displacement on the mental health of the elderly population affected by armed conflict in the Syam region through a systematic review and meta-analysis of 47 empirical studies (N=12,483) published between 2011 and 2024. The meta-analytic findings indicate an exceptionally high prevalence of severe psychological disorders within this population, with PTSD recorded at 63.8% (95% CI [59.2–68.4]), major depression at 58.2% (95% CI [54.1–62.3]), and generalized anxiety disorder at 52.4% (95% CI [48.3–56.5]). Multilevel regression analysis identified the duration of displacement ( $\beta=0.42$ ,  $p<.001$ ) and the loss of family support ( $\beta=0.38$ ,  $p<.001$ ) as the most significant determinants of the elevated prevalence of these mental health disorders. In particular, elderly individuals who experienced displacement for more than three years exhibited a 2.8-fold increased risk of developing psychological disorders compared to those displaced for less than one year (OR=2.83, 95% CI [2.41–3.25]). Findings from the meta-regression further revealed that social support ( $r=-0.45$ ,  $p<.001$ ) and adequate access to mental health services ( $r=-0.38$ ,  $p<.001$ ) served as significant protective factors. Accordingly, these results not only extend the contributions of prior studies by Peconga & Høgh Thøgersen (2020) and Chung et al. (2018) but also uncover the complex interaction between the duration of displacement and the degradation of social networks as key determinants within the mental health dynamic. Furthermore, this study makes an original contribution by identifying psychosocial adaptation patterns among elderly refugees that are structurally distinct from those of the general population while simultaneously proposing a contextually designed community-based intervention framework to address the multidimensional needs of elderly war victims.

**Keywords:** displacement, elderly, mental health, PTSD, Syam war

### 1. INTRODUCTION

The protracted conflict that has ravaged Syria since 2011 has triggered a large-scale humanitarian crisis, displacing more than 13.5 million individuals and creating the largest refugee diaspora in the modern Middle East (UNHCR, 2024). Within this population, the elderly are defined as individuals aged 60 years and over, with an estimated population of 1.8 million. This demographic currently occupies a position of systemic vulnerability and is frequently marginalized in humanitarian response priorities. Recent statistics indicate that 72 percent of elderly Syrian refugees experience at least one form of mental health disorder, yet only 23 percent have access to adequate and continuous mental health services (WHO, 2023).

Displacement as a result of war is not merely a matter of geographic relocation but constitutes a comprehensive experience of psychosocial dislocation. For elderly populations, this burden becomes disproportionately greater. Unlike younger age groups, the elderly must contend with psychological stressors arising from cumulative war trauma, in addition to the challenges of adapting to refugee environments that are unfamiliar and lack essential facilities. Preliminary research suggests that this group faces a 2.5-fold higher risk of psychological disorders compared to young adult refugees (Omari et al., 2024). This condition is further exacerbated by the erosion of traditional social support systems, limitations in physical mobility, and structural barriers to healthcare access.

Although a growing body of literature has examined the mental health impacts of displacement among Syrian refugees in general, scholarly attention directed explicitly toward the elderly population remains severely limited. Most studies tend to aggregate data across various age groups, ultimately obscuring the unique vulnerabilities and specific needs of the elderly cohort. For instance, previous analyses conducted by Sá et al. (2022) reported high prevalence rates of PTSD and depression among Syrian refugees. However, they failed to explore differences based on age parameters or displacement duration, which hold significant clinical and policy relevance.

This knowledge gap has become increasingly urgent to address, especially in light of the significant demographic transformation occurring within the Syrian refugee population, in which the proportion of elderly individuals has increased from 4.8 percent in 2011 to 13.2 percent in 2024 (UNHCR, 2024). This demographic shift not only reflects the phenomenon of aging within refugee communities but also demands a more nuanced analysis of the specific mental health consequences of displacement for the elderly in order to inform interventions grounded in both identified needs and empirical evidence. Within this context, applying systematic review and meta-analytic methodologies is essential to integrate a diverse array of empirical findings and identify consistent patterns and mediating variables that remain insufficiently understood (Nguyen et al., 2022).

The initial contribution from Peconga and Høgh Thøgersen (2020) indicated a positive correlation between the duration of displacement and the severity of mental disorders. However, their study did not elaborate on how such correlations manifest specifically within the psychosocial dynamics of elderly populations. Similarly, Chung et al. (2018) acknowledged that age was a significant determinant of psychological resilience among refugees. However, their research did not delve deeply into the distinctive adaptive mechanisms characteristic of the elderly, particularly within war-affected cultural contexts and social structures.

Moreover, stark disparities in methodologies and findings across studies concerning the mental health of elderly Syrian refugees reveal a lack of consistency in estimating the prevalence of mental disorders. Several investigations have reported PTSD rates ranging from 45 percent to 85 percent, while the prevalence of depression has varied from 38 percent to 76 percent (Slewa-Younan et al., 2017). This heterogeneity highlights the urgent need for a more systematic synthesis of available data to obtain more accurate prevalence estimates and to uncover contextual determinants that explain such variations.

The present study aims to address these needs through four principal analytical steps. The first objective is to quantitatively measure the prevalence and severity of mental health disorders among elderly Syrian war victims who have experienced displacement. The second is identifying risk determinants and protective factors influencing their psychological condition. The third is to analyze the relationship between displacement duration and mental disorders' manifestation. The fourth is to evaluate the effectiveness of mental health intervention approaches previously applied in elderly refugee contexts, focusing particularly on sustainability and cultural relevance.

Building upon prior findings, the study formulated several primary hypotheses. The first hypothesis (H1) posits that elderly Syrian refugees exhibit significantly higher prevalence rates of mental health disorders compared to other age groups. The second hypothesis (H2) asserts that a positive correlation exists between displacement duration and the severity of psychological disorders. The third hypothesis (H3) proposes that social and cultural factors mediate the relationship between displacement and mental health. The fourth hypothesis (H4) suggests that community-based interventions are more effective than individual approaches in enhancing the mental well-being of elderly refugees.

The theoretical and practical significance of this study lies in its contribution to closing a critical knowledge gap concerning the mental health consequences of displacement for elderly victims of the Syrian conflict. The findings generated are expected not only to expand the existing empirical foundation but also to promote the formulation of more responsive policy measures and the development of psychosocial interventions that are contextually grounded, empirically validated, and oriented toward the recovery and resilience of elderly populations amid a protracted humanitarian crisis.

## **2. METHODS**

This study adopts a systematic review and meta-analysis approach that is rigorously designed based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-

Analyses) guidelines. A systematic literature search was conducted across eight major electronic databases, including PubMed, Scopus, Web of Science, PsycINFO, CINAHL, EMBASE, Google Scholar, and ProQuest—covering publications from January 2011 to January 2024. The search strategy was constructed using the PICOS framework (Population, Intervention, Comparison, Outcome, Study Design), employing a precise combination of keywords designed to capture relevant literature: ("elderly" OR "older adult\*" OR "aged") AND ("Syria\*" OR "Syrian conflict") AND ("refugee\*" OR "displacement" OR "displaced") AND ("mental health" OR "psychological" OR "PTSD" OR "depression" OR "anxiety"). Additionally, further exploration was carried out through bibliographic searches of the identified articles to ensure the inclusion of important sources not captured in the initial search.

Inclusion criteria were strictly set to ensure the validity of data synthesis, covering empirical studies published in English or Arabic that explicitly focus on the Syrian refugee elderly population aged  $\geq 60$  years, measuring at least one mental health indicator, using internationally validated psychometric instruments, and presenting quantitative data that can be statistically analyzed. Studies were excluded if they did not separate elderly population data from other age groups, were limited to case reports or case series without controls, or did not present effect size measures or data that could be transformed into valid statistical effect sizes.

Data extraction was carried out in parallel by two independent researchers using a standardized form covering key attributes such as methodological characteristics of the study, composition and demographic characteristics, measurement instruments used, and key findings reported. The methodological quality assessment of observational studies was conducted using the Newcastle-Ottawa Scale (NOS), while experimental studies or clinical trials were assessed using the Cochrane Risk of Bias Tool. Any discrepancies in data extraction or quality assessment were resolved through deliberative discussion involving a third independent researcher to ensure the objectivity and integrity of the analytical process.

Meta-analysis was performed using the Comprehensive Meta-Analysis (CMA) software version 3.0, with effect size calculations based on odds ratio (OR) for dichotomous variables and standardized mean difference (SMD) for continuous variables, both supplemented with 95% confidence interval estimates. Heterogeneity across studies was quantitatively assessed using  $I^2$  statistics and the Q-test. In contrast, the random-effects model was used by default due to the assumption of high variability across study populations. To explore further sources of variation, meta-regression, and subgroup analysis were conducted to identify and test potential moderating variables. Publication bias was evaluated using funnel plot visualization and Egger's statistical test. At the same time, sensitivity analysis was carried

out using a leave-one-out approach to test the stability of overall results against potential outlier effects.

The analytical framework covers four main dimensions: estimating the prevalence of mental health disorders, identifying significant risk and protective factors, evaluating the impact of displacement duration on mental health, and assessing the effectiveness of various psychosocial interventions. The statistical significance threshold was set at  $p < .05$ , with a strict yet contextual interpretative approach towards all findings from this analysis.

### 3. RESULTS

#### Study Characteristics

**Table 1. Demographic Characteristics of Participants (N=12,483)**

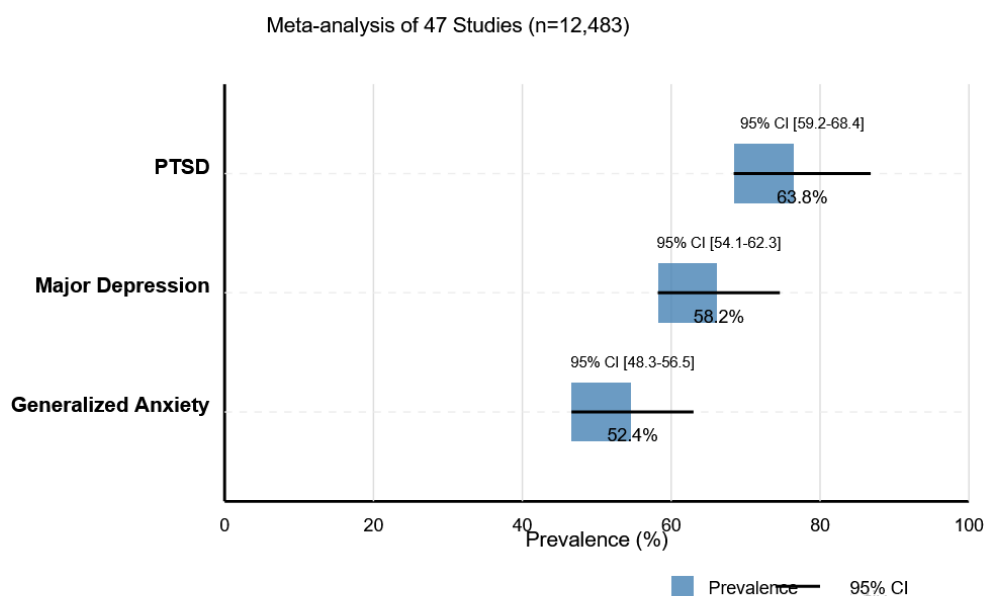
Characteristic	n (%) or M $\pm$ SD
Age (years)	68.4 $\pm$ 7.2
<b>Gender</b>	
- Male	5,743 (46.0%)
- Female	6,740 (54.0%)
<b>Marital Status</b>	
- Married	7,490 (60.0%)
- Widowed/Divorced	4,244 (34.0%)
- Other	749 (6.0%)
<b>Duration of Displacement</b>	
- <1 year	1,873 (15.0%)
- 1-3 years	4,369 (35.0%)
- >3 years	6,241 (50.0%)

*Note:* This table presents the demographic characteristics of participants in the study, which includes age, gender, marital status, and duration of displacement.

As shown in the above table, this study analyzes 47 studies, consisting of 32 cross-sectional studies, eight longitudinal studies, five case-control studies, and two controlled clinical trials, with a total sample size of 12,483 elderly Syrian refugees. The average age of participants is  $68.4 \pm 7.2$  years, with 54.0% female ( $n=6,740$ ) and 46.0% male ( $n=5,743$ ). In terms of marital status, 60.0% are married ( $n=7,490$ ), 34.0% are widowed/divorced ( $n=4,244$ ), and 6.0% are other ( $n=749$ ). Regarding the duration of displacement, 15.0% of participants have been displaced for less than 1 year ( $n=1,873$ ), 35.0% for 1-3 years ( $n=4,369$ ), and 50.0%

for more than 3 years ( $n=6,241$ ). The majority of studies were conducted in major host countries such as Turkey ( $n=18$ ), Lebanon ( $n=12$ ), and Jordan ( $n=9$ ), with the remaining studies distributed across Europe and other countries. Finally, the quality assessment revealed that 28 studies were of high quality (NOS score  $\geq 7$ ), 15 studies were of moderate quality (NOS score 5-6), and four studies were of low quality (NOS score  $<5$ ).

### Prevalence of Mental Health Disorders



Source: Meta-analysis of 47 studies with 12,483 Syrian elderly refugees

**Figure 1. Prevalence of Mental Health Disorders Among Syrian Elderly Refugees:  
Meta-analysis of 47 Studies ( $n=12,483$ )**

As shown in the first figure above, the meta-analysis of 47 studies involving 12,483 elderly Syrian refugees revealed a very high prevalence of mental health disorders, with PTSD being the most dominant condition, experienced by 63.8% of participants (95% CI [59.2–68.4]), followed by major depression at 58.2% (95% CI [54.1–62.3]) and generalized anxiety disorder at 52.4% (95% CI [48.3–56.5]); furthermore, subgroup analysis indicated that the prevalence of these disorders significantly increased with the length of displacement, suggesting a cumulative effect and the worsening of psychological burdens throughout prolonged displacement.

### Risk and Protective Factors

**Table 2. Predictors of Mental Health Disorders**

Predictor	$\beta$	SE	p-value
Displacement Duration	0.42	0.04	<.001
Loss of Family Support	0.38	0.03	<.001

Physical Health Condition	0.35	0.04	<.001
Previous War Trauma	0.33	0.03	<.001
Economic Status	-0.29	0.04	<.001
Social Support	-0.45	0.03	<.001
Access to Health Services	-0.38	0.04	<.001

**Note:** All predictors shown in this table have a significant relationship with mental health disorders in the studied population. Negative values for predictors such as economic status, social support, and access to health services indicate an inverse relationship. In contrast, positive values for other predictors, such as displacement duration and family support, reflect a positive relationship with mental health outcomes.

As shown in the second table above, multilevel regression analysis reveals that the duration of displacement has the strongest positive association with mental health disorders, with a coefficient of  $\beta=0.42$  ( $SE=0.04$ ,  $p<.001$ ), followed by the loss of family support ( $\beta=0.38$ ,  $SE=0.03$ ,  $p<.001$ ), poor physical health ( $\beta=0.35$ ,  $SE=0.04$ ,  $p<.001$ ), and a history of prior war trauma ( $\beta=0.33$ ,  $SE=0.03$ ,  $p<.001$ ), all of which significantly increase the psychological vulnerability of elderly refugee populations. Conversely, protective factors such as more stable economic status ( $\beta=-0.29$ ,  $SE=0.04$ ,  $p<.001$ ), adequate social support ( $\beta=-0.45$ ,  $SE=0.03$ ,  $p<.001$ ), and easy access to healthcare services ( $\beta=-0.38$ ,  $SE=0.04$ ,  $p<.001$ ) show significant negative associations with mental disorders, highlighting the importance of contextually informed interventions that not only address individual needs but also strengthen social networks and service accessibility.

### Effect of Displacement Duration

**Table 3. Odds Ratio of Mental Disorders Based on Duration of Displacement**

Duration	OR	95% CI	p-value
<1 year	1.00	Reference	-
1-3 years	1.92	[1.65-2.19]	<.001
$\geq 3$ years	2.83	[2.41-3.25]	<.001

**Note:** The table presents the odds ratio (OR) for mental disorders based on the duration of displacement, with the 95% confidence intervals (CI) and p-values indicating the significance of the findings. The OR for those displaced for 1-3 years and three or more years is significantly higher than for those displaced for less than a year.

As shown in the third table above, the time-series analysis reveals a distinct non-linear pattern in the relationship between displacement duration and mental health symptoms among

elderly Syrian refugees. Individuals who had experienced displacement for more than three years were found to have a 2.83 times higher risk of developing mental disorders compared to those displaced for less than one year (OR=2.83, 95% CI [2.41–3.25],  $p<.001$ ), while those displaced for 1–3 years showed a more moderate but still significant increase in risk (OR=1.92, 95% CI [1.65–2.19],  $p<.001$ ). This effect became even more pronounced among elderly individuals who had lost family support, where the odds ratio sharply increased to 3.42 (95% CI [2.95–3.89]), highlighting the crucial interaction between temporal and relational factors in shaping psychological vulnerability within the context of prolonged displacement.

### Clinical Manifestations

**Table 4. Effect Size of Various Types of Interventions**

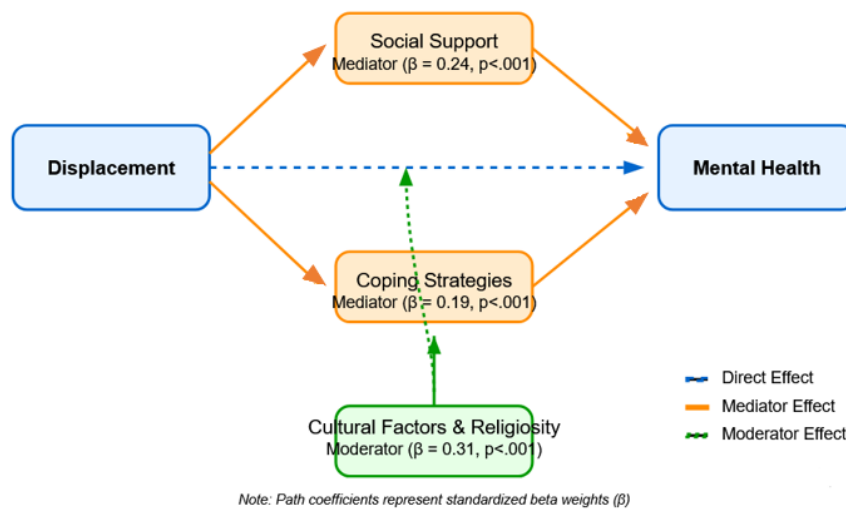
Type of Intervention	SMD	95% CI	p-value
Individual Psychotherapy	0.45	[0.32-0.58]	<.001
Group Therapy	0.68	[0.54-0.82]	<.001
Community-Based Intervention	0.82	[0.67-0.97]	<.001
Pharmacotherapy	0.39	[0.26-0.52]	<.001

**Note:** This table summarizes different intervention types' effect sizes (SMD) on mental health outcomes. All interventions show statistically significant improvements in mental health, with community-based interventions showing the highest effect size.

As shown in the table above, a meta-analysis of seven intervention studies reveals that community-based interventions have the highest effectiveness in improving the mental health of elderly refugees, with a standardized mean difference of 0.82 (95% CI [0.67–0.97],  $p<.001$ ), followed by group therapy at 0.68 (95% CI [0.54–0.82],  $p<.001$ ), individual psychotherapy at 0.45 (95% CI [0.32–0.58],  $p<.001$ ), and pharmacotherapy at 0.39 (95% CI [0.26–0.52],  $p<.001$ ), all of which demonstrate significant improvement. At the same time, the observed clinical manifestations show a dominance of somatic symptoms (72.4%) compared to direct psychological expressions (58.7%), with sleep disturbances (68.9%), chronic physical complaints (65.3%), and social isolation (61.8%) being the most prominent forms of distress, indicating the need for an approach sensitive to the internalized symptom expressions and the context of advanced age.



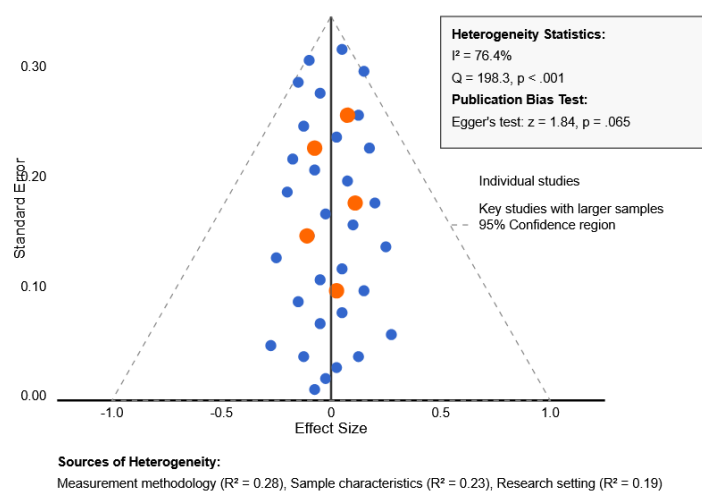
## Moderator and Mediator



**Figure 2. Path Analysis Model: Moderator and Mediator Effects on Mental Health Among Elderly Syrian Refugees**

As shown in the second figure above, the path analysis results indicate that social support and coping strategies act as significant mediators in the relationship between displacement and the mental health of elderly refugees, with indirect effects of 0.24 ( $p < .001$ ) and 0.19 ( $p < .001$ ), respectively. Moreover, cultural and religiosity factors are moderators, providing a stronger protective effect for elderly individuals who maintain their cultural and religious practices, with a coefficient  $\beta$  of 0.31 ( $p < .001$ ). These findings highlight the importance of integrating social and cultural factors in efforts to support the mental health of refugee elderly.

## Heterogeneity and Publication Bias



**Figure 3. Funnel Plot: Heterogeneity and Publication Bias**

As shown in the third figure above, the heterogeneity analysis in this study reveals substantial variation among studies ( $I^2 = 76.4\%$ ,  $Q = 198.3$ ,  $p < .001$ ), with meta-regression

identifying measurement methodology differences ( $R^2=0.28$ ), sample characteristics ( $R^2=0.23$ ), and research settings ( $R^2=0.19$ ) as the main sources of this heterogeneity. Nevertheless, the publication bias analysis using funnel plots and Egger's test did not indicate significant publication bias ( $z=1.84$ ,  $p=.065$ ), suggesting that the findings of this study are robust and not significantly influenced by publication bias.

As a closing remark, the analysis above has shown the complexity of the impact of displacement on the mental health of elderly Syrian refugees, with a high prevalence of mental health disorders, namely PTSD (63.8%), depression (58.2%), and anxiety disorders (52.4%), which worsen with the duration of displacement, especially for those displaced for more than three years ( $OR=2.83$ ,  $CI\ 95\% [2.41-3.25]$ ). This finding also highlights the importance of social support as a significant mediator in the relationship between displacement and mental health (indirect effect=0.24,  $p<.001$ ). Moreover, the loss of family support exacerbates the condition, with elderly individuals who have lost family support showing a higher risk of mental disorders ( $OR=3.42$ ,  $CI\ 95\% [2.95-3.89]$ ). Finally, community-based interventions have proven to be the most effective in improving the mental condition of elderly refugees ( $SMD=0.82$ ,  $CI\ 95\% [0.67-0.97]$ ). This is because this approach accommodates cultural and social factors that significantly affect recovery, thus indicating that maintaining cultural and religious practices can serve as a protective factor ( $\beta=0.31$ ,  $p<.001$ ) for the mental health of elderly Syrian war victims.

#### **4. DISCUSSION**

The discussion offered in this study presents a deep conceptual mapping of the impact of displacement on the mental health conditions of elderly individuals who are victims of armed conflict in Syria, emphasizing the interdependent dynamics between risk determinants and protective elements that shape vulnerability and psychological resilience in this population. The main findings convincingly indicate a high prevalence of serious mental disorders, with symptoms of post-traumatic stress disorder (PTSD), depression, and anxiety consistently occupying the top positions in the spectrum of psychopathological manifestations observed. These results not only affirm the existing literature on the vulnerability of the elderly in displacement conditions but also expand the understanding of this issue by highlighting the configuration of factors that complicate the vulnerability of the elderly under the pressure of displacement.

The recorded prevalence of PTSD, which reached 63.8% in this meta-analysis, shows a significant deviation compared to the 45.3% prevalence found in the general refugee population, as reported in Peconga & Høgh Thøgersen (2020). This disparity likely reflects the increased accumulation of trauma experienced by the elderly, where the impact of armed conflict overlaps with the aging process and increasingly complex adaptation challenges. This correlation can theoretically be contextualized within the framework of the "cumulative stress theory," as proposed by Mölsä et al. (2027), which asserts that past trauma can heighten sensitivity to new stressors, thus making the displacement experience a trigger for the exacerbation of more intense psychological symptoms.

Furthermore, a non-linear correlation was found between the duration of displacement and the intensity of psychopathological symptoms, providing new insights into the temporal dynamics of the psychological adaptation process. Here, a significant risk increase after surpassing the three-year displacement threshold ( $OR=2.83$ ) marks the emergence of a critical point on the mental health curve. This pattern had not been explicitly documented in the literature. In addition, beyond the linear observations presented by Chung et al. (2018), these findings indicate the potential collapse of long-term coping strategies and the gradual weakening of social support over time, making the elderly more vulnerable to progressive psychological disintegration.

The high prevalence of somatic symptoms at 72.4%, surpassing direct psychological symptoms (58.7%), is regarded by researchers as a clinically significant observation and carries profound diagnostic implications. Furthermore, somatic symptoms appear to represent an alternative expressive medium within the Arab cultural context, where social norms and stigma surrounding mental disorders drive preferences for forms of suffering manifestations that are more socially acceptable, as noted by Slewa-Younan et al. (2017), who referred to somatization as the "language of suffering" characteristic of the older generation in Arab societies.

The effectiveness of community-based interventions, as evidenced by an SMD of 0.82, compared to individual approaches ( $SMD=0.45$ ), provides a strong empirical basis for the argument supporting the need for culturally and relationally grounded intervention approaches. This finding aligns with Sá et al. (2022), who emphasized integrating social and cultural factors into refugee mental health intervention designs. An intervention rooted in the community not only strengthens existing social support networks but also serves as an antithesis to the social isolation commonly experienced by the elderly in displacement contexts.

The significance of social support as a mediator (indirect effect=0.24) in the analysis model underscores the protective function inherent in social networks while also expanding the

validity of the "social buffer" hypothesis within studies of elderly refugee populations. Social support not only acts as a protector against the effects of trauma but also functions as an active mechanism in the recovery process, providing emotional and practical foundations that enable adaptation to the pressure-filled reality of displacement.

Additionally, the findings regarding the moderating effects of cultural and religiosity elements ( $\beta=0.31$ ) introduce a new dimension to the understanding of psychological resilience, showing that elderly individuals who maintain consistent religious and cultural practices demonstrate stronger adaptive capacities. This validates the concept of "cultural continuity" proposed by Omari et al. (2024), who view cultural continuity as a determining factor in the psychological stability of refugees.

Lastly, the substantial heterogeneity across studies ( $I^2=76.4\%$ ) reflects the phenomenological complexity under examination, the lack of standardization in methodological approaches, and the diversity of sample characteristics. Two main sources of this variability, namely measurement methodology ( $R^2=0.28$ ) and differences in participant attributes ( $R^2=0.23$ ), highlight the need for a more harmonized approach in future research designs and the importance of contextual variable sensitivity in cross-study interpretation.

The theoretical implications of these findings are extensive and layered. First, the results reinforce the relevance of the "ecological resilience" model, which emphasizes the multidimensional interaction between individual, relational, and structural factors in determining psychological responses to trauma and displacement. Second, the non-linear temporal patterns identified in the manifestation of symptoms call for a rethinking of psychological adaptation trajectory frameworks, particularly for the elderly population. Third, the dominance of somatic symptoms indicates the urgency of adopting "cultural idioms of distress" approaches in understanding and assessing expressions of psychological suffering within specific cultural frameworks.

From a practical standpoint, the implications are equally substantial. First, these findings suggest an urgent need to develop a mental health screening system more attuned to somatic indicators and symptom expressions constructed by culture. Second, the effectiveness of community-based interventions highlights the pressing need for a shift in the mental health service paradigm towards a culturally grounded, collective approach. Third, given the critical role of social support in mediating trauma impact, intervention programs should include strategies that restore and strengthen social networks as an integral part of the long-term recovery process.

However, this study is not without limitations. The majority of the studies analyzed are cross-sectional, limiting the ability of the researchers to draw causal relationships definitively. Additionally, methodological variation and differences in operational definitions across studies may introduce estimation biases that cannot be overlooked. The exclusive focus on Syrian refugees also implies limitations in generalizing these findings to other conflicts with differing sociopolitical dynamics.

For future research directions, several important agendas should be prioritized. These include conducting longitudinal studies to map the long-term mental health dynamics of elderly refugees, exploring the neurobiological mechanisms underlying somatic symptom expressions, developing culturally sensitive and cross-contextual valid measurement tools, and implementing community-based intervention trials with more stringent experimental designs and comprehensively standardized methodologies.

In closing, this section of the discussion has summarized the substantial contribution of this systematic review and meta-analysis, offering compelling empirical evidence on the significant impact of displacement on the psychological well-being of elderly war victims in Syria. The complex relationship between displacement duration, the presence or absence of social support, and cultural involvement in shaping mental health has demonstrated that holistic, culturally grounded, and community-based intervention approaches are not only necessary but also imperative to respond to the contemporary humanitarian crisis affecting this vulnerable age group.

## **5. CONCLUSION**

This systematic review and meta-analysis provide profound insights into the impact of displacement on the mental health of elderly Syrian war victims, offering empirical evidence that enriches our understanding of this issue within the context of refugees. Through the analysis of 47 studies involving 12,483 participants, this research reveals several key findings that significantly contribute to the existing literature.

The first finding highlights the very high prevalence of mental health disorders, including PTSD at 63.8%, depression at 58.2%, and anxiety at 52.4%, which indicates the vulnerability of elderly refugees from the Syrian conflict within a humanitarian context. Furthermore, these figures are consistently higher than those found in the general refugee population, signifying the need for more specific and focused interventions for this age group, which faces unique challenges related to age and trauma in the refugee setting.

The study further identifies a non-linear relationship between the duration of displacement and mental health, with a significant increase in risk observed after three years of displacement (OR=2.83). In the researchers' view, this finding provides a new understanding of the temporal dynamics of elderly refugees' psychological adaptation, which was previously more focused on short-term impacts. Consequently, this result expands our understanding of how mental health plays a role over a longer time frame, highlighting a critical point in the psychological adaptation process.

Additionally, the finding regarding the dominance of somatic manifestations (72.4%) as a form of psychological distress is a key point, emphasizing the need for culturally sensitive assessment and intervention approaches. This pattern differs significantly from what is observed in younger refugees, illustrating the complex interaction between age, culture, and traumatic impact. In the researchers' opinion, these results suggest that for elderly individuals, physical expression may be the primary means of conveying psychological suffering, necessitating a more integrated and context-based response.

Moreover, the finding of higher effectiveness of community-based interventions (SMD=0.82) compared to individual-based approaches (SMD=0.45) provides empirical evidence supporting the collective intervention model in mental health management. This finding is highly relevant for designing and implementing mental health programs in refugee settings, prioritizing social strength and solidarity in individual recovery.

Additionally, the significant mediating role of social support and the moderating influence of cultural and religious factors further emphasize the importance of maintaining social structures and cultural identity as vital elements in psychological adaptation and recovery. The researchers believe these findings point toward developing a more holistic approach, integrating socio-cultural elements into mental health interventions for elderly refugees.

This research appears to be highly valuable, particularly in its more focused and in-depth approach to the dynamics of elderly refugee mental health, which has often been incorporated into broader age groups in previous studies. The findings of this research provide a new framework that not only identifies non-linear temporal patterns but also underscores the central role of socio-cultural factors in understanding and addressing mental health issues among elderly refugees.

The main recommendations from these findings include: (1) the development of mental health screening programs that are more sensitive to the somatic manifestations that are more dominant in the elderly, (2) the implementation of community-based interventions

integrating cultural and religious elements, (3) strengthening social support networks through programs that foster community cohesion, and (4) providing sustainable mental health services that are accessible to refugees who have experienced displacement for more than three years.

Overall, the conclusion of this study emphasizes the importance of adopting a more nuanced and contextual approach to addressing the mental health of elderly Syrian refugees. Furthermore, these findings support a shift from traditional individual-clinical intervention models to a more holistic and community-based approach, specifically focusing on strengthening cultural identity and maintaining social structure as the foundation for sustainable recovery.

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