

REVIEW

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Psychosocial support for disaster-affected women in India: a narrative review of the literature

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Abstract

The narrative review aims to identify the psychosocial issues and interventions for disaster-affected women in India. A standard narrative review was followed for identifying, screening and selecting the studies for revealing the results. The review included 6 studies out of 193, published between 2005 and 2024. The critical quality appraisal checklist and thematic analysis were employed in the review. The study characteristics found that the majority of the included studies are from the Southern part of India, community-based studies, Post-Traumatic Stress Disorder (PTSD) as the most common psychiatric disorder. The key themes identified were psychosocial issues and associated factors, psychosocial interventions, effectiveness and contextual relevance of psychosocial support. The study concludes that there is a need for gender-inclusivity and effective long-term interventions for disaster-affected women in India.

Keywords Psychosocial support, Women, Gender equality, Narrative review

Introduction

Disaster is not a serious disruption of psychological vulnerability; it is meticulously linked with physical and social aspects as well [1]. Almost all individuals in society experience psychological distress, especially due to emergencies. One in five individuals had faced war or conflict in the past years and developed psychological distress. This kind of disaster interrupts the mental health of individuals and leads to vulnerable conditions [2]. A systematic review found that the most common mental illnesses in disasters are general anxiety disorder, depression,

substance use, post-traumatic stress disorder and adjustment disorder [3]. The psychosocial consequences are a significant factor in the overall well-being of individuals affected by disasters.

Psychosocial support played an inevitable role in addressing the psychosocial consequences, mitigating negative outcomes, and promoting positive well-being for an individual [4]. Mental health and psychosocial support typically promote psychosocial wellbeing or treat mental health conditions of an individual in society. It is a multi-sectoral approach to address the emergency responses, individuals, families and communities [5].

Negative gender impact is always seen in disasters, and mortality rates are higher among women. The impacts are in the biological way, discrimination in relief, gendered poverty and lack of communication and resources. Violence against women and girls has increased in disasters and risk factors such as life stressors, high-risk

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environments, gender inequalities and inadequate social norms [6].

Disasters in the Indian context revealed that most geographical areas are disaster-prone, and India is the most disaster-prone country in the world [7]. Women in disasters are often a vulnerable group, and in the Indian context, cultural practices, homemaking, lack of education and financial instability, widowhood, male headed families are leading factors. The other factors, like violence, psychological distress, social and political environments all add to women's vulnerability in disasters [8].

Psychosocial support interventions are necessary for those disaster-affected individuals. The multilevel support strategies like practical help, community-based interventions, psychological first aid, trauma-focused cognitive behavioural therapy and other relevant therapies [9]. The current Indian scenario shows that psychosocial support and mental health services have national-state-district level guidelines, and NIMHANS developed a module for further services [10].

There are no specific guidelines for women on psychosocial support in disaster settings. There are several challenges in providing psychosocial support for women in disasters, such as limited access to services, stigma surrounding mental health and cultural practices, lack of gender sensitive approaches. Issues like gender-based violence and caregiver burden in disasters were not addressed or provided with a proper intervention in this area. The special interventions for women to address their psychosocial needs are lacking in the Indian settings, such as policy-level gaps in gender-responsive care and limited training for women in psychosocial care. There are limited syntheses of evidence focusing specifically on women on psychosocial support in disasters. The notable gaps are a lack of comprehensive narrative reviews, a complex interplay of socio-political and cultural factors and understanding the challenges and effectiveness of psychosocial support for disaster-affected women in India.

This study adopts a narrative review approach to understand the heterogeneity of available studies, context-specific social-political-cultural changes, and conceptual clarity and contextual insight. The specific objectives of the current study are: (1) To identify the issues and interventions for women in disaster settings, (2) To analyse the effectiveness and contextual relevance of psychosocial support for disaster-affected women in India.

Methods

Narrative reviews provide an in-depth examination and critique of existing literature, encompassing various subtypes such as empirical integrative reviews and state-of-the-art reviews. These reviews aim to deepen understanding of a topic by synthesizing and interpreting existing knowledge,

often highlighting significant developments and changes in research orientations over time [11].

The narrative review carried out the following steps for the selection of the study:

Step 1: Search strategy

The search words like ("psychosocial care" OR "support" OR "crisis intervention" OR "mental health") AND ("women" OR "females") AND ("India") AND ("disasters" OR "natural disasters" OR "human-made disasters") were used for identifying the studies from Scopus, PubMed, PsycINFO, EBSCOhost, and Cochrane. The search words were developed using the key concepts and related terms, and combined using the Boolean operators.

Step 2: Study criteria

The current review focused on studies published between January 2005 to December 2024, aligning with the Sustainable Development Goals' (SDGs), which prioritizes gender equity and well-being. The current study applied specific inclusion criteria: peer-reviewed journal articles written in English that are closely related to psychosocial support for women in disaster situations. The literature predominantly comprised academic research conducted by independent researchers within major educational institutions, encompassing various disaster types and affected populations across Indian states. Although the search spanned all states, studies from Tamil Nadu, Bihar, and the Andaman and Nicobar Islands were most relevant to the final analysis. The review included diverse study designs to capture a broad range of findings and enhance further understanding of the topic.

Step 3: Search results

The search string yielded 193 peer-reviewed publications. During the review process, 12 studies were found to be duplicates. The review excluded 169 studies for being off-topic, unrelated to disasters, or not focused on India. Out of 12, 6 studies were included due to data availability and relevance to the psychosocial focus of the review. Ultimately, 6 studies were selected for the final stage of the review, and it is represented in Fig. 1.

Step 4: Data extraction

The included studies were classified in accordance with the following categories: year of publication, state or union territory, study type, gender identity of respondents, types of psychiatric disorders, domain and outcome of the study, authors, aim of the study, design of the study, sample size and tools, major findings, and types of disasters. The studies were further grouped under themes such as: gender vulnerability and cultural context, socio-geographic-

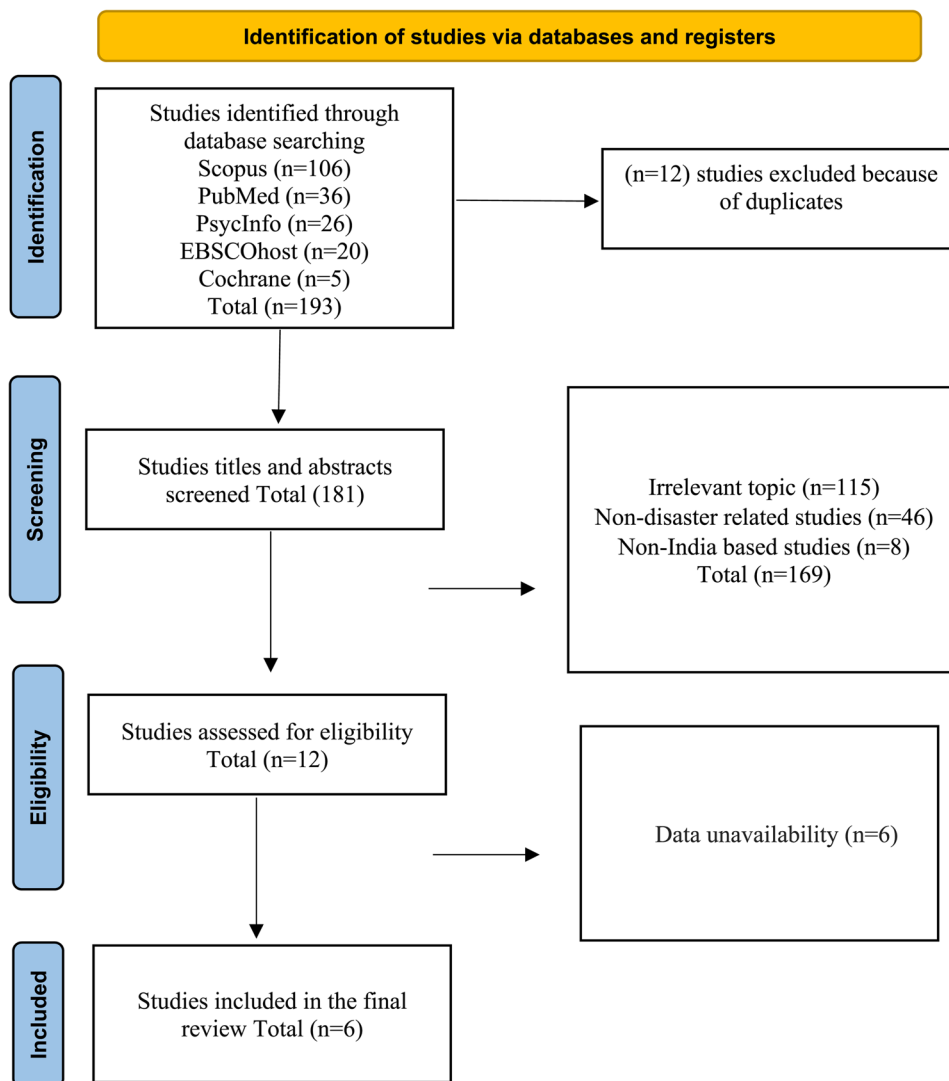


Fig. 1 Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) diagram employed for the identification of articles

economic risks and psychosocial counselling. The Joanna Briggs Institute (JBI) critical appraisal checklist was used for the quality of the selected studies [12]. The studies that served the JBI checklist appraisal included quasi-experimental, cross-sectional and case-control. The JBI checklist for quasi-experimental studies included nine questions, of which, 0–3 (low), 4–6 (moderate), 7–9 (high); cross-sectional studies included eight questions of which 0–4 (low), 5–6 (moderate), 7–8 (high); case control studies included ten questions of which 0–4 (low), 5–7 (moderate), 8–9 (high). The JBI checklist comprises of four response options: Yes (1), No (0), Unclear (0) and Not Applicable (0).

Table 1 shows that two of the cross-sectional studies had gained full scores, which indicates high quality, fulfilling all the criteria of the JBI checklist, whereas the other one

achieved a moderate score, as it lacked details on the confounding factors and strategies to deal with confounding factors. The quasi-experimental study had gained high-quality status despite the insufficient data on pre-test. One of the case control study has gained high quality status even though it lacked information on confounding factors and its strategies; whereas the other one is of moderate level because of the information gap on exposure measurement, confounding strategies and statistical analysis.

Results

The findings indicate the study characteristics, quantitative outcomes, summaries, and themes.

Study characteristics

Table 2 indicates that the majority of the articles were published between 2010 and 2019, and notably, most of the studies were conducted in the state of Tamil Nadu.

Table 1 The quality appraisal of the included studies

Studies	1	2	3	4	5	6	7	8	Quality		
[13]	1	1	1	1	1	1	1	1	High (8)		
[14]	1	1	1	1	0	0	1	1	Moderate (6)		
[15]	1	1	1	1	1	1	1	1	High (8)		
Study	1	2	3	4	5	6	7	8	9	Quality	
[16]	1	1	1	1	0	1	1	1	1	High (8)	
Studies	1	2	3	4	5	6	7	8	9	10	Quality
[17]	1	1	1	1	0	1	0	1	1	0	Moderate (7)
[18]	1	1	1	1	1	0	0	1	1	1	High (8)

Table 2 Characteristics of included studies

Characteristics	Total (n = 6)
<i>Year of publication</i>	
Pre – 2009	2
2010–2019	3
2020–2024	1
<i>State / Union territory</i>	
Andaman and Nicobar Islands	1
Tamil Nadu	4
Bihar	1
<i>Study type</i>	
Clinical	2
Community	4
<i>Gender identity of respondent</i>	
Women	2
Men and women	4
<i>Type of psychiatric disorders</i>	
More than one type	2
PTSD	4

Furthermore, the studies predominantly focused on both men and women as the gender categories. Among the psychiatric disorders examined, PTSD emerged as the most common single condition identified in the review.

Quantitative outcome

The included studies consisted uniquely of quantitative articles, which examined outcomes such as gender differences, psychiatric morbidity, and social factors. The findings revealed that women were disproportionately affected compared to other genders. Notably, PTSD was the most prevalent condition observed. Furthermore, Table 3 illustrates the socioeconomic status, highlighting that women experience significant psychosocial issues during and after disasters.

Summary of the included studies

The included studies revealed several key findings: most studies employed a cross-sectional design, highlighted high rates of psychiatric morbidity, and underscored the significance of psychosocial issues, particularly among women. Notably, tsunami emerged as the primary

disaster type examined in these studies, emphasizing the impact on women’s mental health.

Themes from included studies

The study had identified three key themes aligned with the objectives. These themes have been described on the basis of the methodologies and results of the selected studies.

Theme 1: psychosocial issues and associated factors

The result of the selected studies focuses on gender differences, psychiatric morbidity and social factors. The gender differences predict that women were disproportionately affected in disasters. Psychiatric morbidity includes panic disorder, PTSD, anxiety, depression, unspecified anxiety disorder and somatic complaints. Social factors comprised of displacement, financial constraints, injured family members, low social economic status, lack of counselling and psychosocial care interventions [13–18].

Theme 2: psychosocial interventions and effectiveness

The results from the selected study reveal that psychosocial support and care plays a significant role for women in disaster settings. The counselling and supportive services are considered as a crucial protective factor against PTSD and distress among women [16–18].

Theme 3: contextual relevance of psychosocial support

Disasters have a significant impact on women’s mental health and the studies indicate that they are more vulnerable to psychiatric morbidity which is further linked to factors such as displacement, injury, lower socioeconomic status, poverty, age, marital status, lack of income, and urban residency which increased the psychosocial risk of disaster-affected women [13–15, 17, 18].

Discussion

The narrative review of research on psychosocial support for women affected by disasters identified six relevant studies. The selected studies included cross-sectional studies, quasi-experimental study, and case-control studies. The critical appraisal study revealed that the majority

Table 3 Summary of included studies

Author(s)	Aim of the study	Design of the study	Sample size and tools	Major Findings	Type of Disaster
[13]	The study explored gender differences in psychiatric morbidity during the first three months after the December 2004 tsunami in the Andaman and Nicobar Islands.	Cross-sectional study	The study included 475 survivors (188 men, 287 women) from 74 relief camps in Port Blair and Car-Nicobar, where psychiatrists diagnosed mental health conditions using International Classification of Diseases (ICD)-10.	Displaced women had higher rates of panic disorder, anxiety, and somatic complaints, while non-displaced survivors showed more adjustment disorder.	Tsunami
[14]	The study aimed to estimate PTSD prevalence, identify its risk factors, provide psychiatric support, and develop culturally appropriate mental health interventions for tsunami-affected communities.	Cross-sectional study	There were 515 shelter residents (327 adults) using the Harvard Trauma Questionnaire to evaluate PTSD based on Diagnostic and Statistical Manual of Mental Disorders (DSM) - IV criteria.	PTSD prevalence was 12.7%, with higher odds among women, the injured, and those without household income.	Tsunami
[15]	The study examines anxiety, depression, and PTSD among women affected by the Kosi floods in Bihar, India.	Cross-sectional study	A total of 250 women, 125 from high flood-affected areas and 125 from unaffected areas, used purposive sampling and standardized tools Hopkins Symptoms Checklist (HSC - 25) and PTSD Civilian Checklist to assess mental health among ever-married women aged 17–49.	Significant differences were found between the affected and unaffected groups in anxiety and depression, with the affected group showing an inverse association between age and anxiety, depression, and PTSD symptoms.	Flood
[16]	The effectiveness of Psychosocial Care, a community-based mental health initiative for 2004 tsunami survivors in India.	Post-Intervention study	NIMHANS implemented a train-the-trainer psychosocial care model in tsunami-affected South India, providing three months of care to an intervention group of women, with Impact of Event Scale (IES) scores used to assess outcomes against a control group.	The intervention group showed significant symptom improvement, with post-test total IES and subscale scores lower than pre-test and control group scores.	Tsunami
[17]	The study examined how pre, during, and post-disaster factors predicted PTSD differently in men and women survivors of the 2004 tsunami in Kanyakumari, India.	Case control study	The study had a sample size of 485 subjects and used the Impact of Events scale-Revised (IES-R) as a tool to assess PTSD.	Women had 6.35 times higher odds of developing PTSD than men, with increased risk linked to marital status, age, socioeconomic status, and damage severity, while receiving counseling services was a protective factor.	Tsunami
[18]	The study examined the relationship between potential risk factors and post-traumatic stress disorder (PTSD) among survivors of the 2004 tsunami in Kanyakumari district.	Case control study	There were 158 cases and 141 controls among 485 tsunami survivors using the Impact of Events Scale-Revised (IES-R) tool, and analysed risk factors for PTSD	Multivariate analysis revealed that PTSD was significantly associated with female gender, older age, injury, urban residence, and loss of close relatives, while absence of fear of tsunami recurrence, satisfaction with services, and multiple counselling sessions had a protective effect.	Tsunami

of the selected studies achieved a status of high quality. Three themes were identified which correlated with the objectives, and it is included in the result section. The findings underscore how these themes are often integral in framing psychosocial support for women in disaster contexts. The majority of the studies highlighted specific challenges faced by women in disasters, and a study explored the impact of psychosocial care training for women [16].

This review specifically focuses on psychosocial support for women affected by tsunami, highlighting the significant impact of the 2004 tsunami on the coastal regions of Southern India.

Tsunamis are considered as one of the most destructive natural disasters, resulting in catastrophic loss of life and property. A notable example is the Indian coastline's experience with the most devastating tsunami, which occurred on December 26, 2004 [19]. The current review also revealed that research coverage was limited to a few states, with most studies being community-based. The post-disaster psychosocial challenges faced by women are limited to different geographical areas of India. The current study underscores that psychiatric morbidity is prevalent among women following disasters. Research suggests that exposure to multiple catastrophes can have a compounding impact on physical, emotional, and overall well-being, exceeding the effects of single disaster exposure [20]. The current review also found that women affected by disaster experiences mental health conditions, including PTSD and panic attacks, with PTSD being particularly prevalent. Studies have shown that individuals impacted by disasters, such as the tsunami, exhibited significant levels of psychological distress and PTSD symptoms [21, 22]. These findings highlight the importance of accurate knowledge in disaster preparedness to mitigate the health impacts on women in disaster-prone areas [23].

The current review highlights that psychosocial support is crucial in reducing psychiatric morbidity among disaster-affected women. Key risk factors for surging psychosocial vulnerability among these women include age, low income, marital status, and urban residency. A study identified significant predictors for community disaster resilience, including education for social capital, employment status for social mechanisms and equity-diversity, and property ownership for social beliefs. These demographic factors play a crucial role in shaping community resilience to disasters [24]. The cultural context is another crucial factor influencing psychosocial support, and the current review found that psychosocial interventions for women in disasters, tailored to the cultural context, were more likely to be successful. Culture plays a significant role in shaping how individuals experience disasters,

develop coping strategies, and respond to external aid and mental health support [25].

A study explored that, globally, 35% of women are victims of physical or sexual abuse, thereby highlighting a strong connection between natural disasters and gendered violence [21]. Psychosocial interventions should focus on specific genders, particularly in the context of disasters. Strengthening mental health services and reducing stigma are essential for empowering women in disasters, as they can strengthen families and societies [16].

The review has several limitations. One of the limitations is that there is a smaller number of studies that address the psychosocial interventions for women affected by disasters. Most of the studies are focused on Southern India, which restricts generalizability. There is a dearth of gender specific literature that addresses the psychosocial impact of disasters on women. Additionally, the review only included English articles, potentially overlooking important cultural and regional nuances in a multilingual country like India. Furthermore, the cultural and regional aspects of the topic were underrepresented in the existing literature.

Intervention strategies, mental health services, and best practices

While, there are some intervention strategies and mental health services, there is a lack of comprehensive, standardized models and policy initiatives, tailored for women's needs. Community-based psychosocial support interventions like, counselling and peer support, were commonly reported [18]. However, mental health services were typically short-term, fragmented, and led primarily by NGOs, often lacking gender sensitivity and long-term integration into public systems [23]. Best practices identified include culturally adapted interventions and trauma-informed care, though these were limited in scope [25]. At the policy level, India's National Disaster Management Authority (NDMA) guidelines [26] recognizes the importance of psychosocial care, yet implementation remains inconsistent, and gender-specific provisions are insufficiently developed. Recent studies advocate for gender-inclusive disaster governance and the mainstreaming of women's mental health in disaster risk reduction frameworks, but these remain aspirational rather than operational [27, 28].

Implications

This review highlights several important implications:

- ✓ Disaster preparedness and psychosocial interventions must explicitly address the unique vulnerabilities of women, particularly in patriarchal and culturally diverse contexts like India.

- ✓ Gender inclusivity is a significant factor for strengthening disaster mental health and psychosocial support.
- ✓ Women-specific action plans are needed for disaster risk reduction and preparedness.
- ✓ Focusing on other man-made and natural calamities and their psychological effects is crucial.
- ✓ There is a significant need for longitudinal and evidence-based studies to comprehend the long-term psychosocial effects tailored for women.
- ✓ Culturally responsive approaches are more effective in addressing psychosocial needs. Future research and practice should prioritize local values, traditions, and gender roles when designing interventions.
- ✓ The limited number and geographical scope of studies indicate a significant research gap. There is a need for broader, multisite, and longitudinal research covering underrepresented regions and linguistic groups across India.

Conclusion

Women in India face numerous obstacles in accessing psychosocial support during disasters, which negatively impact their mental health, leading to physical and social health issues. The lack of gender inclusivity in disaster preparedness and response efforts exacerbates these negative effects. There is a pressing need for evidence-based psychosocial interventions tailored specifically to women's needs. However, the current review found that only a limited number of issues were addressed, and few interventions were identified in the included studies. Notably, counselling services emerged as a key protective factor for psychosocial well-being in the aftermath of disasters, yielding significant results. To strengthen the psychosocial aspects of women affected by disasters, skill development programs are essential. Furthermore, promoting gender inclusivity and implementing policy-level changes can significantly benefit women's development and well-being.

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Authors' contributions

U.H. wrote writing – review & editing, writing—original draft, methodology, investigation, data curation, and conceptualisation. S.P.S., N.M.R., F.A., H.S., A.E.J., & D.R.N did the data set, data curation and writing. A.A. has review & editing, supervision, methodology, and conceptualisation. G.P. did editing, supervision, and conceptualisation.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Competing interests

The authors declare no competing interests.

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