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Evaluation of Socio-Demographic Features and Psycho-Social Factors Among the Rescued Victims of Human Trafficking in North Karnataka Region: A Cross-Sectional Study

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ABSTRACT

Background: Human trafficking is a major public health concern and a serious violation of human rights, with profound socio-demographic and psychosocial consequences for survivors. Understanding the characteristics and support systems of rescued victims is essential for developing effective rehabilitation and reintegration strategies.
Objective: To evaluate the socio-demographic characteristics and psychosocial factors among rescued victims of human trafficking residing in a government-run shelter home in North Karnataka, India.
Methods: A descriptive cross-sectional study was conducted among 40 rescued victims of human trafficking aged ≥18 years residing at a state-run shelter home in Hubballi, Karnataka, between January 2023 and December 2024. Participants were recruited using convenience sampling. Data on socio-demographic characteristics and psychosocial factors were collected through a structured proforma and semi-structured questionnaire following informed consent. Data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 20. Categorical variables were summarized as frequencies and percentages, and associations were assessed using Fisher's exact test, with $p \leq 0.05$ considered statistically significant.
Results: Most participants were aged 26–35 years (45.0%), resided in rural areas (80.0%), belonged to low socioeconomic status (60.0%), were unemployed (75.0%), and had secondary education or below (82.5%). More than half were married (55.0%). Living immediate family members were reported by 80.0% of participants, while 92.5% indicated that their families were aware of their current circumstances. Family willingness to act as the primary caregiver was reported by 54.1%, and 51.3% received regular family visits. No statistically significant association was observed between family willingness to provide primary caregiving and the presence of psychiatric illness ($p=0.212$).

Conclusion: Rescued victims of human trafficking predominantly originated from socioeconomically disadvantaged rural backgrounds and exhibited substantial psychosocial vulnerabilities. Although family support was available for many survivors, important gaps in caregiving and community reintegration remained. These findings highlight the need for multidisciplinary rehabilitation services integrating mental health care, family-centered interventions, vocational rehabilitation, and sustained community support to facilitate long-term recovery and social reintegration.

Keywords: Human trafficking, Mental health, Socioeconomic factors, Psycho-social factors, Rehabilitation, state run shelter home

INTRODUCTION

Human trafficking represents one of the most severe violations of human rights and continues to be recognized as a critical global public health and social issue. It encompasses the recruitment, transportation, transfer, harboring, or receipt of individuals through coercion, force, deception, abuse of power, or exploitation of vulnerability for exploitative purposes [1]. Survivors are frequently exposed to multiple forms of abuse, including physical violence, sexual exploitation, forced labor, and psychological maltreatment, all of which have profound and enduring effects on their physical, mental, and social well-being. Globally, women and girls account for the majority of identified trafficking victims, with their vulnerability often linked to poverty, limited educational opportunities, social marginalization, and gender-based discrimination [2].

The consequences of human trafficking extend far beyond physical harm and include substantial psychological and social repercussions. Evidence consistently indicates that survivors experience elevated rates of depression, anxiety, post-traumatic stress disorder, substance use disorders, and suicidal behaviors [3]. Recurrent exposure to violence, prolonged victimization, social isolation, and uncertainty about the future collectively contribute to severe psychological distress. Even after rescue, many survivors encounter considerable challenges during community reintegration because of social stigma, disrupted family relationships, financial instability, and inadequate social support. These psychosocial difficulties frequently persist despite ongoing rehabilitation efforts [4].

Assessment of socio-demographic characteristics is fundamental to understanding both the vulnerability to trafficking and the rehabilitation requirements of survivors. Previous research has demonstrated that trafficked individuals often come from economically disadvantaged families, possess limited educational qualifications, have restricted employment opportunities, and predominantly reside in rural or socially marginalized communities. In addition, family dysfunction, marital disruption, and insufficient social support have been identified as significant factors influencing adverse mental health outcomes among trafficking survivors [5,6]. Therefore, comprehensive evaluation of socio-demographic attributes together with psychosocial conditions is essential for planning effective rehabilitation strategies and developing targeted interventions [7].

Despite the implementation of several legislative and policy initiatives, human trafficking continues to pose a major challenge in India. Persistent socioeconomic factors such as poverty, unemployment, migration, gender inequality, and inadequate awareness continue to increase individuals' vulnerability to trafficking [7]. Moreover, in Karnataka, the problem is particularly complex, with deeply rooted social determinants contributing to the state's role as both a transit and destination region for trafficked persons in South India [8]. Government-supported shelter homes established under rehabilitation programs

have been instrumental in providing rescued survivors with protection, psychological counseling, healthcare services, and assistance for social reintegration. Nevertheless, evidence describing the socio-demographic profile and psychosocial characteristics of rescued victims residing in these rehabilitation facilities remains limited **[9,10]**.

A thorough understanding of the socio-demographic background and psychosocial experiences of rescued trafficking survivors is essential for identifying their mental health needs and designing appropriate rehabilitation services. Evaluation of educational attainment, socioeconomic status, family support, and psychosocial vulnerabilities offers valuable insight into the barriers encountered during recovery and community reintegration. Furthermore, such evidence can strengthen the existing body of literature while guiding policymakers, mental health professionals, and rehabilitation organizations in formulating evidence-based interventions tailored to this highly vulnerable population. Against this background, the present study was undertaken to assess the socio-demographic characteristics and psychosocial factors among rescued victims of human trafficking residing at a state-run shelter home in the North Karnataka region.

MATERIALS & METHODS

Study design and Participants

This was a single-center, descriptive, cross-sectional study conducted among rescued victims of human trafficking residing at the state-run shelter home, Hubballi, Karnataka, India. The study was carried out over a period of 24 months from January 2023 to December 2024. A total of 40 participants were included in the study.

Inclusion criteria

1. All rescued victims of human trafficking residing at the shelter home, Hubballi
2. Age >18 years
3. Willingness to provide informed consent for participation in the study

Exclusion criteria

Participants:

1. With organic brain disorder
2. Not willing to provide valid informed consent

Sampling method

Convenience sampling was employed, wherein all eligible participants available during the study period and fulfilling the inclusion criteria were recruited into the study.

Data collection

Data were collected using a pre-structured proforma, semi-structured questionnaire, and standardized psychiatric assessment instruments. After obtaining informed consent, detailed information regarding socio-demographic characteristics, and psychosocial factors was collected through interviews. A comprehensive case history including age, educational status, marital status, occupation, socioeconomic background, trafficking-related factors, psychosocial stressors, and other relevant clinical information was obtained and recorded in the proforma.

Ethical Considerations

Ethical committee approval was obtained from the Institutional Ethics Committee of Karnataka Institute of Medical Sciences, Hubballi (Ref. No.: KIMS: ETHICS COMM:864:2022-23; Dated: 30.03.2023) prior to the commencement of the study. Also, permission to conduct the study was obtained from the Project Director, Department of Women and Child Development, Karnataka, and the authorities of the shelter home, Hubballi. Written informed consent was obtained from all participants before enrolment in the study. Confidentiality of the participants was maintained throughout the study, and participants were informed of their right to withdraw from the study at any stage without any consequences.

Statistical Analysis

Data were entered into Microsoft Excel 2021 and analyzed using IBM Statistical Package for the Social Sciences (SPSS) Version 20. Categorical variables were expressed as frequencies and percentages, and compared using Fisher's exact test. $p \leq 0.05$ was considered statistically significant.

RESULT

The majority of the participants belonged to the 26–35 years age group (45.0%), followed by 18–25 years (30.0%), while only 7.5% were aged 46 years and above. Most participants were Hindus (65.0%), followed by Muslims (25.0%), whereas Christians and individuals belonging to other religions each constituted 5.0% of the study population. A large proportion of the participants were from rural areas (80.0%), while 20.0% were from urban areas. Regarding socio-economic status (SES), 60.0% belonged to the low SES and 40.0% belonged to the middle SES. Educational status revealed that 32.5% had attained secondary education, 30.0% had primary education, 20.0% were illiterate, and 17.5% were graduates or above. With respect to occupation, the majority were unemployed (75.0%), while 20.0% were engaged in unskilled labour and 5.0% in skilled labour. Half of the participants belonged to nuclear families (50.0%), followed by joint families (30.0%) and broken families (20.0%). More than half of the participants were married (55.0%), whereas 25.0% were separated or divorced, 12.5% were widows, and 7.5% were single (Table 1).

Table 1. Socio-demographic characteristics of rescued victims of human trafficking

Variables	Category	N (%)
Age (years)	18–25	12 (30.0)
	26–35	18 (45.0)
	36–45	7 (17.5)
	≥46	3 (7.5)
Religion	Hindu	26 (65.0)
	Muslim	10 (25.0)
	Christian	2 (5.0)
	Others	2 (5.0)
Place of Residence	Rural	32 (80.0)
	Urban	8 (20.0)
Socio-economic Status	Low	24 (60.0)
	Middle	16 (40.0)
	High	0 (0.0)
Education	Illiterate	8 (20.0)
	Primary	12 (30.0)
	Secondary	13 (32.5)
	Graduate and above	7 (17.5)
Occupation	Unemployed	30 (75.0)
	Unskilled Labour	8 (20.0)
	Skilled Labour	2 (5.0)
Type of Family	Nuclear	20 (50.0)
	Joint	12 (30.0)
	Broken	8 (20.0)
Marital Status	Single	3 (7.5)
	Married	22 (55.0)
	Separated/Divorced	10 (25.0)
	Widow	5 (12.5)

The duration of stay in the state home varied among participants, with half (50.0%) having stayed for less than six months. A further 37% had resided in the facility for 6–12 months, while only 13% had stayed for more than 12 months, indicating that the

majority of participants were relatively recent (Figure 1).

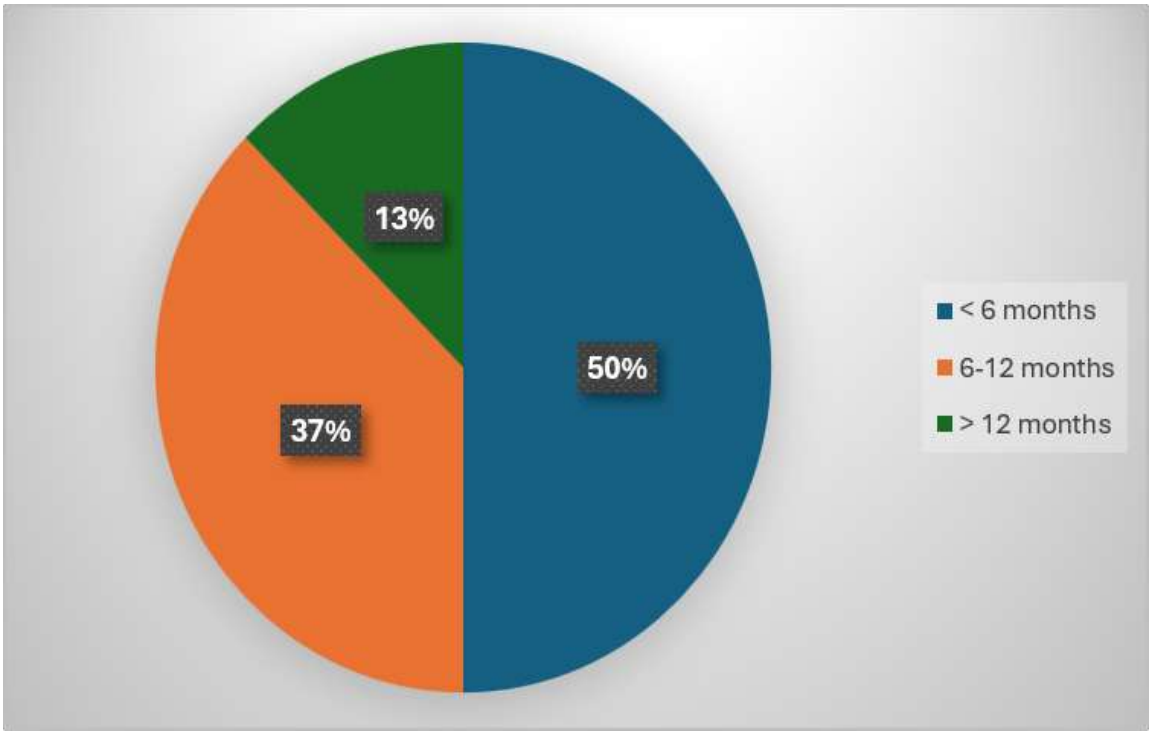

Figure 1. Duration of stay at the shelter home, Hubballi

Most participants had living immediate family members (80.0%), and their families were aware of their current status (92.5%). Among those whose families were aware (n=37), 54.1% reported that their families were willing to act as primary caregivers, while 51.3% received regular family visits. A family history of psychiatric illness was reported by 12.5% of the participants (Table 2).

Table 2. Psycho-social factors among rescued victims of human trafficking

Variable	Category	N (%)
Living status of immediate family member	Alive	32 (80.0)
	Deceased	8 (20.0)
Family aware of current status	Yes	37 (92.5)
	No	3 (7.5)
Family willing to be primary caregiver (n=37)	Yes	20 (54.1)
	No	17 (45.9)
Regular family visits (n=37)	Yes	19 (51.3)
	No	18 (48.7)
Family history of psychiatric illness	Yes	5 (12.5)
	No	35 (87.5)

The results on association between family willingness to be primary caregiver and presence of psychiatric illness. Results depicted that among participants whose families were willing to act as primary caregivers, 90.0% had psychiatric illness and 10.0% did not. Among those whose families were not willing to act as primary caregivers, 70.6% had psychiatric illness and 29.4% did not. Although psychiatric illness was more common among participants whose families were willing to be primary caregivers, the association between family willingness to be a primary caregiver and the presence of psychiatric illness was not statistically significant ($p = 0.212$).

Table 3. Association between family willingness to be primary caregiver and presence of psychiatric illness

Family willing to be primary caregiver	Psychiatric Illness		p-value
	Present	Absent	
Yes	18 (90.0)	2 (10.0)	0.212
No	12 (70.6)	5 (29.4)	
Total	30 (81.1)	7 (18.9)	

Values were N (%) unless otherwise stated

DISCUSSION

Human trafficking remains a major human rights violation and an important public health concern, producing extensive physical, psychological, and social consequences for survivors. Individuals rescued from trafficking frequently experience multiple forms of vulnerability resulting from poverty, social marginalization, fractured family relationships, and prolonged exposure to traumatic events [7]. Human trafficking in Karnataka remains a significant and multifaceted problem driven by deeply embedded social inequalities, positioning the state as an important transit as well as destination region for trafficked individuals in South India. Women and children constitute the most vulnerable groups, frequently being exploited for commercial sexual exploitation and forced labor. From a sociological perspective, human trafficking extends beyond a criminal offense and represents a grave violation of human rights, rooted in structural determinants such as poverty, gender inequality, social exclusion, and entrenched patriarchal systems [8]. A comprehensive understanding of the socio-demographic profile and psychosocial circumstances of trafficking survivors is essential for planning effective rehabilitation and facilitating successful social reintegration [7]. Hence, the present single-center, descriptive, cross-sectional study was conducted to assess the socio-demographic characteristics and psychosocial factors among rescued victims of human trafficking residing in a state-run shelter home in the North Karnataka region.

The age distribution of participants demonstrated that most survivors were between 26 and 35 years of age (45%), followed by those aged 18–25 years (30%), whereas only a small proportion (7.5%) were 46 years or older. These findings are consistent with previous investigations involving trafficking survivors and other vulnerable female populations, which have similarly reported that young adults constitute the largest proportion of victims [9,10]. Women in early adulthood are particularly susceptible to trafficking because of socioeconomic deprivation, unemployment, limited educational opportunities, and persistent gender inequalities. Studies by Zimmerman et al. and Knight et al., reported that young adult women most frequently affected by trafficking and related exploitation [2,11]. The predominance of economically productive young adults in the present study underscores the substantial social and economic impact of human trafficking.

The religious distribution showed that Hindus constituted the largest proportion of participants (65%), followed by Muslims (25%), while Christians and individuals from other religions each represented 5% of the study population. This pattern is likely reflective of the demographic characteristics of the study region rather than indicating religion-specific susceptibility to trafficking. Notably, 80% of participants originated from rural areas, suggesting that rural communities continue to experience a disproportionate burden of human trafficking. Similar findings have been reported in Indian studies, where rural residence, poverty, inadequate educational access, and limited employment opportunities were identified as key contributors to trafficking vulnerability [12,13]. These findings emphasize the importance of implementing focused

awareness campaigns and preventive interventions within rural populations.

Evaluation of socioeconomic and educational characteristics revealed considerable disadvantage among the participants. Most survivors belonged to the low socioeconomic status category (60%), and none were classified within the high socioeconomic group. Additionally, one-fifth of the participants were illiterate, whereas only 17.5% had completed graduate-level education or higher. Existing literature consistently recognizes economic deprivation and limited educational attainment as major determinants of vulnerability to human trafficking **[14,15]**. Restricted educational opportunities often reduce employability and increase dependence on exploitative networks. Similar conclusions have been reported by James and Ranghanathan, who observed that trafficking survivors predominantly originate from socioeconomically disadvantaged backgrounds **[13]**. The present findings further reinforce the close relationship between socioeconomic deprivation and the risk of human trafficking.

The occupational characteristics of the study participants further reflected their disadvantaged socioeconomic circumstances. Three-fourths of the women were unemployed, whereas only 5% were engaged in skilled occupations. Unemployment and financial insecurity have long been recognized as important factors promoting migration and increasing vulnerability to trafficking. Economic dependence frequently exposes women to exploitative circumstances and coercive environments. Comparable occupational profiles have been described among rescued trafficking survivors in previous studies, where unemployment and engagement in unskilled work predominated **[16,17]**. These findings highlight the critical need to integrate vocational training and skill-development initiatives into post-rescue rehabilitation programs.

Family composition and marital status constitute important psychosocial determinants that may influence rehabilitation outcomes. In the present study, half of the participants belonged to nuclear families, while one-fifth came from broken families. More than half of the women were married, whereas one-quarter were separated or divorced. Family instability and marital disruption have previously been identified as important contributors to psychological distress among trafficking survivors. Altun et al., similarly reported that disrupted family relationships and social isolation substantially influence survivors' mental health and recovery **[18]**. The relatively high proportion of separated or divorced participants observed in this study may represent one of the long-term social consequences associated with trafficking and exploitation.

Assessment of psychosocial characteristics indicated that most participants had surviving immediate family members (80%), and the majority reported that their families were aware of their current circumstances (92.5%). Among those whose families were informed, 54.1% indicated that family members were willing to assume the role of primary caregiver, while 51.3% received regular family visits. These observations suggest that meaningful family support was available for a substantial proportion of survivors. Concurrently, previous studies have consistently emphasized that family support is a key determinant of successful psychological recovery and community reintegration following rescue **[19,20]**. Nevertheless, the absence of regular caregiver involvement or family visits for nearly half of the participants indicates persistent barriers to reintegration and underscores the importance of strengthening family-centered and community-based rehabilitation services.

Only 12.5% of participants reported a family history of psychiatric illness. Regarding rehabilitation, half of the participants had remained in the shelter

home for less than six months, whereas only a small proportion (12.5%) had stayed for more than one year. This pattern may indicate active rehabilitation and reintegration efforts within the shelter home. The association between family willingness to act as the primary caregiver and the presence of psychiatric illness was also explored in the present study. Psychiatric illness was identified in 90% of participants whose families expressed willingness to provide primary care, compared with 70.6% among participants whose families were unwilling. Although this difference was not statistically significant ($p = 0.212$), the observed trend may have practical relevance. The absence of statistical significance is likely attributable to the limited sample size. Nevertheless, these findings may suggest that recognition of psychiatric illness encourages greater family involvement in caregiving, reflecting increased awareness of survivors' psychological support needs. Further investigations involving larger samples are warranted to clarify this relationship.

This study had several strengths. The present study contributes important evidence regarding the socio-demographic and psychosocial characteristics of rescued victims of human trafficking, a population that remains inadequately represented in the existing literature. The comprehensive assessment of family support and psychosocial factors enhances both the clinical relevance and practical applicability of the findings. However, certain limitations of this study should also be acknowledged. The relatively small sample size, single-center cross-sectional design, and use of convenience sampling limit the generalizability of the findings and preclude causal interpretation. Furthermore, the reliance on self-reported information may have introduced both recall bias and reporting bias.

CONCLUSION

The present study found that rescued victims of human trafficking predominantly belonged to rural, socioeconomically disadvantaged backgrounds and experienced multiple psychosocial vulnerabilities. Family support was available for most participants; however, gaps in caregiving and social reintegration persisted. These findings highlight the need for comprehensive mental health, rehabilitation, and community-based support services for human trafficking survivors.

Declaration by Authors

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REFERENCES

1. Klabbers RE, Hughes A, Dank M, O'Laughlin KN, Rogers M, Stoklosa H. Human trafficking risk factors, health impacts, and opportunities for intervention in Uganda: a qualitative analysis. Glob Health Res Policy. 2023;8(1):52. doi: 10.1186/s41256-023-00332-z.
2. Zimmerman C, Kiss L. Human trafficking and exploitation: a global health concern. PLoS Med. 2017;14(11):e1002437. doi: 10.1371/journal.pmed.1002437
3. Dell NA, Anasti T, Preble KM, Patel H. Substance use disorders among human trafficking victims: evidence from the 2019 to 2021 nationwide emergency department sample. Subst Use Misuse. 2025;60(5):619-627. doi: 10.1080/10826084.2024.2446724.
4. Joshi R, Andersen PT, Aro AR, Rømer M, Thapa S, Karlsson LE. Challenges and opportunities for the reintegration of sex-trafficking survivors into Nepalese communities. Glob Health Action. 2025;18(1):2522489. doi: 10.1080/16549716.2025.2522489
5. Edgemon TG, Clay-Warner J, Kawashima T, Anarfi JK, Okech D. Violence Increases Psychological Distress Among Women Trafficking Survivors in Ghana. Violence Against Women. 2025;31(6-7):1469-1487. doi: 10.1177/10778012241231780.
6. Allan C, Winters GM, Jeglic EL. Current trends in sex trafficking research. Curr Psychiatry Rep. 2023;25(5):175-82. 182. doi: 10.1007/s11920-023-01419-7

7. Nkwanzi V, Bulamba RM, Okech D, Evans D, Akello D, Kyasanku E, Daama A, Mugamba S, Namakula S, Carlson C, Nalugoda F, Kigozi G, Nakigozi G. Individual and Communal Factors Associated with Re-Trafficking Vulnerability Among Women Survivors in Kampala, Central Uganda. J Interpers Violence. 2025:8862605251392277. doi: 10.1177/08862605251392277.
8. Shaikh SM. Study of human trafficking: sociological perspectives and solutions in Karnataka state. Int J Eng Dev Res. 2026;14(1):586-599.
9. Ghafoori B, Martinho G, Gonçalves M, Matos M. Clinical profiles and factors associated with treatment initiation in survivors of sex trafficking: a comparison with survivors of domestic violence and sexual assault. Psychol Trauma. 2023;15(6):1032-1040. doi: 10.1037/tra0001273.
10. Furlong C, Hinnant B. Sex trafficking vulnerabilities in context: an analysis of 1,264 case files of adult survivors of commercial sexual exploitation. PLoS One. 2024;19(11): e0311131. doi: 10.1371/journal.pone.0311131.
11. Knight L, Xin Y, Mengo C. A scoping review of resilience in survivors of human trafficking. Trauma Violence Abuse. 2022;23(4):1048-1062. doi: 10.1177/1524838020985561.
12. Acharya AK. Violence, emotional coercion, and psychological morbidity among trafficking victims in India. Violence. 2025;6(1):101-19. https://doi.org/10.1177/26330024251330321
13. James N, Ranganathan S. Of vulnerability and agency: perspectives from survivors of sex trafficking in India. Indian J Hum Dev. 2021;15(1):117-27. https://doi.org/10.1177/0973703021100365 7
14. Mandal J. A socio-pedagogical study on educational deprivation and women trafficking in tea garden communities of North Bengal. Int J Creat Res Thoughts. 2026;14(3):h556-h558.
15. Singh S, Rani S, Rani R. Human trafficking in India. Int J Res Anal Rev. 2019;6(2), 907-909.
16. Riaduzzaman M, Hasan MM, Ullah A, Emo SZ, Yeasmin KM, Islam KR, Sakib MS. Socio-cultural and structural realities shaping post-trafficking social reintegration experiences of human trafficking victims in Bangladesh. J Hum Rights Soc Work. 2026; 11:1-7. https://doi.org/10.1007/s41134-026-00454-7
17. Williamson SH. Human trafficking in the era of global migration: unraveling the impact of neoliberal economic policy. Bristol: Policy Press; 2022. https://doi.org/10.2307/j.ctv2m7c5j8
18. Altun S, Abas M, Zimmerman C, Howard LM, Oram S. Mental health and human trafficking: responding to survivors' needs. B J Psych Int. 2017;14(1):21-3. doi: 10.1192/s205647400000163x
19. da Silva IM, Sathiyaseelan A. Emotional needs of women post-rescue from sex trafficking in India. Cogent Psychol. 2019;6(1):1631584. https://doi.org/10.1080/23311908.2019.1631584
20. Tsoi CM, Smith TB, Cutrer-Párraga E, Clayton D, Marshall JM, Mastny J. Recommendations from Multi-Disciplinary Professionals for Survivor-Informed and Comprehensive Care for Human Trafficking Survivors. Healthcare (Basel). 2025; 13(23):3070. doi: 10.3390/healthcare13233070.

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