Original Research Article

Life satisfaction and depression among women living in slum areas of Bhubaneswar

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Abstract

Introduction: Generally, slum areas are overcrowded and have poor quality of house and poor access to safe water, sanitization and other infrastructure. The lack of basic necessities and insecurity to earn for livelihood may cause depression among slum dwellers. But, since everybody has their own perception regarding success and satisfaction, it is worthwhile to know the prevalence of depression and life satisfaction among the slum dwellers.

Aim: To find out the prevalence of life satisfaction and depression and its associated factors of life satisfaction and depression among reproductive age group women of slum area.

Materials and Methods: A cross-sectional study was carried out among 386 slum women of reproductive age during January 2019 to September 2020 in Bhubaneswar. Tools used for the study were a semi-structured socio-demographic questionnaire, depression scale (Beck`s Depression Inventory) and Life satisfaction scale by (Diener, E. et.al. (1985). Chi-square test, fisher's exact test and t-test was used to assess association with life satisfaction and depression.

Results: The mean age of the study participants was 30.90 ± 7.21 years. The marital status had no role for life satisfaction and depression. Age has no role in satisfaction of life. Satisfaction of life was similar for the women belonging to lower or middle class. The prevalence of depression was similar regardless of marital status. However, Younger women were more depressed in comparison to older

women (p=0.045). The association of socioeconomic status with depression is found to be statistically significant in the present study (p=0.027).

Conclusion: The life satisfaction among slum women is 37.5% and prevalence of depression is 7.2%. Life satisfaction was similar regardless of marital status, social class and age. However, depression was more in younger women and women belonging to lower class in comparison to middle class.

Key words

Life satisfaction, Depression, Women, Reproductive age group.

Introduction

Health is as a State of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity defined by World Health Organization (WHO). Life Satisfaction is a subjective, cognitive evaluation of an individual's life as a whole based on the corresponded personal goals and procurement [1]. Satisfaction with life has come in attention due to its associations with good health outcomes and longevity [2]. Various health issues are directly or indirectly associated with dissatisfaction in life. Psychiatric comorbidities and the duration of a disorder have a contrary relationship with life satisfaction [3]. According to World Health Organization, Depression is a common mental disorder affecting more than 264 million people worldwide. Depression has conciliated advancement in all over the world as a progressive concern, especially among the women. The prevalence of major depression is higher in women than in men [4, 5] in 2010 its global annual prevalence was 5.5% and 3.2%, respectively, representing a 1.7-fold greater incidence in women [6, 7]. In this era of urbanization, there are rapidly growing requirement of housing facility for migrated population. Generally, slum areas are overcrowded and have poor quality of house and poor access to safe water, sanitization and other infrastructure (UN Habitat 2003) [8]. Slum dwellers have insecure residential status. The lack of basic necessities and insecurity to earn bread and butter may cause depression among slum dwellers. But, since everybody has their own perception regarding success and satisfaction, it is worthwhile to know the prevalence of depression and life satisfaction among the slum dwellers. Further, there is need to assess the factors which are impacting the life satisfaction. Although, there are few studies have been done to assess life satisfaction among slum women but to the best of our knowledge, there is no such study conducted in Odisha. Further, existing studies have not examined the predictors of life satisfaction. Based on these views, we intended to assess the prevalence of depression and life satisfaction of slum women along with its predictors.

Materials and methods

This community based cross-sectional study was done during January 2019 to September 2020 in the urban health centre of Kalinga Institute of Medical Sciences, the field practice area in slums of Bhubaneswar, Odisha, India. Ethical clearance was obtained (KIMS/KIIT/IEC/089/2018 dated 30.08.2018) before the collection of data. A detailed and informed consent/assent was taken from the participants and all privacy and confidentiality was maintained at all levels. The study population was women of 15-49 years age groups residing in the selected slum area for more than one year regardless of their employment status. Women of diagnosed with mental illness or on anti-psychotic medications was excluded from the study. A multistage sampling design had been adopted for data collection. In the first stage, using simple random sampling total of 5 wards containing slums had been chosen from each of the 3 zones of Bhubaneswar. In the second stage, using simple random sampling method, one slum was chosen from each of 15 wards. In the third stage, using systematic random sampling, 20 households were chosen from each of the selected slum. The

line listing of household available with the local ASHA/Anganwadi worker/Social Health worker in each slum area was the sampling frame for the study. In case of absence of eligible woman in the household, next adjacent household was considered till we get the eligible woman. If there are more than one eligible woman in the household, one had been chosen based on simple random sampling method.

A pre-designed, pre-tested, semi-structured questionnaire was used for collection of relevant data from the study participants. It includes the socio-demographic details including modified Kuppuswamy's socio-economic scale (2019) to determine the socioeconomic classification of the family. To assess the depression, Beck`s Depression Inventory, Beck AT (1972) [9] was used. Further, Life satisfaction was assessed using life satisfaction scale by (Diener, E., et al. 1985) [10].

Statistical Analysis
Considering 80% prevalence of depression among slum women (Saumitra Adhikari, et al. 2018) [11] with 5% relative precision at 5% level of significance, the calculated sample size was 384 eligible women.

Data collected using paper-pencil survey was entered in Microsoft Excel 2019 and then analyzed using Stata 15.1, Statacorp, Texas, USA. All the tests were considered significant at 5% level of significance. Categorical variables are presented by frequency and percentages while the continuous variables (including all scores) are represented as Mean $\pm$ SD (Standard Deviation). Mean score between two groups were compared using independent t – test. Comparison between two categorical variables was done by Chi – square test and a *p* value of less than 0.05 was considered as statistically significant.

Results

A total of 386 eligible women of 15-49 years were included as study participants with the objective to determine the prevalence of life satisfaction and depression and the factors associated with life satisfaction and depression residing in urban slums of Bhubaneswar. The mean age of the participants was found to be 30.90 ± 7.21 years (Range: 16-49 years). Most of the women were married, homemaker and living in joint family. The socio-demographic characteristic of the study participants was are presented in **Table - 1**.

Table - 1 describes majority 381 (98.7%) of the participants were Hindus, 4 (1.04%) were Muslims and only one participant was Christian out of total 386 participants. It is found that majority 309 (80.05%) of the 386 participants were home maker and 77 (19.95%) participants were employed. In the present study, as portrayed maximum of the participants 369 (95.60%) belonged to the upper lower socioeconomic class with the other 11 (85%) in lower middle class and 6 (1.55%) participants belongs to the upper middle class. None of the respondents were belongs to the only upper and only lower, socioeconomic class in this study. In this present study majority 370 (95.85%) of the women were married where as both unmarried and widows were found to be same i.e. 8 (2.07%). Study participant's types of family found to be maximum number were belong to joint family 341 (88.34%) followed by nuclear family 45 (11.66%). Finally the study participant's husbands were found to be supportive to the family as employed 374 (96.89%) and the non-employed husbands were found to be 12 (3.11%). The current study shows no association of marital status with life satisfaction score (**Table – 2**). As seen above, the prevalence of life satisfaction was relatively higher in widow/unmarried women married women. The difference in prevalence of life satisfaction between the married and unmarried/ widow was not significant in the current study (p=0.185). The mean age of the participants who were unsatisfied from life was slightly high in comparison with those who were satisfied with their life. The difference observes was not statistically significant (p = 0.987). Satisfaction

of life was similar for the women belonging to lower or middle class. Middle class (upper middle and lower middle) women were relatively more satisfied of life in comparison to women of middle class. Out of the 370 married respondents, 345 (93.24%) were found to be depressed, 8 were unmarried in which 5 (62.50%) were depressed and 8 were widow out of which all 8 (100%) were found to be depressed (**Table – 3**). As seen above, the prevalence of depression was similar regardless of marital status. However, older women were relatively less depressed in comparison to younger women as mean age of the participants who were not depressed was high (31.11 ± 7.50) in comparison with those who were depressed (28.28 ± 6.72).The difference observes was statistically significant (p = 0.045).

Table - 1: Socio-demographic characteristics of Study participants (n = 386).

Socio-demographic characteristics	Frequency in Number(n)	Frequency in Percentage (%)
Religion		
Hindu	381	98.7%
Muslim	4	1.04%
Christian	1	0.26%
Occupation		
Employed	77	19.95%
Unemployed(Home maker)	309	80.05%
Socioeconomic status		
Upper Middle	6	1.55%
Lower Middle	11	2.85%
Upper Lower	369	95.60%
Marital status		
Married	370	95.85%
Unmarried	8	2.07%
Widowed	8	2.07%
Types of Family		
Joint	341	88.34%
Nuclear	45	11.66%
Working status of Husband		
Employed	374	96.89%
Unemployed	12	3.11%

Table – 2: Association of various parameters with life satisfaction among study participants.

Factor	Life satisfied N (%) Mean±SD	Life Unsatisfied N (%) Mean±SD	P-value
Marital Status			0.185
Married	229(61.89)	141(38.11%)	
Unmarried/Widow	13 (81.25)	3 (18.75)	
Age (in years)	30.90 ±7.50	30.91±6.72	0.987
Social Class			0.736
Middle	10 (58.82)	7 (41.18)	
Lower	232 (62.87)	137 (37.31)	

Table - 3: Association of various parameters with depression among Study participants.

Variables	Depression present N(%)	Depression absent N(%)	P value
Marital Status **Married** **Unmarried/Widow**	345 (93.24) 13 (81.25)	25 (6.76) 3 (18.75)	0.101
Age (in years)	28.28±6.72	31.11±7.50	0.045
Social Class **Middle** **Lower**	13 (76.47) 345 (93.50)	4 (23.53) 24 (6.50)	0.027

As described in **Table - 3**, the prevalence of depression was highest among women whose families were from the upper lower socioeconomic group 345 (93.50%), followed by lower middle class 9 (81.82%) and lower in upper middle class 4 (66.67%). The association of socioeconomic status with depression is found to be statistically significant in the present study (p=0.027).

Discussion

Present study found that 37.5% slum women are satisfied with their life and prevalence of depression among slum women is 7.2% which is relatively low from other similar studies. The study done by Paul CN P, et al. [12], in Thiruvallur dist. of Chennai, 332 (83%) of the total 400 study participants were Hindus, 60 (15%) participants were Christians and another 8 (2%) participants were Muslims, showing similarities of more number of Hindu participants of the present study. According to the census of 2011, Hinduism is the largest religious grouping in India, constituting around 79.8% of the total population.

In the study done by Marvic B, et al. [13], on depression and life satisfaction among employed and unemployed married women in Turkey: a gender based research conducted in a traditional society reported that there is a statistically significant relationship between depression and life satisfaction, and there is a negative correlation between depression and life satisfaction in general, also there is a significant difference between employed and unemployed women on life satisfaction. Individual might be satisfied with more domains of their lives and still be dissatisfied overall because of the impact of the particular domain (Diener, 1984) [14]. In another study by A Balaji, et al. [15], it was observed that 31.5% participants were from upper class, 21.6% were from upper middle class. 14.4% were from lower middle class, 20.7% were from upper lower class where as 11.8% were from lower class which is found to be different from our study. Study by A Balaji, et al. [15] showed 63.75 % women were married and 36.24% were widow and unmarried. In the study by Paul, et al. [12], reported that 89.3% women were married and 19.7% were widow and unmarried, which is found to be similar from our study. In another study by A Balaji, et al. [15], it was observed that 82.2% participants belongs to nuclear family where as 17.7% were belongs to joint family which is found to be different from our study results. In another study by A panigrahi, et al. [16], was found that 81% married women belongs to nuclear family and other 19% married women belongs to joint family which was found to be different from this study. In an another study by Shidhaye R and Patel V [17] found that there were maximum number of employed husband (98.2%) and low in unemployed (1.8%) , which was similar to current study findings. In the study done by Ali, et al. [18], married women who are not satisfied with their life were found to be associated with depression. In other study done by Anu Dandona, et al. [19], result indicates that if

depression is high in married women then their married life will be suffered and vice-versa. Our hypothesis regarding this relationship is supported. In other study done by G Hammerton, et al. [20], reported that mother with chronic sever symptom of depression were more likely to attempt suicide. In the study done by Akram, et al. [21], results shows that that there was a relationship between age and depression. Around the age of 40 the depression level reaches its highest. In the quantitative study done by Daraei M and Mohajery A [22] at Mysore (South India), reported that there is a positive correlation between socioeconomic status and life satisfaction. In another study by Rzonca E, et al. [23], reported that there is a significant association of satisfaction of life with socioeconomic status. A study done at Institute of Home Science, University of Kashmir [24], expressed that with an increase in personal income, the overall life satisfaction increases. Moreover, with an increase in family income, the overall life satisfaction of women also increases. Home and workplace atmosphere played a major role in deciding the mental health status of married working women. Conducive workplace atmosphere, favorable attitude of colleagues at workplace, and favorable attitudes of husbands/in-laws at home were found to be protective of overall mental health. Kopp, et al. [25], established in their study that job related factors and social support from family were important predictors of mental health. A study by Deyessa N, et al. [26], reported that very poor economic conditions were associated with a higher prevalence of depression in this overall very poor setting. A study by Turgunova L, et al. [27], shows that the rate of depressive symptoms existed to varying degrees among groups of respondents with different income levels. Among the respondents who declared having an "average," "above average," or "high" income level, there appears to be a lower incidence of severe and very severe degree of depressive symptoms. Similarly a study by Urvashi, et al. [28], concluded that depression was seen to be on higher side among housewives in rural area of Ludhiana and lower socio-economic status was

found to be associated with higher rates of depression (p=0.039).

Conclusion

The life satisfaction among slum women is 37.5% and prevalence of depression is 7.2%. Life satisfaction was similar regardless of marital status, social class and age. However, depression was more in younger women and women belonging to lower class in comparison to middle class.

Acknowledgement

Recommendation

Reproductive age group women should get adequate support and care from health sector to stay happy and healthy.

References

1. Wirtz D, Biswas-Diener R, Tov W, Kim-Prieto C, Choi DW, Oishi S. New measures of well-being. Social Indicators Research Series book series (SINS, volume 39), p. 247-266.
2. Danner DD, Snowdon DA, Friesen WV. Positive emotions in early life and longevity: findings from the nun study. J Pers Soc Psychol. 2001; 80: 804–13.
3. Meyer C, Rumpf HJ, Hapke U, John U. Impact of psychiatric disorders in the general population: satisfaction with life and the influence of comorbidity and disorder duration. Soc Psychiatry Psychiatr Epidemiol., 2004; 39: 435–41.
4. Cyranowski JM, Frank E, Young E, et al. Adolescent onset of the gender difference in lifetime rates of major depression: a theoretical model. Arch Gen Psychiatry, 2000; 57: 21–7.
5. Ford DE, Erlinger TP. Depression and C-reactive protein in US adults: data from the Third National Health and

Nutrition Examination Survey. Arch Intern Med., 2004; 164: 1010–4.

6. Whiteford HA, Degenhardt L, Rehm J, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. Lancet, 2013; 382: 1575–86.

7. Baxter AJ, Scott KM, Ferrari AJ, et al. Challenging the myth of an "epidemic" of common mental disorders: trends in the global prevalence of anxiety and depression between 1990 and 2010. Depress Anxiety, 2014; 31: 506–16.

8. The challenge of slums - Global report on human settlements 2003. Publisher: UN-Habitat, pages: 345; HS number: HS/686/O3E: ISBN; 978-1-84407-037-4.

9. Beck, A.T., R.W. Beck. Screening depressed patients in family practice: A rapid technic. Postgraduate Medicine, 1972; 52: 81–85.

10. Diener E., Emmons R. A., Larsen R. J., Griffin S. The Satisfaction With Life Scale. Journal of Personality Assessment, 1985; 49(1): 71–75.

11. Adhikari S, Srivastava P, Thakur RP, Chatterjee S, Das DK. A Study on Prevalence of Depression among Adult Females in a Slum Area of Purba Barddhaman District, West Bengal. IOSR Journal of Dental and Medical Sciences, 2018; 17(5): 33-36.

12. Paul CN P, Stanly AM, Archanalakshmi P A. A Study on the Prevalence of Depression Among Women in the Reproductive Age Group (15- 49 Years) in A Rural Population. Indian Journal of Research, 2013; 2(9): 169-172.

13. Marvic B, Esra Alp Z, Kunt A S. Depression and life satisfaction among employed and unemployed married women in Turkey. A gender based research conducted in a traditional society. Inquiry, 2016; 2: 153-178.

14. Diener E. (1984). Subjective well-being. Psychological Bulletin, 1984; 95: 542–575.

15. Balaji A, Sarumathi V, Saranya N. A comparative study on depression among working and non- working women in Chennai, Tamil Nadu, India. Journal of Medical and Health Sciences, 2014; 3(1): 73-76.

16. Panigrahi A, Padhy AP, Panigrahi M. Mental health status among married working women residing in Bhubaneswar City, India: a psychosocial survey. BioMed research international, 2014 Jan 1; 2014.

17. Shidhaye R, Patel V. Association of socio-economic, gender and health factors with common mental disorders in women: a population-based study of 5703 married rural women in India. International Journal of Epidemiology, 2010; 39: 1510–1521.

18. Ali FA, Zuberi RW. Association of socio-demographic factors with depression in women of reproductive age. Asia Pacific Journal of Public Health, 2012 Jan; 24(1): 161-72.

19. Dandona A. Study on Marital Adjustment and Depression of Working and Non-Working Married Women. International Journal of Education, Development, Society and Technology, 2013; 1(1): 46-51.

20. Hammerton G, Mahedy L, Mars B, Harold GT, Thapar A, Zammit S, Collishaw S. Association between maternal depression symptoms across the first eleven years of their child's life and subsequent offspring suicidal ideation. PloS one, 2015 Jul 7; 10(7): e0131885.

21. Akram B, Khuwaja FA. Study on depression among working and non-working women of Gujrat, Pakistan. European Academic Research, 2014; 1(10): 2948-62.

22. Daraei M, Mohajery A. The impact of Socioeconomic Status on Life

Satisfaction. Social indicators research, 2013; 112: 69-81.

23. Rzonca E, Bien A, Wdowiak A, Szymanski, Iwanowicz-Palus G. Determinants of Quality of Life and Satisfaction with Life in Women with Polycystic Ovary Syndrome. International Journal of Environmental Research and Public Health, 2018; 15(376): 1-12.

24. Muzamil Jan, et al. An Assessment of Life Satisfaction among Women. Studies on Home and Community Science, 2008; 2(1): 33-42.

25. Kopp MS, Stauder A, Purebl G, Janszky I, Skrabski A. Work stress and mental health in a changing society. European Journal of Public Health, 2008 Jun 1; 18(3): 238-44.

26. Deyessa N, Berhane Y, Alem A, Hogberg U A, Kullgren G. Depression among women in rural Ethiopia as related to socioeconomic factors: a community-based study on women in reproductive age groups. Scandinavian Journal of Public Health, 2008; 36(6): 589-97.

27. Turgunova L, Laryushina Ye, Turmukhambetova A, Koichubekov B, Sorokina M, Korshukov I. The Incidence of Depression among the Population of Central Kazakhstan and Its Relationship with Sociodemographic Characteristics. Behavioural Neurology, 2017; 1-7.

28. Urvashi, Sangeeta Girdhar, Anurag Chaudhary, Sanjay Gupta, Shamim Monga. Socio-demographic co-relates of depression among housewives in rural area of district Ludhiana. International Journal Of Community Medicine and Public Health, 2019; 6(5): 2147-2151.