Psychological Distress Among General Adult Population Of Kathmandu Valley

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Abstract

Introduction: A large proportion of the population in the community with psychological distress goes unnoticed. This study was done to assess the psychological distress among adult population of urban area of the Kathmandu Valley.

Material And Method: The study was conducted among 280 individuals of age 18 years and above. Samples were conveniently selected from passersby in front of Mental Hospital, Lagankhel on World Mental health day 2018. The Nepali translated version of the General Health Questionnaire-12 (GHQ-12) was used to assess the psychological distress among the study participants.

Results: Majority of the participants had low psychological distress (62.86%) followed by typical (12.86%), more than typical (9.29%), evidence of psychological distress (5.71%) & severe distress (8.93%). 23.93% of the participants had psychological distress which needed attention.

Conclusion: The psychological distress is a major public health concern in our study population. Focused interventions to improve the mental health of population are required to decrease the level of psychological distress among the general population.

Keywords: Psychological Distress, Mental health, GHQ-12, Community.
including civil wars and major natural calamities, viz. the 2015 earthquake. In addition, lack of employment opportunities and poor financial state has led to high levels of stress. Many people are unable to cope with the pressures of everyday living and are prone to experience mental, emotional, physical and psychological problems. People who experience such psychological distress suffer from disruptions in their regular tasks. This in turn makes them prone to experience more mental distress or psychiatric disorders. Therefore, it appears necessary for the general public to be in their good and balanced psychological health in order to excel in their pursuit and for a successful future by contributing positively towards human capital resources of the country.

Therefore, research on the psychological health of the general public is important to identify distress experienced by them, determine the contributing factors that lead to their distress, and ultimately design a plan that can be used to improve their quality of life and reduce their risks of experiencing mental illness. A large proportion of population in the community with psychological distress goes unnoticed and primary health care providers could have a key role to play in the detection of risk of mental disorders in community. Considering this we aimed present study to assess the psychological distress among adult population of an urban area of Kathmandu valley using standardized tool.

**MATERIAL AND METHOD**

The present study was a cross sectional study with convenience sampling among 280 individuals of age 18 years and above, randomly selected from passersby in front of Mental Hospital, Laganikhel on World Mental health day 2018. After providing participants with detailed information regarding the study in Nepali language informed written consent was obtained. A semi-structured proforma was administered to collect relevant socio-demographic data of the study subjects. After that the psychological health of the respondents was measured using the 12-item General Health Questionnaire(GHQ-12). Due to its widespread use and recognition as an indicator of distress, the GHQ is often considered as the Gold standard for the measurement of psychological distress. The GHQ scales have been validated with clinical and non-clinical samples. The questionnaire was translated into the Nepali language, using the repeated ‘forward-backward’ procedure. The translators are fluent in both English and Nepali. The translation procedure was conducted several times until an agreement was reached for the final Nepali version. The formal ethical clearance of the study was not done as this was designed as a part of awareness program for World Mental Health Day, 2018. The permission for the study was taken from the Director of the institute and all ethical considerations were taken care of.

The GHQ is a screening tool which was used to identify the severity of psychological distress experienced by an individual within the past few weeks. Each item on the scale has four responses from “better than usual” to “much less than usual.” For this study, the GHQ scoring method used was the simple Likert scale of 0-1-2-3. The scores were summed up by adding all the items on the scale ranging from 0 to 12 with a score range of 0–36, and were categorized into five subgroups and assessed. The interpretation of the five categories of the Likert score was done as 1-10: Low psychological distress 11-12: Typical, 13-15: More than typical, 16-20: Evidence of psychological distress, >20: Severe Distress.

Data were entered in Microsoft excel spreadsheet and Statistical Package for Social Sciences (SPSS) for a windows version 16.0 (Armonk, NY: IBM Corp.) was used for the analysis. A descriptive analysis was performed to determine the distributional characteristics of all the variables studied, including the sample population’s level of psychological health.

**RESULT**

All 280 participants responded to the questionnaire. Among the 280 respondents, the majority (66.79%) were males. Most of the participants were from the age group of 18 to 30 years (76.78%) followed by those in the age range of 30 to 40 years (12.86%). Majority of the participants were married (67.85%) and service holders (64.64%) [Table 1].
Only 0.36% of the total respondents had no psychological distress, whereas remaining had some degree of psychological distress, with 8.93% of the sample having severe psychological distress [Table 2].

**Table 1: Socio-demographic profile of participants**

| Variables         | Number | Percentage (%) |
|-------------------|--------|----------------|
| Age               |        |                |
| Less than 18 years| 2      | 0.71           |
| 18 years to 30 years| 215    | 76.78          |
| 31 years to 40 years| 36    | 12.86          |
| 41 years to 50 years| 18     | 6.43           |
| 50 years to 60 years| 9     | 3.21           |
| More than 50 years| 0      | 0              |
| Gender            |        |                |
| Male              | 187    | 66.79          |
| Female            | 93     | 33.21          |
| Marital Status    |        |                |
| Married           | 190    | 67.85          |
| Unmarried         | 84     | 30             |
| Widowed           | 2      | 0.71           |
| Divorced          | 4      | 1.43           |
| Occupation        |        |                |
| Service           | 181    | 64.64          |
| Student           | 46     | 16.42          |
| Business          | 11     | 3.93           |
| Homemaker         | 14     | 5.0            |
| Unemployed        | 16     | 5.71           |
| Agriculture       | 12     | 4.23           |

**Table 2: Levels of Psychological Distress among the study population**

| Level of Distress | GHQ score | Number | Percentage |
|-------------------|-----------|--------|------------|
| No Distress       | 0         | 1      | 0.36       |
| Low               | 1-10      | 176    | 62.86      |
| Psychological distress | 11-12 | 36    | 12.86      |
| Typical           | 13-15     | 26     | 9.29       |
| More than typical | 16-20     | 16     | 5.71       |
| Evidence of Psychological distress | > 20 | 25    | 8.93       |
| Severe Distress   |           |        |            |

**DISCUSSION:**

The current study aimed to assess the psychological distress among adult population of an urban area of Kathmandu valley using GHQ-12, a standardized tool. When we look at the data overall 23.93 % of the respondents reported of having evidence of some psychological distress and 8.93% of respondents reported of having severe distress. As per the pilot study of Mental Health Survey of Nepal it was seen that current prevalence of any form of mental disorders was 13.2% among the adult population. The National Mental Health Survey also showed a similar life time prevalence of 10 % among adults. Though our study didn’t look into the specific mental disorders per se, but the findings of distress is somewhat comparable to the data from mental health survey. The studies of psychological distress done in Nepalese setting have been mainly in a specific group in a vulnerable state like in the aftermath of armed conflict or earthquake, patients of rehabilitation centers etc. These group of population have reported a higher level of distress than our study sample which is very understandable as we had taken general population. There is ample evidence that any stressful event can lead to a psychological distress among the population at risk.

The preventive psychiatry is evolving. It is known that the cumulative lifetime effect of multiple small effect size risk factors progressively increases vulnerability to mental health disorders. This process might inform different levels of distress at multiple stages. Hence to develop a tailored interventions to lessen risk, or increase protective factors and resilience, especially during sensitive developmental periods it is mandatory to know the base line distress level of the community. In this study we aimed to know the same. There are some strengths of this study. Our study is one of the few studies conducted in Nepal on psychological distress of general population and we hope this can be taken as a baseline while planning a further larger study. Also this was done on the World Mental Health Day 2018; we had an opportunity to create some level of mass awareness while collecting informed consent and data. Also, person having high level of
distress was asked to come to psychiatry OPD for further management. However, there are many limitations to our study. As we had taken respondents who were passing by Mental Hospital, Lagankhel, hence the findings cannot be generalizable. As all self-reporting instrument can have bias, this questionnaire cannot be free of biases. Our study doesn’t account for confounders as well. The most important thing to note here is we only looked at psychological distress; hence any inference about mental disorders cannot be made.

**CONCLUSION:**
About 8.3% of the study participants reported that they experienced severe psychological distress. Detailed studies to find out the factors leading to psychological distress among the study participants are recommended. Also, community level interventions to increase the awareness regarding the ill effects of psychological distress and implementing specific measures for psychological distress reduction and promoting interventions for mental wellbeing in general are recommended.

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**REFERENCES:**
1. LAbate L. Mental Illnesses: Understanding, Prediction and Control. BoD – Books on Demand; 2012. 476 p.
2. Slade T, Grove R, Burgess P. Kessler Psychological Distress Scale: Normative Data from the 2007 Australian National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry. 2011 Apr 1;45(4):308–16.
3. Dohrenwend BS, Dohrenwend BP. Some Issues in Research on Stressful Life Events. In: Millon T, Green CJ, Meagher RB, editors. Handbook of Clinical Health Psychology [Internet]. Boston, MA: Springer US; 1982 [cited 2021 Feb 20]. p. 91–102. Available from: https://doi.org/10.1007/978-1-4613-3412-5_5
4. Wheaton B. The twin meet: distress, disorder and the continuing conundrum of categories (comment on Horwitz). Health (N Y). 2007 Jul 1;11(3):303–19.
5. Payton AR. Mental Health, Mental Illness, and Psychological Distress: Same Continuum or Distinct Phenomena? J Health Soc Behav. 2009 Jun 1;50(2):213–27.
6. Westermeyer J, Janca A. Language, Culture and Psychopathology: Conceptual and Methodological Issues. Transcult Psychiatry. 1997 Sep 1;34(3):291–311.
7. Kleinman A, Kleinman J. Suffering and its professional transformation: toward an ethnography of interpersonal experience. Cult Med Psychiatry. 1991 Sep 1;15(3):275–275.
8. Kirmayer LJ. Cultural variations in the response to psychiatric disorders and emotional distress. Soc Sci Med. 1989 Jan 1;29(3):327–39.
9. Kane JC, Luitel NP, Jordans MJ, Kohrt BA, Weissbecker I, Tol WA. Mental health and psychosocial problems in the aftermath of the Nepal earthquakes: findings from a representative cluster sample survey. Epidemiol Psychiatr Sci. 2017 Jan 9;27(3):301–10.
10. Kohrt BA, Hruschka DJ, Worthman CM, Kunz RD, Baldwin JL, Upadhyaya N, et al. Political violence and mental health in Nepal: prospective study. Br J Psychiatry. 2012 Oct;201(4):268–75.
11. Grawitch M, Waldrop J, Err K, Werth P, Guarnino S. Productivity Loss Due to Mental- and Physical-Health Decrements: Distinctions in Research and Practice. Consult Psychiat J Pract Res. 2017 Jun;69(2):112–29.
12. Goldberg DP. The detection of psychiatric illness by questionnaire: A technique for the identification and assessment of non-psychotic psychiatric illness. 1972;
13. Furukawa TA, Kessler RC, Slade T, Andrews G. The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. Psychol Med. 2003 Feb;33(2):357–62.
14. Segopolo MT, Selemogwe MM, Plattner IE, Ketlogetswe N, Feinstein A. A Screening Instrument for Psychological Distress in Botswana: Validation of the Setswana Version of the 28-Item General Health Questionnaire. Int J Soc Psychiatry. 2009 Mar 1;55(2):149–56.
15. Nerdrum P, Rusten T, Rummestad MH. Student Psychological Distress: A psychometric study of 1750 Norwegian 1st-year undergraduate students. Scand J Educ Res. 2006 Feb 1;50(1):95–109.
16. Jha AK, Ojha SP, Dahal S, Sharma P, Pant SB, Lah S, et al. Prevalence of Mental Disorders in Nepal: Findings from the Pilot Study. J Nepal Health Res Council. 2019 Aug 8;17(2):141–7.
17. Publication [Internet]. Nepal Health Research Council. [cited 2021 Mar 13]. Available from: http://nhrc.gov.np/publication/
18. Thapa SB, Hauff E. Psychological distress among displaced persons during an armed conflict in Nepal. Soc Psychiatry Psychiatr Epidemiol. 2005 Aug 1;40(8):672–9.
19. Kane JC, Luitel NP, Jordans MJ, Kohrt BA, Weissbecker I, Tol WA. Mental health and psychosocial problems in the aftermath of the Nepal earthquakes: findings from a representative cluster sample survey. Epidemiol Psychiatr Sci. 2017 Jan 9;27(3):301–10.
20. Gyawali B, Choudhary BP, Paneru DP, Ahmad M, Leppin A, Kallestrup P. Prevalence and correlates of psychological distress symptoms among patients with substance use disorders in drug rehabilitation centers in urban Nepal: a cross-sectional study. BMC Psychiatry. 2016 Sep 8;16(1):314.

21. Kohrt BA, Hruschka DJ, Worthman CM, Kunz RD, Baldwin JL, Upadhyaya N, et al. Political violence and mental health in Nepal: prospective study. Br J Psychiatry. 2012 Oct;201(4):268–75.

22. Beaglehole B, Mulder RT, Frampton CM, Boden JM, Newton-Howes G, Bell CJ. Psychological distress and psychiatric disorder after natural disasters: systematic review and meta-analysis. Br J Psychiatry. 2018 Dec;213(6):716–22.

23. Arango C, Díaz-Caneja CM, McGorry PD, Rapoport J, Sommer IE, Vorstman JA, et al. Preventive strategies for mental health. Lancet Psychiatry. 2018 Jul 1;5(7):591–604.