

## ORIGINAL ARTICLE

## Psychological health and its associates among migrants and non-migrants in a rural area of Northern India

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### Abstract

**Background:** Migration, whether voluntary or forced, entails major adaptations. An elaborate insight into the circumstances helps to induce various interventions in migrants. **Aims and Objectives:** To elicit the psychological health, lifestyle variables, religiosity, spirituality and coping among migrants and compare it with non-migrants in a rural locality. **Material and Methods:** A community based, cross-sectional study was undertaken among 404 adults aged 20 years and above. The General Health Questionnaire–12, Religiosity scale by Wilkes, The Daily Spiritual Experience Scale and COPE scale were used as psychometric tools for data collection. Data was analysed using SPSS (Version 20.0). **Results:** A sample of 137 migrants and 267 non-migrants were analysed. There was a statistically significant difference between the two groups for occupation and education ( $p=0.002$  &  $0.000$  respectively). The mean scores of the psychological health of migrants ( $10.58 \pm 6.32$ ) were slightly better than that of non-migrants ( $11.49 \pm 5.69$ ,  $p=0.142$ ). Spirituality scores showed migrants being more inclined towards spiritualism ( $p=0.016$ ). Young age, religious and spiritual propensity showed a statistically significant correlation with better Psychological health ( $p=0.036$ ,  $0.000$  &  $0.013$  respectively). **Conclusion:** Providing psychosocial assistance to migrant populations focusing on educational, occupational & religious-spiritual issues can reduce vulnerabilities especially for psychological health.

### Keywords

Migration; Psychological health; Rural; Religiosity; Spirituality; COPE

### Introduction

In the current world of furtherance, conditions of political, social and even environmental changes have increasingly led to internal or external

migration/displacement of individuals across the globe. This situation involving a significant diversification may not always be amicable to all (1). The migration process has a definite consequence on

health, socio-economic, cultural, religious and political aspects of human life and the realm (2). Among the various health issues among migrants, mental health issues and its coping strategies are at the centre stage as they also determine the overall health (3). Adverse social conditions characterized by poverty, unemployment, job insecurities, low status occupations etc. are important determinants of poor mental health (4).

Good mental state is inherent to human health and well-being which is further enhanced by various dimensions of religiousness and spirituality that can offer comradeship and suffuse life with sense of meaning and essence (5).

Owing to the turmoil, the state of Jammu and Kashmir witnessed a mass forced exodus of people from Kashmir valley in 1990; the predominant group among these were the Kashmiri Pandits who eventually settled in camp and also non-camp areas in and around Jammu city and also other parts of India (6).

### Aims & Objectives

1. To compare the psychological health and its associates between migrants and non-migrants.
2. To correlate the Psychological health of study population with religious-spiritual variables.

### Material & Methods

A community-based cross-sectional study was conducted among migrant population and local residents in the rural field practice area of post graduate department of community medicine, Government Medical College Jammu. The study received ethical clearance from Institutional Ethical Committee.

**Selection of the study area:** - The study was conducted in a natural setting where both the study and comparison groups are cohabitating. Purposive sampling technique was used to select the universe for undertaking the study. The present study was carried out in the Kashmiri Basti area and its adjoining locality in village Singhpura, Miran Sahib Zone, Block R.S. Pura, Jammu. The population of the zone is approximately 23,500, spread over 23 villages. Majority of the population comprises of Hindus and Sikhs and their major occupation is agriculture. The health services in the zone are administered through a network of institutions comprising of one New Type Primary Health Centre (NTPHC) and four sub centres (SC). Migrant Kashmiri Pandits are settled in Kashmiri Basti area and their

total population is 272 with 58 households. The adjoining Singhpura village has a population of 657 with 131 households. Adults of ages 20 years and above in these two villages were 162 and 394 resp. Selection of the Study Subjects: All the adults of more than 20 years of age residing in the study area were included in the study.

**Inclusion Criteria**-Adults more than 20 years of age who are members of the family settled in the locality, available during the study period, give consent.

**Exclusion Criteria**-Staying outside for employment or education purpose, do not give consent.

**Procedure of inquisition:** The local community leaders were sensitized about the purpose of the study to garner grounds well of support from the public for the present study. A map of the area was laid down and all the households were included in the study. Upon reaching a particular household, the objectives of the study were explained to the head of each household who had the freedom to refuse. The participants were explained the purpose of the study and were assured that the information thus gathered will be kept confidential. After the rapport building, the individuals willing to participate in the study were interviewed in person in a relaxed and pleasant environment. In case, the adults of more than 20 years were not present at the time of the visit, the house was visited again second time for their inclusion, and if still not found, they were excluded from the present study.

**Methods of Enquiry and collection of data:** - The enquiry has been conducted through the survey method. Data has been collected through personal interview method with the respondents in a predesigned, pre tested, semi structured questionnaire. The questionnaire captured information on socio demographic variables, duration of migration, any diagnosed chronic diseases with duration more than six months (diabetes, hypertension, and cardiac diseases etc), lifestyle attributes (physical activity of at least 150 minutes in a week), details of habits (such as tobacco usage i.e. smoking or consuming smokeless tobacco products daily and daily alcohol consumption) and religious-spiritual variables (religiosity, spirituality and Coping).

Following psychometric tools were employed to assess the extent level of the variables included in this study.

1. The General Health Questionnaire-12 (GHQ-12): To assess the psychological health of the

respondents, the tool used was GHQ-12 (Goldberg and Hillier, 1979) which is a short screening test for detecting minor, non-psychiatric disorders in the general population. Respondents are asked to indicate the extent to which they have experienced change in the particular symptom or feeling in question. The 12- statements are to be rated (less than usual, no more than usual, rather more than usual, or much more than usual); on a four-point Likert scoring styles (0-1-2-3). Thus, the total score may range from 0 to 36. Lower the score better is psychological health and vice versa (7).

2. Religiosity scale by Wilkes et al (1986)- Religiosity was measured using Religiosity scale - a 5 point rating scale with statements rated from strongly disagree to strongly agree, where higher score revealed that more is the religiosity (8).
3. The Daily Spiritual Experience Scale (DSES) - is a 16-item self-report scale along a 6-point Likert scale (item 1 to 15) anchors labelled; Many times in a day, Every day, Most days, Some days, once in a while and Never and 4 point- Likert scale (item 16) labelled Not at all, Somewhat close, Very close and As close as possible (which was reverse scored in the study). It is designed to assess ordinary experiences of connection with the transcendent in daily life or spirituality. A lower score indicated a high spirituality among individuals (9).
4. COPE Scale – Brief COPE was administered to the study subjects. These items deal with ways a person has been coping with the stress in his life. A higher score shows a greater ability to handle stress (10).

Reliability score for GHQ-12, Religiosity scale, DSES and COPE scale was 0.90, 0.85, 0.92 and 0.90 resp.

#### **Statistical analysis**

Data was analysed using SPSS (ver20.0). All tests were performed at a level of significance of 5%, thus for an association to be significant, a p value of less than 0.05 was considered. The categorical variables were presented as percentages (%) and quantitative variables were represented as mean (standard deviation). The test of association used for qualitative data was Pearson's Chi-square test and Student's t-test was applied to find the significance of difference between the two group means. The correlation between various independent variables and psychological health was assessed using the Pearson's correlation test.

## **Results**

During the study period 148 migrants and 321 non-migrants of ages 20 years and above were found to be residing in the study area. A sample of 404 adults was studied; it included 137 migrants and 267 non-migrants. The age range of the study population was 21-84 years with the mean age of  $43.74 \pm 10.91$  years. The range for ages among migrants was 26-82 years and for non-migrants it was 21-84 years and the sex ratio M:F in the two groups was 1:0.90 and 1:0.84 respectively. There was no statistically significant difference between migrants and non-migrants in terms of gender and marital status. As compared to migrants, more of the non-migrants were involved in agriculture related activities and the difference in occupations of the two groups was statistically significant ( $p=0.002$ ). Analysis of education status showed that majority of the migrants had completed secondary level schooling and above and their education status was statistically significantly different compared to local population ( $p=0.000$ ).

A considerable percentage (ie.28.21%, 114/404) of the study population was suffering from one or more kind of chronic disease. Higher prevalence of Diabetes was observed in migrants (12.40%), whereas Hypertension was more frequent among non-migrants (14.98%).

Enquiry into the life style factors of the two groups showed that they were almost similar with reference to habits like smoking, alcoholism and physical activity. When enquired for presence of any stress in the participants, one-third of the migrants reported in affirmation in comparison to only 15% of the non-migrants and this difference was statistically significant ( $p=0.000$ ) ([Table 1](#)). Family members followed by work place and neighborhood figured as top three sources of stress in this order.

The mean scores of GHQ-12 in the study population were  $11.18 \pm 5.92$ , and for religiosity, spirituality and coping they were  $23.37 \pm 4.18$ ,  $43.19 \pm 13.37$  and  $62.60 \pm 10.13$  respectively. [Table 2](#) shows that as per mean scores, the psychological health of migrants was slightly better than non-migrants although no statistically significant difference was observed, and similar difference was observed for religiosity and coping scores. Spirituality scores showed a statistically significant variation ( $p=0.016$ ), with migrants being more inclined towards spiritualism. Correlation was performed to examine the relationship between the psychological health of the

sample and various demographic and religious-spiritual variables. [Table 3](#) summarizes that among variables like age, income, religiosity, spirituality and coping; religiosity showed a significant correlation with Psychological health in migrants, non-migrants and the study population as a whole (migrants and non-migrants combined). As the scores of religiosity increase (depicting that individual is more religious) the scores of psychological health decrease (depicting that individual has better psychological health). Age showed a significantly negative correlation indicating that as the age increases the scores of psychological health decrease (i.e. have better psychological health).

## Discussion

The present study capitalizes on the unplanned experiment of nature represented by the migrant population settled for more than twenty years in a rural area to investigate and compare their psychological health and its related variables with that of local residents. This study further reveals that although comparable in various socio demographic statistics, socioeconomic status (including income and education) of migrants was higher as compared to the local population. The importance of socioeconomic factors cannot be undermined considering the fact that they could act as lens to monitor mental health and also by improving employment opportunities, mental health could be promoted (11).

The scores for psychological health were similar in both the groups in our study; one of the explanations to this similarity could be the long duration since migration, which could have acclimatized them to the conditions in the new locality. A previous study has concluded that as the time elapses and immigrants start to adopt traditional health behaviours, their health status begins to converge with that of the local population (12). Research has shown that a group of Asian immigrants in United Kingdom presented a little lower or almost equal psychological morbidity compared to local native population (13).

The present study has revealed that religiosity scores were slightly higher in migrants as compared to local population and there was a significant correlation between psychological health and religiosity. Congruous findings to our results of psychological wellbeing and religious involvement has been shown in a previous research (14). Amadi KU et al have

inferred that mental and physical health outcomes are related to religious coping especially in various life circumstances like health problems and bereavement (15). The horrendous/ nightmarish experience of forced migration could be the possible explanation to religious inclination of migrants in the present study. Behere P.B, et al also calls attention to the fact that people may have more inclination to pray, when sick or in stressful conditions (16). Multitudinous emotions ranging from gratitude, humility, forgiveness etc are invigorated in individuals who adhere to religious beliefs, this in turn has preventive and therapeutic benefits and also helps in fostering healthy behaviours e.g. avoidance of tobacco, alcohol, drugs, antisocial behaviour (17). Goforth A.N et al has deciphered that religiosity plays an important role not only in psychological adjustment but also acculturation in migrants (18).

The importance of spirituality (independently and in tandem with religious participation) on psychological well-being has been confirmed in previous studies (19). The results of the current study are also in agreement.

Ben C.H has pointed that when the individuals encounter major life challenges like migration etc the experience of stress and coping strategies become prominent to counter inevitable aspects of acculturation and cultural change (20). In the similar lines the migrant population in the current study had higher COPE score than the locals, though the results failed to achieve statistically significant difference or correlation.

## Conclusion

Migrant mental health depends on conditions in the society where they are resettled. Employment opportunities, education, religious and spiritual inclination were better in the migrant population than local residents which were probably the reasons for similar or slightly better psychological health among them. Psychological health was significantly correlated with Religiosity.

## Recommendation

Conglomeration of the migrants with the local residents and focusing on their employment and education opportunities could help in their early reestablishment. Spiritual counselling can further assist in rebuilding their lives and play a decisive role in rehabilitation.

## Limitation of the study

Convenience sampling with a small sample and cross-sectional nature of data limits the generalization of results in wider population. Further, planning a longitudinal study with simultaneous comparison of migrants in non-camp settings with those in camp areas and also with local residents could give a more lucid insight into the various issues considered.

## Relevance of the study

Limited evidence is available in literature on comparison of these issues among migrants and local population, so the study is relevant to the future researchers. The findings of the study are also of relevance to administrators and health programme planners who are at the helm of affairs of migrant population to conceive strategies for their better settlement.

## Authors Contribution

BL: conception, design, collection of data, analysis and interpretation of data, literature search, drafting and critical revision of manuscript. RK: conception, design, analysis and interpretation of data. RM: interpretation of data, literature search, drafting and critical review of final manuscript. RKG: literature search, drafting and review of manuscript. PS: collection of data, literature search and drafting. NC : collection of data, analysis and drafting.

## References

- Virupaksha HG, Kumar A, Nirmala BP. Migration and mental health: An interface. *J Nat Sci Biol Med.* 2014 Jul;5(2):233-9. doi: 10.4103/0976-9668.136141. Review. PubMed PMID: 25097389; PubMed Central PMCID: PMC4121889. [[Pub Med](#)]
- Li J, Rose N. Urban social exclusion and mental health of China's rural-urban migrants - A review and call for research. *Health Place.* 2017 Nov;48:20-30. doi: 10.1016/j.healthplace.2017.08.009. Epub 2017 Sep 23. Review. PubMed PMID: 28892746. [[Pub Med](#)]
- Turrini G, Purgato M, Balette F, Nosè M, Ostuzzi G, Barbui C. Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. *Int J Ment Health Syst.* 2017 Aug 25;11:51. doi: 10.1186/s13033-017-0156-0. eCollection 2017. PubMed PMID: 28855963; PubMed Central PMCID: PMC5571637.. [[Pub Med](#)]
- Li CC, Meng XH, Wang JR, Ma HJ, Chen C, Liu YQ. Association between sociodemographic, psychosocial, lifestyle factors, and self-reported health among migrant laborers in China. *J Chin Med Assoc.* 2017 Apr;80(4):204-211. doi: 10.1016/j.jcma.2016.10.011. Epub 2017 Feb 12. PubMed PMID: 28202340. [[Pub Med](#)]

- Cohen S, Asgary R. Community Coping Strategies in Response to Hardship and Human Rights Abuses Among Burmese Refugees and Migrants at the Thai-Burmese Border: A Qualitative Approach. *Fam Community Health.* 2016 Apr-Jun;39(2):75-81. doi: 10.1097/FCH.000000000000096. PubMed PMID: 26882410. [[Pub Med](#)].
- Raj S, Sharma S and Singh M. Migration, Relief & Rehabilitation and Social-Living Condition of Kashmiri Pandit Migrants of Camp and Non-Camp Areas in Jammu District. *IOSR Journal of Humanities and Social Science (IOSR-JHSS).* 2014 Aug; 19(8), Ver. III: 31-39.
- Goldberg D. P. & Hillier V. F. A scaled version of the General Health Questionnaire. *Psychological Medicine.* 1979;9(1):139-145. Doi: 10.1017/S0033291700021644.
- Wilkes R.E., Burnett J.J. & Howell R.D. On the meaning and measurement of religiosity in consumer research. *Journal of the Academy of Marketing Science JAMS.* 1986; 14(1): 47-56. Doi: 10.1007/BF02722112.
- Lynn G.U. The Daily Spiritual Experience Scale: Overview and Results. *Religions.* 2011; 2(1):29-50. Doi:10.3390/rel2010029.
- Carver CS. You want to measure coping but your protocol's too long: consider the brief COPE. *Int J Behav Med.* 1997;4(1):92-100. PubMed PMID: 16250744. [[Pub Med](#)].
- World Health Organization and Calouste Gulbenkian Foundation. Social determinants of mental health. Geneva, WHO, 2014. Available from [http://apps.who.int/iris/bitstream/10665/112828/1/9789241506809\\_eng.pdf?ua=1%20](http://apps.who.int/iris/bitstream/10665/112828/1/9789241506809_eng.pdf?ua=1%20). Last assessed 06. 08. 2017.
- Beutel ME, Jünger C, Klein EM, Wild P, Lackner KJ, Blettner M, Banerjee M, Michal M, Wiltink J, Brähler E. Depression, anxiety and suicidal ideation among 1(st) and 2(nd) generation migrants - results from the Gutenberg health study. *BMC Psychiatry.* 2016 Aug 12;16(1):288. doi: 10.1186/s12888-016-0995-2. PubMed PMID: 27516075; PubMed Central PMCID: PMC4982128. [[Pub Med](#)].
- Bellas I, Livaditis M. Psychopathological impacts of migration. *ENCEPHALOS* 2013; 50:100-103.
- Ford K, Jampaklay A, Chamratrithirong A. Mental health in a conflict area: Migration, economic stress and religiosity in the three southernmost provinces of Thailand. *Int J Soc Psychiatry.* 2017 Mar;63(2):91-98. doi: 10.1177/0020764016685119. Epub 2016 Dec 27. PubMed PMID: 28024446. [[Pub Med](#)].
- Amadi KU, Uwakwe R, Ndukuba AC, Odinka PC, Igwe MN, Obayi NK, Ezeme MS. Relationship between religiosity, religious coping and socio-demographic variables among out-patients with depression or diabetes mellitus in Enugu, Nigeria. *Afr Health Sci.* 2016 Jun;16(2):497-506. doi: 10.4314/ahs.v16i2.18. PubMed PMID: 27605965; PubMed Central PMCID: PMC4994570. [[Pub Med](#)].
- Behere PB, Das A, Yadav R, Behere AP. Religion and mental health. *Indian J Psychiatry.* 2013 Jan;55(Suppl 2):S187-94. doi: 10.4103/0019-5545.105526. PubMed PMID: 23858253; PubMed Central PMCID: PMC3705681. [[Pub Med](#)].
- Garcia G, Ellison CG, Sunil TS, Hill TD. Religion and selected health behaviors among Latinos in Texas. *J Relig Health.* 2013 Mar;52(1):18-31. doi: 10.1007/s10943-012-9640-7. PubMed PMID: 22911394. [[Pub Med](#)].

18. Goforth A.N, Oka E.R, Leong F.T.L, Denis D.J. Acculturation, Acculturative Stress, Religiosity and Psychological Adjustment among Muslim Arab American Adolescents. Journal of Muslim Mental Health. 2014; 8(2):3-19. Doi: 10.3998/jmmh.10381607.0008.202
19. Arrey AE, Bilsen J, Lacor P, Deschepper R. Spirituality/Religiosity: A Cultural and Psychological Resource among Sub-Saharan African Migrant Women with HIV/AIDS in Belgium. PLoS One. 2016 Jul 22;11(7):e0159488. doi: 10.1371/journal.pone.0159488. eCollection 2016. PubMed PMID: 27447487; PubMed Central PMCID: PMC4957758. [Pub Med].
20. Kuo BC. Coping, acculturation, and psychological adaptation among migrants: a theoretical and empirical review and synthesis of the literature. Health Psychol Behav Med. 2014 Jan 1;2(1):16-33. Epub 2014 Jan 2. PubMed PMID: 25750766; PubMed Central PMCID: PMC4346023. [Pub Med].

**Tables**

**TABLE 1 CROSS TABULATION OF THE CATEGORIES OF LIFE STYLE VARIABLES AND PRESENCE OF STRESS AMONG MIGRANTS AND NON-MIGRANTS**

Variable	Migrant (N=137) Frequency (% age)	Non-migrant (N=267) Frequency (% age)	X2	p
<b>Smoking</b>				
No	119(86.9)	225(84.3)	0.481	0.296
Yes	18(13.1)	42(15.7)		
<b>Alcohol</b>				
No	114(83.2)	209(78.3)	1.37	0.149
Yes	23(16.8)	58 (21.72)		
<b>Exercise</b>				
No	81(59.1)	176(65.9)	1.80	0.109
Yes	56(40.9)	91(34.1)		
<b>Stress</b>				
No	90(65.7)	226(84.6)	19.08	0.000*
Yes	47(34.3)	41(15.4)		

\*highly significant

**TABLE 2 COMPARISON OF VARIOUS DEMOGRAPHIC AND RELIGIOUS-SPIRITUAL VARIABLES BETWEEN MIGRANTS AND NON-MIGRANTS**

Variable	Migrants (N=137)		Non migrant (N=267)		t	p
	Mean	SD	Mean	SD		
Age	44.64	11.11	43.27	10.80	1.197	0.232
Income (per capita)	10568.12	104.18	6984.83	68.87	4.140	0.000**
Psychological health	10.58	6.32	11.49	5.69	-1.470	0.142
Religiosity	23.63	4.24	23.23	4.14	0.900	0.369
Spirituality	40.97	13.19	44.34	13.34	-2.412	0.016*
Coping	63.30	11.10	62.32	9.60	0.917	0.360

N=404 \*\*highly significant, \* significant

**TABLE 3 CORRELATION BETWEEN SCORES OF PSYCHOLOGICAL HEALTH AND VARIOUS DEMOGRAPHIC AND RELIGIOUS-SPIRITUAL VARIABLES AMONG MIGRANTS, NON-MIGRANTS AND TOTAL STUDY POPULATION**

Variable	Psychological Health	Age	Income	Religiosity	Spirituality	Coping
<b>Migrant N=137</b>	Pearson Correlation	-0.143	0.049	-0.249**	0.145	0.076
	Sig. (2-tailed)	0.096	0.567	0.003	0.091	0.378
<b>Non-migrant N=267</b>	Pearson Correlation	-0.076	0.025	-0.355**	0.099	0.047
	Sig. (2-tailed)	0.216	0.679	0.000	0.105	0.447
<b>Total (404)</b>	Pearson Correlation	-0.104*	0.020	-0.318**	0.123*	0.055
	Sig. (2-tailed)	0.036	0.682	0.000	0.013	0.273

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)