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Using the 12-item General Health Questionnaire (GHQ-12) to assess the Mental Health of Farmers of Punjab

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ABSTRACT

The present study was conducted to assess the mental health of the farmers of Punjab during the Kisan Mela organized by Punjab Agricultural University, Ludhiana. A self structured questionnaire was formulated to collect details from the farmers along with the GHQ-12 questionnaire. Simple Random Sampling technique was used for the selection of the farmers and a total 202 farmers comprised the sample for this study. The GHQ is a screening tool which is used to identify the severity of psychological distress experienced by an individual within the past few weeks. Based on the GHQ scores of the respondents, the cut-off point 5 was used to determine the respondents' level of mental health. The higher score indicating poorer mental health of the individual. The study revealed that a considerable proportion of the farmers (respondents) of Punjab had been identified as on the verge of facing psychological distress. A very less percentage of the respondents were found to be having severe mental illness. It was concluded from the data that age had negative and significant relationship with the level of mental health of the respondents.

Key words: *GHQ-12, Mental health, Indebtedness, Farmers*

INTRODUCTION

Farmers of Punjab made the nation self-sufficient in food, but when the issues were emerging they were fighting their battle alone. All policies like providing them with subsidies and free power isn't at all making a difference. With time two primary assets like land and water have sharply deteriorated overtime. This crisis is causing low productivity, rising cost of production, contracting wage and work, depleting land holding, mounting indebtedness and environmental harm. In the long run, these issues are playing an imperative part in nerve racking the mental health of the farmers of Punjab. The stress level of indebtedness approaching bankruptcy and this is inversely associated with the farm size. The main consequence of agrarian distress has been that the marginal and small farmers, who find it increasingly hard to sustain on farming, are getting pushed out from agriculture. But due to lack of any skills, it is difficult for them to get absorbed in any other sector.

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The prevalence of mental disorders has been of great interest to the medical professional, researchers, and policy planners. Thus, a huge number of epidemiological studies have been carried out in India. Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental health can influence everyday life, connections, and even physical wellbeing. Mental health too incorporates a person's capacity to appreciate life - to attain a balance between life activities and endeavors to attain mental flexibility. The most common types of mental illness are anxiety disorders, mood disorders, and schizophrenia disorders. It can be prevalent in anyone irrespective of their age, gender, caste or area. Like other states of India, predominance of mental sickness among the farmers of Punjab is also noticeable and of great concern.

According to National Mental Health Survey[13], it was found that every 6th Punjabi has suffered from mental illness and every 8th is still suffering. Further, the survey found that in Punjab, the total lifetime prevalence of mental illnesses was 18% (National level: 13.6%) and the current prevalence is 13% (National level: 10.5%). It means, there are nearly 21.9 lakh people are currently suffering from mental illness in Punjab. Only 20% of them (4.38 lakh) have access to treatment and rest 80% are not getting any treatment. Mental illness is a great contributor towards the suicidal behavior of the farmers in Punjab. It is an issue that needs to be addressed to and is a subject of great importance since so many farmers in the Punjab have lost their lives in recent past.

The General Health Questionnaire (GHQ) is a self-administered screening tool designed to detect current mental disturbances and disorders. It was originally developed by Goldberg and Hillier in a 60-item format. But currently it's shorten versions i.e. GHQ-30, GHQ-28, GHQ-20 and GHQ-12 are also available. It is translated into 38 different languages till date to the validity and reliability of the questionnaire. The GHQ-12 is particularly more appealing to use in the modern busy world as it is a quick, reliable and sensitive short form of questionnaire which is ideal for research studies. It was also adopted as a screening tool in an international World Health Organization (WHO) study of psychological disorders in primary health care. Hence, keeping in view the need and importance of mental illness this study was planned with the specific objective to survey and assess the mental wellbeing of the farmers of Punjab at *Kisan Mela* organized by Punjab Agricultural University, Ludhiana.

MATERIAL AND METHODS

The present study was conducted to assess the mental health of the farmers of Punjab during the *Kisan Mela* organized by Punjab Agricultural University, Ludhiana in the month of September, 2018. An expansive number of farmers from the distinctive regions of Punjab come to attend this *Kisan Mela*. To fulfill the purpose of present study, the GHQ-12 was chosen as a screening tool for psychological problems faced by the farmers of Punjab. A self structured questionnaire was formulated to collect details from the farmers along with the GHQ-12 questionnaire. During the survey the details of the respondents were recorded accordingly. Before filling up the questionnaire, the purpose of the study was clearly explained to the farmers. Simple Random Sampling technique was used for the selection of the farmers and a total 202 farmers comprised the sample for this study.

The mental health of the farmers of Punjab was measured by using the GHQ-12. Selected questionnaire was translated into the regional language i.e. Punjabi by a panel of translators, who were fluent in both Punjabi and English. A number of times, the translation procedure were conducted until and unless a final agreement was reached for the Punjabi version. In the end, the investigators decided to present GHQ-12 in both the languages (Punjabi and English) to the

respondents as these are commonly used in Punjab. The GHQ is a screening tool, used to find out the severity of mental distress faced by an individual within the past few weeks. On the scale, each item has four responses i.e. More so than usual, same as usual, less so than usual and much less than usual. For the purpose of this study, the GHQ scoring method (0-0-1-1) was chosen over the simple Likert scale of 0-1-2-3, as this particular method is believed to help eliminate any biases which might result from the respondents who tend to choose responses 1 and 4 or 2 and 3, respectively[5]. The scores were summed up by adding all the items on the scale ranging from 0 to 12. Due to the various thresholds of the GHQ-12, the mean GHQ score for a population of respondents was suggested as a rough indicator for the best cut-off point[6]. Therefore, based on the mean GHQ score for this sample, the cut-off point 5 was used to determine the respondents' level of mental health. The higher score indicating poorer mental health of the individual..

A descriptive analysis was performed to determine the distributional characteristics of all the variables studied, including the farmer's level of mental health. The frequency, percentage, totals and Correlation coefficient 'r' value was used to see the relationship between variables and scores obtained by the respondents on the GHQ-12 were calculated.

RESULTS AND DISCUSSION

Personal profile of the respondents:

The background information of the farmers viz. caste, age, marital status, educational qualification, occupation, family type, land holding, long term disease and drugs was analyzed for frequency and percentage as shown in Table 1. Caste is a system of dividing people in a society into different social classes. The data revealed that a larger proportion of the respondents belonged to General caste (87.62%) followed by Schedule Caste (4.46%) and Other Backward Classes (4.00%). Further, four per cent of the farmers did not mention their caste.

Table 1. Socio-personal profile of the respondents

n=202

Caste	**f**	**%**
General	177	87.62
Schedule Caste	9	4.46
Other Backward Classes	8	4.00
Not Mentioned	8	4.00
Age		
18-30	85	42.08
31-43	65	32.18
44-56	30	14.85
57-69	11	5.45
70-82	5	2.48
Not Mentioned	6	2.97
Marital Status		
Married	142	70.30
Unmarried	56	27.72
NM	4	2.00
Educational Qualification		
Primary	8	4.00
Middle	9	4.00
Secondary	34	16.83
Senior Secondary	60	29.70
Graduate	60	29.70
Post-Graduate	25	12.38
Not Mentioned	6	2.67
Family type		
Joint	59	29.21
Nuclear	136	67.33
Not Mentioned	7	3.47
Land Holding		

No Land	28	13.86
Small (less than 5 acres)	56	27.72
Medium (5 – 25 acres)	108	53.46
Large (above 25 acres)	8	3.96
Not Mentioned	2	1.00
Long Term Disease (any)		
Yes	37	18.32
No	158	78.22
Not Mentioned	7	3.47
Drugs (Alcohol/ Tobacco)		
Yes	42	20.79
No	157	77.72
Not Mentioned	3	1.49

Age refers to the chronological age of the respondents in terms of years completed at the time of data collection. The data showed that a large proportion of the selected farmers (42.08%) were in the age group of 18-30 years followed by 32.18 per cent in the age group of 31-43 years.

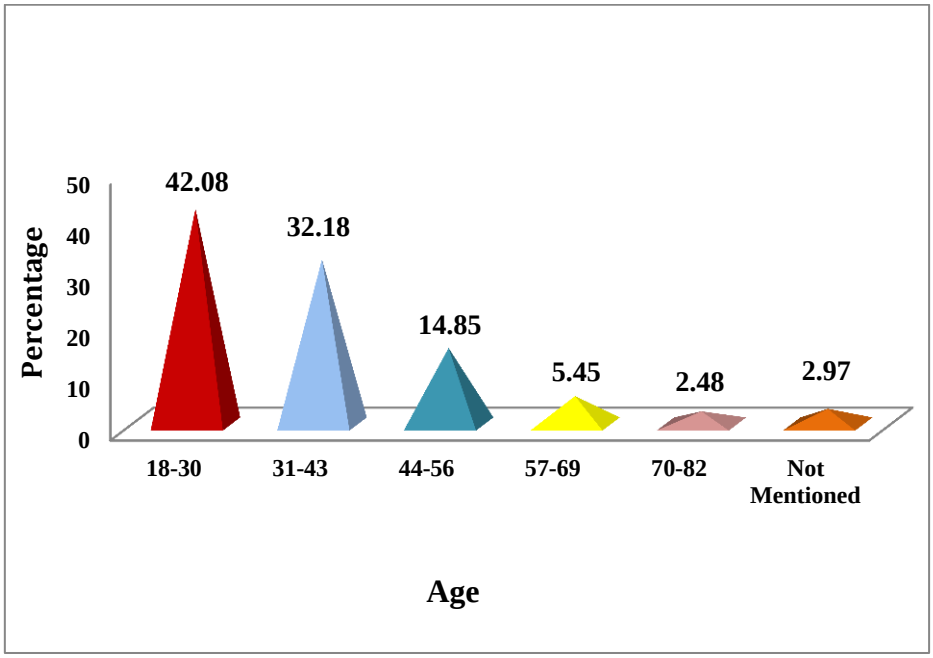

Fig.1. Distribution of the respondents according to their Age

The data revealed that majority of the respondents (70.30%) were married and 27.72 per cent were unmarried while, two per cent of farmer's didn't mention their marital status in the questionnaire. Operationally, education is defined as the level of formal schooling or degree program completed successfully. The data indicated that equal number of the respondents (29.70%) were educated upto senior secondary level and graduate level followed by 16.83 per cent who were educated upto secondary and 12.38 per cent who were Post-graduates. The family structure is a most important parameter which may influence the environment in the family. The type of family in which a person lives and gets socialized has immense importance in deciding his values, beliefs and behavior patterns which are likely to affect his attitude. Therefore, it was pertinent to understand the family type of the respondents. It is evident from the data that majority of the respondents (67.33%) were from nuclear households and 29.21 per cent were from joint households.

Land holding represents the cultivated land that the respondent or his family operated at the time of the investigation. The number of acres cultivated by the respondent or his

family was interpreted as the earned score of the respondent. It is very clear from data that 3.96 per cent of respondents were large farmers (>25 acres), majority of the respondents (53.46 %) were medium farmers (5to 25 acres) followed by 27.72 per cent who were small farmers (< 5 acres). Health problems, *illness* and addictions *can* leave a person struggling for money, therefore *illness* and vulnerability is a major *cause* of indebtedness. Hence it was found important to check if there is any long term disease in the family of the respondent or not. The data indicated that a large proportion of the respondents (78.22%) reported that there is no long term disease in their family while 18.32 per cent of the respondents revealed that there is the prevalence of one or other long term disease in their family.

Causes of rural indebtedness in Punjab:

Major causes of rural indebtedness include poverty, land improvement, social and other obligations, etc. Debt is closely related to high levels of stress, anxiety and depression. It is also the major reason of farmer suicides in Punjab and other states of India as reported by the various organizations and research institutions. Therefore, it was also included in the questionnaire as a variable.

Table 2. Distribution of the respondents according to their debt and causes of rural indebtedness. n=202

Debt	**f**	**%**
Yes	93	46.04
No	106	52.48
Not Mentioned	3	1.49
Causes of Debt (n=93)		
Agriculture	45	48.39
Disease	2	2.15
Home (construction, renovation, etc.)	9	9.67
To buy land	6	6.45
Investing in a business	2	2.15
To go to abroad	1	1.08
Marriage	6	6.45
Study	2	2.15
Personal work	5	5.38
Not Mentioned	15	16.13

Data revealed that nearly half of the respondents (52.48%) were not indebted while remaining 46.04 per cent were indebted during the time of collection of data and 1.49 per cent of the respondents didn't disclosed anything.

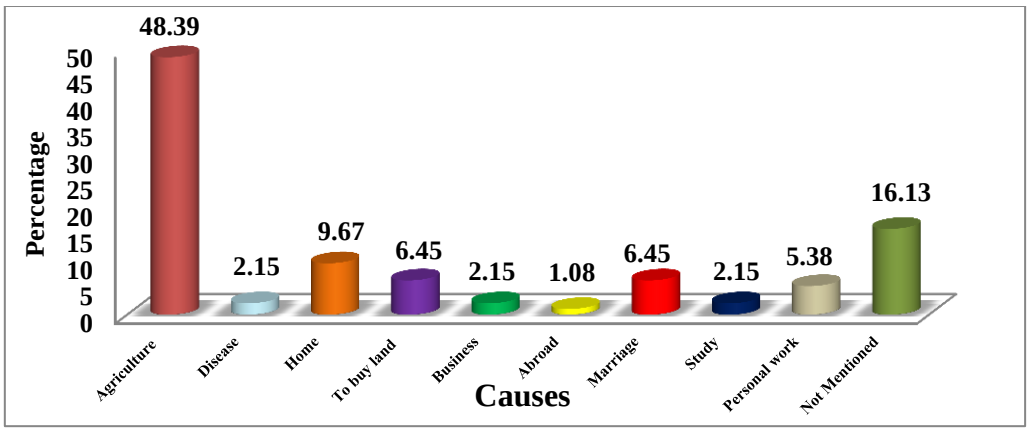

Fig.2. Major causes of rural indebtedness

The results are contradictory with the report published in 'The Tribune' newspaper that revealed that among marginal and small farmers, 83.3 per cent and 88.64 per cent farmer households are under debt, respectively. In case of semi-medium and medium farmers, the figure is 89.06 per cent and 84.09 per cent, respectively. Nearly 82.61 per cent of large farmers are under debt with the state average of households under debt being 85.9 per cent. Therefore it can be concluded that there is a great possibility, that a large per cent of the farmers were hiding about their indebtedness at the time of data collection.

The major reason of debt as reported by nearly half of the respondents (48.39%) was agriculture followed by 16.13 per cent didn't mentioned the reason and 9.67 per cent reported that the reason of having debt was home.

Respondent's Level of mental health:

The dispersion of the respondents according to their scores obtained in 12 items of GHQ-12 is given in Table 3. The findings assembled in the study reported that 33.17 per cent of the respondents obtained zero score in GHQ which clearly indicates the great level of mental health of these respondents.

Table 3. Distribution of respondents according their Level of Psychological Health

Level of Psychological Health	f	(%)
Zero	67	33.17
1-4	98	48.51
5-8	30	14.85
9-12	7	3.47

Further nearly half of the selected respondents (48.51%) lies between 1 to 4 scores which propose that a considerable portion of the respondents have the potential to develop and experience mental health issues. Fourteen per cent of the respondents scored 5-8 scores which mean these respondents are enduring from the mental issues upto a few degree and they require counseling or mental health assistance from a recognized psychologist. A less percentage (3.47%) of the respondents has scored 8-12 GHQ scores, which need to be addressed and taken care immediately. The high range of GHQ score indicates the serious mental ailment among the respondents.

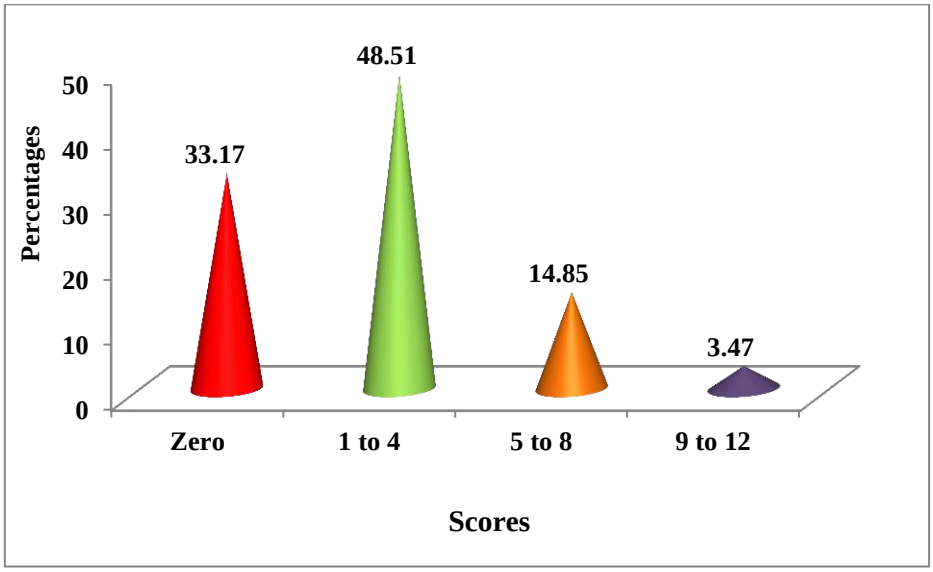

Fig.3. Scores obtained by the respondents in GHQ-12

Therefore, it can be concluded from the above discussion that a considerable proportion of the farmers had been identified as on the verge of facing psychological distress.

Relationship of socio personal profile with level of mental health

The data presented in Table 4 measured the relationship of the socio-personal profile with level of mental health and it was found that age had a negative and significant relationship with the level of mental health of the respondents.

Table 4. Relationship between socio-personal profile and level of mental health of the respondents

Variables	'r' value (level of psychological health)
Age	-0.249**
Education	0.017 ^{NS}
Total family members	-0.028 ^{NS}
Land Holding	0.068 ^{NS}

****Significant at 1% level, NS- Non significant**

Other variables like education, total family members and land holding had a non-significant relationship at 1 % level of mental health of respondents.

CONCLUSION

The 12-item General Health Questionnaire (GHQ-12) has been widely used as a measure of minor mental disorders, but there has been no study on mental health of farmer's of Punjab. The GHQ-12, scores revealed that a considerable proportion of the farmers of Punjab had been identified as on the verge of facing psychological distress while a very less percentage of the respondents were found to be having severe mental illness. It was concluded from the data that age had negative and significant relationship with the level of mental health of the respondents.

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