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Prevalence and Correlates of Depression and Anxiety: A Cross-sectional Study Among Lohars of Himachal Pradesh

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ABSTRACT

Background: Depression and anxiety are two common mental disorders increasing day by day and affecting the well-being of individuals. Various studies have estimated its burden among the urban population, but very few have focused on rural and vulnerable populations. This study aims to estimate the prevalence of anxiety and depression and its correlation with sociodemographic and lifestyle variables among the Lohar community of Himachal Pradesh.

Methodology: A cross-sectional study was conducted in selected villages of the Mandi district of Himachal Pradesh using purposive sampling with specific inclusion and exclusion criteria among the adult population of the Lohar community. Sociodemographic and lifestyle characteristics were taken through a predesigned, structured interview schedule. Anxiety and depression were measured through standardised scales, which are GAD-7 and PHQ-9, respectively.

Results: The prevalence of depression and anxiety was found to 23% and 28.9% respectively, equally affecting both males and females. Age was strongly associated with both anxiety and depression, showing a higher prevalence among the older adults ($p<0.05$). Tobacco use was associated with increased depression among women; it showed a surprising inverse relationship with anxiety levels overall. Additionally, socio-economic constraints, such as low income and unemployment, further influenced mental health outcomes.

Conclusions: Prevalence of anxiety and depression is higher in this community, especially among the older adults. Findings suggest that it is important to bring forward the interventions in the community for its welfare and betterment, to decrease and prevent the development of severe levels of anxiety and depression.

Keywords: Depression, anxiety, mental health, sociodemographic and lifestyle factors.

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INTRODUCTION

Recently, Mental health has become a very important aspect of an individual's life. It has become a crucial element in designing various policies, even included in the Sustainable Development Goals (SDGs) (Chokshi et.al., 2016). Depression and anxiety are the two main symptoms of common mental disorders (CMDs), which include neurotic and nonpsychotic affective disorders. These conditions are referred to as "common" because they are frequently seen in basic care and the community (Jaishankar et.al., 2018).

In India, the National Mental Health Survey (NMHS, 2015–16) estimated the lifetime prevalence of depression at 5.25% and neurotic and stress-related disorders (including anxiety) at 3.5%. Factors such as gender, poverty, and lack of access to health services amplify these disorders. The prevalence of common mental disorders is 17.6% worldwide, and it is significantly higher in Low-Middle-Income Countries (LMICs), estimated as 22.7% (Steel et al, 2014). Despite these numbers, there are still large gaps in care because mental health services are undeveloped and underfunded (Khan et.al, 2025). Patel et al. (2016) highlighted the treatment gap in LMICs, where over 75% of individuals with mental disorders do not receive adequate care. Cultural stigma, lack of trained professionals, and low awareness further impede mental health service utilisation.

As we know, depression, also known as depressive disorder, is a common mental health disorder affecting millions of lives and is also regarded as a major public health concern. The symptoms may include anhedonia, feelings of worthlessness, concentration and sleep difficulties, and suicidal ideation (Remes et.al., 2021). According to a report by the WHO, globally, 5% of adults suffer from depression, with females being more affected, and approximately 280 million people in the world have depression (WHO, 2017).

While in India, the prevalence is 4.5%, which means approximately 56 million people are suffering from depression (WHO, 2017). In Himachal Pradesh, the prevalence of depressive disorders is 3600 per 100000 (India State-Level Disease Burden Initiative, 2019).

People with anxiety disorders experience extreme fear and worry. It can cause distress syndromes such as shaking, shortness of breath, headache, loss of mental power, anger, heart arrest, and many other syndromes (Hofmann, et.al, 2014). According to the WHO, anxiety disorders are also regarded as the world's most common mental disorders, affecting 301 million people with a prevalence of 4% globally (WHO, 2025).

While in India, the National Mental Health Survey (NHMS) estimated that about 3.5% of the Indian population suffered from anxiety disorders (NHMS, 2015). Alarmingly, its prevalence has been rising over the last decades. In Himachal Pradesh, the prevalence of anxiety disorders is 3500 per lakh individuals (India State-Level Disease Burden Initiative, 2019).

The prevalence of depression and anxiety is mainly found among adults, especially older adults. Various associated factors are linked to it, which can be socio-demographic like age, sex, income, marital status or family type and also lifestyle factors such as consumption of alcohol, tobacco, physical activity, sun exposure, and dietary habits.

There is scanty of information available at community level. Hence, this study aims to study Lohar community in terms of mental health, despite their socioeconomic vulnerabilities. It also estimates the prevalence and correlates of Depression and anxiety among the Lohar Community. Attempt is also to explain how these socio-demographic and lifestyle factors shape mental health of individuals. The study will also be helpful in providing targeted interventions and policy-making.

METHODOLOGY

Study population and Data

The present cross-sectional study was a community-based study conducted in the following villages of Mandi District of Himachal Pradesh, India which are *Tandu, Nasloh, Sakor, Odh, Roparu and Bharon*.

A total of 235 participants of either sex in the age group 18-75 years belonging to the Lohar community were recruited randomly based on exclusion and inclusion criteria. All the data were collected from recruited participants after obtaining a well-written Informed Consent along with a Participation Information Sheet.

A predesigned interview schedule was used to collect the socio-demographic and lifestyle details of the study participants. For some Lifestyle variables, the standard dietary diversity questionnaire with a 24-hour recall method (FAO, 2013) and the General Physical Activity Questionnaire (GPAQ) were used to collect data on dietary patterns and physical activity from the recruited participants. Standardised tools were used for collecting data on Mental health variables, Patient Health Questionnaire (PHQ-9) and Generalised Anxiety Disorder (GAD-7) for depression and anxiety, respectively. Both tools are reliable and valid measures of severity, also for screening (Kroenke, et.al, 2001; Nunes, et.al, 2021)

All the data were entered into a Microsoft Excel worksheet and were analysed using SPSS software (Statistical Package for the Social Sciences Inc., version 22.0).

For descriptive statistics, we used Pearson's Chi-square Test in the evaluation of differences between groups, which were used according to the type and distribution of the variables studied.

Spearman's rank correlation was used to check the correlation between variables, and Binary logistic regression was used to check the association of socio-demographic variables for nutrition.

RESULTS

Socio-demographic and Lifestyle Variables

The description of the of socio-demographic variables of studied population according to sex is provided in Table 1, where we found that the educational status showed a statistically significant difference among both the genders with a greater number of Males (87.8%) in the literate category than females (71.7%) also a greater proportion of females (28.3%) are non-literate compared to males (12.2%). The occupational distribution varies significantly between genders ($\rho < 0.001$). A large proportion of males (82.2%) are engaged in employment or business, while only 13.8% of females fall in this category. On the other hand, the majority of females (74.5%) are homemakers or cultivators, whereas only 2.2% of males are in these roles. For economic status, we categorised it into two parts based on the average monthly income, which was ₹18,000 per month. A significant difference was observed in both genders, with a high number of males (46.7%) in the ≥₹18,000 income category compared to females (30.3%). A larger percentage of females (69.7%) fall in the lower-income category (<₹18,000). While in Alcohol Consumption, a statistically significant difference was observed ($\rho < 0.001$) in which Males (47.8%) were more in number compared to females (30.3%).

Table.1: Sex-wise distribution of socio-demographic variables of the studied population**.**

Socio-demographic variables	Overall N (%)	Male N (%)	Female N (%)	Chi-square ρ-value
Age cohort in years				
18-39	113 (48.1%)	40 (44.4%)	73 (50.3%)	0.55
40-59	79 (33.6%)	34 (37.8%)	45 (31.0%)	
≥60	43 (18.3%)	16 (17.8%)	27 (18.6%)	
Family type				
Nuclear	73 (31.3%)	30 (33.3%)	43 (29.7%)	0.55
Joint	162 (68.9%)	60 (66.7%)	102 (70.3%)	
Marital status				
Married	183 (77.9%)	69 (76.7%)	114 (78.6%)	0.72
Unmarried/Widowed	52 (22.1%)	21 (23.3%)	31 (21.4%)	
Education				
Literate	183 (77.9%)	79 (87.8%)	104 (71.7%)	**<0.001**
Non-Literate	52 (22.1%)	11 (12.2%)	41 (28.3%)	
Occupation				
Employed/business	94 (40.0%)	74 (82.2%)	20 (13.8%)	**<0.001**
Cultivator/homemaker	110 (46.8%)	2 (2.2%)	108 (74.5%)	
Student	22 (9.4%)	5 (5.6%)	17 (11.7%)	
Retired/unemployed	9 (3.8%)	9 (10.0%)	0 (0%)	

Monthly income				
≥18000	86 (36.6%)	42 (46.7%)	44 (30.3%)	**0.01**
<18000	149 (63.4%)	48 (53.3%)	101 (69.7%)	
Diet				
Veg	44 (18.9%)	13 (14.6%)	31 (21.5%)	0.19
Non-veg	189 (81.1%)	76 (85.4%)	113 (78.5%)	
Tobacco consumption				
No	115 (61.2%)	42 (54.5%)	73 (65.8%)	0.12
Yes	73 (38.8%)	35 (45.5%)	38 (34.2%)	
Alcohol Consumption				
No	148 (63.0%)	47 (52.2%)	101 (69.75%)	**<0.001**
Yes	87 (37%)	43 (47.8%)	44 (30.3%)	
Sedentary behaviour				
Low	174 (82.9%)	70 (81.4%)	104 (83.9%)	0.63
High	36 (17.1%)	16 (18.6%)	20 (16.1%)	

*ρ<0.05 is considered as statistically significant.

Depression categories with socio-demographic and lifestyle variables

The overall prevalence of depression in the studied population was recorded as 23% and further reveals that a majority (59.6%) do not exhibit symptoms of depression followed by Mild depression (17.4%), moderate depression (17.0%) then Severe depression is the least common category, affecting only 6.0% of the population, with a slightly higher prevalence among males (7.7%) than females (4.9%). The age-cohort-wise distribution of participants with respect to depression categories reveals a significant variation across age groups (ρ< 0.001), it was found that with increasing age, the severity of depression also increases. Tables 2 and 3, depict the association of depression categories with socio-demographic and lifestyle variables.

Education level shows a significant association with depression (ρ< 0.001). The increase of depression among non-literate individuals increases with depression severity category, from 12.1% in the no-depression to 50.0% in the severe depression category. This finding suggests that lower educational attainment may be a risk factor for depression. Occupational status is significantly associated with depression (ρ= 0.04). Those belonging to the No-depression category, 46.4% are employed or in business, compared to only 24.4% among those with mild depression.

Table 2: Distribution of depression categories with respect to the socio-demographic and lifestyle variables.

Socio-demographic variables		**Depression Categories**				**Chi-square p-value**
		No-depression N (%)	**Mild N (%)**	**Moderate N (%)**	**Severe N (%)**	
Age cohort in years	18-39	71 (58.7%)	21 (45.7%)	13 (36.1%)	8 (25.0%)	**<0.001**
	40-59	40 (33.1%)	15 (32.6%)	13 (36.1%)	11 (34.4%)	
	≥60	10 (8.3%)	10 (21.7%)	10 (27.8%)	13 (40.6%)	
Sex	Overall	140 (59.6%)	41 (17.4%)	40 (17.0%)	14 (6.0%)	0.71
	Male	55 (61.1%)	14 (15.6%)	14 (15.6%)	7 (7.7%)	

	Female	85 (58.6%)	27 (18.6%)	26 (17.9%)	7 (4.9%)	
Family type	Nuclear	39 (27.9%)	14 (34.1%)	12 (30.0%)	8 (57.1%)	0.15
	Joint	101 (72.1%)	27 (65.9%)	28 (70.0%)	6 (42.9%)	
Marital status	Married	115 (82.1%)	29 (70.7%)	30 (75.0%)	9 (64.3%)	0.22
	Unmarried/Widowed	25 (17.9%)	12 (29.3%)	10 (25.0%)	5 (35.7%)	
Education	Literate	123 (87.9%)	26 (63.4%)	27 (67.5%)	7 (50.0%)	**<0.001**
	Non-literate	17 (12.1%)	15 (36.6%)	13 (32.5%)	7 (50.0%)	
Occupational status	Employed/Business	65 (46.4%)	10 (24.4%)	13 (32.5%)	6 (42.9%)	**0.04**
	Cultivator/Homeworker	59 (42.1%)	23 (56.1%)	21 (52.5%)	7 (50.0%)	
	Student	15 (10.7%)	4 (9.8%)	3 (7.5%)	0 (0.0%)	
	Retired/Unemployed	1 (0.7%)	4 (9.8%)	3 (7.5%)	1 (7.1%)	
Monthly income	≥18000	55 (39.3%)	11 (26.8%)	17 (42.5%)	3 (21.4%)	0.25
	<18000	85 (60.7%)	30 (73.2%)	23 (57.5%)	11 (78.6%)	
Diet	Veg	31 (22.3%)	4 (9.8%)	6 (15.4%)	3 (21.4%)	0.30
	Non veg	108 (77.7%)	37 (90.2%)	33 (84.6%)	11 (78.6%)	
Tobacco consumption	Yes	72 (66.7%)	21 (65.6%)	13 (37.1%)	9 (69.2%)	**0.01**
	No	36 (33.3%)	11 (34.4%)	22 (62.9%)	4 (30.8%)	
Alcohol consumption	Yes	94 (67.1%)	27 (65.9%)	20 (50.0%)	7 (50.0%)	0.16
	No	46 (32.9%)	14 (34.1%)	20 (50.0%)	7 (50.0%)	
Sedentary behaviour	Low	107 (87.7%)	30 (78.9%)	27 (73.0%)	10 (76.9%)	0.15
	High	15 (12.3%)	8 (21.1%)	10 (27.0%)	3 (23.1%)	

*ρ<0.05 is considered as statistically significant.

Table 3: Association of socio-demographic variables with depression.

Socio-demographic variables		**Depression**	
Categories		**OR (95%CI)**	**ρ-value**
Age	18-39	Reference	
	40- >60	2.743 (1.427-5.270)	**0.002**
Sex	Male	Reference	
	Female	0.968 (0.519-1.807)	0.919
Family type	Nuclear	Reference	
	Joint	0.704 (0.372-1.333)	0.281
Marital status	Married	Reference	
	Unmarried/Widowed	1.497 (0.746-3.004)	0.25
Education	Non-Literate	2.739 (1.399-5.361)	**0.003**
	Literate	Reference	
	Employed/Business	Reference	

Occupational status	Cultivator/Homeworker	1.348 (0.696-2.612)	0.376
	Student	0.623 (0.167-2.328)	0.482
	Retired/Unemployed	3.158 (0.773-12.907)	0.109
Monthly income	≥18000	Reference	
	<18000	0.976 (0.520-1.832)	0.93
Diet	Non-veg	1.180 (0.527-2.643)	0.687
	Veg	Reference	
Alcohol consumption	Yes	0.428 (0.219-0.833)	0.13
	No	Reference	
Tobacco consumption	Yes	2.017 (1.088-3.737)	**0.01**
	No	Reference	
Sedentary Behaviour	High	Reference	
	Low	0.478 (0.221-1.033)	0.06

*ρ<0.05 is considered as statistically significant.

Table 4: Correlation between socio-demographic, lifestyle variables and depression.

Variables		**PHQ-9 scores**
Age	r	0.359
	ρ -value	**0.000**
Annual income	r	-0.153
	ρ -value	**0.019**
Physical activity	r	-0.025
	ρ -value	0.700
Sedentary Behaviour	r	0.062
	ρ -value	0.374

*ρ<0.05 is considered statistically significant, * r=co-relation coefficient

Anxiety categories with socio-demographic and lifestyle variables.

The distribution of anxiety categories across socio-demographic and lifestyle variables as shown in Table 5, reveals notable trends, particularly in age, education, occupational status, tobacco consumption and sedentary behaviour. The overall prevalence of anxiety among the studied population is reported as 28.9%. The age-cohort-wise distribution of anxiety categories among the studied participants reveals a significant association between age and anxiety levels ($\rho < 0.001$), where we can see that with increasing age, anxiety severity also increases. Education is one of the variables with a statistically significant association with anxiety ($\rho = 0.01$). A greater proportion of non-literate individuals fall into the moderate (25.0%) and severe (37.5%) anxiety categories, while literate individuals are more frequent in the no-anxiety group (86.0%), indicating that education might serve as a protective factor against anxiety.

Additionally, the inferences drawn from the association between socio-demographic variables and anxiety from Table- 6 shows that age is a strong predictor of anxiety, with individuals aged 40 years and above having 2.745 times higher odds of experiencing anxiety compared to those aged 18-39 years ($\rho = 0.001$). This suggests that older individuals may face increased anxiety. Education shows a significant trend, where non-literate individuals had nearly twice the odds of experiencing anxiety compared to literate individuals (OR = 1.960; 95% CI: 1.028–3.738), and this association was statistically significant ($\rho = 0.04$). Occupational status presents an interesting trend. Cultivators and homemakers have 1.835 times higher risks of experiencing anxiety than employed or business individuals,

though this association is marginally significant (ρ = 0.057). The highest risk, however, is observed among retired or unemployed individuals, who have significantly increased risks of anxiety (OR = 6.952, ρ = 0.010).

Further, we can observe the correlation of anxiety with various socio-demographic and lifestyle variables from Table 7. The Spearman correlation analysis examines the relationship between socio-demographic and lifestyle variables with anxiety (GAD-7 scores). Age shows a positive and statistically significant correlation with anxiety (r = 0.274, ρ = 0.000), indicating that older individuals tend to experience higher levels of anxiety compared to younger individuals. Sedentary behaviour, on the other hand, is positively correlated with anxiety (r = 0.143, ρ = 0.039), indicating that individuals who engage in more sedentary activities tend to experience higher anxiety levels.

Table 5: Distribution of anxiety categories with respect to the socio-demographic and lifestyle variables.

Socio-demographic variables		Anxiety categories				Chi-square ρ -value
		No-anxiety	Mild	Moderate	Severe	
		N (%)	N (%)	N (%)	N (%)	
Age cohort in years	18-39	71 (58.7%)	21 (45.7%)	13 (36.1%)	8 (25.0%)	**<0.001**
	40-59	40 (33.1%)	15 (32.6%)	13 (36.1%)	11 (34.4%)	
	≥60	10 (8.3%)	10 (21.7%)	10 (27.8%)	13 (40.6%)	
Sex	Overall	121 (51.5%)	46 (19.6%)	36 (15.3%)	32 (13.6%)	0.79
	Male	49 (54.4%)	15 (16.7%)	13 (14.4%)	13 (14.4%)	
	Female	72 (49.7%)	31 (21.4%)	23 (15.9%)	19 (13.1%)	
Family type	Nuclear	33 (27.3%)	14 (30.4%)	15 (41.7%)	11 (34.4%)	0.41
	Joint	88 (72.7%)	32 (69.6%)	21 (58.3%)	21 (65.6%)	
Marital status	Married	99 (81.8%)	34 (73.9%)	28 (77.8%)	22 (68.8%)	0.38
	Unmarried/Widowed	22 (18.2%)	12 (26.1%)	8 (22.2%)	10 (31.3%)	
Education	Literate	104 (86.0%)	32 (69.6%)	27 (75.0%)	20 (62.5%)	**0.01**
	Non-literate	17 (14.0%)	14 (30.4%)	9 (25.0%)	12 (37.5%)	
Occupational status	Employed/Business	57 (47.1%)	16 (34.8%)	10 (27.8%)	11 (34.4%)	0.08
	Cultivator/Homemaker	48 (39.7%)	24 (52.2%)	21 (58.3%)	17 (53.1%)	
	Student	14 (11.6%)	5 (10.9%)	2 (5.6%)	1 (3.1%)	
	Retired/Unemployed	2 (1.7%)	1 (2.2%)	3 (8.3%)	3 (9.4%)	
Monthly income	≥18000	47 (38.8%)	16 (34.8%)	8 (22.2%)	15 (46.9%)	0.17
	<18000	74 (61.2%)	30 (65.2%)	28 (77.8%)	17 (53.1%)	
Diet	Veg	29 (24.2%)	5 (10.9%)	5 (14.3%)	5 (15.6%)	0.18
	Non-veg	91 (75.8%)	41 (89.1%)	30 (85.7%)	27 (84.4%)	
Tobacco consumption	Yes	60 (65.2%)	26 (68.4%)	15 (50.0%)	14 (50.0%)	0.21
	No	32 (34.8%)	12 (31.6%)	15 (50.0%)	14 (50.0%)	

Alcohol Consumption	Yes	83 (68.6%)	28 (60.9%)	20 (55.6%)	17 (53.1%)	0.27
	No	38 (31.4%)	18 (39.1%)	16 (44.4%)	15 (46.9%)	
Sedentary Behaviour	Low	95 (88.8%)	31 (79.5%)	27 (77.1%)	21 (72.4%)	0.11
	High	12 (11.2%)	8 (20.5%)	8 (22.9%)	8 (27.6%)	

Table 6: Association of socio-demographic and lifestyle variables with anxiety.

Socio-demographic variables		**Anxiety**	
Categories		**OR (95%CI)**	**ρ -value**
Age	18-39	Reference	
	40- >60	2.745 (1.510-4.993)	**0.001**
Sex	Male	Reference	
	Female	1.004 (0.562-1.793)	0.990
Family type	Nuclear	Reference	
	Joint	0.633 (0.349-1.146)	0.131
Marital status	Married	Reference	
	Unmarried/Widowed	1.408 (0.730-2.717)	0.307
Education	Non-literate	1.960 (1.028-3.738)	**0.04**
	Literate	Reference	
Occupational status	Employed/Business	Reference	
	Cultivator/Homeworker	1.835 (0.983-3.426)	0.057
	Student	0.549 (0.148-2.036)	0.370
	Retired/Unemployed	6.952 (1.601-30.190)	**0.01**
Monthly income	≥18000	Reference	
	<18000	1.185 (0.656-2.142)	0.574
Diet	Non-veg	1.468 (0.679-3.172)	0.329
	Veg	Reference	
Alcohol consumption	Yes	0.602 (0.339-1.070)	0.084
	No	Reference	
Tobacco consumption	Yes	0.512 (0.272-0.961)	**0.03**
	No	Reference	
Sedentary Behaviour	Low	Reference	
	High	2.100 (1.005-4.387)	**0.04**

* ρ<0.05 is considered as statistically significant.

Table 7: Correlation between socio-demographic, lifestyle variables and anxiety.

Variables		**GAD-7 scores**
Age	r	0.274
	p-value	**0.000**
Annual income	r	-0.053
	p-value	0.420
Physical activity	r	-0.029
	p-value	0.659

Sedentary Behaviour	r	0.143
	p-value	**0.039**

* ρ <0.05 is considered as statically significant* r = co-relation coefficient.

DISCUSSION

The present cross-sectional study provides valuable insights into the prevalence and correlates of depression and anxiety among the Lohars from Himachal Pradesh. Lohars often refer to a person who works with metals and iron objects, typically forging and shaping them into tools, implements, or other objects.

The prevalence of depression in the studied population is 28% and is almost the same among both sexes. The elderly population of Himachal Pradesh showed that the prevalence of depression was 9.5% (Sharma et.al, 2016). A study from Northwest India found the prevalence of depression 8.94% (Gupta et.al, 2020). Additionally, a very significant finding was observed in the present study, where age cohorts were associated with depression categories. It was found that with increase of age, depression severity also increases significantly (p = <0.001). Also, there existed a moderate positive correlation between age and PHQ-9 scores, (r = 0.359, p < 0.001), indicating that depressive symptoms tend to increase with age. It was also observed that Individuals aged 40 and above are 2.7 times more likely to experience depression compared to those aged 18–39, and this association is statistically significant. Some studies have also shown that the older age groups are found to have more depressive symptoms than the younger age (Schaakxs et.al, 2018). It was also reported that the prevalence of depression with higher rates was found among older adults of developing countries (Zenebe et.al, 2021). The probable reasons can be social isolation and lack of purpose in their life (Sutin et.al, 2013).

Again, for educational status, in both sexes, non-literate individuals had notably higher values, with males at 8.0 (3.0-14.0) and females also at 8.0 (3.0-12.0), indicating non-literates are highly associated with severity of depression in which literacy can play a protective role. Similar finding has been observed in another study which shows people with less education have high chances of getting depression (Meich et.al, 2000). Non-literate individuals are 2.7 times more likely to experience depression compared to literate individuals, a statistically significant association.

Those who had a monthly income of less than Rs. 18000 had shown higher severity of depression, which can be due to financial challenges, lack of resources in their daily life, although it was not significant. Studies have also shown that there is a higher incidence of depression among persons with lower income (Zimmerman et.al, 2005). However, a small but statistically significant negative correlation existed between annual income and PHQ-9 scores.

Tobacco consumption among females was seen to be significantly associated with high depression scores. A similar finding was observed in a study where females who used to consume tobacco were at higher risks of developing depression; hence, tobacco consumption is a major risk factor for depression (Pasco et.al, 2018). Tobacco users were found to be twice as likely to experience depression compared to non-users. This statistically significant association supports prior evidence that links smoking to increased risk of major depressive disorder.

The prevalence of anxiety in the studied population was 28.9% and which was almost the same for both sexes. A study from North India found the prevalence of anxiety with 24.4% among young adults (Sahoo et.al, 2010). Another study from India found that the prevalence of anxiety was 18.4% among older adults (Patel et.al, 2024).

Additionally, a very significant finding was observed when age cohorts were associated with anxiety categories; it was found that with age, anxiety severity also increases, which was statistically significant, with the older age group

having the highest number of severe cases. A significant positive correlation between age and anxiety ($r = 0.274$, $p = 0.000$), indicating that as age increases, anxiety levels also tend to increase. Individuals aged 40 years and above were significantly more likely to experience anxiety compared to those aged 18–39 years, indicating that older adults had more than twice the odds of reporting anxiety symptoms. Also, the relationship between age and anxiety was statistically significant among females, with the highest anxiety levels observed in the 40–59 years age group (8.0 [1.50–12.0]) and the ≥60 group (8.0 [3.0–15.0]). However, previous studies align with this finding where they found anxiety disorders prevalent among older people and women exhibited higher anxiety levels compared to men (Witlox et.al, 2020).

The present study showed a higher prevalence of anxiety among non-literates. It means individuals with low literacy have higher chances of getting mental health disorders, including anxiety and depression (Hunn et.al, 2023). Compared to literate people, nonliterate people were almost twice as likely to experience anxiety, suggesting that lower educational attainment may be a risk factor for anxiety. Regarding occupational status, the retired/unemployed and homemaker/cultivator categories showed a rising trend in anxiety levels.

Studies on Indian women observed a higher prevalence of anxiety among the homemakers than employed ones, as involvement in working outside the home can help women in reducing anxiety (Patel et.al, 2016).

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This cross-sectional study provides significant findings about the mental health of the Lohar community in Himachal Pradesh, revealing alarming rates of anxiety (28.9%) and depression (23%) that are significantly higher than those found in more comprehensive regional and national surveys. Given that older people had noticeably greater levels of anxiety and depression symptoms, the results imply that age is a key factor related to both disorders. Additionally, there was a substantial correlation between mental health outcomes (depression and anxiety) and socio-demographic characteristics such as marital status, occupational status, and educational level. Older age groups, illiterate people, widowed or unmarried women, and unemployed or retired men are among the most vulnerable categories.

The study highlights how interrelated socio-demographic and lifestyle factors impact mental health's complex nature. It emphasises how urgently mental health treatments are needed, taking into account the particular social and financial difficulties faced by marginalised groups like the Lohars. The mental health burden in this population might be considerably reduced by focused initiatives to raise knowledge of mental health issues, increase access to education, and offer social assistance to older and underprivileged people.

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