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### **Body**

#### Abstract

Objective: To determine the prevalence of psychiatric morbidity in young unemployed people and analyze associated socio demographic factors.

Study Design: Cross sectional study.

Place and Duration of Study: Enrollment camps at Punjab and Kashmir, from Jan 2014 to March 2014.

Material and Methods: The sample population comprised of unemployed people who came for recruitment in Pakistan Army at different parts of the country. General Health Questionnaire 12 (GHQ12) was used to screen the population for psychiatric morbidity, 3 was used as cut off score. Age, province, education, level of family income, tobacco smoking, naswar (a tobacco based substance) use, marital status, dependent family members, worrying about the future and social support status were correlated with high GHQ score. Descriptive statistics were used to describe the characteristics of participants and the distribution of GHQ score.

Result: Out of 2511 people 1887 (75.1%) had GHQ score more than 3 showing some psychiatric morbidity. A total of 696 were Kashmiris out of which 540 (77.5%) were GHQ positive, 1329 were Punjabis out of which 978 (73.5%) were GHQ positive, 339 were Pakhtoons out of which 258 (76.1%) were GHQ positive, 129 were Balti out of which 102 (79%) were GHQ positive and 18 were from other ethnicities out of which 9 (50%) were GHQ positive. With logistic regression we found that family size, smoking, naswar use, family income, family history of psychiatric disorder, lack of social support, and low education were significantly correlated with high GHQ score while age of individual, worry about future and marital status had no significant relation with high GHQ score among unemployed people in our study.

Conclusion: This study showed a high prevalence of psychiatric morbidity among unemployed youth of our country. Special attention should be paid to poor people, people with low education and large families. Adequate social support should be provided to young people with no jobs and use of cigarette and naswar should be discouraged.

Keywords: Prevalence, Psychiatric morbidity, Socio demographic factors, Unemployment.

#### INTRODUCTION

Pakistan is a developing country with an unstable political and social environment. Low literacy rate, poverty, inadequate health facilities and unemployment are basic challenges which our country is facing nowadays. A total

of 55.6% of our population is below the age of 25 out of which 21.6% are between the age of 15 and 24 who need sources for employment in near future1.

Employment status has been found to be related to psychiatric symptoms. A study done in US suggests that the impetus for unemployment be it voluntary or involuntary, may significantly impact a person's mental health2. In the few studies that focused on employment status the results consistently show that employed participants were less depressed than unemployed subjects3,4. A study done in France revealed that unemployed men are found to have significantly higher prevalence of depression than the working population5. A study done in our neighboring country India showed that unemployment is a risk factor for psychological symptoms among alcohol dependent people6.

A study done in a big city of our own country also revealed that unemployment is a risk factor for anxiety and depression7.

Many studies have reported a correlation with psychiatric problems and such factors as smoking8-9, drinking10, family structure11,12, parental relationships13,14, family income 15 and family history of depression 16.

Table-1: Characteristics of the study group and their General Health Questionnaire 12 scores.

			Health Questionnaire 12 scores.  Psychiatric morbidity		
(0-	No psychiatric morbidity (0-3)		(score >3)		
N	%	N	%	p-value	
624			75.1		
234	37.5%	669	35.4%	0.356	
390	62.5%	1218	64.6%		
513	82.2%	1653	87.5%	0.001	
111	17.8%	234	12.5%		
45	7.2%	150	7.9%	0.551	
579	92.8%	1737	92.1%		
423	67.7%	1656	87.76%		
201	32.3%	231	12.24%	less	
3	0.48	54	2.86%	less	
621	99.52	1833	97.14%		
18	2.9%	123	6.5%	less	
606	97.1%	1764	93.5%		
246	39.4%	306	16.2%	less	
378	60.6%	1581	83.8%		
495	79.3%	1641	86.96%	less	
129	20.7%	246	13.04%		
507	81.3%	1635	86.7%	0.001	
_	0.050			-	
6	0.96%	123	6.5%	less	
610	00.040	154	0.2 5.0		
618	99.04%	1764	93.5%		
	N 624  234 390  513 111  45 579  423 201  3 621 18 606 246	N	N       %       N         624       24.9       1887         234       37.5%       669         390       62.5%       1218         513       82.2%       1653         111       17.8%       234         45       7.2%       150         579       92.8%       1737         423       67.7%       1656         201       32.3%       231         3       0.48       54         621       99.52       1833         18       2.9%       123         606       97.1%       1764         246       39.4%       306         378       60.6%       1581         495       79.3%       1641         129       20.7%       246         117       18.7%       252         507       81.3%       1635	N       %         624       24.9       1887       75.1         234       37.5%       669       35.4%         390       62.5%       1218       64.6%         513       82.2%       1653       87.5%         111       17.8%       234       12.5%         45       7.2%       150       7.9%         579       92.8%       1737       92.1%         423       67.7%       1656       87.76%         201       32.3%       231       12.24%         3       0.48       54       2.86%         621       99.52       1833       97.14%         18       2.9%       123       6.5%         606       97.1%       1764       93.5%         246       39.4%       306       16.2%         378       60.6%       1581       83.8%         495       79.3%       1641       86.96%         129       20.7%       246       13.04%         117       18.7%       252       13.3%         507       81.3%       1635       86.7%         6       0.96%       123       6.5%	

Stressors are also found to be correlated with psychiatric illness. They include the military17, family18, love relationship19, finances20, worrying about the future18, poor coping skills21-24 and inadequate social support25-27.

There is evidence to support a link between unemployment and lower levels of psychological well-being, but debate continues as to whether unemployment results in psychological morbidity, or whether the association is due to those who are more vulnerable to mental illness becoming unemployed.

Here we assess the effect of unemployment in young men on the risk of developing psychiatric illness and to further evaluate and analyze factors associated with psychiatric morbidity.

#### MATERIAL AND METHODS

This cross sectional study was planned from January 2014 to March 2014. All the applicants who came for enrollment and met the inclusion criteria were included in the study. Males of age greater than 18 years who were unemployed and came for enrollment in Pakistan Army and gave written informed consent were included in the study.

Table-2: The correlated factors relating to psychiatric morbidity: binary logistic regression.

	В	p-value	Odds	95% C.I for EXP(B)	
			ratio	Lower	Upper
Education	.381	.005	1.467	1.121	1.910
(reference is higher than					
matriculate)					
Marriage	.214	.266	1.238	.83150	1.804
(reference is unmarried)					
Family size	.383	.004	1.467	1.131	1.903
(reference is less than5 members	)				
Family income	1.118	.000	3.059	2.425	3.859
(reference is low income)					
Smoking	1.667	.007	5.295	1.580	17.739
(reference is no smoking)					
Naswar use	.701	.010	2.016	1.186	3.427
(reference is no use of					
naswar)					
Family history of psychiatric	2.015	.000	7.504	3.197	17.616
disorder					
(reference is negative family					
hx)					
Worry about future	.260	.049	1.297	1.001	1.681
(reference is not worried)					
Social support	1.134	0.000	3.109	2.511	3.849
(reference is adequate					
support)					

Non consenting applicants or applicants with past or current history of any psychiatric illness or with past or current psychoactive substance use or those who were unable to understand/complete the required questionnaires were also excluded.

Non probability convenient sampling was done. After the application of inclusion and exclusion criteria, 2511 subjects were included in the analyses.

Different cultures use various methods or screening questionnaires for assessment of mental disorder or psychiatric morbidity. We used validated Urdu version of General Health Questionnaire 12 (GHQ 12)28,29. It is a standardized psychometric test for assessing the general health status of individuals and is used as a screening test. It is 12-item rating screening instrument. The cut off score is greater than 3 by Likert scoring. Severe psychiatric morbidity is suspected above score of 15.

The sample was drawn from unemployed applicants who came to get enrolled in Pakistan Army at enrollment camps at different areas of Pakistan. The applicants were gathered in a quiet field with complete reassurance of confidentiality. The subjects were provided with a detailed description of the study and were inducted into the study after written informed consent. The socio demographic data of the full sample of subjects participating in the research was entered in a structured Proforma. The confounding variables were taken care of by detailed history taking about any current or previous psychiatric illness and any current or previous evidence of illicit substance/drug use. Those subjects with confounding variables were excluded from the study. GHQ 12 was administered to the subjects and 3 was taken as cut off value.

Descriptive statistics were used to describe the characteristics of participants and the distribution of GHQ score. Between-group variances in categorical correlates were determined using chi-square. Binary logistic regression analysis was done to evaluate factors related to depressive symptoms.

All statistical analysis was performed using Statistics Package for Social Sciences version 20.0. Differences between groups were considered significant if p-values were less than 0.05

#### **RESULTS**

Out of 2511 people 1887 (75.1%) had GHQ score more than 3 showing some psychiatric morbidity. A total of 696 were Kashmiris out of which 540 (77.5%) were GHQ positive, 1329 were Punjabis out of which 978 (73.5%) were GHQ positive, 339 were Pakhtoons out of which 258(76.1%) were GHQ positive, 129 were Bulti out of which 102(79%) were GHQ positive and 18 were from other ethnicities out of which 9(50%) were GHQ positive. With logistic regression we found that family size, smoking, naswar use, family income, family history of psychiatric disorder, lack of social support and low education were significantly correlated with high GHQ score

#### **DISCUSSION**

Our study is unique in a sense that it helps in the understanding of psychiatric morbidity among young people who are unemployed and struggling to survive in a competitive environment where making both ends meet is a problem. Using GHQ 12 we found that more than 75% of our sample population showed psychiatric morbidity. This is similar to other studies and surveys showing mental health issues among unemployed people30,31. We used a screening tool so result may show a higher reflection and needs some diagnostic tool to ascertain the problem among the positive individuals. Reason for high frequency may also be inflation and political instability in the country.

Low education was found significantly correlated with psychiatric morbidity in our sample similar to the studies done in the past7.

Large family size and low family income is also associated with psychiatric morbidity in accordance with foreign literature3,7. Reason is very clear as large family with less income needs more earning hands to earn adequate to meet the needs. Lack of social support is also found associated with psychiatric morbidity in accordance with the studies done in the past2-4. Smoking and naswar use also have a strong link with psychiatric morbidity in our study sample. Use of these may give a temporary relief but in long term they have adverse effect on mental health. A study done in France showed the similar results5.

Our study has few limitations as well. Randomized selection of study subjects from all the unemployed people was not done. Therefore, the results of the present study cannot be generalized. We used the cross-sectional study method.

#### CONCLUSION

This study showed a high prevalence of psychiatric morbidity among unemployed youth of our country.

#### **CONFLICT OF INTEREST**

This study has no conflict of interest to declare by any author.

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