

## Perceived stigma towards mental illness and its associated factors among community people of Pokhara Metropolitan, Kaski, Nepal

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### ABSTRACT

**Introduction:** Mental illness is a major and neglected public health problem. People suffering from mental health problems are among the foremost stigmatized, discriminated, marginalized, disadvantaged and vulnerable members of our society. According to the World Health Organization, 450 million people are suffering from mental illness worldwide and around 80% of them live in middle and low-income countries. In spite of the high burden of mental disorders, globally, around 70% of people with mental illness do not receive any treatment, and evidence suggests that stigma plays a major role in treatment avoidance. The objective of this study is to assess the level of perceived stigma towards mental illness and its associated factors among community people of Pokhara Metropolitan.

**Methods:** A community based cross-sectional study was conducted among the people of Pokhara Metropolitan. Systematic random sampling was employed for the selection of 292 participants. Face to face interview was conducted for the data collection using the Community Attitude Towards Mental Illness (CAMI) scale. A Chi-square test was used to find the association between variables and stigma towards mental illness on different subscales of CAMI scale.

**Results:** The overall prevalence of stigma towards mental illness was 72.9%. The prevalence of stigma was high under all the four domains of CAMI scale. Age, education, occupation and income were significantly associated with stigma score in all domains. Marital status had significant association to authoritarian as well as social restrictiveness domains score. However, sex and family history of mental illness was associated with Benevolence and community mental health ideology score respectively.

**Conclusion:** The findings of the study depicted that stigma towards mental illness is high among the community people in all four subscales of CAMI scale. The study has revealed the stigma towards mental illness is influenced by the various socio-demographic and socioeconomic factors. This study suggested that there is strong need to eliminate the stigma associated with mental illness to improve the mental health status of the region.

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**Keywords:** *Stigma, Mental illness, Associated factors, CAMI scale, Nepal*

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### INTRODUCTION

Mental illness is the maladjustment in living which produces a disharmony in the person's ability to meet human's need comfortably or effectively and function within a culture. A recent index of 301 diseases found psychological problems to be one among the most of the cause of the overall disease burden worldwide.<sup>1</sup> National Mental Health Survey (NMHS) survey (2015-16) has shown that every sixth person in India needs mental health help of some sort.<sup>2</sup> Similarly, in the UK, mental illness are responsible for the largest burden of disease— 28% of the total burden and constitute the largest single source of world economic burden, with an estimated global cost of £1.6 trillion (or US\$2.5 trillion).<sup>3</sup>

People with mental illness are made as a subject of defame.<sup>4</sup> Mentally ill people are made fun of, blamed and criticized for their sickness. This stigmatization is beyond just "labelling" the patients. The condition is perceived as frightening, shameful,

imaginary, and is considered to be incurable, whereas the patients are considered to be dangerous, lazy, weak, worthless, unpredictable, untrustworthy, unstable, and helpless within the community.<sup>5</sup>

A study conducted in the US had shown that majority of Americans unwilling to have people with a mental illness marry into their family (68%), work closely with them (58%), or spend an evening socializing with them (56%). Also, individuals with mental illnesses often encounter fewer opportunities and reduced access to resources because of discriminatory practices by employers who tend to avoid giving jobs to them and proprietors who are less inclined to rent housing to them,

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thus depriving those with mental illnesses of the chance to fully participate in society in ways that others can.<sup>6</sup> Therefore, this study is intended to assess the level of stigma towards mental illness and its associated factors among community people of Pokhara-24.

## METHODS

A community based descriptive cross-sectional study was conducted among the community people of Pokhara Metropolitan. There were 1750 houses in Pokhara 24, therefore, systematic random sampling was employed for selection of 292 participants from 1750 households. First household to be included in sample was chosen randomly by picking one out of six random pieces of paper numbered 1-6. As, no any study related to stigma of community people was conducted in Nepal So, sample size was calculated by taking the reference of the study conducted in India<sup>7</sup>. People residing on Pokhara-24 since 2 years and of age group 18 years and above were only included in the study. Face to face interview was conducted for the data collection using Community Attitude Towards Mental Illness (CAMI) scale. CAMI is a 40-item scale developed by Taylor and Dear<sup>8</sup> consisting of four subscales, namely authoritarianism, social restrictiveness, benevolence, and community mental health ideology. In this study authoritarianism refers to the view of mentally ill person as someone who is inferior and requires supervision and coercion, benevolence refers to the humanistic and sympathetic view towards mentally ill person, social restrictiveness as the belief that mentally ill person are threat to society and should to be avoided and community mental health ideology refers to the acceptance of mental health services and integration of mentally ill patient in community.

Each subscale comprises of 10 items with 5 positively scored and 5 negatively scored items. The maximum score for each subscale is 50 and minimum is 5. Scores were reversed on negatively scored items and then the total score for each subscale was calculated. Tool developed in English language was used and was later translated into simple and clear Nepali language by a bilingual translator and was again back translated into English language.

The appropriateness of the instrument was established by pretesting. Pre-testing of instrument was conducted among 10% of the total sample size in Pokhara 10. Data collection was done from 2076/09/15 to 2076/10/03, about 20 participants were interviewed in a day. Collected data was coded and entered in Epi data version 3.1, and was later exported to SPSS version 20 for the further analysis. Descriptive statistics such as frequencies and percentage was employed for the demographic, socio-economic and knowledge related to mental illness. Chi square test was used to find the association between variables and

stigma towards mental illness.

Study was conducted after getting ethical approval from Institutional review committee (IRC) of Pokhara University. Written permission was taken from authorized member of Pokhara 24. Written and verbal consents were taken from each respondent. Respondent's confidentiality and privacy were maintained throughout the study.

## RESULTS

Table 1: Socio-demographic and Socio-economic characteristics of the participants (n=292)

Variables	Frequency (n)	Percentage (%)
Age		
18-25 years	51	17.5
26-40 years	80	27.4
41-60 years	103	35.3
Above 60 years	58	19.9
Ethnicity		
Dalit	74	25.3
Disadvantaged janajati	9	3.1
Relatively advantaged janajatis	11	3.8
Upper caste groups	198	67.8
Marital Status		
Unmarried	58	19.9
Married	225	77.1
Widowed	7	2.4
Divorced	2	0.7
Education		
Illiterate	53	18.2
Informal	44	15.1
Primary	37	12.7
Secondary	89	30.5
Bachelors and above	69	23.6
Occupation		
Agriculture	116	39.7
Service	41	14
Business	69	23.6
Daily wages	2	0.7
Working Abroad	8	2.7
Others	56	19.2
Family Income status		
Poor	84	28.8
Middle Class	67	22.9
Rich	141	48.3

Table 2: Distribution of participants according to Stigma scores for the components of CAMI scale (n= 292)

Characteristics	Frequency (%)		
	Low	Medium	High
Authoritarianism	88 (30.1)	71 (24.3)	133 (45.5)
Benevolence	87 (29.8)	72 (24.7)	133 (45.5)
Social Restrictiveness	79 (27.1)	77 (26.4)	136 (46.6)
Community Mental Health Ideology	81 (27.7)	75 (25.7)	136 (46.6)

Figure-1: Distribution of stigma towards mental illness in the community

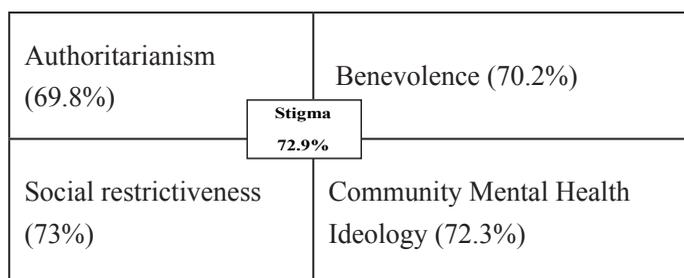


Figure-1: shows, prevalence of stigma towards mental illness was found to be 69.8% on authoritarianism, 70.2% on benevolence, 73% on social restrictiveness and 72.3% on Community mental health ideology, which indicates the overall prevalence of stigma towards mental illness was 72.9%.

Table 3: Association between stigma and independent variables according to AU

Variables	Frequency (%)	df	P-value	$\chi^2$
<b>Age</b>				
18-25 years (n= 51)	30 (58.8)	6	0.00 <sup>#</sup>	39.237
26-40 years (n=80)	44 (55.0)			
41-60 years (n= 103)	77 (74.7)			
Above 60 years (n= 58)	53 (91.4)			
<b>Sex</b>				
Male (n= 137)	95 (69.3)	2	0.200	3.223
Female (n= 155)	109 (70.3)			
<b>Religion</b>				
Hindu (n=269)	189(70.3)	2	0.804	0.437
Non-Hindu (n=23)	15(65.2)			
<b>Ethnicity</b>				
Non privileged (n=94)	67 (71.2)	2	0.231	2.931
Privileged (n= 198)	137 (69.2)			
<b>Marital Status</b>				
Married (n=225)	162 (72.0)	2	0.005*	10.712
Others (n=67)	42 (62.7)			
<b>Education</b>				
Illiterate (n= 53)	48 (90.6)	8	0.00 <sup>#</sup>	40.969
Informal (n= 44)	38 (86.4)			
Primary (n= 37)	24 (64.8)			
Secondary (n=89)	57 (64.0)			
Bachelors (n=69)	37 (53.6)			
<b>Occupation</b>				
Agriculture (n= 116)	93 (80.1)	2	0.003*	11.436
Others (n= 176)	111 (63)			
<b>Family Income status</b>				
Poor (n=84)	44 (52.4)	4	0.002*	17.229
Middle Class (n=67)	44 (65.7)			
Rich (n=141)	89 (63.1)			
<b>Family Mental illness</b>				
Yes (n=51)	35 (68.6)	2	0.930	0.145
No (n=241)	169 (70.2)			

\*p value significant at <0.05

<sup>#</sup>p value highly significant at <0.001

Table 3 reveals the association of stigma on mental illness with selected independent variable such as age, education, occupation, Marital status, and Family income status. However, stigma isn't found associated with sex, ethnicity, religion, and family mental illness.

Table 4: Association of stigma with variables according to Benevolence

Variables	Frequency (%)	df	P-value	$\chi^2$
<b>Age</b>				
18-25 years (n= 51)	44 (86.2)	6	0.00 <sup>#</sup>	30.582
26-40 years (n=80)	67 (83.7)			
41-60 years (n= 103)	66 (64.0)			
Above 60 years (n= 58)	28 (48.3)			
<b>Sex</b>				
Male (n= 137)	107 (78.1)	2	0.009*	9.498
Female (n= 155)	98 (63.3)			
<b>Religion</b>				
Hindu (n=269)	187(69.5)	2	0.236	2.890
Non-Hindu (n=23)	18(78.2)			
<b>Ethnicity</b>				
Non privileged (n=94)	61 (64.9)	2	0.389	1.888
Privileged (n= 198)	144 (72.8)			
<b>Marital Status</b>				
Married (n=225)	154 (68.4)	2	0.289	2.481
Others (n=67)	51 (76.1)			
<b>Education</b>				
Illiterate (n= 53)	21 (39.6)	8	0.00 <sup>#</sup>	46.499
Informal (n= 44)	25 (56.8)			
Primary (n= 37)	25 (67.5)			
Secondary (n=89)	74(83.2)			
Bachelors (n=69)	60(86.9)			
<b>Occupation</b>				
Agriculture (n= 116)	69 (59.5)	2	0.005*	10.631
Others (n= 176)	136 (77.3)			
<b>Family Income status</b>				
Poor (n=84)	26 (30.9)	4	0.001*	13.360
Middle Class (n=67)	45 (67.2)			
Rich (n=141)	112 (79.4)			
<b>Family Mental illness</b>				
Yes (n=51)	33 (64.7)	2	0.246	2.808
No (n=241)	172 (71.4)			

\*p value significant at &lt;0.05

<sup>#</sup>p value highly significant at <0.001

Table 4 reveals the association of stigma on mental illness with selected independent variables such as age, sex, education, occupation and family income status. However it isn't found being associated with religion, ethnicity, marital status and family mental illness.

Table 5: Association of stigma with variables according to Social restrictiveness.

Variables	Frequency %	df	P-value	$\chi^2$
<b>Age</b>				
18-25 years (n= 51)	27 (52.9)	6	0.00 #	52.646
26-40 years (n=80)	53 (66.3)			
41-60 years (n= 103)	75 (72.8)			
Above 60 years (n= 58)	58 (100)			
<b>Sex</b>				
Male (n= 137)	94 (68.6)	2	0.067	5.413
Female (n= 155)	119 (76.8)			
<b>Religion</b>				
Hindu (n=269)	197(73.3)	2	0.853	0.317
Non-Hindu (n=23)	16(69.5)			
<b>Ethnicity</b>				
Non privileged (n=94)	74 (78.7)	2	0.189	3.329
Privileged (n= 198)	139 (70.2)			
<b>Marital Status</b>				
Married (n=225)	174 (77.3)	2	0.008*	9.707
Others (n=67)	39 (58.2)			
<b>Education</b>				
Illiterate (n= 53)	52 (98.1)	8	0.00#	64.678
Informal (n= 44)	41 (93.2)			
Primary (n= 37)	28 (75.6)			
Secondary (n=89)	53 (59.6)			
Bachelors (n=69)	39 (56.5)			
<b>Occupation</b>				
Agriculture (n= 116)	105 (90.5)	2	0.00#	32.199
Others (n= 176)	108 (61.4)			
<b>Family Income status</b>				
Poor (n=84)	50 (59.5)	4	0.00#	58.516
Middle Class (n=67)	44 (65.7)			
Rich (n=141)	86 (61.0)			
<b>Family Mental illness</b>				
Yes (n=51)	32 (62.8)	2	0.192	3.303
No (n=241)	181 (75.1)			

\*p value significant at <0.05

#p value highly significant at <0.001

Table 5 show that there is association between stigma of mental illness and selected independent variables such as age, marital status, education, occupation and family income status. However, sex, religion, ethnicity and family mental illness aren't associated with stigma of mental illness according to social restrictiveness.

Table 6: Association of stigma with variables according to Community mental health ideology.

Variables	Frequency (%)	df	P-value	$\chi^2$
<b>Age</b>				
18-25 years (n= 51)	47 (92.2)	6	0.00 #	49.161
26-40 years (n=80)	67 (83.8)			
41-60 years (n= 103)	73 (70.9)			
Above 60 years (n= 58)	24 (41.4)			
<b>Sex</b>				
Male (n= 137)	104 (75.9)	2	0.424	1.717
Female (n= 155)	107 (69.0)			
<b>Religion</b>				
Hindu (n=269)	192 (71.4)	2	0.473	1.496
Non-Hindu (n=23)	19 (82.6)			
<b>Ethnicity</b>				
Non privileged (n=94)	61 (64.9)	2	0.141	3.918
Privileged (n= 198)	150 (75.8)			
<b>Marital Status</b>				
Married (n=225)	156 (69.3)	2	0.059	5.665
Others (n=67)	55 (82.1)			
<b>Education</b>				
Illiterate (n= 53)	19 (35.9)	8	0.00 #	63.227
Informal (n= 44)	26 (59.1)			
Primary (n= 37)	30 (81)			
Secondary (n=89)	74 (83.2)			
Bachelors (n=69)	62 (89.9)			
<b>Occupation</b>				
Agriculture (n= 116)	72 (62.1)	2	0.00 #	16.079
Others (n= 176)	139 (79.0)			
<b>Family Income status</b>				
Poor (n= 84)	24 (28.5)	4	0.00 #	27.402
Middle Class (n= 67)	52 (77.6)			
Rich (n= 141)	116 (82.3)			
<b>Family Mental illness</b>				
Yes (n=51)	36 (70.6)	2	0.035 *	6.714
No (n=241)	175 (72.6)			

\*p value significant at &lt;0.05

#p value highly significant at &lt;0.001

Table 6 shows the association between the stigma and selected independent variables such as age, education, occupation, family income status and family mental illness. However, sex, religion, ethnicity and marital status aren't associated to stigma of mental according to Community Mental Health Ideology.

## DISCUSSION

The findings of the study reveals that the overall prevalence of stigma is 72.9% ,which is consistent with the prevalence as shown by the study conducted among community people in south India stigma i.e. 74.38%<sup>7</sup> , this might be because of the similar setting in both of the study, but is higher than the

prevalence as revealed by studies conducted among college students of western Nepal (43.6%) and among people in Ethiopia (50.8%).<sup>9 10</sup> Such, findings might have resulted because of difference in study population than that of study conducted in western Nepal and difference in geographical location might be the reason for contrast findings than that of the study conducted among people in Ethiopia. Similarly, the Authoritarian level in my study is found to be 69.8%, which is similar to the authoritarian level revealed by a study conducted in India, i.e. 74.38%.<sup>7</sup> Accordingly, the Benevolence, Social restrictiveness and Community mental health ideology is found to be 70.2%, 73% and 72.3% respectively which is consistent with findings revealed by the study conducted in India where Benevolence,

Social restrictiveness and Community mental health ideology is 74.16%, 71.46% and 72.14% respectively.<sup>7</sup> Since, both of the study were conducted in similar setting and same research tool was used in both of the study, this might have resulted in similar findings.

In this study, the participant's age is found to be significantly associated with the stigma towards mental illness. Consistent with this finding, a study conducted in Indonesia showed age is highly associated with mental illness stigma.<sup>11,12</sup> Contradictory with this finding, other studies conducted in Southern Ghana<sup>13</sup> and south Utah<sup>14</sup> had not shown any association of age with stigma towards mental illness. Sex of the participants was found to be statistically significant as revealed by the study conducted in Indonesia<sup>11</sup> and South India<sup>7</sup> whereas this study found sex to be associated with stigma only in benevolence subscale of CAMI. Percentage of male and female participants is almost equal in the study conducted in India and that of female is much higher in the study conducted in Indonesia, however, in this study percentage of female is just slightly higher than that of male, which might be the reason for such findings. In this study, education is found to have a positive effects on stigma which is consistent with the findings revealed by the studies conducted in Nepal<sup>15</sup>, Karfi village of Northern Nigeria<sup>16</sup> Southern Ghana<sup>13</sup> and Gimbi town Ethiopia<sup>10</sup>, as the classification of the sample into different categories on the basis of the highest education attained is almost similar to that of this study.

The study identifies the significant association between the occupation and stigma towards mental illness. Similar to it, occupation was found to be significantly associated in the study conducted among community people of Gimbi town, western Ethiopia<sup>10</sup> and among caregivers of mentally ill people in Nepal.<sup>15</sup> Considering that, this study is also conducted in Nepal which might be the reason the findings of the study are consistent to the one conducted among the caregivers of mentally ill people. Higher income was associated with higher level of stigma as revealed by a study conducted in Ethiopia<sup>12</sup> and India<sup>7</sup>. Consistent to this study, family income status is statistically associated with the stigma, revealing rich people have higher stigma in benevolence and community mental health ideology subscales of CAMI scale. As, the difference in the per capita income of Nepal, Ethiopia and India is not immense, this might have been the cause of consistent findings of the result.

The study conducted in Ethiopia showed marital status to be associated with social restrictiveness.<sup>17</sup> Similar to my study where marital status was found to be associated with stigma indicating that married people have more autocratic and socially restrictive attitude towards mental illness than others.

Denying this, a study conducted in India hadn't shown any association between marital status and stigma.<sup>7</sup> Accordingly, participants who don't have history of mental illness in any of their family member have higher stigma in community mental health ideology subscale than those of having mental illness in the family which is in line with the study conducted in Gimbi Town, Western Ethiopia<sup>10</sup> whereas it wasn't associated with other subscale of CAMI scale. Higher stigma in community mental health ideology subscale among the participants without history of mental illness in their family member may be seen because of lack of knowledge regarding mental illness and belief that people with mental illness can't recover and work as a functioning member of community.

## CONCLUSION

The findings of the current study conclude that the stigma towards mental illness is high among the community people in all four subscales of CAMI scale. Educational status regarding mental health is the key predictor of stigma in community people. Improving awareness campaign on mental health and illness can reduce its stigma. Stigma prevention policies and strategies, safety measures, education and training and adoption of protective factors such as counselling, timely visit to doctors could reduce the incidence of mental illness among community people.

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