Original article

Knowledge Status on Mental Health among Health Professionals of Chitwan District, Nepal

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Abstract

Introduction: Mental health issues are not openly shared by people due to the negative stigma that it carries. In addition, health professionals lack adequate knowledge on mental health issues. This prevents effective management of patients with mental illness.

Methods: A descriptive cross-sectional study was carried out among hundred health professionals working in government health institutions of Chitwan District in order to determine the knowledge, attitude and practices on different aspects of mental illness. Knowledge score was added for each domain and changed to categorical variable. Chi-square and fisher-exact test was done accordingly. P-value of less than 0.05 was considered as significant.

Results: Age of respondents ranged from 18 to 59 years. A significant number of respondents had very little knowledge on mental health issues and its causes. Majority of them identified neurosis as types of mental illness followed by personality disorder, psychosis and substance abuse. Only a quarter had better knowledge about the treatment. Age group, being male or female, high or low income, knowledge on mental illness, knowledge on type, causes, signs and symptoms, attitudes and practices of mental illness was significantly different between four levels of health professionals namely Health Assistants (HA), Staff Nurse (SN), Community Medical Assistants (CMA) and Auxillary Nurse Midwife (ANM).

Conclusions: The findings suggest that further information regarding mental illness, its sign/symptoms, causes and treatment modalities should be provided to health workers along with actions to reduce stigma related to mental illness among them.

Keywords: Chitwan District, Cross-sectional study, Health Professionals, Mental Health

Introduction

Mental health issues are not openly shared by people due to negative stigma,[1] so it requires a lot of effort for diagnosis and treatment. Psychiatry has been the least priority for future career development among the medical practitioners[2,3] Most of the psychiatrists in Nepal have been limited to major cities and the medical colleges.[1, 2] Majority of health service in Rural Nepal is provided by the community health professionals who find difficult to tackle most of the patients due to lack of proper knowledge and skills.

Most of the mental health problems are curable. Knowledge and skills on mental health needs to be improved in order to improve the mental health issues and reduce the burden it creates.[4] Government of Nepal is planning to implement the mental health component into community based integrated management[5] but there is limited data.

Methods

We conducted a non-experimental and cross sectional study among the mid-level health professionals including

the nurses and paramedics working in government hospital, health post or sub-health post of Chitwan District, a growing medical city in the Southern Region of Nepal. The sample size was calculated based on single proportion test formula, with the hypothesis that about 50% of the health professionals have adequate knowledge on different aspects of and issues related to mental health. With this hypothesis, sample size obtained was 100.

Doctors, staff nurses (SN), public health nurse (PHN), health assistants (HA), auxiliary health workers (AHW), community medical assistants (CMA) and auxiliary nurse midwife (ANM) are the health professionals who deal with these patients at the community level. However, we excluded the doctors from the study with a hypothesis that they have a higher level of knowledge and skill regarding the mental health issues, as psychiatry is an integral part of the undergraduate curriculum in Medicine. We only included the health care workers in the government health centers. However, the health workers working in the private and public sectors such as non-governmental institutions were excluded due to possibility of bias that these staffs are recruited for a specific purpose and either trained in mental health or not look after the mental health issues.

Data was collected by using a semi-structured questionnaire using in person interview. We created six dummy scenarios, four of them related to some sort of mental illness and two of them unrelated to any underlying mental disorders. The questionnaire was verified by a clinical psychiatric consultant, translated into Nepali language and pretested before being used in the study.

The outcome variable regarding knowledge status were knowledge of common mental illness, causes, types, sign and symptoms, treatment, attitude and practice. The independent variables were demographic characteristics, such as age, sex, caste, religion, education and income. The variables related to their current practice included duration of working in mental health sector, number of patient treated per week, history taking process, last treated mental patient, problems faced upon return of mental patient at home and their feeling of getting experience in mental health sector.

Data entry was done using Epi-data. Double entry and validation using Epi-data allowed maintenance of the quality of data. Analysis was done using R and SPSS software. Percentage, proportion, means, standard deviation, median and range were used as descriptive statistics. The 25^{th} and 75^{th} percentile were used to categorize the knowledge level into 3 categories: low, moderate and high. Association of demographic factors and knowledge level of health professionals between different categories of health professionals were identified by chi-square and fisher-exact test as appropriate. A P-value of less than 0.05 was considered as significant.

Ethical approval was taken from the Nepal Institute of Health Sciences (Stupa College) . An approval for the study was also obtained from the District Public Health Office (DPHO) of Chitwan District. Informed written consent was taken from the health workers before data collection. Confidentiality and anonymity of the respondents was maintained.

Results

Age of the respondents ranged from 18 to 59 years (mean age 33.23 and SD of 10.04). Half of them were below the age of 30 years where as another half were above 30 years (Table 1). About 51% of the respondents were female whereas, remaining 49% were male. Nearly three quarters of the respondents had their monthly income above 10,000 NRs(US$100).Brahmin and Chhetri caste comprised majority of the respondents (68%).

Table 1 Demographic characteristics of the respondents

Characteristics	Number (%)
Age	
Less than 30	50 (50)
More than 30	50 (50)
Sex	
Male	49 (49)
Female	51 (51)
Caste	
Brahmin	45 (45)
Chhetri	23 (23)
Newar	8 (8)
Lama and magar	24 (24)
Religion	
Hindu	93 (93)
Buddhist	7 (7)
Education	
Auxiliary Nurse Midwife (ANM)	30 (30)
Community Medical Assistant (CMA)	41 (41)
Health Assistant (HA)	19 (19)
Staff Nurse	10 (10)
Income	
<10000	25 (25)
>10000	75 (25)

Table 2 Score for different domains

Statistics	Knowledge	Causes	Types	Sign	Treatment	Attitude	Activities	Practice
Mean	14.54	15.49	6.90	12.96	14.11	39.97	8.41	3.91
Median	15	16	7	13	14	40	9	4
Mode	16	16	7	14	14	39	10	5
Std. Deviation	2.24	1.82	1.28	1.07	2.13	4.52	2.54	1.26
Percentiles								
25	13	14	6	12	13	37	6	3
50	15	16	7	13	14	40	9	4
75	16	17	8	14	16	43	10	5

Table 3 Level of knowledge among health professionals

Characteristics	Level of knowledge		
	Low (%)	Moderate (%)	High (%)
Knowledge on Mental Illness	30	46	24
Knowledge on Cause of mental illness	30	30	40
Knowledge on Signs and symptoms	22	36	42
Knowledge on Treatment	39	35	26
Knowledge on Overall Management	31	39	30
Knowledge on Activities that can be done by mentally ill patients	25	29	46
Practice of treating mentally ill patients	14	37	49

About 94% of the respondents had mental health management issues incorporated into their academic curriculum while 6% had not had received knowledge on mental health management issues during their training period. However, most of them felt that the training was not sufficient. Regarding government training, only 16% of them had received it. Almost all health professionals felt that they need more training on mental illness management incorporating assessment, medical treatment, counseling treatment, psychotherapy and family therapy skills. About a quarter of the respondents thought that mental illness management component had been addressed by mental health policy.

The mean and standard deviation of knowledge score for mental illness, causes, types, sign and symptoms, treatment, attitude, activities and practice were 14.54 (2.24), 15.49 (1.81), 6.9 (1.28), 12.96 (1.07), 14.11 (2.31), 39.97 (4.52), 8.41(2.54) and 3.91 (1.25), respectively (Table 2).

Nearly half of the respondents (46%) had sufficient knowledge about different aspects of mental health illness (Table 3). A significant number of respondents (30%) had very little knowledge on mental health issues. Only about 30% of the respondents had a significant amount of knowledge on the possible causes of mental illness. Similarly, another 30% had little knowledge about the causes of mental illness. However, majority of the respondents had moderate knowledge on the causes. About 99% of the respondents knew that mental illness is not a contagious disease. Majority of about 90% revealed that mental health issues can occur at any age.

Almost all of the respondents had good knowledge about the signs and symptoms of mental illness. More than one third (36%) of the respondents had very low knowledge on the signs and symptoms of the illness. Only a quarter of the respondent of about 27% had heard about Mental State Examination (MSE) tool for examining mental ill patients. Among those, majority of about 15% named MSE test followed by ECT, counseling and psychotherapy. However, very few of 6% had used it.

Table 4 Comparison of demographics and knowledge level by health professional category

Characteristics	Health professionals				
	ANM	CMA	SN	HA	P-value
Demographic factors					
Age					**0.005**
Less than 30	22 (73.3)	13 (31.7)	4 (40)	11 (57.9)	
More than 30	8 (26.7)	28 (68.3)	6 (60)	8 (42.1)	
Sex					**< 0.001**
male	0 (0)	30 (73.2)	0 (0)	19 (100)	
female	30 (100)	11 (26.8)	10 (100)	0 (0)	
Income					**< 0.001**
<10000	21 (70)	4 (9.8)	0 (0)	0 (0)	
>10000	9 (30)	37 (90.2)	10 (100)	19 (100)	
Knowledge level on different domains					
Mental illness					**0.378**
Low knowledge	5 (16.7)	14 (34.1)	4 (40)	7 (36.8)	
Moderate knowledge	7 (23.3)	10 (24.4)	1 (10)	6 (31.6)	
High knowledge	18 (60)	17 (41.5)	5 (50)	6 (31.6)	
Causes					**0.32**
Low knowledge	7 (23.3)	15 (36.6)	3 (30)	6 (31.6)	
Moderate knowledge	17 (56.7)	13 (31.7)	3 (30)	5 (26.3)	
High knowledge	6 (20)	13 (31.7)	4 (40)	8 (42.1)	
Types					**0.173**
Low knowledge	10 (33.3)	11 (26.8)	1 (10)	9 (47.4)	
Moderate knowledge	14 (46.7)	17 (41.5)	5 (50)	3 (15.8)	
High knowledge	6 (20)	13 (31.7)	4 (40)	7 (36.8)	
Sign and symptoms					**0.285**
Low knowledge	9 (30)	18 (43.9)	3 (30)	6 (31.6)	
Moderate knowledge	5 (16.7)	6 (14.6)	4 (40)	7 (36.8)	
High knowledge	16 (53.3)	17 (41.5)	3 (30)	6 (31.6)	
Treatment					**0.586**
Low knowledge	12 (40)	15 (36.6)	4 (40)	4 (21.1)	
Moderate knowledge	13 (43.3)	16 (39)	3 (30)	7 (36.8)	
High knowledge	5 (16.7)	10 (24.4)	8 (42.1)	3 (30)	
Attitude					**0.285**
Good attitude	9 (36)	7 (21.9)	4 (40)	6 (33.3)	
Moderate attitude	10 (40)	16 (50)	1 (10)	5 (27.8)	
Bad attitude	6 (24)	9 (28.1)	5 (50)	7 (38.9)	
Practice					0.243
Poor practice	10 (33.3)	18 (43.9)	6 (60)	3 (15.8)	
Moderate practice	5 (16.7)	5 (12.2)	0 (0)	4 (21.1)	
Good practice	15 (50)	18 (43.9)	4 (40)	12 (63.2)	

Majority of the respondents had a moderate level of knowledge on management of the mental illness. Similarly, nearly third of the respondents had low level of knowledge on the management of mentally ill patients. Most of the respondents (98%) thought that mental illnesses have effective treatment. However, only about a quarter of the respondents had a better knowledge about the treatment of the mental illnesses. About a third of the respondents had a very low knowledge about the treatment of mental illnesses.

About 38% of the respondents opined that mentally ill patients should not be allowed to be engaged in work or job and rest thought they can work. A quarter of them would allow them to do usual work whereas as much as 74% would not allow them for regular works. More than 65% thought that mental illness is a disease of being insane. Furthermore, 35% of respondents thought mentally ill patients are dangerous. Turning into their settlement, majority of them would give them space in their own community. In addition, 88% of them thought that mentally ill patients can marry and have family. Surprisingly, about 17% of the respondents would allow their children to marry mentally ill patients. Most of the respondents (46%) had good knowledge on the activities a mentally ill patient can do. However, a quarter of the respondents had a very poor knowledge on what activities such a patient can do.

Age group, being male or female, having high or low income, knowledge on mental illness, knowledge on causes of mental illness, knowledge on types of mental illness, knowledge on sign and symptoms of mental illness, attitude about mental illness and practice was significantly different among four levels of health professionals, namely, ANM, CMA, SN and HA (Table 4).

About half of the respondents (49%) had good practice of treating mentally ill patients whereas 37% and 14% had poor and moderate practice, respectively. More than half of the respondents (60%) had more than 5 years of experience in mental health sector (Table 5). Very few of only 3% had less than a year experience. About a quarter of the respondents treats about 10-50 patients per day. While treating, majority of the health professionals take history from family followed by patient and friends. Discontinuation of the medicine of about 91% was seen among the patients followed by loss to follow up (88%), problem in family matters (73%), isolation (72%) and facing stigma (67%) after they go back home. Most of the health professionals (72%) felt they had experience in treating mentally ill patients a great deal.

Table 5 Current practices

Characteristics	Number (%)
Duration of working in mental sector	
<1 year	3 (3)
1-2 years	17 (17)
2-5 years	20 (20)
>5 years	60 (60)
Treating patient per week	
<5	75 (75)
5-10	16 (16)
10-20	5 (5)
>20	4 (4)
Person from whom history is taken	
Patient self	58 (58)
Family	71 (71)
Friends	25 (25)
Last treated mental patient	
Last one month	90 (90)
Last two months	5 (5)
Last three months	5 (5)
Problems faced after mental patient are back home	
Discontinue medicine	91 (91)
Loss to follow-up	88 (88)
Problem in family matters	73 (73)
Isolation	72 (72)
Facing stigma	67 (67)
Feeling effective in getting experience	
A great deal	72 (72)
Some	21 (21)
Few	7 (7)

We had created 6 dummy clinical scenarios leading to some of the common mental diseases prevalent in our community. For distraction, we had two of the clinical scenario not related to any mental disease or condition. In this, we wanted to see for the ability of the health workers to identify the clinical scenario. We had one case each of depression, schizophrenia, anxiety, seizure, and two distracting cases one of anemia and another without any specific findings. Majority of them were able to identify epilepsy and schizophrenia. Only about half of the health workers were able to identify depression and anxiety.

Discussion

Our study revealed that only half of the respondents had sufficient knowledge about different aspects of mental illness and a quarter had very little knowledge on mental health issues. Similarly, majority of respondents had moderate knowledge on the causes of mental illness. Almost all of the respondents were aware that mental illness is not a contagious disease and it can occur at any age. Neurosis was the commonly known mental illness types among the respondents followed by personality disorder and psychosis. Only a handful of the respondents had knowledge that substance abuse is also a form of mental disorder. More than one third of the respondents had very low knowledge on signs and symptoms of the illness. Surprisingly, only quarter of respondents had heard about MSE and only few of them had used in their clinical setting.

Majority of them thought that mental illness have effective treatment. However, only about a quarter of them had a better knowledge about the treatment of the mental illness. More than two thirds of the respondents would not allow them for regular works and still more than half of the respondents thought mental illness as a disease of insane. Most of them agreed that these patients can marry and have family. Respondents had experience in mental health sector but they still think that the training provided to them either by their academic institution or the government is not sufficient. To the good point, this study revealed that there was overall adequate knowledge and positive attitude towards mental illness.

Previous study conducted on knowledge, attitude and practice of mental illness among staff in medical facilities in Kenya revealed that among 684 general hospital staff revealed that about three quarters were less than 40 years of age. In contrast, in this study, it was found that half of the respondents were below the age of 30 years. More than 90% of the respondents thought that mental illness have effective treatment and can be cured which was similar to the Kenyan study.[6] Our study also revealed that health professionals had very little knowledge on effective management of mental illness in this study. It might be because a very few of 16% had undertaken government training on mental health illness management.

The study carried out in Zambia showed that health providers felt they required basic training in order to enhance the knowledge and skill in providing health care to people with mental health problems. Likewise, almost all health professionals felt that mental health management training was not sufficient and they were in more need of it. The findings are similar as government is not providing training according to the time and changing need of health professionals.[8]

The study on ethnic differences in the knowledge, attitude and beliefs towards mental illness in a developing countries showed that more Qataris thought that mental illness is due to punishment from god and is due to possession of evil spirits.[9] In addition, the study carried out in tertiary care hospital in Nepal with 110 respondents showed that about 38% of participants thought mentally ill people are insane.[10]

About a quarter of health care worker in Zambia would not allow their child to marry someone with epilepsy and thought that they should not marry or hold employment. They were rejected by their families and communities.[11] Furthermore, the study carried out in tertiary care hospital in Dharan showed that three fourth of 110 respondents were ready to work together and chat with them. These findings were similar to our study where about a quarter of respondents opined that mentally ill patients should be allowed to be engaged in work or job.

The study on knowledge of mental health benefits and preferences for type of mental providers among the general public in Michigan revealed that large proportion of respondents were uninformed about their mental health benefits. In this study, training was also not sufficient about mental health management. They were also unaware about the current mental health policies and ideas.[12]

They study carried out in Dharan among nursing staffs showed that majority of respondents among 110 reported to have received information regarding mental illness from seeing mentally ill people (94%), communication with doctors and health workers (84.5%) and friends and relatives (79%).[10] These findings were in reverse in our study. Alternately, in a UK study, it was found that 33% of respondents cited personal experience of someone with mental disorders as their main source of information, while a further 10% cited friends and relatives.[13]

Conclusions

The majority had fairly good knowledge about the causes of mental illness and less had idea about the correct treatment process for mentally ill people. Till now, stigma related to mental illness persists among the health professionals. Dissatisfaction with their current knowledge reflects their willingness to acquire more information and training. It calls for further information imparting activities to mid-level health professionals regarding mental illness, its sign/symptoms, causes and treatment modalities.

Conflicting Interest: None declared

Acknowledgement

Our sincere thanks to University Grants Commission who provided fund for the research, Sudip KC who helped in data collection, Dr. Rabi Shakya, consultant psychiatrist, Patan Hospital, Akash Bhandari, for translating the questionnaire into Nepali language and District Public Health Officer, Chitwan district.

Source(s) of support: University Grants Commission (This research was conducted under the faculty development grants provided by University Grants Commission of Nepal)

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