

Impact of Caring for Mentally Ill Patient on Caregivers

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DOI: <https://doi.org/10.52403/ijshr.20230359>

ABSTRACT

Mentally ill person needs caretakers during hospitalization for severe conditions, continuing care, and rehabilitation. Caretakers experience mental illness when providing care for their mentally ill patients in Nepal. About 24.5% of caretakers had anxiety and 19.6% had depression. The financial, social, and psychological health of caregivers may all impact. The objective was to examine the psychological, financial and social impact on caregivers. A descriptive study was conducted on 207 caregivers' of mentally ill patients at mental hospital, Nepal. Purposive sampling technique was used. Semi-structured questionnaires were developed to assess psychological and financial impacts and Likert scale questions were included to assess social impact. Information was gathered using a structured face-to-face interview. Impacts on caregivers' psychological, economic and social were associated to their sociodemographic characteristics. Education, religion, and the patient's length of mental illness were all associated with psychological impact ($\chi^2=54.37$; $df=5$; $p= <0.001$). Education and the duration of their mental illness are also related to the financial impact ($\chi^2=31.95$; $df=7$; $p= <0.001$). The social impact experienced by caregivers is similarly associated with education, occupation, and the length of mental illness ($\chi^2=61.03$; $df=5$; $p= <0.001$). The association between caregivers' sociodemographic factors and the psychological, financial, and social impacts on them was observed. This justifies encouraging caregivers to be a part of the support group in order to increase the information and emotional support

they get from other caregivers who have similar experiences.

Keywords: Impact, psychological, financial, social, mentally ill patient, caregiver

INTRODUCTION

Mental illnesses cause changes in emotion, thought, and behaviour that affect human behaviour. Mental illness causes distress and difficulties in social functioning, employment, and family. Severe mental problems have a two- to three times higher average mortality rate than the general population, and they die more often from unnatural causes such accidents, homicide, and suicide. It reveals that mentally ill persons need caretakers, hospitalization for severe conditions, continuing care, and rehabilitation.^[1] The impact of mental illness on family caregivers is significant. Mental illness impacts not just the mental illness patient, but also their caregivers. According to research, the impacts of mental illness on family caregivers were mostly financial, social, psychological, and physical health.^[2] Nearly a billion people have mental disease, including 14% of adolescents worldwide. Over 1 in 100 deaths were suicides, and 58% were under age 50. Mental diseases are the major cause of mental disability, affecting one in six people. According to research, people with severe mental health disorders die 10–20 years earlier than the general population.^[3]

South-East Asia's mental health services were urban-centred and hospital-based, resulting in 80-90% of populations not having access to treatment for mental illness. People suffering from mental illness on this continent are vulnerable and frequently face stigma and discrimination. Suicide rates are higher and 90% of suicides attributed to mental disorders.^[4]

Mental health services initiated in general hospital settings in Nepal. Psychiatric outpatient and inpatient services began in 1962 and 1964, respectively. Mental hospital was established in 1984 and started treatment only for serious mental disorders. Psychiatry units of medical colleges, provincial government hospitals, and a few private hospitals provide mental health care. Most mental hospitals are in cities, and rural people don't know about mental disease. Suicide (16%) was the biggest cause of mortality for reproductive-age women, 21% of them were under the age of 18.^[5] The mentally ill patient was cared after by family, close relatives and friends. Only 20% of mentally ill patients were hospitalized, meaning that most cases are addressed at home. Family supports most home-based mental health patients. However, many factors, including the economic crisis, a lack of understanding about mental illness, and a shortage of human resources for caregiving, took a toll on the physical and emotional health of caregivers. Mentally ill patient caregivers had higher rates of psychological distress than the general population.^[6] A recent study found that 24.5% of caretakers of mentally ill patients had anxiety and 19.6% had depression. During caregiving for mentally ill patients, family careers also develop mental illness.^[7]

Mentally ill people in Nepal are sent to hospitals with family caregivers. Some of them were aware of the sickness, but most individuals with mental illnesses only go to the hospital when their condition has gotten severe. In reality, a number of studies have shown that family caregivers have an impact on the health of the mentally ill patients they

care for on top of the physical, psychological, and financial components of care.^[8] Mental illness plays an important role in the maladjustment of living and abnormal changes in a person's thinking, perception, memory, feeling, and judgment, which increases the incorrect functioning of day-to-day life and makes a person unable to meet the requirements of human fundamental needs. Psychiatric patients are becoming more common, and caregivers play an important role in their care. In Nepal, most mentally ill patients are cared for by family and related caregivers, and it has been found that this impacts psychological well-being, increased load, and economy.^[9]

Caretakers experience mental illness when providing care for mentally ill patients, which has an adverse effect on their health. The financial, social, and psychological health of caregivers may all impact. Psychological issues that caregivers experience have an effect on their mental health as well. But it was ignored by management and was not recognized by the government. In the Nepal context, the mental health of the caregivers of mentally ill patients rarely discussed. The aim of the study is to examine the psychological, financial and social impact of caring for mentally ill patients on caregivers and to associate these impacts with caregivers' selected socio-demographic variables.

MATERIALS & METHODS

A descriptive cross-sectional study was conducted on 207 caregivers of mentally ill patients in Mental Hospital, Lagankhel, Lalitpur, Nepal. It is an only government hospital has 50 bed capacities for the inpatient care and it was occupied most of the time. Usually patients stay longer in in-patients unit. At the outpatient department (OPD) tentative number of patients' regular follow up rate per week was 150 above for the sampling. All 50 caregivers from in-patients' and 157 from OPD were included. Non probability purposive sampling technique was used. The inclusion criteria

for study participants were caregivers of mentally ill patients admitted at mental hospital and caregivers of mentally ill patients diagnosed mental illness before six months attending OPD for follow up, willing to participate in this study and available at the time of data collection.

Semi-structured questionnaires were developed for the interview in collecting the data. Questionnaires were arranged into four sections. Section one consisted of socio-demographic information of respondents, section two consisted of psychological impact, section three consisted questionnaire related to financial impact and Likert scale questions related to social impact were in section four. The researcher tested the readability and understands ability of the study instrument and translated into Nepali language before it was administered in the study setting. Then, pre-testing of the study instrument was done on 10% of the total sample size, 18 caregivers, for validity and reliability in the similar study settings at Rhythm Hospital and Research Centre Pvt. Ltd, Lalitpur (A psychiatric rehabilitation centre). The instrument's internal consistency was assessed using Cronbach alpha. Most of the questions' Cronbach alpha values were >0.7, indicating excellent levels of reliability. After the pre-test, the necessary adjustments were made to the questionnaires.

Data were collected from August 2022 to September 2022. Only the researchers were involved in the data collection process. Written informed consent was obtained from the participants through signature or finger print. They had given instruction regarding the responding of question. If they had any doubt how to respond to the interview, then the researcher clarifies their queries. Face to face structure interview was conducted to obtain the information and questions were filled up. Participation in this study was entirely voluntary. It was completely up to the respondents if they wanted to withdraw from the interview at any time or refuse to answer any questions that made them feel uncomfortable.

Anonymity was ensured throughout the entire research process, and all information gathered was kept confidential. Privacy was maintained by interviewing the respondent separately.

STATISTICAL ANALYSIS

Statistical Package for Social Sciences (SPSS Version 25) was used to analyze the data. Descriptive statistical techniques, such as frequencies, means, and standard deviations, were used to analyze the demographic data. The chi-square (χ^2) test, odds ratio (OR) calculation with a confidence level (CI) of 95%, and P-value were used in bivariate analysis to investigate the relationship between the psychological, financial, and social impact of caring for mentally ill patients on caregivers and independent variables (selected demographic factors). The significance level was set at the ≤ 0.05 level. Consequently, multivariate analysis was performed using logistic regression through a multilevel analysis approach to assess the strength of the association between psychological, financial and social impact on caregivers (dependent variables) and socio-demographic factors (predictor variables). The prevalence of psychological, financial, and social impacts was evaluated using a distinct mean score for the psychological, financial, and social impacts on caregivers. If the mean score was higher than the obtained value, the impact of psychological, financial, and social factors was taken into account. If it was above 8, the subject was thought to have a psychological impact; if it was 8 or lower, it was thought not to have. The scores were added to determine financial impact, and if the result was 6 or less, the participant was considered to have no financial impact. If it was greater than 6, the person was thought to have a financial impact. The prevalence of social impact was also evaluated using the Likert scale. Nine items make up the scale. Each item received a 5-point rating (0-neutral, 1-strongly disagree, 2-disagree, 3-agree and 4-strongly agree). If the mean score was higher than

22, the participant was considered to have a social impact.

RESULT

Demographic characteristics of the respondents:

The demographic information showed that the respondents' mean age ranged from 26 to 30 years. The majority of the respondents 97 (46.9%) were above the age of 30 and 47 (22.7%) were between the ages 21 to 25. While the proportion of respondents aged 26 to 30 years and 16 to 20 years were 37 (17.9%) and 26 (12.6%) respectively. The most of the caregivers, 118 (57%) were male and 89(43%) were female. Only 76 (36.7%) of the study's participants were from the Bagmati Province, while 131 (63.3%) were from other provinces of Nepal. The largest proportion of respondents 112 (54.1%) reported having a monthly household income of between 11,000 to 15,000 rupees. Whereas 59 (28.5%) had between 6,000 and 10,000, 29 (14%) had more than 15000 rupees and the least 7(3.4%) had less than 5,000. By greatest education level gained, 106 (51.2%) of respondents had a secondary education, followed by 50 (24.2%) with up to a primary education, 42 (20.3%) with a secondary education or above, and 9 (4.3%) with no formal education. Only 38 (18.4%) were identified as Hindu and the majority 169 (81.6%) of the respondents had chosen another religion. Considering the respondents' relationship status with the patients, the majority of respondents 64 (30.9%) were children, 56 (27.1%) had other kinds of relationship, 42 (20.3%) belonged to the patients' parents and 15 (7.2%) were spouses who helped care for the patients. Just over the half of the caregivers 106 (51.2%) had jobs whereas another about half 101 (48.8%) of the participants were homemakers. Regarding the length of the patients' mental illnesses, 174 (84.1%) had them for less than six months to one year, while 33 (15.9%) had them for longer than a year. The majority 126 (60.9%) of the respondents had been

caring for their mentally ill patients for longer than six months whereas 81 (39.1%) had done so for a shorter period of time.

Descriptive analysis of the psychological impact of the respondents:

The majority of the respondents, 172 (83.1%) said they had regularly cared for their mentally ill patients. Nearly half of the respondents 92 (44.4%) reported feeling anxious when caring for their patients about the recent situation. Most of respondents, 109 (52.7%), stated that they had previously experienced physical illness, and at least 16 (7.7%) reported having additional issues. In addition to physical health problems, there were concurrently 19 (9.2%), 38 (18.4%), 17 (8.2%), and 22 (10.6%) cases of chronic metabolic disease, musculoskeletal disease, skin issues, and cardiac disease. Just 88 (42.5%) of the respondents reported experiencing different emotions before and after caring for individuals with mental illness. Similarly, 82 (39.6%) of them experienced anxiety after caring for patients with mental illnesses. Respondents were given the option of providing many answers when asked about their problems with anxiety. One-fourth 52 (25.1%) of the respondents were afraid, 38 (18.4%) had trouble remembering things, 32 (15.5%) had trouble paying attention, and 4 (1.9%) had issues with restlessness. Likewise, 58 (28.0%) of the respondents had experienced changes in their mood as a result of caring for patients who were mentally ill. Whereas 33 (15.9%) reported losing their appetite, 38 (18.4%) reported not enjoying their activities as much, 6 (2.9%) felt hopeless, and 16 (7.7%) felt helpless. Seventy-two (34.8%) of the respondents had sleep disturbances while 56 (27.1%) had trouble falling asleep, 27 (13.0%) slept insufficiently, 10 (4.8%) had interrupted sleep, 8 (3.9%) were dissatisfied with their sleep, 15 (7.2%) experienced nightmares, and only 3 (1.4%) had none of these issues.

Descriptive analysis of the financial impact of the respondents:

Of the 207 respondents, more than half 120 (58%) of them manage financial expenses on their own, while 44 (21.3%) were supported by family members, 24 (11.6%) were assisted by donations, and 19 (9.2%) were assisted by outsiders. A total of 111 (53.6%) respondents had supporting agents. While 71 (34.3%) respondents received help from family members, 19 (9.2%) received support from others, 18 (8.7%) received support from donor agencies, and the least number of respondents (3 (1.4%) received support from charities. When it comes to financial issues related to care for mentally ill patients, 114 (55.1%) of the respondents said they had not experienced any. Among 93 (44.9%) respondents reported financial difficulties while caring for mentally ill patients, 75 (36.2%) reported having trouble paying for diagnostic, pharmaceutical, and laboratory costs and 20 (9.7%) reported having difficulty finding accommodations. Also, the proportions of respondents who struggled to find better options for high-quality care and treatment were 52 (25.1%) and 29 (14.0%) respectively. According to the respondents' experiences with financial difficulties in their personal lives, 90 (43.5%) of them reported having such difficulties. However, 44 (21.3%) of them reported having had financial difficulties in their personal lives as a result of losing their jobs. On the other hand, the least of the respondent 2 (1.0%) had experienced financial difficulties as a result of others. In addition, there were simultaneously 42 (20.3%) and 14 (6.8%) respondents who reported having financial difficulties in their personal lives as a result of unemployment and property loss. According to the respondents' feelings about their financial situation, 64 (30.9%) of the respondents had challenges. Loss of appetite, sleeplessness, a lack of interest in everyday activities, and feelings of anxiety were experienced simultaneously by 50 (24.2%), 20 (9.7%), 15 (7.2%), and 7 (3.4%) of the respondents who reported having financial troubles.

Descriptive analysis of the social impact of the respondents:

The descriptive analysis of the social impact of caregivers of caring mentally ill patient is shown in Table 1. Only 10 (4.8%) of the 207 respondents strongly agreed that they had supporting family and friends while 86 (41.5%) said they strongly disagreed. Similarly, the lowest percentage of respondents, 7 (3.4%) said they strongly agreed that caring for mentally ill family members had been difficult whereas 70 (33.8) disagreed with it. The majority of respondents, 75 (36.2%), disagreed that they felt uneasy when their family and friends came to visit them at home, while a minimum of 4 (1.9%) strongly agreed with this statement. Most of respondents, 63 (30.4%), made a neutral comment about whether they believed that their relatives perceived that mentally ill people were violent and could hurt them, whereas 1/4th of respondents 54 (26.1%) agreed with it. Most of respondents, 76 (36.7%), agreed that they had noticed a decrease in social engagement with friends and family, and 7 (3.4%) strongly agreed. Also, highest proportion of the respondents 74 (35.7%) strongly disagreed with the statement that they were ashamed by the behaviour of mentally ill family members' whereas, just 11 (5.3%) of them strongly agreed with it. The majority of respondents 81 (39.1%) felt neutral that they experienced detachment with family, relatives and friends due to mentally ill family member's behavior. In contrast, just 6 (2.9%) strongly agreed. At least 5 (2.4%) respondents strongly agreed that they have been experiencing signs of diminished socializing after caring for the mentally ill patients, while slightly more than 1/3rd of respondents, 54(31.9%), did not agree that they have been experiencing these symptoms. In addition, 61 (29.5%) of the respondents strongly disagreed with the statement that they believe their relationship with their spouse, children, or other family members has suffered as a result of a mental illness in the family. The same goes for at

least 10 (4.8%) of the respondents who strongly agreed.

Table 1: Social impact Likert scale of caregivers of caring mentally ill patient (n=207)

Statement	Strongly disagree N (%)	Disagree N (%)	Neutral N (%)	Agree N (%)	Strongly agree N (%)
I feel that I have supportive relatives and friends.	86 (41.5)	46 (22.2)	31 (15.0)	34 (16.4)	10 (4.8)
I have faced problem to care mentally ill family members	44 (21.3)	70 (33.8)	44 (21.3)	42 (20.3)	7 (3.4)
I feel uncomfortable when my relatives and friends visited my house	50 (24.2)	75 (36.2)	41 (19.8)	37 (17.9)	4 (1.9)
I think that my relatives perceived that mentally ill patients were violent and they can harm to them	36 (17.4)	50 (24.2)	63 (30.4)	54 (26.1)	4 (1.9)
I feel decrease interaction with my friends and family members.	36 (17.4)	57 (27.5)	31 (15.0)	76 (36.7)	7 (3.4)
I feel embarrassed over my mentally ill family member's behavior	74 (35.7)	68 (32.9)	40 (19.3)	14 (6.8)	11 (5.3)
I experienced detachment with family, relatives and friends due to mentally ill family member's behavior.	36 (17.4)	49 (23.7)	81 (39.1)	35 (16.9)	6 (2.9)
I have been experiencing symptoms of decrease socialization.	36 (17.4)	54 (26.1)	66 (31.9)	46 (22.2)	5 (2.4)
I feel that my relationship with my spouse/children/family members has been strained due to my family member's mental illness.	61 (29.5)	56 (27.1)	40 (19.3)	40 (19.3)	10 (4.8)

Socio-demographic factors associated with the psychological impact, financial impact and social impact of caregivers of mentally ill patient:

Bivariate analysis was used to examine the relationship between the dependent variables (psychological impact, financial impact and social impact on caregivers) and independent variables (selected demographic variables: age, income, education, religion, occupation, duration of mental illness of caregivers' patient and duration of caring mentally ill patient by caregivers).

All the socio-demographic factors studied showed a statistically significant association with psychological impact on caregivers except for age and duration of caring mentally ill patient by caregivers as displayed in table 2. A total of 54 (26.1%) of caregivers of mental ill patients with monthly income of 11000 to 15000 were 1.46 times more likely to have psychological impact as compared to those less than 5,000 to less than 10,000 monthly income and it was statistically significant

($\chi^2=5.75$; OR= 1.46; CI=1.08-1.97; p=0.024). Those with higher education levels were 0.43 times more likely as compared to those with lower education levels to have psychological impact and it was significant ($\chi^2=24.82$; OR= 0.43; CI=0.28-0.65; p<0.001). Caregivers who were Christian, Buddhism and others were 2.18 times more likely to affected by psychological impact than Hindus and it was statistically significant ($\chi^2=23.12$; OR= 2.18; CI=1.68-2.83; p<0.001). Jobholders were 1.75 times more likely to have psychological impact as compared to the homemakers and it was significant ($\chi^2=12.07$; OR= 1.75; CI=1.25-2.45; p<0.001). Those caregivers' patients who had mental illness more than 1 year had been affected by psychological impact was 2.1 times greater than that for caregivers of patients who had mental illness less than 6 months to 1 year. This means that as the patients have long duration of mental illness increase the psychological impact on their caregivers ($\chi^2=12.07$; OR= 1.75; CI=1.25-2.45; p<0.001).

Table 2: Bivariate data analysis of socio-demographic factors associated with psychological impact (n=207)

Demographic variables	Category	Have psychological impact		Not have psychological impact		Total	χ^2	P-Value	OR (95% CI)
		N	%	N	%				
Age (in years)	16 to 25	32	15.5	42	19.8	73	0.00	1.000	1.00 (0.78-1.79)
	26 and above	59	28.5	75	36.2	134			
Monthly income (in rupees)	<5000 to <10000	37	17.9	29	14.0	66	5.75	0.024*	1.46 (1.08-1.97)
	11000 to >15000	54	26.1	87	42.0	141			
Education	Cannot read &	42	20.3	17	8.2	59	24.82	<0.001*	0.43 (0.28-0.65)

	write to up to primary level								
	Secondary level and above	49	23.7	99	47.8	148			
Religion	Hindu	30	14.5	8	3.9	38	23.12	<0.001*	2.18 (1.68-2.83)
	Christian, Buddhism & others	61	29.5	108	52.2	169			
Occupation	Job holders	59	28.5	47	22.7	106	12.07	0.001*	1.75 (1.25-2.45)
	Homemakers	32	15.5	69	33.3	101			
Duration of mental illness of caregivers' patient	< 6 months to 1 year	26	12.6	7	3.4	33	19.32	<0.001*	2.10 (1.62-2.73)
	> 1 year	65	31.4	109	52.7	174			
Duration of caring mentally ill patient by caregivers	< 6 months	40	19.3	41	19.8	81	1.58	0.251	1.22 (0.89-1.65)
	6 months & more	51	24.6	75	36.2	126			

Note: *=Significant, χ^2 = Chi Square, OR=odds ratio, CI=confidence interval, p value <0.05.

Table 3 indicates, every sociodemographic characteristic that has a statistically significant relationship to the financial impact on caregivers. Those who were older increased the likelihood of experiencing financial hardship while caring for their mentally ill patient and this was statistically significant ($\chi^2=7.24$; OR =1.51; CI=1.12-2.02; p=0.007). With a monthly income between 11,000 to 15,000, 51 (24.6%) caregivers of mentally ill patients were 1.47 times more likely to experience financial hardship than those with lower monthly incomes and it was statistically significant ($\chi^2=6.26$; OR= 1.47; CI=1.10-1.97; p=0.016). There is an association between caregivers' educational attainment and their ability to influence financial decisions. Higher education-level caregivers had higher odds than caregivers with less education ($\chi^2=10.54$; OR= 1.65; CI=1.24-

2.20; p=0.002). Moreover, the OR for caregivers who identified as Christians, Buddhists, and others was statistically significant ($\chi^2=10.38$; OR= 1.72; CI=1.29-2.29; p=0.002) and was 1.72 times greater for those who identified as Hindus. The occupation of the caregivers is also associated with having a financial impact (2=13.98; OR= 1.81; CI=1.30-2.52; p=0.001). Longer mental illness duration resulted in 1.83 times greater financial impact than shorter illness duration illness ($\chi^2=12.26$; OR= 1.83; CI=1.38-2.42; p=<0.001). Lastly, the lengthier period of time that caregivers spent caring for mentally ill patients was 1.65 times more than that for the impact on finances. In other words, financial impact was more likely to occur for caregivers who cared for mentally ill patients for 6 months or longer ($\chi^2=11.04$; OR= 1.65; CI=1.23-2.23; p=0.001).

Table 3: Bivariate data analysis of socio-demographic factors associated with financial impact (n=207)

Demographic variables	Category	Have financial impact		Not have financial impact		Total	χ^2	P-Value	OR (95% CI)
		N	%	N	%				
Age (in years)	16 to 25	42	20.3	31	15.0	73	7.24	0.007*	1.51 (1.12-2.02)
	26 and above	51	24.6	83	40.1	134			
Monthly income (in rupees)	<5000 to <10000	38	18.4	28	13.5	66	6.26	0.016*	1.47 (1.10-1.97)
	11000 to >15000	55	26.6	86	41.5	141			
Education	Cannot read & write to up to primary level	37	17.9	22	10.6	59	10.54	0.002*	1.65 (1.24-2.20)
	Secondary level and above	56	27.1	92	44.4	148			
Religion	Hindu	26	12.6	12	5.8	38	10.38	0.002*	1.72 (1.29-2.29)
	Christian, Buddhism & others	67	32.4	102	49.3	169			
Occupation	Job holders	61	29.5	45	21.7	106	13.98	<0.001*	1.81 (1.30-2.52)
	Homemakers	32	15.5	69	33.3	101			
Duration of mental illness of caregivers' patient	< 6 months to 1 year	24	11.6	9	4.3	33	12.26	<0.001*	1.83 (1.38-2.42)
	> 1 year	69	33.3	105	50.7	174			
Duration of caring	< 6 months	48	23.2	33	15.9	81	11.04	0.001*	1.65 (1.23-2.23)

mentally ill patient by caregivers	6 months & more	45	21.7	81	39.1	126			
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Note: *=Significant, χ^2 = Chi Square, OR = odds ratio, CI = confidence interval, p value <0.05.

Table 4 reveals the bivariate data analysis of socio-demographic characteristics associated to social impact on caregivers. With the exception of age and the duration of time caregivers had been caring for patients with mental illnesses, all sociodemographic parameters analyzed revealed statistically significant associations with social impact. High monthly income respondents were 1.43 times more likely to have a social impact than low monthly income respondents. It was determined to be statistically significant ($\chi^2=6.54$; OR =1.43; CI=1.10-1.81; $p=0.012$). Higher education levels significantly increased the likelihood of experiencing social impact by 1.25 times compared to lower education levels

($\chi^2=28.16$; OR= 1.25; CI=1.59-2.52; $p<0.001$). The OR was also greater for caregivers who identified as Christians, Buddhists, and others than it was for Hindus ($\chi^2=10.87$; OR= 1.63; CI=1.28-2.07; $p=0.001$). Significantly, those with jobs had a 1.82 times higher likelihood of having social impact than those who stayed at home ($\chi^2=19.08$; OR= 1.82; CI=1.36-2.44; $p<0.001$). Similarly, the duration of the mental illness of the caregiver's patient is also associated with having a social impact. A longer duration of mental illness resulted in a social impact 1.93 times greater than a shorter duration of mental illness ($\chi^2=20.05$; OR= 1.93; CI=1.57-2.37; $p<0.001$).

Table 4: Bivariate data analysis of socio-demographic factors associated with social impact (n=207)

Demographic variables	Category	Have social impact		Not have social impact		Total	χ^2	P-Value	OR (95% CI)
		N	%	N	%				
Age (in years)	16 to 25	38	18.4	35	16.9	73	0.001	1.000	1.00 (0.75-1.31)
	26 and above	70	33.8	64	30.9	134			
Monthly income (in rupees)	<5000 to <10000	43	20.8	23	11.1	66	6.54	0.012*	1.43 (1.10-1.81)
	11000 to >15000	65	31.4	76	36.7	141			
Education	Cannot read & write to up to primary level	48	23.2	11	5.3	59	28.16	<0.001*	1.25 (1.59-2.52)
	Secondary level and above	60	29.0	88	42.5	148			
Religion	Hindu	29	14.0	9	4.3	38	10,87	0.001*	1.63 (1.28-2.07)
	Christian, Buddhism & others	79	38.2	90	43.5	169			
Occupation	Job holders	71	34.3	35	16.9	106	19.08	>0.001*	1.82 (1.36-2.44)
	Homemakers	37	17.9	64	30.9	101			
Duration of mental illness of caregivers' patient	< 6 months to 1 year	29	14.0	4	1.9	33	20.05	<0.001*	1.93 (1.57-2.37)
	> 1 year	79	38.2	95	45.9	174			
Duration of caring mentally ill patient by caregivers	< 6 months	46	22.2	35	16.9	81	1.13	0.320	1.15 (0.89-1.49)
	6 months & more	62	30.0	64	30.9	126			

Note: *=Significant, χ^2 = Chi Square, OR = odds ratio, CI = confidence interval, p value <0.05.

Multivariate analysis of Sociodemographic factors associated with the psychological, financial and social impact on caregivers

To determine the strength of the association between sociodemographic factors (predictor variables) and the psychological, financial, and social impact (dependent variables), multivariate analysis was performed on factors that were statistically significant in bivariate analysis. The outcomes of the multivariate analysis are shown in Table 5. With 207 observations,

there were 5 variables observed at levels 1 and 3, and 7 variables at level 2. It has been observed that caregivers are one time more likely to face psychological impact who had completed secondary education or higher. The psychological impact of Buddhism, Christianity, and other religions is 0.36 times greater than that of Hinduism. Also, caregivers were 0.2 times more likely to experience this influence if their patients' mental illness had lasted longer than a year. Similar to this, caregivers with secondary

education or above and patients who have experienced mental illness for more than a year are more likely to experience financial impact. The social impact is associated with the caregivers' level of education, occupation, and the length of mental illness. As a consequence of model fitting criteria, the likelihood of having a psychological impact was associated to sociodemographic factors such education, religion, and the

patient's length of mental illness ($\chi^2=54.37$; $df=5$; $p= <0.001$). Education and the length of the patient's mental illness are also associated to financial impact ($\chi^2=31.95$; $df=7$; $p= <0.001$). Similar to this, the social impact experienced by caregivers is independently associated with education, occupation, and the and length of mental illness ($\chi^2=61.03$; $df=5$; $p= <0.001$).

Table 5. Multivariate logistic analysis of psychological, financial and social impact (n=207)

Variables	B	χ^2	Exp(B)	95% Confidence Interval for Exp(B)		P-Value
				Lower Bound	Upper Bound	
Psychological impact						
Income (<5000 to 10000 and 11000 to >15000)	-0.01	0.00	0.99	0.45	2.17	0.982
Education (Cannot read & write to up to primary level and Secondary level and above)	-1.43	12.58	0.23	0.10	0.52	<0.001*
Religion (Hindu and Christian, Buddhism & others)	-1.01	4.45	0.36	0.14	0.93	0.035*
Occupation (Job Holders and homemakers)	-0.42	1.22	0.65	0.31	1.38	0.269
Duration of mental illness of caregivers' patient (< 6 months to 1 year & more)	-1.56	8.72	0.20	0.07	0.59	0.003*
Financial impact						
Age (16 to 15 and 26 & above)	-0.69	1.35	0.49	0.15	1.61	0.245
Income (<5000 to 10000 and 11000 to >15000)	-0.13	0.12	0.87	0.42	1.81	0.721
Education (Cannot read & write to up to primary level and Secondary level and above)	-1.00	5.66	0.36	0.16	0.83	0.017*
Religion (Hindu and Christian, Buddhism & others)	-0.40	0.72	0.67	0.26	1.69	0.396
Occupation (Job Holders and homemakers)	-0.62	2.37	0.53	0.24	1.18	0.124
Duration of mental illness of caregivers' patient (< 6 months to 1 year and more)	-0.98	4.06	0.37	0.14	0.97	0.044*
Duration of caring mentally ill patient by caregivers (< 6 months and 6 months & more)	-0.63	0.53	1.58	0.46	5.45	0.466
Social impact						
Income (<5000 to 10000 and 11000 to >15000)	0.16	0.17	1.18	0.53	2.61	0.678
Education (Cannot read & write to up to primary level and Secondary level and above)	-2.07	20.53	0.12	0.05	0.30	<0.001*
Religion (Hindu and Christian, Buddhism & others)	0.07	0.02	1.08	0.39	2.96	0.879
Occupation (Job Holders and homemakers)	-0.82	4.85	0.43	0.20	0.91	0.028*
Duration of mental illness of caregivers' patient (< 6 months to 1 year and more)	-1.98	9.74	0.13	0.04	0.47	0.002*

DISCUSSION

In this study, the researcher assessed the sociodemographic characteristics of respondents and the psychological, financial, and social effects on caregivers of patients with mental illnesses as well as evaluated the association between these impacts and the sociodemographic factors of the respondents. The psychological impact on caregivers of mental ill patients was found to be significantly associated with monthly family income, educational attainment, religious affiliation, occupation, and length of mental illness. Patients who experienced mental illness for more than a year and caregivers with monthly incomes

between 11,000 to 15,000 rupees as well as those with higher education (secondary level and above), who were not Hindus, and job holders were all impacted psychologically. In fact, numerous studies have shown that family caregivers have an impact on the financial, psychological, and social well-being while caring their mentally ill patients. The results of different studies supported this [10, 11, 12, 13].

All sociodemographic factors have an association to the financial impact on caregivers, including age, income, education, religion, occupation, the length of the patient's mental illness and the length of time the caregivers have been caring for

the patient. The likelihood that a financial impact would occur was higher for caregivers aged 26 and older, those with higher monthly incomes, higher educational attainments, who identified as Christians, Buddhists, or other religious groups, who had jobs, longer durations of mental illness, and longer amounts of time spent caring for mentally ill patients. The findings of this study are similar with those of other studies in that these sociodemographic characteristics had an impact on the financial impact [14, 15, 16].

Also, it was found that the social impact on caregivers was remarkably associated with their level of income, education, religion, occupation, and length of mental illness. Secondary and above levels of education, the adoption of religions other than Hinduism, monthly income between 11,000 to 15,000 rupees, jobholders and respondents whose patient's mental illness lasted more than a year had an effect on the social impact of caregivers. The previous studies reported the social impact experienced by family caregivers who provide care to their patients with mental illness [17, 18].

Limitation

In just one of the mental hospitals, the sample was purposefully chosen. The study only included respondents who met the requirements and were available during the time when the data were collected. It demonstrates that there might not be much generalizability to other similar study areas. The inclusion of caregivers from the same mental hospital's outpatient department helped to reduce this bias.

CONCLUSION

In conclusion, the findings showed that the majority of caregivers had significant social impact, however less than half of the respondents reported experiencing psychological or financial impacts. This has to include highlighting the association between caregivers' sociodemographic characteristics and the psychological,

economical, and social effects on them. Substantial correlations between the respondents' income, education, religion, occupation and the length of their patient's mental illness were observed, which had an effect on caregivers' psychological and social well-being. The financial burden on caregivers was also correlated with factors such as age, income, education, religion, occupation, patient's length of mental illness and length of caregiving. Caring for individual with mental illness is undoubtedly more difficult than caring for people with other illnesses, but having a proper understanding of the different types of mental illnesses and their treatments can help caregivers better understand the behaviors of those they are caring for and enhance their coping skills. The study suggests that caregivers should be encouraged to participate in the support group in order to enhance the knowledge and emotional support they receive from other caregivers who have similar experiences.

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

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How to cite this article: Tara Ramtel, Arisha KC, Elina Achhami. Impact of caring for mentally ill patient on caregivers. *International Journal of Science & Healthcare Research*. 2023; 8(3): 444-454.
DOI: <https://doi.org/10.52403/ijshr.20230359>
