

ORIGINAL RESEARCH ARTICLE

FAMILY, SOCIAL AND ORGANIZATIONAL SUPPORT AMONG HEALTHCARE PROFESSIONALS DURING COVID-19 PANDEMIC IN SELECTED DISTRICTS OF NEPAL

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ABSTRACT

Background: One of the important factors that could affect better health care delivery during COVID-19 pandemic remains the better working environment for healthcare professionals. Support provided by the family, society and workplace would play an important role to boost their work performance. This study aimed to assess the perception of family, social and organizational support among the frontline healthcare professionals during COVID-19 pandemic in selected districts of Nepal.

Methods: This descriptive cross-sectional study consisted of 325 healthcare professionals working in different hospitals of Bagmati province of Nepal. Data were collected using self-administered structured questionnaire via Google form. Collected data were analyzed using descriptive and inferential statistics.

Results: Adequate support was perceived by 50.5% of the respondents and the mean overall perceived support score was 98.83±11.2. The highest perceived score (37.25±4.37) was on family support domain followed by social support (33.55±4.08) and the organizational support (28.01±5.7). Factors like advanced age, higher education level, male sex, and working in the government hospitals showed significant association with perceived family and social support. Type of the institutions and tenure status were main predictors for the perception of adequate organizational support.

Conclusions: For their inspiration to work, adequate support to healthcare professionals not only from family but also from the society and organizational level would be quite important. Apart from some non-modifiable factors, other factors like adequate and timely provision of monthly salary, guaranteed medical treatment if they fall sick have been found to play important role to keep the them motivated to their work.

INTRODUCTION

COVID-19 pandemic has created tremendous challenges on healthcare delivery system globally. One of the important factors that could affect better healthcare delivery during this pandemic is the wellbeing and better working environment for the frontline healthcare professionals (HCPs) who are facing unprecedented social and professional impacts during this pandemic.¹⁻⁴ Frontline HCPs during COVID pandemic always remain vulnerable to burnout due to a number of factors.^{5,6}

World Health Organization (WHO) has listed a number of hazardous factors that would negatively affect the work performance of HCPs.⁷ The pandemic has overturned the HCPs' sense of order and control, which might lead to substantial stress in the short-term and higher risk of burnout over the long term.⁸ As the frontline fighters during the pandemic, HCPs would expect support and recognition not only from the patients and their relatives but also from the society and the workplace that requires maintenance of harmony and synchrony with social and family level as well.

Fear and anxiety about the new disease can be overwhelming

and can cause strong emotions among the HCPs too.⁹ Support provided by the family, society and organization would have an enormous impact on the availability and well-being of any HCPs to keep them mentally, physically and spiritually fit for the service of mankind, especially in the low-income countries like Nepal. So, this study was conducted with an aim of assessing the perception of family, social and organizational support among the frontline HCPs during the pandemic of COVID-19 in selected districts of Nepal.

METHODS

A descriptive cross-sectional study was conducted from November to December 2020 to find out the healthcare professional's perception of family, social and organizational support. Healthcare professionals (doctors and nurses) working in different hospitals of Kathmandu valley (Kathmandu, Lalitpur and Bhaktapur) and Chitwan district of Nepal were the target population of the study. Doctors and nurses registered with respective medical and nursing councils and currently getting involved in the clinical practice were included and those who were not directly involved in patient care and were on long leave at the time of study were excluded.

Purposive sampling was used and about 325 health care professionals participated in the study. We derived adequate versus inadequate levels of perceived support based on the survey responses.

Calculation of sample size with Cochran's formula as follows¹⁰:

Large population sample (n_0) = $Z^2pq/e^2 = 385$

Population adjusted sample (n) = $n_0/1+(n_0-1)/N = 323$

where, $Z = 1.96$ confidence interval at 95%; $P =$ equal probability of responses (0.5); $e = 0.05$ margin of Error at 5% .05, $n_0 =$ Large population sample; $n_1 =$ Population adjusted (small population) sample and $N =$ Estimated Doctor/Nurse population in study area (2000).

With population adjusted sample, 323 participants were needed. With a response rate of about 60%, questionnaire was sent to around 500 eligible HCPs. Ethical clearance was obtained from Nepal health research council (NHRC) with reference number of 641/20. The acceptance at the beginning of the survey was taken as a written consent to participate in the study and participants had the rights to drop at any time during the survey. Participants' anonymity was maintained by not collecting any personally identifiable information from the response form and data was shared only among investigators.

Research tool to assess the family and social support was developed by the researchers through literature review. In this study family Support was operationalized as the perception or feelings that one is cared for, has assistance available from immediate family members (mother/father, grandfather/mother, daughter/son). Social support was operationalized as the perception or feelings that one is cared for, has assistance available from colleague, friends, neighborhood and house owner measured by the social support likert scales. Similarly, organizational Support was the perception or feelings that one is cared for from the currently working organizations, measured by COVID-19 Organizational Support (COVID-OS)¹¹ questionnaire and is measured as strongly disagree to strongly agree. The revised version of COVID-OS instrument was used after taking permission from the author, in which two questions were added and one question was modified to match the local scenario. Translation of the research tool from English to Nepali language was done with the help of the subject experts. The instrument was divided into four different sections. The first section included sociodemographic and organizations related variables and the second to fourth section consisted of the questions related to the assessment of perception of perceived family, social and organizational support related items.

The independent variables included were: Sociodemographic and organizational characteristics, age, gender, marital status, type of family, type of residence, living with family at the time of COVID outbreak, working district, ever tested positive for COVID, academic degree, profession, institution type, and professional experience, working area, tenure status and hospital treating COVID case.

Data collection was done by using structured, self-administered

questionnaire through online survey method by the use of Google forms. Healthcare professionals working in various hospitals were contacted through their health professional network. Similarly, questions were posted at various professional forums of doctors and nurses and requesting the members for participation through social network and circle of friends.

Data was retrieved in Excel version 10 and then data checking, cleaning and coding done and was transferred to IBM SPSS version 20. The exploratory analysis was based on the nature of the data in terms of descriptive and inferential statistics. Data normality was tested and based on the nature of first Pearson's chi-squared test of dependence were performed to check the association between independent and dependent variables for each domain. Simple binary logistic regression was done for each variable, which showed significant association in chi square test ($p < 0.05$ at 5% level of significance) and then multivariate binary logistic regression model was used to identify factors associated with health professionals' perceived support on family, social and organizational domain. Adjusted odds ratio was calculated and significance was considered at $p \leq 0.05$ at CI 95%.

Perceived support was measured by 30 statements with 10 questions in each domain. Utmost attention was applied to include equal numbers of positive and negative statements in total. Each statement included five-point Likert scale responses that ranged between 1 to 5 (1: strongly disagree, 2: disagree, 3: neither agree nor disagree, 4: agree and 5: strongly agree). Reversed scoring system was applied for negatively expressed statements ranging between 1 to 5 (1: strongly agree, 2: agree, 3: neither agree nor disagree, 4: disagree and 5: strongly disagree) and the total score ranged from 30 to 150 and domain score from 1 to 50.

The content validity of the tool was maintained by undertaking extensive literature review by all the researchers and also performing a pre-testing of the tool among 32 respondents prior to the main study. For the data received during pretesting, each section of the perceived support (family, society and organizational) was analyzed separately and Cronbach's Alpha calculated in total. The Cronbach's alpha obtained was 0.732. Data obtained during pretesting was excluded from the final analysis. The reliability score was calculated domain-wise and in total from the whole sample ($n = 325$) that was found acceptable. The obtained Cronbach's score in the family, social support and organizational domain and in total were 0.793, 0.655, 0.829 and 0.0863 respectively (Table: 3).

Association between sociodemographic variables and perceived support were analyzed for each domain separately. The total score was classified into adequate support and inadequate support based on the median values of obtained score for each domain. The values more than or equals to median was classified as adequate support and values below median score was classified as inadequate support.

RESULTS

A total of 325 HCPs were included in the study. Median age of the respondents was 29 years (Range: 20-49 years) and 56.3%

were females. Majority of the HCPs belonged to nuclear family (84%) and 59.4% were married. Altogether 74.5% of them were staying with their family members during the pandemic. Majority of the respondents were from Chitwan district (36%) followed by Kathmandu (29.8%), Lalitpur (24%) and Bhaktapur (10.2%) districts. Almost 57% were living at their own home, 37.6 % at rented flat or home and 4.6% at office quarter. Academic degree of the highest percentage of the respondents was bachelor of nursing (30.2%) followed by MD/MS (28.6%), MBBS (19.6), proficiency certificate in nursing (14.2%), DM/MCH and MN/MS nursing (3.7% on each). Almost 56.3% of the HCPs included in the study were tested positive for COVID-19 (Table 1).

Table 1: Sociodemographic characteristics (n=325)

Characteristics	Number (%)
Age	
≤30 years	192 (59.1)
31-39years	102 (31.4)
≥40 years	31 (9.5)
Min-Max	20-49
Mean±SD	30.22±6.030
Sex	
Male	142 (43.7)
Female	183 (56.3)
Marital Status	
Unmarried	129 (39.7)
Married	193 (59.4)
Divorced	1 (0.3)
Widow/widowder	2 (0.6)
Type of family	
Nuclear	273 (84.0)
Joint	52 (16.0)
Living with family at time of outbreak	
Yes	242 (74.5)
No	83 (25.5)
District	
Kathmandu	97 (29.8)
Bhaktapur	33 (10.2)
Lalitpur	78 (24.0)
Chitwan	117 (36.0)
Residence	
Own home	188 (57.8)
Rented room/flat	122 (37.6)
Office quarter	15 (4.6)
Academic Degree	
BN/BSc.	98 (30.2)
MD/MS	93 (28.6)
MBBS	64 (19.6)
PCL	46 (14.2)
DM/MCH	12 (3.7)
MN/MS	12 (3.7)
Ever tested COVID 19 positive	
Yes	183 (56.3)
No	142 (43.7)

More than half of the respondents were doctors (52%). Over all, the highest percentage of the respondents were working at government or public organizations, 36.9% were working at medical colleges and 23.1% at private hospitals. Majority of the respondents were at non-permanent status (temporary-46.2%, contract- 21.2%, others-0.9%) and 31.7% were in permanent tenure. Almost 59.7% had more than 5 years of work experience in their respective profession. Only 19.6% of the HCPs were working in the isolation ward and COVID intensive care unit (ICU) and the rest (80.6%) were working either in the general ward or ICU and only outdoors (Table 2).

Table 2: Organizations related characteristics (N=325)

Characteristics	Number (%)
Profession	
Doctor	169 (52.0)
Nurse	156 (48.0)
Type	
Medical College	120 (36.9)
Private Hospital	75 (23.1)
Public/Government	130 (40.0)
Tenure status	
Temporary	150 (46.2)
Permanent	103 (31.7)
Contract	69 (21.2)
Daily wages	2 (0.6)
Others	1 (0.3)
Professional experience in years	
≤5yrs	194 (59.7)
>5yrs	131 (40.3)
Current working area	
General ward	46 (14.2)
Emergency room	51 (15.7)
General ICU/CCU	47 (14.5)
OPD only	3 (0.9)
Isolation ward	36 (11.1)
COVID ICU	27 (8.3)
Have to take rounds in all wards	106 (32.6)
Laboratory/Radiology	9 (2.8)
Do your hospital treat COVID cases	
Yes	294 (90.5)
No	31 (9.5)

The mean overall perceived support score was 98.83±11.2 and highest perceived score (37.25±4.37) was on family support domain followed by social support (33.55±4.08) and the organizational support (28.01±5.7). The median perceived support score in family support, social support and organizational support domains were 38, 34 and 27 respectively. Adequate support was perceived by 50.5% of the respondents in an overall. On breaking down it into three domains, adequate support was perceived by 58.5% of the respondents in family support domain followed by 52.9% in organizational and 51.4% in social support domain (Table 3).

Table 3: Family, social and organizational support among health care professionals (n=325)

Domains	$\mu \pm \sigma$	Median	Adequate support, n (%)	Inadequate support, n (%)	Reliability
Family	37.25±4.37	38	190 (58.5)	135 (41.5)	0.793
Social	33.55±4.08	34	167 (51.4)	158 (48.6)	0.655
Organizational	28.01±5.7	27	172 (52.9)	153 (47.1)	0.829
Overall support	98.83±11.21	98	164 (50.5)	161 (49.5)	0.863

Notes: Overall support-adequate support: ≥ 98 and inadequate support: < 98 , Domain support-adequate support: \geq median values and inadequate support $<$ median, Reliability or internal construct validity is given as Cronbach's alpha coefficient

Table 4: Sociodemographic characteristics associated with perceived family, social and organizational support (n=325)

Character	N (%)	Family support			Social support			Organizational support		
		Inad (%)	Ad (%)	p*(OR) ^a	Inad (%)	Ad (%)	p*(OR) ^a	Inad (%)	Ad (%)	p*(OR) ^a
Age										
<29 yrs	153 (47.1)	52.9	47.1	RC	59.5	40.5	RC	61.4	38.6	RC
≥ 29 yrs	172 (52.9)	31.4	68.6	0.001(2.45)	39	61	0.001(2.30)	34.3	65.7	0.001(3.05)
Sex										
Female	183 (56.3)	48.6	51.4	RC	57.4	42.6	RC			
Male	142 (43.7)	32.4	67.6	0.003(1.97)	37.3	62.7	0.001(2.261)			
Marital Status										
Single	132 (40.6)	51.5	48.5	RC				65.9	34.1	RC
Married	193 (59.4)	34.7	65.3	0.003(1.99)				34.2	65.8	0.001(3.72)
Living with family (RC: No)	242 (74.5)	38	62	0.029(1.75)				39.7	60.3	0.001(3.33)
District										
Outside valley	117 (36.0)							56.4	43.6	RC
Inside valley	208 (64.0)							41.8	58.2	0.012(1.80)
Residence										
Rented room/flat	122 (37.5)	52.5	47.5	RC				64.8	35.2	RC
Own home/Office quarter	203 (57.8)	35	65	0.002(2.05)				36.5	63.5	0.001(3.20)
Academic degree										
\leq Undergraduate	208 (64.0)	49.5	50.5	RC	57.7	42.3	RC	55.8	44.2	RC
\geq Graduate	117 (36.0)	27.4	72.6	0.001(2.60)	32.5	67.5	0.001(2.83)	31.6	68.4	0.001(2.72)
Ever tested COVID positive (RC:No)	183 (56.3)				38.8	61.2	0.001(2.49)	39.3	60.7	0.002(2.04)

Abbreviations: Ad- Adequate, Inad- inadequate, RC- reference category

p* and Odds ratio (OR)^a from simple binary logistic regression.

p value considered significant at < 0.05 at the 5% level of significance

Binary logistic regression performed in only those variables which showed significant association ($p < 0.05$) during Chi-square test

Initially, all the variables listed in independent variables section were assessed to find the association in each domain separately by using chi square test. In next step, for those variables, which showed significant association at $p < 0.05$ at 5% level of significance in chi square test, simple binary logistic regression model was performed. This result showed some of the variables have stronger association. So, in order to evaluate each of these factors while simultaneously controlling all the confounders, a multiple logistic regression model was used. The initial chi square test suggested the selection of variables shown in tables 4 and 5.

Health professionals who were aged ≥ 29 years, males by gender, married and staying at own home perceived adequate

and significant family support. Similarly, HCPs with higher academic degrees, who had working experiences of > 5 years, working at government organizations, and had permanent tenure and were working at hospital treating COVID cases perceived adequate family support in comparison to the reference category. However, location (inside or outside valley), family type, profession and current working area and COVID positive status of the HCPs did not elicit any association with family support (Tables 4 and 5).

In social support domain, age, gender, academic degree, profession, professional experience, institutions types, tenure status and COVID status showed significant association with perceived social support. In comparison to their counterparts,

HCPs who were doctors by profession (OR 1.925, p=0.004) and were males (OR 2.261, p=0.001) had more likelihood to perceive adequate social support. HCPs who were tested positive for COVID also perceived adequate social support (OR 2.49, p<0.001) (Tables 4 and 5).

Regarding organizational support domain, respondents with increasing age, married, staying at home or quarter, and location of organization showed significant association with perceived organizational support. Similarly, organizational and professional related variables like, respondents with academic degree masters and above, professional experience more than 5 years, type of institutions, tenure status, working area, living with family or in quarter, and COVID status were significantly associated to perceive organizational support. Respondents working at government hospitals were more likely to perceive adequate organizational support (OR=10.04, p <0.001). Respondents working inside Kathmandu valley were 80% more likely to perceive adequate organizational support (OR=1.80, p <0.012) (Tables 4 and 5).

Table 6 showed the result of the multiple logistic regression model where the perceived support is the results of many variables. HCPs with work experience of >5 years (p=0.03), working at public or government organizations (p=0.001) and working at hospital treating COVID case (p <0.02) were the only significant variables. Respondents working at government hospitals were 2.6 times more likely to perceive adequate family support. Similarly, HCPs with experience >5 years were 2.1 times more likely to perceive adequate family support than those with ≤5 years of work experience. Academic degree and COVID status were two major predictors for adequate social support among the respondents. Those HCPs who had completed academic degrees of graduate or above and ever tested positive were 2.1 time more likely to perceive adequate support. Type of the institutions and tenure status were main predictors for the perception of adequate organizational support. While controlling the confounding variables, the staffs working at government and public institutions were five times (OR=5.57, p <0.001) and the staffs with permanent tenure were 2.3 times (OR=2.38, p <0.04) more likely to perceive adequate organizational support.

Table 5: Organizations and professional characteristics associated with perceived family, social and organizational support (n=325)

Characteristics	N (%)	Family Support			Social Support			Organizational Support		
		Inad (%)	Ad (%)	p* (OR) [‡]	Inad (%)	Ad (%)	p* (OR) [‡]	Inad (%)	Ad (%)	p* (OR) [‡]
Profession										
Nurse	156 (48.0)				57.1	42.9	RC			
Doctor	169 (52.0)				40.8	59.2	0.004 (1.92)			
Type										
Medical Coll./Private Hosp.	195 (60.0)	52.8	47.2	RC	54.9	45.1	RC	67.2	32.8	RC
Public/Government	130 (40.0)	24.6	75.4	0.001 (3.42)	39.2	60.8	0.006 (1.88)	16.9	83.1	0.001 (10.04)
Tenure status										
Temporary and contract	222 (68.3)	50	50	RC	53.6	46.1	RC	62.2	37.8	RC
Permanent	103 (31.7)	23.3	76.7	0.001 (3.29)	37.9	62.1	0.009 (1.89)	14.6	85.4	0.001 (9.63)
Professional exp. in yrs										
≤5yrs	187 (57.5)	52.4	47.6	RC	52.4	47.6	RC	59.4	40.6	RC
>5yrs	138 (42.5)	26.8	73.2	0.001 (3.00)	26.8	73.2	0.002 (2.05)	30.4	69.6	0.001 (3.33)
Current working area										
Non COVID area	262 (80.6)							50	50	RC
COVID ward and ICU	63 (19.4)							34.9	65.1	0.033 (1.86)
Hospital treating COVID case (RC: No)	294 (90.5)	39.5	60.5	0.022 (2.43)						

Abbreviations: Ad- Adequate, Inad- inadequate, RC- reference category

p* and Odds ratio(OR)[‡] from simple binary logistic regression, RC- reference category

p value considered significant at < 0.05 at the 5% level of significance

Binary logistic regression performed in only those variables which showed significant association (p<0.05) during Chi square test

DISCUSSION

Health care professionals have always worked in the frontline during the battle against COVID-19. They have remained in the focus of hope for many patients and their family afflicted by this highly infectious disease. Despite the risk of contracting the disease to themselves and their family members, the HCPs

have shown their devotion and dedication during the entire course of pandemic. The support provided by the family, society and the work place would directly impact the outcome during the fight against COVID-19. So, this cross-sectional study conducted in selected districts of Bagmati province of Nepal intended to assess the support provided by the family, society and their working organization to the frontline health

Table 6: Results of multiple logistic regression model

Characteristics	p [§]	AOR [®]	95% CI
Family Support			
Age ≥ 29 years	0.75	0.886	0.420-1.868
Male gender	0.183	0.1499	0.826-2.720
Married	0.944	0.977	0.503-1.896
Staying at own home/quarter	0.57	1.182	0.664-2.106
Academic degree graduate and above	0.555	1.26	0.585-2.711
Professional experience >5yrs	0.031	2.155	1.071-4.337
Working at public/government organizations	0.001	2.682	1.470-4.896
Permanent tenure	0.97	1.015	0.471-2.186
Working at Hospital treating COVID Case	0.022	2.654	1.150-6.126
Living with family at the time of COVID	0.852	0.94	0.489-1.807
Social Support			
Age ≥ 29 years	0.652	1.187	0.563-2.503
Male gender	0.173	1.781	0.777-4.082
Academic degree graduate and above	0.048	2.117	1.008-4.446
Doctor by profession	0.439	0.691	0.271-1.760
Professional experience >5yrs	0.706	1.144	0.570-2.295
Working at public/government organizations	0.148	1.533	0.860-2.736
Permanent tenure	0.483	0.77	0.371-1.598
Tested COVID positive	0.001	2.171	1.356-3.477
Organizational Support			
Age ≥ 29 years	0.936	1.033	0.463-2.303
Married	0.101	1.798	0.892-3.625
Staying at own home/quarter	0.744	1.113	0.585-2.118
Institutions inside valley	0.271	1.402	0.768-2.560
Academic degree graduate and above	0.46	1.38	0.588-3.238
Professional experience >5yrs	0.802	0.906	0.421-1.952
Working at public/government organizations	0.001	5.577	2.934-10.601
Permanent tenure	0.041	2.386	1.038-5.483
Working in COVID ICU/ Isolation Ward	0.286	1.501	0.712-3.167
Living with family at COVID time	0.5	1.286	0.618-2.677
Tested COVID Positive	0.13	1.532	0.882-2.658

p[§] and Odds ratio (OR)[®] from Multiple logistic regression

AOR –adjusted odds ratio, p significant at <0.05 at the 5% level of significance

care workers during the COVID-19 pandemic. During the study period, at least one family member or close relative of most of the HCWs had been tested positive for COVID-19 that would directly impact their work performance, which would also reinforce the importance of the objective of the study.

In this study, we have tried to evaluate the family and social support separately. More than half of the respondents in the current study perceived adequate family support. A study done among nurses showed that the level of the social support perceived by the nurses during COVID 19 pandemic was good.¹² Though, the overall score of the family support has been found to be good in our study, still forty percent of the health professionals perceived inadequate family support. The reason for this finding could be due to the higher proportions of respondents being females. Female HCPs had dual responsibility at this time. In one hand, they had to work as the frontline professionals during the battle against COVID-19

and on another hand, they had to fulfil the equal, if not more, responsibilities at home with lots of household activities.¹³ Moreover, about half of the respondents were nurses, all of whom were females. Most of the family members of the nurses in Nepal have the feeling that they are underpaid in comparison to their workload. So, the female nurses might have felt extra pressure from their family members either to quit their job or to stay on leave during the COVID-19 pandemic. However, it is suggested that the support from families is crucial than from other sources for better professional performances.¹² Negative feedback to the frontline workers from the families and friends could subject them vulnerable to the development of depression, anxiety and insomnia. Therefore, the family members could provide support to the HCPs by creating and enhancing environment for adequate rest and sleep, supporting and listening to their problems and showing respects to their profession.

A remarkable number of HCPs, in this study, perceived inadequate social support that is comparable to the study conducted in Korea during the outbreak of the middle east respiratory syndrome corona virus (MERS-CoV) where they scored low in support from family and friends.¹⁴ There were reports that HCPs were targeted by the house owner, neighbors and public during the outbreak of COVID-19.¹⁵ There were several stories from around the world where health care workers faced discrimination, harassment and physical violence.¹⁶ Social support is directly associated with psychological resilience and the nurses' burnout increased with poor support from family and friends.^{12, 14} Those with high level of perceived social support had lower risk for irritability, poor sleep quality, loneliness and depression.¹⁷ Social support has been documented as a protective and helpful factor for better mental health and wellbeing among health professionals.¹⁸

The health professionals working in the selected area perceived very low score in organization support with near about half felt inadequate support from their organizations. Health professionals expect support on child care services, flexibility in duty hours, adequate resources for preventing and transmitting infections, financial support and communications. Study from USA showed that the nurses during COVID pandemic felt unequal benefits (distribution of resources like child care, food for night and day shifts, COVID testing, scrub dress), decreasing resources and insufficient distribution of PPE (USA).¹⁹ In contrast to these findings, the study from one of the tertiary centers from Nepal showed that health care workers were aware of COVID-19 and were satisfied to their work.²⁰ The difference on the findings may be because of the different set up of the institution, which is one of the leading public medical colleges that has a very good infection control measures and till that time no health care workers were reported to be infected with COVID-19 in Nepal. Moreover, being a public hospital there were no economic burden placed to the staffs.²⁰ Whereas, the study done among nurses in Philippines demonstrated moderate level of perceived social and organizational support.²¹ Several studies have clearly demonstrated that increased organizational and social support were directly associated with increased personal life satisfaction, resilience and decreased psychological problems such as job stress and anxiety related to COVID-19.^{21, 22}

HCPs with advanced age, those who are married, had higher academic degree and professional experience, working in permanent tenure and having job at public or government hospitals perceived adequate support from family and organizations, which are similar to few other studies.^{12, 18, 19} HCPs with advanced age and higher professional experiences might already have developed the ability to cope with the minor stresses and psychological fragility. These group of HCPs have developed their ability to speak out for betterment and developed skills to cope with the psychological resilience. Male gender had perceived adequate family and social support in comparison to their female counterparts. It has been described that the female HCPs and those with academic degree up to bachelor were vulnerable to perceived anxiety, sadness, shock, anger and enthusiasm during COVID- 19 pandemic.²³

The predictors of the adequate family support were having increased professional experience, working at government/ public organizations and hospitals treating COVID case. The reasons behind these findings could be because of regular provision of monthly salary on regular basis and delivering leave facilities as per the rule of the government. Furthermore, in comparison to the private institutions, HCPs working at government hospitals were supplied with adequate personal protective equipment (PPE) that would develop better sense of protection against COVID-19 transmission not only to the HCPs but also their family members. Interestingly, those HCPs who were tested positive perceived adequate social support from friends and family circle. The credit goes to the government and the members of the society to positively motivating the HCPs for their kind efforts of fighting against COVID pandemic.

Similarly, the final predictors for the organizational support were the health professionals working at public and government organizations and those in permanent tenure, which is most probably due to the provision of extra benefits like annual grade system and provident fund for the HCPs working in the permanent tenure. It has been speculated that the economic conditions of the HCPs, especially the nurses, played an important role to deal with the situation during the pandemic.¹² Because of their caring nature and special obligation towards the profession, HCPs would always be ready to work during the crisis when the organization ensures adequate support for their livelihood such as monetary incentives, provision of child care and adequate supply of PPE.²⁴ Other important factors that would play important role to motivate the employees from the organizational level would be the provision of guaranteed and timely medical treatment if they fall sick, adequate and timely provision of monthly salary and other benefits, delivery of paid sick leave, flexible working environment, open communications, provision of training, social interactions and priority to their health and safety.²⁵

Despite important and fruitful findings, there are few limitations of this study. First, it was a cross-sectional survey that could cover the HCPs working in only four districts of the country, limiting the generalization of findings to less affected regions. Secondly, as the study was conducted at the time when larger group of population had already been affected by COVID-19, it might not have eliminated the outcome and response bias. Moreover, being the online survey, few of the participants were not able to open the questionnaire due to technical error that might have resulted to sampling bias.

CONCLUSION

Fighting a battle against COVID-19 requires a multi-dimensional approach where the role of frontline HCPs would play the pivotal role. For their motivation to work, adequate support not only from family but also from the society and organizational level would be quite important. Apart from some non-modifiable factors such as age and gender, other factors like adequate and timely provision of monthly salary, adequate supply of PPE, guaranteed medical treatment if they fall sick have been found to play important role to keep the HCPs motivated to their

work. So, it's time for the professional bodies and government to equally distribute the resources to the private sector too during such pandemic situation. The findings might be helpful to the stakeholders and planners, professional organizations, and private health sectors to maintain the minimum standards to support the HCPs to fight against current pandemic.

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