# **Original Research Article**

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# Professional quality of life of health care providers in Bishnupur district, Manipur: a cross sectional study

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#### **ABSTRACT**

**Background:** ProQOL is the quality of life related to professional attributes. It has a direct impact not only on mental wellness of the healthcare worker but can affect day to day decision making required in his services. Objectives of current study was to determine ProQOL of health care providers and to assess the association between ProQOL and demographic variables of interest.

**Methods:** A cross sectional study was conducted among 153 health care providers of Bishnupur district, Manipur selected by random sampling during August-September, 2021 using ProQOL-5 questionnaire. Univariate analysis was done, followed by Chi-square test and Pearson Correlation for assessing association.

**Results:** Mean age was  $37.54\pm9.1$  years and 64.1% were females. 46.4% were from District Hospital, 27.5% from CHC and 26.1% from PHC. 32.7% were nurses followed by physicians (25.5%). Mean values for compassion satisfaction (CS), secondary traumatic stress (STS), burnout (BO) was  $36.84\pm5.2$ ,  $23.2\pm4.5$  and  $23.3\pm5.6$  respectively. Majority had moderate CS (79.1%), BO (54.9%) and STS (52.3%). BO and STS were positively correlated (r=0.552, p=0.000). 63.6% working both day and night shifts had more BO (p=0.05). Those working for  $\geq 8$  hrs more often felt trapped as their job as a helper (p=0.031).

**Conclusions:** Majority had moderate CS, STS and BO level. Stress management and coping skills training can be considered as a measure to decrease significant BO, STS and increase CS.

Keywords: Healthcare worker, Profession quality of life, Burnout

#### INTRODUCTION

Professional quality of life (PROQoL) is the quality one feels in relation to their work as a helper. Both the positive and negative aspects of doing work influence professional quality of life. People who work helping others may respond to individual, community, national, and even international crises. They may be health care professionals, social service workers, teachers, attorneys, police officers, firefighters, clergy, transportation staff, disaster responders, and others. Compassion satisfaction (CS) and Compassion fatigue (CF) are two aspects of

professional quality of life. Compassion fatigue breaks into two parts. The first part concerns things such as exhaustion, frustration, anger and depression typical of burnout (BO). Burnout is associated with feelings of hopelessness and difficulties in dealing with work. Second part that is, secondary traumatic stress (STS) is a negative feeling driven by fear and work-related trauma. <sup>1</sup> They can affect an individual, their family, the care they provide, and their organizations.

In its first physician lifestyle report in 2013, Medscape found that 40% of respondents reported burnout. In its 2017 survey, the rate rose to 51%. The highest

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percentages of burnout in the 2017 survey occurred among emergency medicine physicians (59%), OB/GYNs (56%) and family physicians, internists and infectious disease physicians (55%).2 More importantly there has been an increasing trend in the emotional exhaustion of clinicians over the years.3 Two different studies showed 7.3% and 40% of the respondents who scored high on CF compared with 1.2% and 23%, respectively, who had severe BO.4 There are four significant factors that place health professionals at higher risk for compassion fatigue: lack of coping and self-care, having unresolved trauma, failure to control job stress, and decrease in work satisfaction. Satisfaction level of health care workers would affect their ability to cope with challenges in the health-care delivery system and to guarantee the quality of care rendered and client satisfaction on the care received. Very few studies have been done in Manipur related to this topic. To cope with the challenges in the health-care delivery system and to guarantee the quality of care rendered and client satisfaction on the care received, it is important to know how satisfied health-care workers are with their quality of life, job and what characteristics influence their quality of life. Thus, it is necessary to know the level of burden a health care provider is carrying & find out the way to improve their life style as well as patient care.

### **Objectives**

Objectives of current study were to determine the ProQOL of health care provider and to assess the association between professional quality of life and demographic variables of interest.

#### **METHODS**

A cross sectional study was conducted on 153 participants across eight health care centres of Bishnupur district of Manipur. Health care workers were recruited from these sites. This study was conducted during August-September 2021. Informed written consent was sought after the participants were explained about the study in a language they can understand. Permission was also sought from the medical superintendent, District hospital and medical officer in charge of the respective health centres.

#### Sample size

Population prevalence formula (4pq/l²) was used for sample size calculation. Taking compassion satisfaction of 9.2% (p), absolute allowable error (l) as 5% and 10% non-response rate the sample size obtained was 147 at 95% Confidence Interval and 80% power.<sup>5</sup>

#### Study setting

Manipur has sixteen districts. This study was conducted across Bishnupur district in one District hospital, two community health centres (CHCs) (Moirang and Nambol)

and five primary health centres (PHCs) (Ningthoukhong, Oinam, Leimapokpam, Kumbi, Thanga). Total number of health care providers in each setting was 122, 63, 54, 59, 24, 27, 22 and 18 respectively.

#### Study population

Study was conducted among health care providers of district hospital, CHCs and PHCs of Bishnupur District. All doctors (allopathy/AYUSH), nurses, others (pharmacist, lab technicians, counsellors, assistants, ANM) and those who were present during the time of data collection were included.

# Sampling process

Line listing for all health care workers from healthcare centres mentioned was obtained beforehand. Probability proportionate to size method was applied to obtain sample size requirement in each centre. Simple random Sampling using random number generator app online was used done to recruit participants from each centre. Sample required in each centre were: District hospital (46), Moirang CHC (24), Nambol CHC (21), Ningthoukhong PHC (22), Oinam PHC (9), Leimapokpam PHC (10), Kumbi PHC (8) and Thanga PHC (7).

## Study tool

A pre-designed structured questionnaire was used to collect the data. The questionnaire was divided into two parts. Socio-demographic characteristics were assessed in the first section. Professional quality of life of health care providers was assessed in the second section developed by Dr. Beth Hundall, 2009-2012. PRoQOL has two domains that is CS and CF. Compassion fatigue further has two sub-domains that is BO and STS. Total three domains have 10 items each, with total of 30 items. This questionnaire is based on five-point Likert scale marked as "never"; "rarely"; "sometimes"; "often" and "very often". These results were marked from 1 mark to 5 marks respectively. There are 5 items reverse scored in the domain of burn-out (1, 4, 15, 17 and 29). In each domain, those scoring <22 had a low level, those with score of 23-41 had moderate and ≥42 had high level of respective domain.

#### Data collection and analysis

Informed written consent was taken from the participants and they were allowed to leave the interview midway if they felt uncomfortable. Data was collected using self-administered questionnaire method. The completed questionnaire was collected on that day itself. Data analysis was done in SPSS 26 for Windows (IBM Corp. Chicago, US). Univariate analysis was done including descriptive statistics of mean, standard deviation, frequency and percentage. Chi-square test was used to test the significance between proportions. Pearson's r correlation was used to assess the correlation between

ProQOL domains, p value of  $\leq$ 0.05 was considered as statistically significant.

#### RESULTS

Total number of participants was 153. Mean age was 37.54±9.08 years with minimum age being 22 years and maximum age being 58 years.

Table 1: Distribution of participants according to socio-demographic variables (n=153).

Socio demographic variables	N	%
Age (years)		
≤30	43	28.1
31-40	65	42.5
41-50	26	17.0
>60	19	12.4
Gender		
Male	55	35.9
Female	98	64.1
Type of health setup		
District Hospital	47	30.7
CHC	47	30.7
PHC	59	38.6
Designation		
Physician	40	26.1
Nurse	50	32.7
Pharmacist	15	9.8
Technicians	26	17.0
Counsellors	5	3.3
Assistants	8	5.2
Others*	9	5.9
Highest educational qualificati	on	
Higher secondary	38	24.8
Graduate	92	60.2
Post graduate	23	15.0
Working hours		
≤7	117	76.5
8-12	33	21.6
>12	3	2.0
Working shifts		
Day	66	43.1
Both day and night	87	56.9
Years of experience		
≤3	39	25.5
4-7	38	24.8
≥8	76	49.7
Marital status		
Unmarried	34	22.2
Married	119	77.8

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Majority of the participants (64.1%) were females. 46.4% of health care providers were from district hospital, 27.5% from CHCs and 26.1% from PHCs. Majority i.e., 32.7% were physicians followed by nurses (25.5%). Majority i.e., 56.9% had both day and night shift. Median

of years of experience was 7 years with minimum being 1 year and maximum being 36 years. Majority of them had working hours of less than seven hours. Details of socio-demographic variables are discussed in (Table 1). The mean scores for CS, STS and BO was 36.7±5.2 (minimum 17-maximum 49), 23.2±4.5 (minimum 11-maximum 43) and 23.3±5.6 (minimum 12-maximum 35) respectively. Distribution of participants according to levels of risk each domain has been illustrated in (Table 2). Majority of physicians and nurses had moderate CS, STS and BO but others had moderate CS, BO but low STS.

Table 2: Distribution of participants according to ProQOL domain levels (n=153)

Domains	Low (≤22) N (%)	Moderate (23-41) N (%)	High (≥42) N (%)
CS	1 (0.7)	121 (79.1)	31 (20.3)
STS	72 (47.1)	80 (52.3)	1 (0.7)
ВО	69 (45.1)	84 (54.9)	0

Those working both day and night shift had significantly more burn out level compared to those working only day shift and it was statistically significant (p=0.045) as shown in (Table 3).

Table 3: Association between variables of interest and burnout level (n=153).

	BO level					
Variables of interest	Low (n=69) Frequency (%)	Moderate (n=84) Frequency (%)	P value			
Working shift						
Day	45 (65.2)	43 (51.2)	0.045			
Day and night	24 (34.8)	41 (48.8)	0.045			
Type of health setup						
District hospital	22 (31.8)	25 (29.7)	0.520			
CHC	17 (24.6)	30 (35.8)				
PHC	30 (43.6)	29 (34.5)	_			
Gender						
Male	26 (37.6)	29 (34.5)	0.605			
Female	43 (62.4)	55 (65.4)	0.685			
Designation						
Physician	16 (23.3)	23 (27.3)				
Nurses	22 (31.8)	28 (33.5)	0.751			
Others	31 (44.9)	33 (39.2)	-			
Age (years)						
<u>≤</u> 30	22 (31.6)	21 (25.0)	0.595			
31-40	30 (43.7)	35 (41.6)				
41-50	9 (13.2)	17 (20.3)				
>60	8 (11.5)	11 (13.1)				
Marital status						
Unmarried	19 (27.5)	15 (17.8)	0.152			
Married	50 (72.5)	69 (82.2)				

It was observed that females had higher BO and STS while less CS compared to males but it was not statistically significant (p=0.685). In this study age, gender, type of health set-up, designation, highest educational qualification, years of experience, working hours and marital status showed no significant association with the domains CS, STS and BO (p>0.05).

There was significant positive correlation between burnout and secondary traumatic stress (r=0.552, p value=0.000). Correlation was not significant between other domains. Also, there was no significant correlation between age, years of experience and work hours with CS, STS, BO domains.

#### **DISCUSSION**

Assessing the professional quality of life including two important dimensions of compassion satisfaction and compassion fatigue is important for health care providers. CF can have a negative impact on employees' health as well as patient care. The "cost of caring" or compassion fatigue seems to be an important area to be highlighted through more studies as the psychological and physical health of professionals can have potential consequences on the quality of care provided to the patients.

In this study, 79.1% had moderate CS, 54.9% had moderate BO, 52.3% had moderate STS. Mean scores of CS, STS and BO were comparable to study conducted by Bhutani, et al.<sup>6</sup> However in the study conducted by Amanpreet et al in Bengaluru, results indicated an average level of CS and BO while very high STS.<sup>5</sup> This may be because of the difference in study setting as Amanpreet et al conducted their study in palliative care hospitals eventually leading to more STS compared to our study. The moderate level of compassion satisfaction in both the studies indicates more than half of the total study population was able to derive optimum pleasure from their work.

Also, in our study BO level was more in those having both day and night shifts (p<0.05) as compared to those having only day shift which is consistent with a study conducted by Keshaverz et al in Iran.<sup>7</sup> Significant difference of burnout was noticed between doctors, nurses and others in studies done by Hooper et al in South Carolina and Khan et al in Rawalpindi, Pakistan.<sup>8,9</sup> This study was done during the declining phase of 2<sup>nd</sup> wave of COVID-19 pandemic. All heath-workers have been overburdened and affected equally. This might be the reason for not significant results observed in this study.

In our study gender had no significant association with the domains of ProQOL. In a study conducted by Narukriti et al. in Telangana females had more CS and lesser STS, BO as compared to males. Similarly, in our study age, years of experience had no significant association the domains which is inconsistent with the findings of the study by Keshvarz et al.<sup>7</sup> In study done by

Bhutani et al years of experience was significantly associated with greater years of practice (t=0.266, p=0.046). The inconsistency with the previous studies might be due to a variety of reasons including working conditions, workload, coping abilities, type of patient illness, also differences in study duration etc. Positive correlation between BO and STS were found in our study (r=0.552; p=0.000) which is consistent with study conducted by Smar et al but no negative correlation was found in our study between the domains of CS and STS or BO.

#### Strength and limitations

Strength of current study was, it is the first study of its kind in Manipur to evaluate professional quality of life of health care providers. This study can be easily reproduced in different study settings for evaluation of PRoQol among health care workers. The limitations of current study are that our did not cover the private practitioners. Whether health care providers were contractual or temporary workers were not taken into account.

#### **CONCLUSION**

Majority of the participants had moderate compassion satisfaction, burnout and secondary traumatic stress levels. Those having working shifts both day and night have more burn out compared to those working only in day shift. Further studies can be done including all the health care providers (both private and government) in Bishnupur district. Exploratory studies can be conducted among health care providers to know the reason of increasing compassion fatigue and decreasing compassion satisfaction. Interventions targeting improvement in their compassion satisfaction can be planned.

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Institutional Ethics Committee

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