

# The Factors Influencing Satisfaction among Employees in Maternity Hospitals

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**Objective:** To evaluate the level of job satisfaction among the employees of maternity hospitals and to describe variables related to their job satisfaction. **Methods:** A cross-sectional study was undertaken that focused on 480 full time staff of three maternity hospitals located in the capital city of Mongolia, Ulaanbaatar. Data was collected between July 2019 and September 2019. We selected 3 hospitals as our sample target in order to assess an organizational management capability index using 9 chapters with 90 criteria that used over 30 local public organizations. The Minnesota Satisfaction Questionnaire was used as a data gathering tool to assess employee's satisfaction which measures on a five-point Likert scale. **Results:** Overall, 48.0 % of participants had low levels of satisfaction with their jobs. Factors that were statistically significant to employees' job satisfaction in the univariate analysis were entered into the logistic regression analysis including employees' professional title, department work hours, work requirements, and life and work stress. The results of the logistic regression analysis suggested that employees' job satisfaction was related to their age, working hours, leadership attention, wage and promotion as well as cooperation with colleagues. **Conclusion:** There is an urgent need for maternal hospitals in Mongolia to establish a more reasonable promotion and management system for employees and pay more attention to less-experienced staff and help them release their work stress.

**Keywords:** Job Satisfaction, Maternity Hospital, Health Care, Psychiatry

## Introduction

Health care organizations are undergoing fundamental changes in recent years in Mongolia. According to the health care organizations' strategic perspective, they should improve quality

and build up the confidence of patients, professionals and cost payers in the quality of the context, the structures, the processes, and the outcomes. Health care managers must find new ways to provide services to meet these requirements. Quality management creates an appropriate response to this challenge.

It is an appropriate approach to improve service quality in terms of outcome quality, i.e., patient and employee's satisfaction, and overall performance results [1]. Chen et al. summarized how person-organization fit correlated with job satisfaction in China. In this study, higher job satisfaction and person-organization fit were associated with higher ratings on hospital performance ( $p < 0.01$ ). Moreover, the effects of person-organization fit and job satisfaction on hospital performance were stronger in the respondents with higher income. The authors summarized that high job satisfaction is associated with high ratings on hospital performance [2]. Another study performed by Chmielewska et al. also showed similar results, where the "quality and style of supervision" had a high effect on organizational performance of hospitals [3]. Lowe demonstrated also that employee engagement is a prerequisite for high performance. The survey consisted of 10,000 employees who worked in 16 Ontario hospitals showed that high level of employee engagement is related to retention, patient-centered care, patient safety culture, and employees' positive assessments of the quality of care or services provided by their team [4].

Although work stress, work-family conflict and doctor-patient relationship has been found to be associated with job satisfaction, there is little literature exploring the relationship of job satisfaction with these factors when taken together. Furthermore, there is little research that investigated the job satisfaction of maternal hospital workers. Marques-Duarte et al. demonstrated that the Sociodemographic, Job Satisfaction S20/23 and WHOQOL-Brief questionnaire performed among workers in a public maternity hospital of Brazil resulted in 75.4% job dissatisfaction, and the job satisfaction (JS) was associated with quality of life (QOL) ( $p < 0.001$ ) and the number of jobs [2-5]. Another study conducted with maternity care providers in the Netherlands revealed that there was not a significant difference in job satisfaction between community midwives or clinical care providers working in or with a birth center and those working in a different setting. However, there was a significantly higher score of satisfaction for maternity care assistants and this score was higher than other groups [6-8]. The cross-sectional study conducted in midwives who work in a Swiss maternity hospital showed that due to their high score for work-private life conflicts, midwives had higher thoughts about leaving their organization. In this study, the work-private life conflict score of midwives was significantly higher than among other health

professionals, with the exception of physicians [9-13].

During last several years, Mongolian maternal and child healthcare organizations have been purposefully working to improve maternal and child healthcare delivery and decrease the maternal and child mortality rate. It is insufficient to just say the right words to allocate resources for implementing the system. It is necessity to assess leadership management performance (and/or operation) of maternity hospitals. As described above, job satisfaction of the employees who work in maternity hospitals as well as birth centers differs according to type of social community and subculture. The purpose of this study is to evaluate the level of job satisfaction among employees of maternity hospitals in Mongolia and to describe variables related to their job satisfaction.

## Materials and Methods

### Study population

This study was conducted at the Amgalan Maternity Hospital, Urguu Maternity Hospital and Khuree Maternity Hospital between July 2019 and September 2019 by using a cross-sectional study method. The study recruited a total of 480 employees from the above mentioned hospitals. We used 9 chapters, with 90 criteria that were used in over 30 Mongolian public organizations for assessing capability to determine an organizational management capability index for maternity hospitals.

### Measurements

We used a questionnaire with 90 questions, including organizational management capability in 9 chapters which are organizational goal and task, leadership skill in organization, worthwhile structure and arrangement, organization's motivation and leverage, organization's relationship and collaboration, organizational behavior and culture, resource utilization, knowledge and innovation, organizational productivity, and quality and performance. Each question was scored 1 to 5 and an organizational capability index was estimated by assessing each question's 1 to 5 score. We used a medical employee's satisfaction questionnaire developed by a Minnesota University team.

### Statistical analysis

Frequencies, percentages, and chi-square test were used to

examine the difference among groups. Multiple logistic regression was performed to identify workplace stress predictors. A p-value of < 0.05 was used as the cut-off point for determining the statistical significance. The data were collected using quantitative methods and were analyzed using Statistical Packages for Social Sciences (SPSS) version 20 statistical software.

**Ethical statement**

The study was approved by the Research Ethics Committee of Mongolian National University of Medical Sciences (No. 2019/3-08).

**Results**

The study recruited 220 employees from the Urguu Maternity Hospital, 125 employees from the Khuree Maternity Hospital, and 135 employees from the Amgalan Maternity Hospital during the study periods. Completely, 46 administration officials, 75 doctors, 208 nurses and midwives, 105 caregivers and service assistants and 46 financial officers were involved in this study.

Table 1 shows general information of study participants. As can be seen here, 87.1% of total employees of maternity hospitals were female and 12.9% were male. Occupation type and worked year in the health sector and workplace were

**Table 1.** General information of study participants.

Variables	Maternity Care Hospitals				p-value
	Urguu (n = 221)	Khuree (n = 125)	Amgalan (n = 135)	Total (n = 481)	
	N (%)	N (%)	N (%)	N (%)	
Age range					
18-25	29 (13.1)	24 (19.2)	16 (11.8)	69 (14.4)	0.341
26-35	79 (37.7)	43 (34.4)	61 (45.2)	185 (38.5)	
36-45	55 (24.9)	29 (23.2)	30 (22.2)	113 (23.5)	
46 <	58 (26.2)	29 (23.2)	28 (20.7)	113 (23.5)	
Gender					
Male	30 (13.6)	12 (9.6)	20 (14.8)	62 (12.9)	0.416
Female	191 (86.4)	113 (90.4)	115 (85.2)	418 (87.1)	
Educational level					
Secondary education	59 (26.7)	34 (27.2)	23 (17.0)	115 (24.0)	0.313
Tertiary education	28 (12.7)	8 (6.4)	16 (11.9)	52 (10.8)	
Diploma	35 (15.8)	17 (13.6)	22 (16.3)	74 (15.4)	
Bachelor	85 (38.5)	55 (44.0)	60 (44.4)	200 (41.7)	
Masters and PhD	14 (6.3)	11 (8.8)	14 (10.3)	39 (8.1)	
Years, worked in health sector					
Up to a year	23 (10.4)	27 (21.6)	27 (20.0)	77 (16.0)	0.009
2-5	62 (28.1)	36 (28.8)	49 (36.3)	147 (30.8)	
6-9	49 (22.2)	25 (20.0)	17 (12.6)	91 (19.0)	
More than 10 years	87 (39.4)	37 (29.6)	42 (31.1)	166 (34.2)	
Years, worked in current workplace					
Up to a year	39 (17.6)	37 (29.6)	42 (31.1)	118 (24.6)	0.000
2-5 years	68 (30.8)	36 (28.8)	55 (40.7)	159 (33.3)	
6-9 years	53 (23.9)	23 (18.4)	16 (11.9)	92 (19.2)	
More than 10 years	61 (27.6)	29 (23.2)	22 (16.3)	112 (22.9)	
Employees satisfaction					
Low	122 (55.2)	70 (56.0)	39 (28.8)	231 (48.0)	0.000
High	99 (44.8)	55 (44.0)	96 (71.1)	250 (52.0)	

statistically different among study participants, while age, gender and education levels were similar.

Moreover, there was a significant difference on the job satisfaction in these hospitals. 55.2% of participants from Urguu hospital and 56% of participants from Khuree hospital answered low satisfied with their job, while only 28.8% from Amgalan hospital showed low satisfaction. It was interesting that even with equal salary, the minimum satisfaction was assessed by employees of Urguu and Khuree maternity hospitals

and the maximum satisfaction was assessed by employees of Amgalan maternity hospital. Within the scope of each maternity hospital, satisfaction assessment was 75.4%, 77.9% and 88.8% at Urguu, Khuree and Amgalan maternity hospital respectively. It is clear that Amgalan maternity hospital employee's satisfaction rate was higher than other hospitals. Probably, employee's independence, organizational management method and organization culture influenced the higher score (Figure 1).

Table 2 shows job satisfaction by each hospital. Age,

Table 2. Job satisfaction.

Variables	Low satisfaction (n = 231)	High satisfaction (n = 250)	Total (n = 481)	p-value
	N (%)	N (%)	N (%)	
Age group				
18-25	41 (17.7)	28 (11.2)	69 (14.3)	0.017
26-35	95 (41.1)	88 (35.2)	183 (38.0)	
36-45	52 (22.5)	62 (24.8)	114 (23.7)	
46<	43 (18.6)	72 (28.8)	115 (23.9)	
Gender				
Male	25 (10.8)	37 (14.8)	62 (12.9)	0.244
Female	206 (89.2)	213 (85.2)	419 (87.1)	
Hospitals				
Urguu	122 (52.8)	99 (39.6)	221 (45.9)	0.000
Khuree	70 (30.3)	55 (22.0)	125 (25.9)	
Amgalan	39 (16.9)	96 (38.4)	135 (28.1)	
Education				
Secondary education	48 (20.8)	68 (27.2)	116 (24.1)	0.049
Tertiary education	20 (8.6)	32 (12.8)	52 (10.8)	
Diploma	34 (14.7)	40 (16.0)	74 (15.4)	
Bachelor	112 (48.5)	88 (35.2)	200 (41.5)	
Masters and PhD	17 (7.4)	22 (0.9)	39 (8.1)	
Years, worked in current workplace				
Up to a year	57 (24.7)	61 (24.4)	118 (24.5)	0.161
2-5 years	75 (32.5)	84 (33.6)	159 (33.1)	
6-9 years	54 (23.4)	38 (15.2)	92 (19.1)	
More than 10 years	45 (19.5)	67 (26.8)	112 (23.2)	
Work place environment				
Bad	27 (11.7)	10 (0.4)	37 (7.7)	0.000
Good	169 (73.2)	106 (42.4)	275 (57.2)	
Excellent	35 (15.2)	134 (53.6)	169 (35.1)	
Encouraging words				
Never	29 (12.5)	19 (7.6)	48 (0.9)	0.000
Sometimes	179 (77.5)	68 (27.2)	247 (51.4)	
Always	23 (10.0)	163 (65.2)	186 (38.7)	

**Table 3.** Multiple logistic regression analysis model on factors associated with satisfaction levels.

Variables	OR	CI 95%	p-value
Age range			
18-26	1.00	Reference	
27<	1.19	1.00-3.01	0.057
Busy working hours			
No	1.00	Reference	
Yes	1.39	1.12-3.54	0.013
Possibility to work myself			
Yes	1.00	Reference	
No	2.51	2.12-6.28	0.073
Multi task			
Yes	1.00	Reference	
No	2.31	2.62-11.95	0.075
Team member			
Yes	1.00	Reference	
No	7.36	0.21-8.59	0.540
Leadership attention			
Yes	1.00	Reference	
No	4.24	1.49-23.7	0.058
Decision making			
Yes	1.00	Reference	
No	3.13	1.71-9.75	0.071
Enable to work for others			
Yes	1.00	Reference	
No	11.0	4.61-23.31	0.058
Using new knowledge and skills			
Yes	1.00	Reference	
No	5.51	3.43-14.9	0.031
Organization's policy appropriate			
Yes	1.00	Reference	
No	5.88	4.75-25.07	0.068
Good promotion			
Yes	1.00	Reference	
No	2.17	1.69-3.78	0.021
Enable improving career advancement			
Yes	1.00	Reference	
No	0.57	0.17-1.40	0.345
Administration decision			
Yes	1.00	Reference	
No	0.43	0.14-1.83	0.616
Implementing new idea			
Yes	1.00	Reference	
No	1.78	1.65-4.69	0.056
Working environment			
Good	1.00	Reference	
Bad	1.33	0.80-2.20	0.061
Cooperation with colleagues			
Yes	1.00	Reference	
No	0.24	0.08-1.71	0.046

education, workplace environment, and relationship were significantly associated with job satisfaction, while gender and job experience did not influence job satisfaction. Furthermore, Figure 2 displays employees' satisfaction by education level. There was a relation between education and satisfaction level. In detail, there were more participants with Bachelor degree who answered low satisfied with their job.

In Table 3, we described the regression analysis of the factors that were associated with satisfaction level. Being busy during the working hours was significantly associated with job satisfaction with  $p$  value of 0.013. Moreover, implementation of a new idea, payment for the performance, and relationship between colleagues were significantly associated with job satisfaction. The employees had a higher level of satisfaction than others. It is obviously that employee who have been working for a long time do not have enough motivation to do their job.

## Discussion

In the present study, we have performed a questionnaire with 90 questions, including organizational management capability in 9 chapters among employees of three main maternity hospitals of Ulaanbaatar. Khuree Maternity hospital is the oldest maternity hospital founded in 1959, while Amgalan was founded in 1966, and Urguu was founded in 1978. These three hospitals differ with respect to the demographic composition of their patients as well as bed capacity. Especially, the patient composition of the Amgalan Maternity hospital differs substantially from the other two hospitals with more patients from a low income area called "ger horoolol" area.

The aim of this study was to determine the job satisfaction level of the employees who work in these maternity hospitals and to analyze the hospital's organizational management capability in order to increase healthcare leaders understanding of the effects of the organization's culture on the application and success of total quality management. The results of this study have shown that the job satisfaction was quite different between these hospitals despite the equal salary and job duty. We found in this study that employees of Amgalan Maternity Hospital was more satisfied with their job (71.1%), while the employees from other two hospitals had answered low satisfied (55.2% and 56%, respectively). This result may be due to factors such as working condition and motivation of the employees. As a

matter of fact, in 2015, Amgalan Maternity Hospital was moved to a new building having 412 rooms and a 150-bed capacity and a well equipped surgical and medical facility. We assume that the high job satisfaction of this hospital could be due to the high job performance and the comfortable working conditions. Several studies had also revealed that working environment could strongly influence productivity at work, which in turn results in employees' job satisfaction.

Furthermore, in the present study, the educational level of the participants was significantly associated with job satisfaction ( $p = 0.049$ ). Especially the satisfaction rate of the employees who had Bachelor degree was lower than other education groups. A study conducted by Kalisch et al. showed that education, gender and job title influenced satisfaction with occupation ( $p < 0.05$ ) in nursing staffs from 80 patient care units [10-12]. Sutaji et al. also demonstrated similar results in which there was a significant influence on the level of education, working period, and job satisfaction on the achievement motivation of midwives in Banjarbaru City Hospital of Indonesia [13, 14]. On the other hand, another study of Ucu et al. also demonstrated the relationship between the levels of job satisfaction in midwives and some socio-demographic characteristics of job satisfaction levels. The average general job satisfaction points of the midwives was  $47.08 \pm 15.52$ , however, education, age and house ownership did not affect the general job satisfaction point average of the midwives ( $p > 0.05$ ). Furthermore, organizational management, working experience, working condition did not affect their job satisfaction point averages ( $p > 0.05$ ). In contrast, the job satisfaction levels of midwives who worked in hospitals were significantly higher than midwives who worked at health centers [15]. Tanriverdi et al. demonstrated that emotional burnout of health personnel who work in a maternity hospital has been found to have high effect on satisfaction. Also, the participants had a medium range of job satisfaction, and there was a meaningful relation between the burnout subscales of the work time and working condition, experience, educational level [16, 17]. Another study of job satisfaction in midwifery of New Zealand revealed that professional recognition is positively linked to job satisfaction for midwives, and decision-making autonomy and empowerment were shown to influence job satisfaction for midwives [18-21].

Job satisfaction is an important parameter of not only employee well-being but also organizational success. Numerous

studies of quality management demonstrated that there is strong positive associations between employee job satisfaction and quality management [20-23]. A cross-sectional survey of midwives who work in a tertiary maternity hospital in Australia showed that about half (53%) had a negative attitude about their professional support and client interaction (49%), and 21% felt negatively about professional development. The majority felt positive regarding professional satisfaction (85%). The main factors that impacted midwives' satisfaction was inadequate acknowledgment from the organization and needing more support to fulfil their current role [24, 25]. In the study of Mosadeghrad, it was shown how quality management could affect employees. A well developed, well introduced and institutionalised quality management model can improve employees' job satisfaction [26-28]. It might also be noted that, in our current study, we studied the relationship of job satisfaction and organization's quality management level of three maternity hospitals. Mongolian private and public organization's quality management level was higher than 61.4% compared to that in a Indian hospital [29]. Moreover, according to the previous study of a district healthcare center's performance assessment, the nurse's assessment was 64.4% and the doctor's assessment was 76% [30-32]. In addition, several studies also demonstrated that implementing the International Organization for Standardization (ISO) standard could increase staff job satisfaction. Organizational culture, infrastructure and cultural beliefs makes it hard to incorporate an ISO standard [18-21].

The limitation of our present study is that it was conducted in only three main maternity hospitals in Ulaanbaatar. As mentioned above, these three hospitals are affiliated in Ulaanbaatar City and its organizational management is highly dependent on city administration. Moreover, patient composition is much different from that found in private hospitals. Therefore, further studies should be conducted with bigger sample sizes and hospitals in rural areas.

## Conclusions

There is an urgent need for maternal hospitals in Mongolia to establish a more reasonable promotion and management system for employees and pay more attention to less-experienced staff and help staff release their work stress.

## Conflict of Interest

The authors state no conflict of interest.

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