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Job Satisfaction among Nurses Working at a Tertiary-Level Hospital in Nepal: A Cross-Sectional Study

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Research Article

Keywords: Job satisfaction, Nurses, MMSS-13, Armed Police Force, Nepal

Posted Date: November 2nd, 2026

DOI: https://doi.org/10.21203/rs.3.rs-10548777/v1

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Additional Declarations: No competing interests reported.

Abstract

Background

In security force hospitals such as Nepal APF Hospital, job satisfaction among nurses plays a crucial role in ensuring quality patient care, organizational stability, morale and motivation of troops and workforce retention. Here, nurses perform dual responsibilities within a disciplined security framework, which may uniquely influence their professional satisfaction. However, limited research has explored job satisfaction among nurses working in security-based healthcare institutions in Nepal. This study aimed to determine the overall level of job satisfaction and to examine its association with socio-demographic characteristics and organizational benefits.

Methods

This was a hospital-based descriptive cross-sectional study conducted at Nepal APF Hospital, Balambu, Kathmandu. A total of 86 nurses were approached; 82 completed questionnaires were included in the final analysis. Data were collected using a structured self-administered questionnaire with consent sampling, comprising socio-demographic variables and the 13-item Mueller/McCloskey Satisfaction Scale (MMSS-13). The total possible score ranged from 13 to 65. Data were initially entered into Microsoft Excel and analyzed using Statistical Package for Social Sciences (SPSS) version 25. Normality was assessed using the Kolmogorov–Smirnov test, and appropriate parametric or non-parametric tests were applied.

Results

The overall mean job satisfaction score was 2.96 (SD = 0.51) on a five-point scale, indicating slightly below-average satisfaction. Among 82 nurses, more than half (53.7%) reported low satisfaction, 43.9% reported moderate satisfaction, and only 2.4% reported high satisfaction. No significant associations were found between job satisfaction and socio-demographic variables ($p > .05$). Only Higher education opportunities demonstrated a marginal association with job satisfaction, $F(1, 80) = 3.74$, $p = .057$, explaining 4.5% of variance ($\eta^2 = .045$)

Conclusions

Nurses at Nepal APF Hospital demonstrated low-to-moderate job satisfaction. Findings suggest that structural and organizational factors, particularly professional development opportunities, play a more influential role than individual characteristics. Institutional improvement in career advancement initiatives may enhance morale, retention, and healthcare service delivery.

Introduction

Job satisfaction refers to the positive emotional state resulting from the appraisal of one's job. Job satisfaction is the feeling of fulfillment that employees experience when their expectations for their work are met. Job satisfaction depends on personal evaluations of factors like the nature of work, workload, workplace environment, coworker relationships, salary, and opportunities for professional growth. [1–4] Globally, nurses, comprising nearly 50% of the health workforce, face challenges such as heavy workloads and limited resources that affect satisfaction and patient outcomes. [5–6] In Asia, studies indicate moderate satisfaction levels among healthcare workers, influenced by factors such as salary, career development, and work-life balance. [7] The existing literature highlights that job satisfaction among nurses is linked to productivity, retention, and the quality of care, with dissatisfaction leading to turnover and migration. [8]

Nursing staffs in armed forces faced different working environment and benefits that influences the level of job satisfaction. In India, nursing staff were found to be moderately satisfied in the army, even though the working environment is different from that in a general hospital.[9] In Nepal, research on nurses in general hospitals shows varying satisfaction, with public sector nurses reporting higher levels than private sector nurses.[8, 10] Also, nurses report moderate satisfaction, affected by organizational policies, leadership, and resources, but inconsistencies exist regarding the role of demographic factors and specific settings.[2, 10] Studies in government hospitals reveal higher satisfaction due to better support, while private ones mention inadequate recognition and work-family conflict as issues. [5, 7]

In Nepal, job satisfaction among general APF personnel was moderate. Furthermore, male APF personnel were more satisfied with their jobs than female APF personnel. [3] Medical staff have a different nature of duty than the general staff. Medical staff in APF, Nepal, serve in security and medical roles, which impose unique pressures, and participation in United Nations humanitarian assistance is a major draw. In addition to APF, Nepal provides higher-education opportunities for nurses, as well as various other training programs. However, by 2025, nearly 28% of the medical staff enrolled in APF in Nepal had left their jobs. Furthermore, nurses accounted for 61% of the medical staff turnover at Nepal APF Hospital over the previous three years according to Armed Police Force Nepal, Human Resource Department. Still, studies of job satisfaction in security forces such as Armed Police Force, Nepal remain limited. This also highlights that the nurses in APF Hospital are more vulnerable than other groups. Likewise, no research specifically addresses the level of job satisfaction of nurses in Nepal APF Hospital. This study aimed to assess the overall level of job satisfaction among nurses at Nepal APF Hospital using the validated MMSS-13 tool and to explore its association with selected socio-demographic and organizational factors.

Methods

This descriptive cross-sectional study was conducted at Nepal APF Hospital, Balambu, Kathmandu, over a period of three months. Ethical approval was obtained from the Institutional Review Committee (IRC)

of Nepal APF Hospital before data collection (Reference no.: NAPFH-12-045/2025). Written informed consent was obtained from all participants. The study population comprised nurses currently employed at Nepal APF Hospital. Nurses serving in UN missions and those who declined to participate were excluded from the study.

The sample size is calculated using the Cochran sample size formula, as shown below.

$$N = \frac{z^2 \times p(1-P)^2}{E^2}$$

(Confidence level:95%; Marginal Error: 5%; p is estimated population portion 57.03%)

N = 376

Utilizing the population correction formula:

$$\mathrm{N_{adj}} = \frac{\mathrm{n}}{1 + \frac{(\mathrm{n}-1)}{\mathrm{N}}}$$

($N_{adj=}$Adjusted Sample Size; n= initial sample size;376, N =Total population size;105)

Putting the values into the above formula, the adjusted sample size obtained is:

N_{adj}=82.2

Resulting in an adjusted sample size of 82. After accounting for a 5% non-response rate, the required sample size was 86. Given that the total number of nurses at Nepal APF Hospital is 90, a convenience sampling method was employed.

Data were collected using a structured, self-administered questionnaire comprising two sections. The first section included socio-demographic variables such as age, marital status, rank, years of service, academic qualifications, mission experience, and access to higher education. The second section incorporated the Mueller/McCloskey Nurse Job Satisfaction Scale (MMSS-13), which assesses thirteen key dimensions of nurse job satisfaction. The MMSS has demonstrated good reliability, with a reported Cronbach's alpha of 0.82.[12] Responses were recorded on a five-point Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied). The total job satisfaction score ranged from 13 to 65 and was categorized as follows: 13–25 (very low satisfaction), 26–38 (low satisfaction), 39–51 (moderate satisfaction), and 52–65 (high satisfaction). Questionnaires were distributed to 86 eligible nurses. Of these, 82 completed questionnaires were returned and included in the final analysis (response rate: 95.3%).

The collected data were analyzed using SPSS version 25. Descriptive statistics were used to summarize socio-demographic characteristics and job satisfaction levels. The Kolmogorov–Smirnov test was used

to assess the normality. As the data were normally distributed, Analysis of Variance (ANOVA) was conducted to examine the association between job satisfaction & organizational benefits, and between job satisfaction & Socio-demographic factor. A p-value of less than 0.05 was considered statistically significant.

Results

The socio-demographic characteristics of participants are presented in Table 1.

Table 1
Demographic Characteristics of Respondents N = 82

Characteristic	Category	Number	Percentage
Gender	Male	2	2.4%
	Female	80	97.6%
Rank	SI (Non-Gazetted First Class)	72	87.8%
	INSP (Gazetted Third Class)	5	6.1%
	DSP (Gazetted Second Class)	5	6.1%
Marital status	Married	40	48.8%
	Unmarried	42	51.2%
Academic Qualification	PCL (Proficiency Certificate Level in Nursing)	32	39.0%
	BNS (Bachelor of Nursing Science)	25	30.5%
	BSC (Bachelor of Science in Nursing)	22	26.8%
	MN (Master in Nursing)	3	3.7%
Mission Experience	Yes	20	24.4%
	No	62	75.6%
Higher Education Opportunities (HEO)	Yes	23	28.0%
	No	59	72.0%

Among 82 nurses, more than half (53.7%) showed the “low” category, 43.9% are moderate, and only 2 nurses (2.4%) reported high satisfaction as shown in Table 2. No one is in the “very low” range. This indicates widespread dissatisfaction despite the security-force setting and associated benefits. Overall job satisfaction is found low to moderate.

Table 2
Level of Job Satisfaction

Range	Job Satisfaction Level	Number	Percentage
13–25	Very low satisfaction	0	-
26–38	Low satisfaction	44	53.7%
39–51	Moderate satisfaction	36	43.9%
52–65	High satisfaction	2	2.4%

The overall mean job satisfaction score was 2.96 (SD = 0.51) on a five-point scale, indicating slightly below-average satisfaction among nurses. The 95% confidence interval for the mean ranged from 2.84 to 3.07, suggesting that the true population mean is near the midpoint and does not reflect high satisfaction levels. The median (2.92) and 5% trimmed mean (2.95) were nearly identical to the mean, indicating minimal influence of outliers and an approximately symmetric distribution. The relatively low standard deviation suggests limited variability in responses, implying that dissatisfaction is broadly shared among participants rather than concentrated within specific subgroups. The observed range (2.00–4.08) further confirms that while extreme dissatisfaction was uncommon, very high satisfaction levels were rare.

Job satisfaction scores were normally distributed as shown in Table 3 during Kolmogorov-Smirnova test.

Table 3
Normality test of job satisfaction

	Kolmogorov-Smirnova		
	Statistic	**df**	**Sig.**
JS_MEAN	.075	82	.200*

A one-way ANOVA was conducted to examine the association of Socio-demographic factors and organizational benefits with job satisfaction and the result was found as shown in Table 4.

Table 4
Association of Socio-demographic factors, Organizational Benefit and Job Satisfaction

Variable	P	Remarks
Gender	.656	No Significant Association
Service Year	.442	No Significant Association
Rank	.761	No Significant Association
Marital Status	.585	No Significant Association
Academic Qualification	.880	No Significant Association
Higher Education Opportunity	.057	Marginally Significant [$F(1,80) = 3.74$; $\eta^2 = .045$]
Mission Experience	.693	No Significant Association [$F(1,80) = 0.157$; $\eta^2 = .002$]

The analysis revealed a marginally non-significant difference in mean job satisfaction scores between nurses who received higher education opportunities and those who did not, $F(1, 80) = 3.74$, $p = .057$. No statistically significant difference in job satisfaction was observed as a function of mission experience, $F(1, 80) = 0.157$, $p = .693$, indicating minimal contribution. According to Cohen's guidelines, the effect size $\eta^2 = .045$, which indicates a small-to-approaching-moderate effect, indicating that higher education opportunities accounted for approximately 4.5% of the variance in job satisfaction scores. No statistically significant differences in job satisfaction were observed across gender, rank, marital status, academic qualification, and service years (all $p > .05$), suggesting limited influence of these variables on satisfaction in this setting.

Discussion

The present study examined job satisfaction among nurses working at a tertiary-level security-force hospital in Nepal and found low-to-moderate levels of satisfaction. More than half of the participants reported low satisfaction, whereas only a small proportion reported high satisfaction. These findings are consistent with previous studies conducted in Nepal, which have identified limited professional development opportunities, heavy workloads, and insufficient institutional recognition as important contributors to dissatisfaction among nursing staff. [1, 5, 15] It also align with the result of J. Eric Fredland and Roger D. Little highlighting the lower level of job satisfaction in military environment. [15] Studies conducted across various hospital settings in Nepal have similarly reported moderate to low levels of job satisfaction among nurses. Research conducted at Western Regional Hospital found that limited career advancement opportunities and inadequate recognition significantly contributed to nurses' dissatisfaction.[2] Likewise, studies conducted in tertiary-level hospitals in Nepal have highlighted salary structure, workload intensity, and limited professional growth opportunities as important determinants of job satisfaction.[1] Compared with these studies, the proportion of nurses reporting high satisfaction in the present study was comparatively lower, suggesting that the institutional context of a security-force healthcare system may influence satisfaction differently from civilian hospital environments.

One notable finding of the present study is the near-significant association between higher education opportunities and job satisfaction ($p = 0.057$). Although the association did not reach complete statistical significance, the observed effect size suggests that professional development opportunities still have practical importance in shaping nurses' perceptions of their work environment. The finding suggests that institutional support for academic advancement may contribute to improved professional morale. This finding aligns with a study reporting that access to higher education and career benefits were positively associated with satisfaction among nursing faculty in Nepal. [12, 16] Similar findings have been reported among nursing faculty in Nepal, where access to postgraduate education and professional advancement opportunities was positively associated with job satisfaction. [8]

Another contextual factor that may influence job satisfaction in the present study is the dual professional role of nurses working within a security-force healthcare institution. In addition to providing clinical care, nurses in APF hospital operate within a disciplined institutional framework that may impose additional organizational expectations and hierarchical structures. These institutional characteristics may influence perceptions of professional autonomy, workload distribution, and work–life balance. Previous research examining work-life balance among personnel in the Armed Police Force has highlighted the challenges of maintaining equilibrium between professional responsibilities and personal life within security-based organizations.[3]

Notably, other examined factors, such as gender, rank, marital status, academic qualifications, mission experience, and service years, showed no significant independent effects, which contrasts with the study of the factors influencing job satisfaction. [14, 17] The lack of association with mission experience (UN missions) is somewhat unexpected, given that such opportunities are often viewed as prestigious and financially rewarding in Nepalese security forces. This may reflect limited access (only 24.4% had mission experience) or unmet expectations regarding post-mission support. The non-significant role of rank and service years suggests that hierarchical position and tenure alone do not drive satisfaction in this setting, possibly due to the sample's homogeneity (87.8% SI rank) or overriding structural constraints. Similar findings have been reported in other healthcare settings, where organizational and environmental factors appear to exert greater influence on job satisfaction than individual demographic characteristics. [2, 13] This suggests that improvements in institutional policies and workplace conditions may be more effective in enhancing job satisfaction than focusing solely on individual-level characteristics.

Overall, these findings suggest that while socio-demographic factors may not strongly influence satisfaction, organizational policies related to recognition, career advancement, and workload management are critical. Addressing these issues could enhance retention, improve morale, and strengthen healthcare delivery within the Armed Police Force, Nepal.

Limitations

This study is among the first to examine job satisfaction within a security-force tertiary hospital in Nepal. The high response rate (95.3%) enhances internal validity and reduces non-response bias. This study has several limitations. First, it was conducted at a single tertiary-level hospital in Nepal, limiting generalizability. Second, the cross-sectional design excludes causal inference. Third, reliance on self-reported data within a hierarchical institutional structure may have introduced response bias. Finally, the exclusion of nurses serving in United Nations missions may have underestimated the influence of certain organizational benefits. Future research could employ longitudinal designs, qualitative or mixed-methods approaches to explore underlying mechanisms, and include additional variables to explain variance in job satisfaction better.

Conclusions

This study highlights low-to-moderate job satisfaction among nurses at Nepal APF Hospital, with higher education opportunities emerging as the key modifiable factor. The lack of association between socio-demographic factors and job satisfaction suggests that structural rather than personal determinants predominate in security-based healthcare institutions. The clustering of scores around the lower midpoint of the scale suggests that structural determinants of job satisfaction within the institutional framework predominate over individual-level variability. This pattern reinforces the need for organizational-level interventions. By investing in professional development, APF Nepal can enhance nurse morale, reduce turnover, and strengthen healthcare delivery within its unique security-oriented framework. These baseline findings provide a foundation for evidence-based reforms to support the nursing workforce in security-force tertiary hospitals.

Abbreviations

APF: Armed Police Force, Nepal

MMSS: Mueller/McCloskey Satisfaction Scale

SPSS: Statistical Package for Social Sciences

IRC: Institutional Review Committee

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Institutional Review Committee (IRC) of Nepal APF Hospital before data collection (Reference no.: NAPFH-12-045/2025). Before the authors also completed the Good Clinical Practice Course. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Written informed consent was obtained from all participants prior to data collection.

Consent for publication

All relevant stakeholders have been consulted and have agreed to the publication of this study.

Availability of data and materials

The datasets generated and/or analyzed during the current study are not publicly available due to institutional restrictions and participant confidentiality but are available from the corresponding author on reasonable request.

Competing Interests

The authors declare that they have no competing interests.

Funding

No funding was received

Authors' contributions

Both authors (BS and GR) conceived the topic. BS (https://orcid.org/0009-0005-3120-4684) recommended the literature; GR (https://orcid.org/0009-0005-2337-2610) searched and added more sources and drafted the paper. BS wrote the main manuscript, and GR collected the data and reviewed the paper for intellectual content and final editing. Both BS and GR read and approved the final version.

Acknowledgements

We would like to thank the administration of Nepal APF Hospital and all the nursing staff for their cooperation during data collection

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