Original Article

JOB SATISFACTION AND ASSOCIATED FACTORS AMONG HEALTH ASSISTANTS IN BANGLADESH

A N M Shamsul Islam[1], Amena Khatun Mita[2], Tanzila Naureen[3], Md. Salman Mahbub Piyal[4]

ABSTRACT

Background: Job satisfaction is the foundation of professional life which determines the purposes, efficacy, and identification with the culture of the organization. To determine the level of job satisfaction and associated factors among Health Assistants in Bangladesh.

Materials and methods: The cross-sectional study was conducted from January to May 2025 using proportionate multi-stage sampling across 15 districts in all 8 divisions of Bangladesh. The study was carried out in 47 Upazilas across 15 districts in all 8 divisions of Bangladesh. A total of 1181 health assistants were selected, considering a 10% non-response rate. Data were collected via face-to-face interviews using a modified pre-tested semi-structured questionnaire adapted from the QPS (Nordic), mostly based on a 5-point Likert scale. Data were analyzed in SPSS 25 using descriptive statistics and inferential tests including Pearson Chi-Square and correlation analysis to explore associations between key variables.

Results: The majority of respondents were aged 30–49 years, had over 10 years of service, and 70.2% had education above HSC. High intrinsic motivation was evident. About 94.2% found their work meaningful, and 87.6% showed strong organizational commitment. Social support was strong, with high peer and supervisory support and low interpersonal conflict. Systemic challenges were severe - 89% reported high job demands, 82.1% faced managerial unpredictability, and 57.9% received inadequate task support. Though direct bullying and abuse were uncommon (experienced by 3% and 2% respectively), their presence helps to create a stressful environment. Correlation analysis revealed that the most powerful negative influence was perceived inequality (r=0.305; r=0.318) whereas a "positive challenge at work" was the strongest positive predictor of motivation (r=0.379 intrinsic; r=0.444 extrinsic). With statistically lower levels of job control (p=0.007) and predictability (p=0.000) than their male counterparts, significant sex differences also appeared in female HAs.

Conclusion: Despite high motivation and support, job satisfaction remains fragile due to systemic issues. Sustainable improvement requires structural reforms in healthcare delivery.

JOPSOM 2025; 44(2): 22-30
DOI: https://doi.org/10.3329/jopsom.v44i2.89219

Key words: Job Satisfaction (JS), Health Assistants (HA), Work Environment (WE), Human Resources for Health.

---

1. *Professor & Head, Department of Public Health and Hospital Administration, National Institute of Preventive and Social Medicine (NIPSOM)*
2. *Assistant Professor, Department of Public Health and Hospital Administration, National Institute of Preventive and Social Medicine (NIPSOM)*
3. *Lecturer, Department of Public Health and Hospital Administration, National Institute of Preventive and Social Medicine (NIPSOM)*
4. *Former Research Associate, Department of Public Health and Hospital Administration, National Institute of Preventive and Social Medicine (NIPSOM)*

Correspondence: *Dr. **A N M Shamsul Islam**, Professor & Head, Department of Public Health and Hospital Administration, National Institute of Preventive and Social Medicine (NIPSOM), Mohakhali, Dhaka-1212. Mobile: 01715408123, Email: masumsislam@yahoo.com*

INTRODUCTION

Job satisfaction is more than satisfaction; it is more or less the foundation of the professional life, that which determines his purpose, efficacy, and identification with the culture of his organization. It is a multifaceted construct impacted by conditions at work, autonomy, opportunity for advancement, recognition, and congruence between individual values and company mission[1–3]. As a foundation stone of workplace well-being, job satisfaction is crucial in maintaining employee retention, productivity, creativity, and stress resistance. Consequently, organizations, especially those working in high-stress occupations like healthcare, have to create particular strategies to enable their employees and relate their jobs to broader organizational goals[4,5].

The implications of job satisfaction are profound. Higher job satisfaction is linked to higher engagement, innovation, and retention, while dissatisfaction leads to costly burnout and turnover[6–10]. Therefore, the focus on employee satisfaction is included in organizational sustainability[11,12]. The level of job satisfaction has direct implications for an individual's work performance and overall mental and physical health. Chronic dissatisfaction can be one of the major sources of stress, which may result in burnout and imbalance, both of which are detrimental to one's ability to function effectively. Organizational policies must prioritize the well-being of the workers so that productivity and health are not affected[13,14]. The fundamental causes of job satisfaction are job security, meaningful work, positive relationships, autonomy, and opportunities for career growth[5,15,16]. Satisfaction flourishes when employees feel valued and that they are making a tangible impact in their environment, especially when their abilities and personal values align with their work roles[17,18].

Healthcare workers worldwide are shaped by a myriad of economic and cultural determinants, leading to wide variations in remuneration, work-life balance, autonomy, care, and professional development among healthcare workers[19,20]. For developing nations, these problems are often added to by institutional inequalities and resource shortages, making culturally tailored measurement instruments for healthcare worker satisfaction essential. Motivation in this case is a complex, context-specific issue driven by factors like safety, recognition, economic stability, and organizational fairness. Ignoring these nuances has the potential to create policies that raise burnout, turnover, and unequal application to already strained systems[21].

Frontline health workers in Bangladesh play a vital role in delivering key services like immunization and maternal care to poor communities. Motivation among them is influenced by the workload, presence of resources, training, interpersonal relationship with the community, and recognition. If left unaddressed, these factors may lead to low morale and turnover, compromising health access and worsening inequalities in high-need, resource-constrained environments[22]. Sustainability of a strong healthcare system, particularly rural, is contingent upon equitable resource distribution, workforce retention, and adaptable infrastructure to mitigate socioeconomic obstacles, geographical isolation, and staff limitations. Localized interventions, combined community engagement, and targeted training are pivotal in enhancing the delivery of services and health system trust.

Since the Alma-Ata Declaration in 1978, Bangladesh prioritized equitable, community-based healthcare to achieve "Health for All." The strategy emphasizes social determinants of health, prevention, and education of grass-root health workers. While there has been progress, there are still gaps in funding and rural-urban inequities, so that continuous development is necessary, in part by embracing digital health programs and partnerships with non-governmental organizations[23]. Health Assistants (HAs), being frontline domiciliary staff of the Upazila Health System (UHS), are central to the provision of primary care in Bangladesh, particularly in rural and slum areas where they address socioeconomic and geographical determinants of care. Supported by community clinics, HAs perform disease surveillance, health education, and prevention services. However, the effectiveness of this decentralized system is undercut by poor resources, training shortages, and high patient loads, creating the need for investment in infrastructure and workforce development in the long term[23].

Though there has been considerable work within Bangladesh on job satisfaction among medical doctors and hospital-based staff, experiences of frontline fieldworkers like HAs have not yet been adequately examined. Such workers are responsible for the delivery of primary care services, including vaccinations, maternal care, and disease prevention, often in resource-constrained areas. Practical problems and research bias toward clinical environments have left a gap in investigations of their job satisfaction.

https://doi.org/10.3329/jopsom.v44i2. 89219

This study aims to bridge this gap in knowledge through examination of the job satisfaction level of HAs within the public health system in Bangladesh and identification of the associated factors. Understanding these dynamics is essential to inform policies that improve retention, optimize delivery of services, and enhance community-based healthcare systems' ability to respond to national health equity targets.

MATERIALS AND METHODS

A descriptive, cross-sectional study was conducted from January 2025 to May 2025 to assess the level of job satisfaction and its associated factors among Health Assistants in Bangladesh. The study was conducted in 47 selected Upazila Health Complexes (UHCs) from 15 selected districts, where participants were chosen through a proportionate multi-stage sampling technique from all eight administrative divisions of Bangladesh. About 1,181 Health Assistants formed the final sample calculated on a total population of 9,632 HAs and for a non-response rate of 10%. The study population comprised only those Health Assistants who had one or more years of working experience, and the unwilling ones were excluded. Data was collected through face-to-face interviews with a pre-tested, semi-structured questionnaire adapted from the Questionnaire for Psychological and Social factors (QPS Nordic)[24]. The instrument included 115 questions in 24 scales, of which a 5-point Likert scale was applied for most. The questionnaire was pre-tested in 10% of the sample size calculated previously at Keraniganj UHC, and necessary changes were made to determine its feasibility. Ethical approval for the research was provided by the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM). Consent was sought from all respondents after the objective of the study had been clarified, and participation was voluntary with strict confidentiality and anonymity. Following data collection, data were edited, coded, and entered for analysis using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics including frequencies, percentages, means, and standard deviations were applied in the analysis, while Pearson Chi-Square (χ^2) test was utilized to assess association between categorical variables. Bivariate correlation was conducted with Pearson's coefficient, and internal consistency of the questionnaire scales was measured with Cronbach's alpha.

RESULT

The details the socio-demographic profile of the 1181 respondents are shown in Table 1. Age of the respondents ranged from 20 years to more than 59 years, with an average of 42.60 (± 7.97) years. More than two-fifth (44.8%) of the respondents were aged between 40 to 49 years. Gender-wise, sample was almost evenly divided with 53.3% of the respondents were male and 46.7% were female. As per their educational qualification, the sample was highly educated as 70.2% had an educational qualification above HSC level.

As per the number of years respondents were working in the current post, a plurality (49.2%) of the respondents had 11 to 15 years of work experience.

Table 1: Socio-Demographic Characteristics of the respondents (n=1181)

	Total	
	Sample (n = 1181)	
Variables	**Number**	**Percentage (%)**
Age range		
20 to 29 years	48	4.1
30 to 39 years	368	31.2
40 to 49 years	529	44.8
50 to 59 years	236	20.0
Mean ± SD	42.60±7.97 years	
Sex		
Male	630	53.3
Female	551	46.7
Educational qualification		
Above HSC	829	70.2
HSC	306	25.9
SSC	46	3.9
Length of service in current position		

https://doi.org/10.3329/jopsom.v44i2. 89219

1 to 5 years	133	11.3
6 to 10 years	101	8.6
11 to 15 years	581	49.2
16 to 20 years	132	11.2
21 to 25 years	128	10.8
26 to 30 years	36	3.0
31 to 35 years	67	5.7
36 to 40 years	2	0.2
41 to 45 years	1	0.1

The modified QPS (Nordic) questionnaire which was created in Scandinavian countries (Sweden, Norway, Finland, and Denmark) was used in this analysis. The reliability of job demands analysis, that is, consistency of the answers between the scales is presented by alpha coefficient. The scale for "learning demands" had the lowest alpha coefficient (alpha 0.24), and "decision demands" also showed poor reliability (alpha 0.38).The second scale with lower reliability was "control of decision" (alpha 0.46).Regarding the average answers in this module, the highest mean value was for "role clarity" ($\bar{x}$ = 4.63), followed by "positive challenge at work" ($\bar{x}$ = 4.51).Differences in middle offered answers between scales in the job demand module are presented in Table 2.

In the organizational module, the scale with the lowest reliability was "fair leadership" (alpha 0.25), while the majority of other scales demonstrated good to excellent internal consistency, such as "empowering leadership" (alpha 0.89) and "inequality" (alpha 0.86). The scales testing "support from coworkers" and "support from superior" had the highest mean values, 4.14 and 4.05, respectively. The differences in middle answers between scales in the area of organizational module are given in Table 2.

Regarding the individual level module, the highest mean value was for the scale which tested "extrinsic motivation to work" (mean value 4.60), and this scale also showed the highest reliability in this module (alpha 0.84). Conversely, the "preference for challenge" scale had the lowest internal consistency in this section (alpha 0.52). Differences in middle answers are presented in Table 2

Table 2: Mean values, standard deviations and consistency for specific scales

Scales	Average of answers ($\bar{x}$ ± SD)	Alpha (Cronbach's)
Job demands module		
Quantitative demands	3.61±0.77	0.75
Decision demands	3.50±0.72	0.38
Learning demands	3.98±0.63	0.24
Role clarity	4.63±0.54	0.52
Role conflict	2.82±0.89	0.50
Positive challenge at work	4.51±0.66	0.70
Control of decision	3.25±1.22	0.45
Control of work pacing	2.37±0.90	0.62
Predictability of the next month	1.88±0.93	0.62
Organizational module		
Support from superior	4.05±0.84	0.75
Support from coworkers	4.14±0.86	0.67
Empowering leadership	3.73±1.13	0.89
Fair leadership	3.41±0.73	0.25
Social climate	3.51±0.75	0.56
Innovative climate	3.64±0.82	0.63
Inequality	1.93±1.14	0.86
Human resource primacy	2.78±1.08	0.77
Perception of group work	3.96±0.77	0.71

https://doi.org/10.3329/jopsom.v44i2. 89219

Interaction between work and private life	2.97±1.15	0.80
Individual level module		
Preference for challenge	3.41±1.13	0.52
Perception of mastery	3.98±0.90	0.70
Commitment to organization	4.06±0.87	0.76
Intrinsic motivation to work	4.44±0.61	0.65
Extrinsic motivation to work	4.60±0.61	0.84

x̄ – mean value; SD – standard deviation.

Table 3 shows coefficients of correlation between motivation aspects (intrinsic and extrinsic) and other scales. In terms of intrinsic motivation, the variables significantly and positively correlated with this dimension were "Positive challenge at work" ($r = 0.379$, $p < 0.01$) which showed the highest correlation, "Commitment to organization" ($r = 0.236$, $p < 0.01$), "Learning demands" ($r = 0.233$, $p < 0.01$) and "Perception of group work" ($r = 0.233$, $p < 0.01$), while "Inequality" ($r = -0.305$, $p < 0.01$), "Control of decision" ($r = -0.220$, $p < 0.01$) and "Fair leadership" ($r = -0.180$, $p < 0.01$) were negatively correlated with it.

In terms of extrinsic motivation, "Positive challenge at work" was also the variable with the highest positive correlation with this dimension ($r = 0.444$, $p < 0.01$) followed by other significant positive relationships with "Perception of group work" ($r = 0.219$, $p < 0.01$), "Innovative climate" ($r = 0.201$, $p < 0.01$) and "Interaction between work and private life" ($r = 0.171$, $p < 0.01$). While the variable with the highest negative correlation with extrinsic motivation was "Inequality" ($r = -0.318$, $p < 0.01$) followed by "Fair leadership" ($r = -0.178$, $p < 0.01$).Several scales, including Role conflict and Support from coworkers, did not have a statistically significant link with either intrinsic or extrinsic motivation

Table 3: Correlation between motivation to work and other examined scales

Scales	Intrinsic motivation to work (r)	Extrinsic motivation to work (r)
Quantitative demands	0.175**	0.150**
Decision demands	0.158**	0.136**
Learning demands	0.233**	0.207**
Role clarity	0.158**	0.144**
Role conflict	-0.017	-0.008
Positive challenge at work	0.379**	0.444**
Control of decision	-0.220**	-0.085**
Control of work pacing	0.016	0.018
Predictability of the next month	-0.088**	-0.065*
Support from superior	0.134**	0.109**
Support from coworkers	0.017	0.016
Empowering leadership	-0.109**	-0.053
Fair leadership	-0.180**	-0.178**
Social climate	0.068*	0.030
Innovative climate	0.212**	0.201**
Inequality	-0.305**	-0.318**
Human resource primacy	0.062*	0.001
Perception of group work	0.233**	0.219**
Interaction between work and private life	0.168**	0.171**
Preference for challenge	0.083**	0.006
Perception of mastery	0.139**	0.093**
Commitment to organization	0.236**	0.192**

*** Correlation is significant at the 0.01 level (2-tailed)*
** Correlation is significant at the 0.05 level (2-tailed)*

https://doi.org/10.3329/jopsom.v44i2. 89219

Table 4 outlines the results of the Pearson correlation analysis, which was performed to assess the relationships between socio-demographic variables (Age, Sex, Education, and Duration of Service) and the other scales examined in the study.

Age was found to be significantly and positively correlated with "Commitment to organization" ($r = 0.092$, $p < 0.01$), "Support from superior" ($r = 0.087$, $p < 0.01$), and "Inequality" ($r = 0.085$, $p < 0.01$). In contrast, age demonstrated a significant negative relationship with "Intrinsic motivation to work" ($r = -0.100$, $p < 0.01$) and "Decision demands" ($r = -0.087$, $p < 0.01$).

Sex showed a strong, significant negative correlation with "Preference for challenge" ($r = -0.210$, $p < 0.01$), indicating a gender-based difference in this preference. Other significant negative correlations were found with "Inequality" ($r = -0.092$, $p < 0.01$) and "Control of work pacing" ($r = -0.083$, $p < 0.01$). A significant positive correlation was noted between sex and "Innovative climate" ($r = 0.084$, $p < 0.01$).

The Education level of respondents correlated positively and significantly with job demands, including "Quantitative demands" ($r = 0.102$, $p < 0.01$) and "Decision demands" ($r = 0.100$, $p < 0.01$). Significant negative correlations were observed with "Perception of mastery" ($r = -0.103$, $p < 0.01$) and "Inequality" ($r = -0.101$, $p < 0.01$).

Duration of service was significantly and positively associated with "Quantitative demands" ($r = 0.096$, $p < 0.01$), "Support from superior" ($r = 0.086$, $p < 0.01$), and "Commitment to organization" ($r = 0.074$, $p < 0.05$). A significant negative, but weak, correlation was found with "Preference for challenge" ($r = -0.072$, $p < 0.05$).

Table 4: Correlation between Socio-Demographic Characteristics and other examined scales

Scales	Age (r)	Sex (r)	Education (r)	Duration of service (r)
Quantitative demands	0.054	0.016	0.102**	0.096**
Decision demands	-0.087**	-0.047	0.100**	-0.048
Learning demands	-0.046	-0.006	0.081**	-0.037
Role clarity	0.059*	0.048	0.062*	0.068*
Role conflict	-0.038	-0.053	0.015	-0.042
Positive challenge at work	-0.057	0.015	0.010	-0.021**
Control of decision	0.003	-0.073*	0.033	-0.038
Control of work pacing	-0.021	-0.083**	-0.001	0.010
Predictability of next month	-0.048	-0.079**	-0.047	-0.060*
Support from superior	0.087**	0.069*	-0.009	0.086**
Support from coworkers	0.055	0.003	-0.031	0.053
Empowering leadership	0.081**	0.046	-0.029	0.034
Fair leadership	0.021	-0.015	0.033	-0.051
Social climate	0.055	0.030	0.024	0.027
Innovative climate	0.072*	0.084**	-0.024	0.064*
Inequality	0.085**	-0.092**	-0.101**	0.042
Human resource primacy	0.055	-0.008	-0.083**	0.043
Perception of group work	0.048	0.043	0.010	0.026
Interaction between work and private life	0.033	0.034	0.007	0.035
Preference for challenge	-0.057	-0.210**	-0.055	-0.072*
Perception of mastery	-0.013	0.012	-0.103**	0.004
Commitment to organization	0.092**	0.064*	0.022	0.074*
Intrinsic motivation to work	-0.100**	0.023	-0.024	-0.052
Extrinsic motivation to work	-0.058*	0.049	-0.017	-0.015

*** Correlation is significant at the 0.01 level (2-tailed)*

** Correlation is significant at the 0.05 level (2-tailed)*

DISCUSSION

This study aimed to determine the level of job satisfaction and its associated factors among Health Assistants (HAs) in Bangladesh. The findings present a significant paradox with a highly experienced and educated workforce that demonstrates strong intrinsic

motivation and organizational commitment, yet simultaneously endures severe systemic and organizational deficiencies. This "fragile satisfaction" appears to be sustained by a supportive microenvironment and the meaningful nature of the work itself, which buffers the impact of broader systemic failures.

A central finding of this study is the high value HAs place on intrinsic rewards. A remarkable 94.2% found their work meaningful, and 85.4% reported a high sense of mastery. This aligns with foundational job satisfaction theories, such as those outlined by Spector[5], which posit that the nature of the work itself is a primary driver of satisfaction. The strong correlation between "positive challenge at work" and both intrinsic (r=0.379) and extrinsic (r=0.444) motivation further reinforces the importance of workplace empowerment, a concept that Cicolini et al.[2] found to be a significant predictor of nurses' job satisfaction in their systematic review. The HAs' high sense of mastery, despite systemic constraints, suggests a high level of professional empowerment that fuels their motivation.

However, this intrinsic satisfaction is starkly contrasted by overwhelming job demands and a lack of resources. The findings show that 89.0% of HAs perceived their job demands as 'High' or 'Highest', and 57.9% were frequently assigned tasks without adequate support. This situation resonates directly with the findings of Roy et al.[18], who, in their study of doctors in the Bangladeshi public-private health system, identified high workload and lack of resources as significant contributors to burnout and turnover intention. While the HAs in our study reported high commitment, this combination of high demands and low control is a well-established precursor to burnout, which can ultimately erode commitment and increase turnover, as demonstrated by Scanlan and Still[12] in their study of Australian mental health personnel.

The supportive immediate work environment appears to play a crucial role in mitigating these systemic pressures. The high levels of support from coworkers (75.7%) and appreciation from superiors (75.2%) are critical buffering resources.

This finding is consistent with research by Goetz et al.[22] in Kenya, which identified a positive working atmosphere and good relationships with colleagues as key determinants of job satisfaction among healthcare staff, even amidst systemic challenges. The importance of positive workplace relationships as a cornerstone of job satisfaction and organizational performance has also been highlighted by Bakotić[17]. The reliance on this social support in our study, however, further highlights the fragility of the HAs' job satisfaction; should this support falter, the negative impact of the systemic issues would likely become more pronounced.

The most powerful negative influence on motivation was perceived inequality (r=-0.305 for intrinsic, r=-0.318 for extrinsic). This is a critical finding, suggesting that feelings of unfairness in the system are highly detrimental to morale. This finding underscores the critical role of organizational justice, a factor strongly linked to turnover intention in empirical studies such as Yücel's[3]. The detrimental impact of perceived unfairness on motivation has been noted in other healthcare contexts as well; Djordjević et al.[19] found that factors related to remuneration and fairness were central to the motivation and satisfaction of health workers in Serbia. This suggests that policy interventions aimed at ensuring fairness and equity may have a more significant impact on satisfaction and retention than other initiatives.

The demographic correlations reveal further nuances. The negative correlation between age and intrinsic motivation (r=-0.100), while age was positively correlated with organizational commitment (r=0.092), suggests a complex dynamic. It may be that older, more experienced HAs become more committed to the organization due to job security, but their intrinsic motivation wanes after years of exposure to systemic frustrations. Furthermore, the significant gender differences observed, particularly the strong negative correlation between being female and "preference for challenge" (r=-0.210), alongside lower levels of job control, point towards potential gender-based inequities. This resonates with the work of Tolbert and Moen[21], who documented how definitions of a "good job" and workplace experiences can differ significantly by gender and age, suggesting that a one-size-fits-all approach to improving job satisfaction may be ineffective.

LIMITATIONS

There are some limits to this research. Its cross-sectional approach means that the correlations found do not imply causality. The results come from self-reported information, which could be influenced by social acceptability bias. The low Cronbach's alpha for a number of measures, including "learning demands" and "fair leadership," indicates that the adapted QPS (Nordic) instrument needs more validation in the Bangladeshi setting.

https://doi.org/10.3329/jopsom.v44i2. 89219

CONCLUSION

The study shows that Health Assistants in Bangladesh have a fragile and paradoxical level of job satisfaction. These Health Assistants have a lot of intrinsic drive and work well with their colleagues. Severe systemic problems including excessive workloads, resource constraints, and negative views of injustice have devastatingly compromised danger. This dependence on team and individual resilience is unsustainable and calls for a deliberate change toward creating a fair and encouraging environment. Therefore, it is strongly advised that government officials give tackling institutionalized inequality top priority by means of clear processes and a formal complaint system, all while also carrying out a formal workload. Examining to match available resources and staff levels with the requirements of a role.

At the management level, better workplace predictability by means of clear scheduling and increased job control via encouraging supervision can help to instantly reduce main stressors. Future longitudinal studies should monitor turnover and burnout in addition to qualitative investigations to investigate the notable gender differences noted, therefore ensuring that therapies are effective for all employees and supported on evidence.

REFERENCES:

1. Eisenblatt S. The straight road to happiness: a personal guide to enable us to overcome tendencies which block our natural flow of happiness and to explore new horizons of inner joy. Feldheim [Internet]. 2002 [cited 2025 May 22];458. Available from: https://books.google.com/books/about/The_Straight_Road_to_Happiness.html?id=StGVjgEACAAJ
2. Cicolini G, Comparcini D, Simonetti V. Workplace empowerment and nurses' job satisfaction: A systematic literature review. J Nurs Manag [Internet]. 2014 Oct 1 [cited 2025 May 22];22(7):855–71. Available from: https://pubmed.ncbi.nlm.nih.gov/25298049/
3. Yücel İ. Examining the relationships among job satisfaction, organizational commitment, and turnover intention: An empirical study. Int J Bus Manag [Internet]. 2012 Oct 16 [cited 2025 May 22];7(20). Available from: https://pdfs.semanticscholar.org/5313/ec4fc3d4c75c872d0a38d6da39d7f45836b9.pdf
4. Judge TA, Zhang S (Carrie), Glerum Dr. Job Satisfaction. Essentials Job Attitudes Other Work Psychol Constr [Internet]. 2020 Dec 21 [cited 2025 May 22];207–41. Available from: https://www.taylorfrancis.com/chapters/edit/10.4324/9780429325755-11/job-satisfaction-timothy-judge-shuxia-carrie-zhang-david-glerum
5. E.Spector P. Job Satisfaction: Application, Assessment, Causes, and Consequences. Job Satisf Appl Assessment, Causes, Consequences [Internet]. 1997 May 30 [cited 2025 May 20]; Available from: https://doi.org/10.4135/9781452231549
6. Piotrowski A, Sygit-Kowalkowska E, Boe O, Rawat S. Resilience, Occupational Stress, Job Satisfaction, and Intention to Leave the Organization among Nurses and Midwives during the COVID-19 Pandemic. Int J Environ Res Public Health [Internet]. 2022 Jun 1 [cited 2025 May 22];19(11):6826. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9180178/
7. Sierra-García E, Sosa-Palanca EM, Saus-Ortega C, Ruiz-Hontangas A, Juárez-Vela R, Gea-Caballero V. Modulating Elements of Nurse Resilience in Population Care during the COVID-19 Pandemic. Int J Environ Res Public Health [Internet]. 2022 Apr 1 [cited 2025 May 22];19(8):4452. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9029380/
8. Rayani S, Rayani M, Najafi-Sharjabad F. Correlation between anxiety and resilience of healthcare workers during COVID-19 pandemic in the southwest of Iran. Environ Sci Pollut Res Int [Internet]. 2021 Mar 1 [cited 2025 May 22];29(15):21528. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC8581131/
9. Newman K, Maylor U, Chansarkar B. The nurse retention, quality of care and patient satisfaction chain. Int J Health Care Qual Assur [Internet]. 2001 [cited 2025 May 22];14(2):57–68. Available from: https://pubmed.ncbi.nlm.nih.gov/11436752/
10. Boev C, Xue Y, Ingersoll GL. Nursing job satisfaction, certification and healthcare-associated infections in critical care. Intensive Crit Care Nurs [Internet]. 2015 Oct 1 [cited 2025 May 22];31(5):276–84. Available from: https://pubmed.ncbi.nlm.nih.gov/26169234/
11. Loan LTM. The influence of organizational commitment on employees' job performance: The mediating role of job satisfaction. Manag

Sci Lett [Internet]. 2020 [cited 2025 May 20];10(14):3307–12. Available from: https://www.researchgate.net/publication/342160900_The_influence_of_organizational_commitment_on_employees'_job_performance_The_mediating_role_of_job_satisfaction

12. Scanlan JN, Still M. Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. BMC Health Serv Res [Internet]. 2019 Jan 23 [cited 2025 May 20];19(1). Available from: https://pubmed.ncbi.nlm.nih.gov/30674314/

13. Faragher EB, Cass M, Cooper CL. The relationship between job satisfaction and health: A meta-analysis. Occup Environ Med [Internet]. 2005 Feb [cited 2025 May 20];62(2):105–12. Available from: https://pubmed.ncbi.nlm.nih.gov/15657192/

14. Wong KP, Lee FCH, Teh PL, Chan AHS. The interplay of socioecological determinants of work–life balance, subjective wellbeing and employee wellbeing. Int J Environ Res Public Health [Internet]. 2021 May 1 [cited 2025 May 20];18(9). Available from: https://pubmed.ncbi.nlm.nih.gov/33923234/

15. Bagheri S, Kousha A, Janati A, Asghari-Jafarabadi M. Factors Influencing the Job Satisfaction of Health System Employees in Tabriz, Iran. Heal Promot Perspect [Internet]. 2012 [cited 2025 May 22];2(2):190. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC3963645/

16. Tzeng HM. The influence of nurses' working motivation and job satisfaction on intention to quit: An empirical investigation in Taiwan. Int J Nurs Stud [Internet]. 2002 [cited 2025 May 22];39(8):867–78. Available from: https://pubmed.ncbi.nlm.nih.gov/12379304/

17. Bakotić D. Relationship between job satisfaction and organisational performance. Econ Res Istraživanja [Internet]. 2016 Jan 1 [cited 2025 May 20];29(1):118–30. Available from: https://www.tandfonline.com/doi/pdf/10.1080/1331677X.2016.1163946

18. Roy A, Van Der Weijden T, De Vries N. Relationships of work characteristics to job satisfaction, turnover intention, and burnout among doctors in the district public-private mixed health system of Bangladesh. BMC Health Serv Res [Internet]. 2017 Jun 20 [cited 2025 May 22];17(1):421. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC5480190/

19. Djordjević D, Petrović D, Vuković D, Mihailović D, Dimić A. Motivacija i zadovoljstvo poslom zdravstvenih radnika u specijalizovanoj zdravstvenoj ustanovi u Srbiji. Vojnosanit Pregl [Internet]. 2015 Aug 1 [cited 2025 May 20];72(8):714–21. Available from: https://www.researchgate.net/publication/281689294_Motivation_and_job_satisfaction_of_health_workers_in_a_specialized_health_institution_in_Serbia

20. Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action [Internet]. 2007 [cited 2025 May 22]. Available from: https://iris.who.int/handle/10665/43918

21. Tolbert PS, Moen P. Men's and women's definitions of "good" jobs: Similarities and differences by age and across time. Work Occup [Internet]. 1998 [cited 2025 May 20];25(2):168–94. Available from: https://www.researchgate.net/publication/249689344_Men's_and_Women's_Definitions_of_Good_Jobs_Similarities_and_Differences_by_Age_and_Across_Time

22. Goetz K, Marx M, Marx I, Brodowski M, Nafula M, Prytherch H, et al. Working Atmosphere and Job Satisfaction of Health Care Staff in Kenya: An Exploratory Study. Biomed Res Int [Internet]. 2015 [cited 2025 May 22]; 2015:256205. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC4609329/

23. Essential Service Delivery 2011.

24. Questionnaire G, Factors S. QPS Nordic Psychological and Social. J Psychol. 2009;50(3), 231–44.