Job Satisfaction and Its Determinants among School **Nurses**

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ABSTRACT

Background: School nurses play a crucial role in promoting health and well-being among students. In Nepal, the school nursing program in public school started since five years and there is a need for a study on their job satisfaction. Therefore, this study aims to investigate the job satisfaction and its determinants among school nurses in Nepal.

Methods: A descriptive cross-sectional study was conducted among 1011 school nurses working in public schools from all provinces in Nepal. The study utilized Paula L. Stamp's modified Index of Work Satisfaction, assessing six domains: pay, autonomy, task requirements, organizational policy, professional status, and interaction. Data were collected through a questionnaire distributed electronically; bivariate and multivariate logistic regression were used to find out determinants.

Results: All school nurses were approached, but only 545 (53.9%) participated. Among them 51.7% expressed overall job satisfaction. Among the six domains, the highest job satisfaction was observed in the professional status (85.3%), interaction (72.8%), and task (61.8%) component while the lowest was in the pay (3.7%) component. Logistic regression revealed the significant determinants were working solely as school nurse (0.001), bachelor and above academic qualification (0.031) and family type p= absent in bot "working solely as school nurse (0.001), bachelor and above academic qualification (0.031).

Conclusions: School nurses with minimum bachelor degree, has better job satisfactions. Similarly, the program implementer needs attention to enhance pay for school nurses and allow autonomy in workplace to increase job satisfaction.

Keywords: Job satisfaction; Nepal; school nurses; school nurse program.

INTRODUCTION

School nurses (SNs) are key person to deliver preventive, promotive services, first aid services including assessment and counseling for children and school personnel. In Nepal, National Health Policy, 2019 envisioned to have one health worker in each school to promote the overall health of children and enhance their academic performance.1 SNs program has been implemented by three tiers of government. It increased students' enrolment and improved nutritional status of school going children through school lunch program² enhanced menstrual hygiene including mental health.3 SNs are satisfied if they have autonomy and positive interaction in their work,^{4,5} have shorter job seniority,⁶ salary and control issues. ⁷ The success and effectiveness of school health services depend on the motivation and satisfaction of SNs. However, there are limited published

articles on their job satisfaction and its determinant at national level. Thus, this study aims to investigate the job satisfaction of school nurses and its determinants in Nepal.

METHODS

A descriptive cross-sectional study was conducted among all SNs who were currently working or had recently left their job as SNs, in public schools from all provinces of Nepal. All the SNs were included in this study by using complete enumeration technique. There were a total of 1011 SNs working in public schools from seven provinces in June 2023. The list of the SNs was obtained from the Nursing and Social Security Division, Department of Health Services, Health Directorate of Bagmati Province and Health Directorate of Koshi Province. SNs were informed about objectives of study via e-media (email,

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viber group, whatsapp) and telephone conversation. They provided their consent to participate through google sheet. Paula L. Stamp's Index of Work Satisfaction8 (modified in the context of the school health program with expert consultation) was used to assess the job satisfaction across six domains (pay, autonomy, task requirement, organizational policy, professional status and interaction). This is an open access questionnaire developed by Stamps P.L. and revised on 2012 used to assess the job satisfaction of nurses. It was used by Foley et al in 2004 to analyze job satisfaction of school nurses in California USA.5 However there was no published article on job satisfaction of school nurses by using this questionnaire in Nepalese context. This questionnaire consisted of 44 items under six domains developed in English language. The questionnaire was translated it into Nepali language and then back translation into English language by independent English and Nepali language teacher. We kept this questionnaire (both English and Nepali version) in Google Sheet and was distributed via e-media (Email, Viber, Whatsapp). The questionnaire was distributed among 50 school nurses through e-media for piloting of study and pretest of the questionnaire. The wordings were corrected and three statements were split into two questionnaires as it was lengthy and could not understood. Therefore, there were 47 items questionnaire under six domains. Regular follow up was done by principal investigator and co-investigators through phone, viber, email. Support was taken from SN coordinators of Koshi and Bagmati Province (these provinces have dedicated coordinator) to facilitate in reaching the SNs. Ethical approval was obtained from Nepal Health Research Council (protocol registration no. 257/2023).

Data was extracted to Excel, cleaned and was exported to IBM SPSS version 20.0 to analyze according to objective of study. Chi-square test was used to find out association between levels of job satisfaction and selected sociodemographic and work related variables. Similarly, bivariate and logistic regression was used to identify determinants of job satisfaction. The data was stored in password protected laptop and will be safe for five years.

RESULTS

Among the 1011 SNs approached for data collection, 545 SNs participated in the study with response rate of 53.9%. The mean age of the SNs was 27.32 years (± 4.43 years) with 28.1% of the SNs belonging to the young age group (24 years or younger). More than half of them (56.0%)) were married, and 51.7% lived in nuclear families. Regarding academic qualification, 67.7% did PCL nursing and 43.7% had experience between one to five years in hospital and school. Majority (53%) of SNs were from Bagmati Province and 57.8% SNs working in the same municipality as that of their permanent address and 32.3% had to travel for 30 minutes or less to reach their respective schools. Among 545 school nurses, 6.4% had already left the job of school nurse at the time of data collection. They responded to the reasons as opportunity in hospital (48.5%), lack of cooperation from school (22.8%), low pay (14.2%), selected for permanent job (8.5%), lack of independence (5.7%) as the reasons to leave school nurse job (table 1).

Table 1. Socio-demographic and job-related characteristics of the school nurses. (n=545)						
Variables		Number	(%)			
Age (in completed years) (Mean 27.32 years; SD ±4.43)	≤24 Years (Youth and young adult)	153	28.1			
	>24 Years (Adult)	392	71.9			
	Single	236	43.3			
Marital status	Married	305	56.0			
marran status	Divorced or widow	4	0.8			
Types of family	Nuclear	282	51.7			
Types of family	Joint or extended	263	48.3			
	PCL nursing	369	67.7			
Academic qualification	Bachelor level of nursing	173	31.7			
	Master level of nursing	3	.6			
	Less than one year	52	9.5			
Working	1-5 years	238	43.7			
experience	5-10 years	197	36.1			
	10 years and above	58	10.6			
	Koshi province	124	22.8			
	Madhesh province	27	5.0			
	Bagmati province	289	53.0			
Address of schools	Gandaki province	27	5.0			
(SNs are deployed)	Lumbini province	22	4.0			
	Karnali province	42	7.7			
	Sudurpaschim province	14	2.6			
Working distance	30 minutes or less	176	32.3			
Working distance from home	More than 30 minutes	369	67.7			

The job satisfaction of SNs in six domains was presented with each statement. The responses were taken in the scale of five points from strongly agree to strongly disagree. While explaining the results, the two points on agree- strongly agree and moderately agree- have been

reported as agree and the two points on disagree- strongly disagree and moderately disagree- have been reported as disagree.

Table 2 showed that among 545 participants, 56.5%, agreed to be satisfied with the present pay. However, the present rate of increase in the pay for SNs provided by the government was expressed as not satisfactory (77.8%) and an upgrading of pay for SNs is needed was strongly agreed by most of the SNs (96.5%).

Most of the SNs (91%) agreed to have sufficient input into their profession and care for each of their students. While 83.0% agreed that they have too much responsibility and not enough authority. Also, more than half (52.7%) agreed that they felt frustrated sometimes because all the activities seem programmed for them (Table 2).

Table 2. Pay and autonomy components related to wor	k satisfaction.	(n=545)			
Statements on pay and autonomy component	Strongly Agree N (%)	Moderately Agree N (%)	Neutral N (%)	Moderately Disagree N (%)	Strongly Disagree N (%)
Pay component					
My present salary is satisfactory	42 (7.7)	266 (48.8)	87 (16.0)	106 (19.4)	44 (8.1)
School nurses are dissatisfied with their pay*	242 (44.4)	182 (33.4)	78 (14.3)	22 (4.0)	21 (3.9)
What is expected from SN pay we get is reasonable	53 (9.7)	171 (31.4)	114(20.9)	118 (21.7)	89 (16.3)
The present rate of increase in pay for SN provided by government is not satisfactory*	317 (58.2)	149 (27.3)	45 (8.3)	22 (4.0)	12 (2.2)
From what I hear, I am being fairly paid.	88 (16.1)	159 (29.2)	128 (23.5)	75 (13.8)	95 (17.4)
An upgrading of pay for SHN is needed	437 (80.2)	89 (16.3)	17 (3.1)	1 (0.2)	1 (0.2)
Autonomy component					
I have sufficient control over scheduling my own shift	112 (20.6)	197 (36.1)	98 (18.0)	73 (13.4)	65 (11.9)
I feel I am supervised more closely than necessary	70 (12.8)	185 (33.9)	140 (25.7)	92 (16.9)	58 (10.6)
I have sufficient input into my profession and care for each of my students	382 (70.1)	114 (20.9)	29 (5.3)	12 (2.2)	8 (1.5)
I have too much responsibility and not enough authority*	292 (53.6)	160 (29.4)	48 (8.8)	31 (5.7)	14 (2.6)
School principal makes all the decisions. I have little control over my work*	120 (22.0)	182 (33.4)	73 (13.4)	103 (18.9)	67 (12.3)
A great deal of independence is permitted for me	73 (13.4)	209 (38.3)	94 (17.2)	106 (19.4)	63 (11.6)
I am sometimes frustrated because all of my activities seem programmed for me*	109 (20.0)	178 (32.7)	147 (27.0)	74 (13.6)	27 (6.8)
I am sometimes required to do things on my job that are against my professional nursing judgment*	99 (18.2)	130 (23.9)	140 (25.7)	73 (13.4)	103 (18.9)
I have freedom in my work to make important decisions	147 (27.0)	217 (39.8)	68 (12.5)	66 (12.1)	47 (8.6)
There is someone who always support and supervise for me	158 (29.0)	184 (33.8)	80 (14.7)	65 (11.9)	58 (10.6)

^{*} Negative statement, score reversely

In the interaction domain, 83.6% SNs agreed to have teachers and school personnel cooperate and 76.3% agreed that the school kids/personnel help during rush times. Similarly, 77.4% agreed that there was a good deal of teamwork and cooperation between various levels of personnel and have teamwork between nurses, teachers and other staff in the school (73.5%). There were 82.6% of SNs who agreed that it was hard for the new nurses to feel at home. However, 61.5% disagreed that the principal and other staff looked down too much on them. In terms of organizational policy, school nurses felt gaps in their work and knowledge they possessed (61.2%). Almost all SNs agreed that they didn't find any opportunities for their career development. However, 55.6% agreed that their voices are included in planning and policy decisions and 39.2% agreed that they have opportunities for professionalism (Table 3).

Table 3. Interaction and organizational policy	components	related to wo	ork satisfacti	on. (n=545)	
Statements of interaction and organizational policy component	Strongly Agree N (%)	Moderately Agree N (%)	Neutral N (%)	Moderately Disagree N (%)	Strongly Disagree N (%)
Interaction component					
The school kids/personnel on my service help during rush time	187 (34.3)	229 (42.0)	58 (10.6)	39 (7.2)	32 (5.9)
Teachers and school personnel are cooperative	209 (38.3)	247 (45.3)	48 (8.8)	24 (4.4)	17 (3.1)
It is hard for new nurses to feel "at home"	280 (51.4)	170 (31.2)	64 (11.7)	19 (3. 5)	12 (2.2)
There is good deal of teamwork and cooperation between various levels of personnel on my service	209 (38.3)	213 (39.1)	51 (9.4)	46 (8.4)	26 (4.8)
There is lot of teamwork between nurses, teachers and other staffs on my school	167 (30.6)	234 (42.9)	60 (11.0)	56 (10.3)	28 (5.1)
Co-workers on my service are not as friendly and outgoing as I would like*	71 (13.0)	165 (30.3)	114 (20.9)	127 (23.3)	68 (12.5)
I wish school management would show more respect for skills and knowledge of the SN	314 (57.6)	154 (28.3)	41 (7.5)	20 (3.7)	16 (2.9)
Principal and other staff generally understand and appreciate what SN does	191 (35.0)	192 (35.2)	67 (12.3)	63 (11.6)	32 (5.9)
Principal and other staff look down too much on the SN	31 (5.7)	87 (16.0)	92 (16.9)	151 (27.7)	184 (33.8)
Organizational policy component					
There is great gap between what nurse need to do and what they are going to do regarding nursing care to the students*	126 (23.1)	208 (38.2)	96 (17.6)	62 (11.4)	53 (9.7)
There are not enough opportunities for advancement school nurse career development*	385 (70.6)	125 (22.9)	19 (3.5)	0 (0)	16 (2.9)
There is huge opportunity for SNs to participate in administrative decision-making process	82 (15.0)	161 (29. 5)	100 (18.3)	95 (17.4)	107 (19.6)
Administrative decisions at school is interfered too much by community people*	93 (17.1)	125 (22.9)	112 (20.6)	115 (21.1)	100 (18.3)
I have all the voice in planning, policies and procedures for this school and work related activities that I want.	133 (24.4)	191 (35.0)	111 (20.4)	77 (14.1)	33 (6.1)
The school administrator generally consult with the school nurse on daily programs and procedures	111 (20.4)	192 (35.2)	72 (13.2)	99 (18.2)	71 (13.0)
I have got better opportunities like various training to growth my professionalism	64 (11.7)	150 (27.5)	56 (10.3)	118 (21.7)	157 (28.8)

^{*} Negative statement, score reversely

In task component, 84.2% were satisfied with the types of activities they were doing. SNs had many responsibilities in their workplace particularly on recording and reporting. Despite a busy schedule, they were providing nutritional assessment and check-ups for each student (94.2%). They agreed that they could deliver better care if they have sufficient time (95.7%). In terms of professional status, 84.7% agreed that their profession has been widely recognized and appreciated by community people. Their work was really important and significant because of which they feel proud to talk to others (89.9%). Most SNs (70.6%) still want to continue their nursing profession even if they are given a chance to rethink (Table 4).

Table 4. Task component and professional status	related to wo	rk componer	nt. (n=545)		
Statements on task and professional status	Strongly agree N (%)	Moderately agree N (%)	Neutral N (%)	Moderately Disagree N (%)	Strongly Disagree N (%)
Task component					
There is too much paperwork required as SN in school*	123 (22.6)	230 (42.2)	97 (17.8)	76 (13.9)	19 (3.5)
I think I could do a better job if I did not have so much to do all the time*	175 (32.1)	186 (34.1)	122 (22.4)	42 (7.7)	20 (3.7)
I am satisfied with the types of activities that I do on my job	222 (40.7)	237 (43.5)	37 (6.8)	35 (6.4)	14 (2.6)
I have plenty of time and opportunities to discuss nursing care problems with other personnel in the school	131 (24.0)	210 (38.5)	83 (15.2)	83 (15.2)	38 (7.1)
I have sufficient time for direct nursing care to the students	254 (46.6)	190 (34.9)	40 (7.3)	43 (7.9)	18 (3.3)
I could have delivered much better care if I had more time with each students	397 (72.8)	125 (22.9)	18 (3.3)	3 (0.6)	2 (0.4)
SNs have more responsibility on recording and reporting in their workplace	368 (67.5)	129 (23.7)	23 (4.2)	16 (2.9)	9 (1.7)
I am providing nutritional assessment and regular check-up for students	374 (68.6)	140 (25.7)	21 (3.9)	7 (1.3)	3 (0.6)
Professional Status					
SN is not widely recognized as being an important profession*	283 (51.9)	179 (32.8)	32 (5.9)	31 (5.7)	20 (3.7)s
Most people appreciate the importance of school nurses service to school community	199 (36.5)	228 (41.8)	50 (9.2)	41 (7.5)	27 (5.0)
There is no doubt whatever in my mind that what I do on my job is really important	442 (81.1)	86 (15.8)	13 (2.4)	1 (0.2)	3 (0.6)
What I do on my job does not make any significance*	21 (3.9)	55 (10.1)	60 (11.0)	124 (22.8)	285 (52.3)
It makes me proud to talk to other people about what I do on my job	362 (66.4)	128 (23.5)	36 (6.6)	12 (2.2)	7 (1.3)
If I had the decision to make all over again, I would still go into nursing profession	244 (44.8)	141 (25.9)	79 (14.5)	47 (8.6)	34 (6.2)
My particular job really does not require much skill or knowledge*	19 (3.5)	136 (25.0)	22 (4.0)	0 (0)	368 (67.5)

^{*} Negative statement, score reversely

The overall mean score of job satisfaction was 3.29 with a Standard Deviation (SD) of 0.37. It was further analyzed among six domains with overall work satisfaction divided into two categories: satisfied (mean or more) and dissatisfied (less than mean). Out of 545 SNs, 51.7% were found to be satisfied in their job/work. Among them, 85.3% were satisfied with the professional status component, 72% on interaction component and 61.8% were satisfied with the task component. The lowest was seen in the pay component where only 3.7% of the SNs were found to be satisfied (table 5).

Component	Satisfaction Categories	Number	Percent
Autonomy	Satisfied (Mean or more)	198	36.3
	Dissatisfied (Less than mean)	347	63.7
- .	Satisfied (Mean or more)	337	61.8
Fask	Dissatisfied (Less than mean)	208	38.2
Organizational Policy	Satisfied (Mean or more)	87	16.0
	Dissatisfied (Less than mean)	458	84.0
Pay	Satisfied (Mean or more)	20	3.7
	Dissatisfied (Less than mean)	525	96.3
Interaction	Satisfied (Mean or more)	397	72.8
	Dissatisfied (Less than mean)	148	27.2
Professional Status	Satisfied (Mean or more)	465	85.3
	Dissatisfied (Less than mean)	80	14.7
Overall Work Satisfaction	Satisfied (Mean or more)	282	51.7
	Dissatisfied (Less than mean)	263	48.3
Total		545	100.0

In terms of associated factors and overall job satisfaction of school nurses, selected socio-demographic factors such as age group, family type, academic qualification and work related characteristics including experience, location of school in the same municipality as that of the permanent residence of the SN, school at the distance within 30 minutes of travel, functioning at school as SN and as a teacher (both) and currently working as SNs were tested for the association between different components and overall job satisfaction. While analyzing with each component of job satisfaction, academic qualification, experience in nursing service, currently working as SNs, function's as school nurse only have significant association. Then the socio-demographic and work related characteristics were assessed with overall job satisfaction for its association. There was a statistically significant association of family type (p-0.027) and functioning as school nurse only (p-0.001) with overall work satisfaction (Table 6).

Table 6. Factors associated with the overall job satisfaction. (n=545)								
Variables		Overall work sat category	Chi-square test					
		Satisfied (Mean or more score) (%)	Dissatisfied (Less than mean score) (%)	Total	p-value at 95% CI			
Ago group	≤24 years	79 (28.0)	74 (28.1)	153 (28.0)	0.975			
Age group	>24 Years	203 (72.0)	189 (71.9)	392 (72.0)	0.975			
Family type	Nuclear	133 (47.1)	149 (56.6)	282 (51.7)	0.027*			
railily type	Joint or Extended	149 (52.9)	114 (43.4)	263 (48.3)	0.027			
Acadomic qualification	PCL nursing	201 (71.2)	168 (63.8)	369 (67.7)	0.065			
Academic qualification	Bachelors and above	81 (28.8)	95 (36.2)	176 (32.3)	0.065			
Experience in nursing field	Less than one year	30 (10.6)	22 (8.4)	52 (9.5)	0.804			
	1-5 years	120 (42.5)	118 (44.8)	238 (43.7)				
	5-10 years	101 (35.8)	96 (36.6)	197 (36.1)				
	10 years and above	31 (11.1)	27 (10.2)	58 (10.7)				
Currently working as	No	13 (4.6)	22 (8.3)	35 (6.5)	0.074			
SN	Yes	269 (93.4)	241 (91.7)	510 (93.5)	0.074			
Worked or working in	No	120 (42.5)	110 (41.8)	230 (42.2)	0.863			
same municipality	Yes	162 (57.5)	153 (58.2)	315 (57.8)	0.803			
Distance from	30 minutes or less	96 (34.0)	80 (30.4)	176 (32.2)	0.366			
permanent residence	More than 30 minutes	186 (66.4)	183 (69.6)	369 (67.8)	0.300			
Function as SN only or	SN only	243 (86.1)	198 (75.2)	441 (80.9)	0.001*			
teacher or both	Both	39(13.9)	65 (24.8)	104 (19.1)	0.001			
Total		282 (51.7%)	263 (48.3%)	545 (100%)				

To find out the determinants of the job satisfaction of SNs, the variables with p-value of 0.200 or less were included in logistic regression analysis. The adjusted odds ratio of the variables- family type, academic qualification and working as school nurse were found to be statistically significant during the logistic regression. The findings showed that the odds of job satisfaction among SNs who were from joint or extended family as compared to those from nuclear families was 1.525 (95% CI: 1.077 - 2.159) satisfied in their job as SN. Similarly, SNs with Bachelor and above level of education had 1.498 odds of job satisfaction (95% CI: 1.037 - 2.164) as compared to the nurses with PCL level education. The SN who worked only as school nurse had 2.121 odds of job satisfaction (95% CI: 1.353 - 3.327) as compared to the nurses who worked as both school nurses and as school teacher (Table 7).

Table 7. Socio-demographic and work-related variables determining job satisfaction								
Variables and categories	n (%)	Crude odd ratio (OR)			Adjusted OR			
		OR	95% CI	p-value	OR	95% CI	p-value	
Family type								
Joint or extended	263 (48.3)	1.464	1.044-2.053	0.027	1.525	1.077-2.159	0.017*	
Nuclear	282 (51.7)	1	1		1	1		
Academic qualification								
Bachelor and above	369 (67.7)	1.403	0.979-2.012	0.065	1.498	1.037-2.164	0.031*	
PCL nursing	176 (32.3)	1	1		1	1		
Currently working as school	nurse							
No	35 (6.5)	0.529	0.261-1.074	0.074	1.524	0.733-3.170	0.259	
Yes	510 (93.5)	1	1	0.074	1	1	0.239	
Function as SN only or Teacher or Both								
Working as school nurse only	441 (80.9)	2.045	1.319-3.173	0.001*	2.121	1.353-3.327	0.001*	
Both as SN and Teacher	104 (19.1)	1	1		1	1	0.001	

Note: Model shows goodness of fit: Hosmer and Lemeshow Test - p-value: 0.245

DISCUSSION

This study found that half of the school nurses were satisfied with their job with major determinants were worked only as a school nurse, bachelor and above academic qualification and from joint families. Among the six components of job satisfaction, SNs were satisfied with the professional status, task and interaction components while they were least satisfied with pay, organizational policy and autonomy component.

More than half of school nurses were satisfied with their job and major components were professional status, task and interaction. The findings were similar with the study conducted by Junious et al7 where 83% of school nurses were satisfied with their present positions and major dissatisfaction was on low salary, lack of trust and support from administration. However, there were contradictory findings with the study conducted in California that autonomy and interaction as the most important and satisfying factors contributing to job satisfaction and school nurses were relatively dissatisfied with their jobs4.

Regarding the pay component, 77.8% SNs were dissatisfied with their pay scale and 96.5% agreed that an upgrading of pay for school nurse is needed. The findings were similar with the study done by Junious et al among Illionis school nurses showed that 17% of the SNs voiced job dissatisfaction, primarily attributed to low salaries and lack of trust and support from administration⁵. Studies done in Nepal among nurses have similar findings that low pay (80.7%) was considered as one of the push factors for brain drain¹⁰.

Regarding autonomy components, more than half (56.7%) agreed on their sufficient control over their scheduling and half of the SNs agreed for great deal of independence were permitted for them. The studies done among nurses practicing as nurse practitioners¹¹, midwives¹² have shown that autonomy is an important component of job satisfaction. However, the Nelson study showed that school nurses were not satisfied especially with autonomy component of their job.9

After adjusting other variables, family type, educational qualification and working only as a school nurse were significantly associated with job satisfaction. Therefore,

it is strongly recommended that SNs should be appointed after bachelor and above education as they are more matured, well communicator as well as coordinator, confident and deal with various problems. This is also supported by the study in Illinois which suggests that when nurses are able to practice to the extent of their education, they are more satisfied with their jobs, and feel like they were able to perform their jobs5. Similarly, the SNs must be assigned for tasks related to job description (JD) only. There are many complaints from SNs that they are allowed to take regular class as a teacher, and SNs have very little time to work as per JD. The findings of this study strongly recommended to assigned SNs for JD related activities only. This is also supported by the study done among Polish school nurses⁶ where SNs involved in the implementation of educational programs (p=0.007), and in those who exchanged information about the health needs of a given student with his/her tutor (p=0.002) have high level job satisfaction.

The total of 1011 nurses surveyed, there was 53 % response rate. This half response rate may be due to internet issues, low digital literacy and out-of-date emails and phone numbers. Various attempts were made to reduce nonresponse such as telephone calls, repeated email, google sheet send through Viber and WhatsApp, and follow up through school nurse coordinators however response rate didn't improve significantly. The study is conducted among nurses working in public schools only so can't generalize to nurses working in private schools.

CONCLUSION

In conclusion, half of the school nurses were satisfied with their work. Among the components of job satisfaction; professional status, interaction and task were satisfying components while pay, organizational policy and autonomy were least satisfying components. This draws the attention of provincial and federal governments to review and update employee's salary. The family type, academic qualifications and working only as school nurse were the significant determinants of job satisfaction. Similarly, autonomy should be provided along with the activities as per job description rather than engaging them as teachers and school nurses and position should be created with bachelors' and above education rather than limiting to only certificate level nurses. It also draws the attention of policymakers to optimize the effectiveness of school nurse programs in Nepal.

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CONFLICT OF INTERESTS

The authors declare that they have no competing interests.

REFERENCES

- Ministry of Health and Population. National health Policy of Nepal, 2076 (pp. 1-23). 2019. from https://drive.google.com/file/ d/1jZ6KrLmjJNjMvbemJ6dSox-30PJndfAT/view
- Cash Based School Feeding Programme. Retrieved May 15, 2022, from https://swnepal.com.np/ project/cash-based-school-feeding-programme/
- Government of Nepal. The Policies and Programmes of the Government of Nepal for FY 2079/80 (Health). 2022. https://www.opmcm.gov.np/en/download/ policies-and-programs-of-the-government-ofnepal-2079-80/
- Foley M, Lee J, Wilson L, Cureton VY, Canham D. A multi-factor analysis of job satisfaction among school nurses. J Sch Nurs. 2004; Apr; 20(2):94-100. doi: 10.1177/10598405040200020701. PMID: 15040765.
- Guenette MG. School Nurse Job Satisfaction, Provision of Health Education, and Student Attendence. Honor Projects, 2014; Paper 46. http:// digitalcommons.iwu.edu/nursing_honproj/46.
- Zborowska-Dulat A, Uchmanowicz I, Manulik E And Manulik S. Job satisfaction among school nurses. Journal of Education, Health and Sport. Online 24, 2018;8(12):530-537. [Accessed 10 August 2023].

- 7. Junious DL, Johnson RJ, Peters RJ, Markham CM, Kelder SH, Yacoubian GS. A study of school nurse job satisfaction. The Journal of School Nursing. 2004;20(2):88-93. doi:10.1177/1059840504020002 0601
- 8. Stamps PL. Scoring workbook for the index of work satisfaction. 2012, Market Street Research Inc Northampton, MA 01060
- 9. Nelson WA. Survey of Perceived Job satisfaction Among School Nurses. 2006, Master's Projects. 798. doi: https://doi.org/10.31979/etd.uf3m-q9jn
- 10. Thapa B, Shrestha K. Factors Influencing Brain Drain among Nepalese Nurses. Kathmandu Univ Med J 2017;57(1):35-9.
- 11. Pursio K, Kankkunen P, Mikkonen S, Kvist T. Organizational characteristics of nursing practice environments related to registered nurses' professional autonomy and job satisfaction in two Finnish magnet-aspiring hospitals: Structural equation modelling study. BMC Nursing. 2024 Feb 6;23(1). doi:10.1186/s12912-024-01772-9
- 12. Altaş SS, Gündüz Çekmecelioğlu H, Konakay G, Günsel M. Relationships among supervisor support, autonomy, job satisfaction and emotional labor on nurses within the Turkey context of healthcare services. Frontiers in Psychology. 2024 Jan 30;14. doi:10.3389/fpsyg.2023.1303170.