# A comparative study on the level of satisfaction among regular and contractual health-care workers in a Northern city of India

# Jyoti Dixit<sup>1</sup>, Sonu Goel<sup>2</sup>, Vijaylakshmi Sharma<sup>1</sup>

<sup>1</sup>Centre for Public Health (U.I.E.A.S.T.), Panjab University, <sup>2</sup>Department of Community Medicine and School of Public Health, PGIMER, Chandigarh, India

#### **ABSTRACT**

**Introduction:** Job satisfaction greatly determines the productivity and efficiency of human resources for health. The current study aims to assess the level of satisfaction and factors influencing the job satisfaction among regular and contractual health-care workers. **Materials and Methods:** A cross-sectional quantitative study was conducted from January to June 2015 among health care workers (n = 354) at all levels of public health-care facilities of Chandigarh. The correlation between variables with overall level of satisfaction was computed for regular and contractual health-care workers. Stepwise multiple linear regression was done to elucidate the major factors influencing job satisfaction. **Results:** Majority of the regular health-care staff was highly satisfied (86.9%) as compared to contractual staff (10.5%), which however was moderately satisfied (55.9%). Stepwise regression model showed that work-related matters ( $\beta = 1.370$ , P < 0.01), organizational facilities ( $\beta = 1.586$ , P < 0.01), privileges attached to the job ( $\beta = 0.530$ , P < 0.01), attention to the suggestions ( $\beta = 0.515$ ,  $\beta = 0.01$ ), chance of promotion ( $\beta = 0.703$ ,  $\beta = 0.01$ ), and human resource issues ( $\beta = 1.0721$ ,  $\beta = 0.01$ ) are strong predictors of overall satisfaction level. **Conclusion:** Under the National Rural Health Mission, contract appointments have improved the overall availability of health-care staff at all levels of public health facilities. However, there are concerns regarding their level of motivation with various aspects related to the job, which need to be urgently addressed so as to improve the effectiveness and efficiency of health services.

**Keywords:** Health-care workers, job satisfaction, primary health center, subcenter

# Introduction

Job satisfaction is a significant predictor of the quality and efficiency of the health-care systems. [1-6] It refers to the perception of health-care workers regarding various aspects of their work, such as physical atmosphere, privileges attached to the job, work-related issues, attitude of boss and coworkers, promotion opportunities, career growth, and human resource issues. [1,4,5] Job satisfaction affects employees' organizational commitment and consequently the quality of health services. [7] In health sector, the job satisfaction of health-care workers has a positive and

Address for correspondence: Dr. Sonu Goel, School of Public Health, PGIMER, Chandigarh - 160 012, India. E-mail: sonugoel007@yahoo.co.in

Access this article online

Quick Response Code:

Website:

www.jfmpc.com

DOI:

10.4103/jfmpc.jfmpc\_278\_16

strong association with patients' satisfaction and contributes to the continuity of care. [8,9] Conversely, job dissatisfaction has a negative impact on the structure and workflows of organizations such as nonconformance with procedures and policies, increase in work accidents, organizational conflicts, [10] increase in rate of medical errors, [11] increased burnout and turnover of health-care staff, thus jeopardizing patient safety. [12,13]

Health-care professionals in public sector of India seem to be less satisfied with the policies of the health-care institutions. Several strikes and protests by the health-care professionals in India in the recent past are the testimony of the fact. [14] This has raised a continuous threat of attrition of medical professionals in public

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

**How to cite this article:** Dixit J, Goel S, Sharma V. A comparative study on the level of satisfaction among regular and contractual health-care workers in a Northern city of India. J Family Med Prim Care 2017;6:416-23.

health-care sector. National Health Mission (NHM) has emphasized on increasing the level of satisfaction of health-care workers by providing better incentives and working environment and decreasing the workload by recruitment of more staff. One strategy to increase the effectiveness and efficacy of health-care services formulated by the National Rural Health Mission is contractualization of staff in health centers. However, increasing attrition of contractual staff is a big question mark for the sustainability of contractual model in health-care system. The present study is the first study in North India which compared the level of job satisfaction among regular and contractual health-care workers.

### **Materials and Methods**

# Study settings

It was a cross-sectional, quantitative study carried out in public health care facilities of Chandigarh city in the northern part of India from January to June 2015. Besides tertiary care services, the government health facility network in Chandigarh includes two community health centers (CHCs), 1 polyclinic, 26 civil dispensaries, 20 AYUSH dispensaries, 16 subcenters, and 1 district hospital. As per the rural health statistics 2015, there are 24 auxiliary nurse midwives (ANMs) at a subcenter and primary health center (PHC) level, 99 nursing staff at PHC and CHC levels, 27 specialists at CHCs, and 17 pharmacists and 19 laboratory technicians at PHC and CHC levels in Chandigarh region.

# Sample size and sampling procedure

A minimum estimated sample size of 354 was calculated on the basis of mean satisfaction level as 70%, [15] absolute error of 5%, 95% confidence interval, and nonresponse rate as 5%. The sampling frame consisted of all government health facilities in Chandigarh. The health-care workers were selected proportionately to their numbers (Probability proportional to size sampling) in the sampling frame. Thus, medical officers (78), ANMs, staff nurses, lady health visitors (LHVs), trained birth attendants (TBHVs), and multipurpose health workers (MPHW) (168), pharmacists (83), laboratory technicians (19), and public health consultants (6) in both regular and contractual positions were selected randomly ensuring at least 30% cadre strength for each category.

#### **Data collection instrument**

An interview schedule based on Kumar and Khan scale<sup>[16]</sup> and Kaur *et al.* scale<sup>[17]</sup> was developed after suitable modifications. The questionnaire comprised of two main parts: sociodemographic profile and domains of job satisfaction. Demographic profile included information on gender, age, designation, educational qualification, and experience whereas job satisfaction part consisted of 49 items in nine key domains such as organizational facilities, privileges attached to the job, interpersonal relations, work, relationship between management and employees, career development, chance

of promotion, human resource issues, and attention to the suggestions. For each item, a respondent had an option to choose from a five-point Likert scale representing various degrees of satisfaction: 1-extremely dissatisfied, 2-dissatisfied, 3-not sure, 4-satisfied, and 5-extremely satisfied.

#### **Data collection**

Prior permission from the office of the NHM, Chandigarh, was obtained after briefing them the above objectives and intent of the study.

# Pilot testing of the instrument

A subset of 20 health-care workers employed in government health facility (not in main study) was interviewed using the tool developed for the study. No potential problems were found in the administration of instrument by a field investigator. The structure of questionnaire remained the same after this stage (i.e. 49 items, nine domains).

#### Main study

The trained investigator visited each health facility of Chandigarh on a fixed date and time after obtaining prior permission from in-charge of health center. After explaining the objectives of the study, an interview schedule was administered to them. The respondents were ensured about anonymity and confidentiality of his/her information. The average time for interviewing each respondent was 30 min.

#### Data analysis

The filled questionnaires were checked for missing information (data mining), which was followed by coding of variables and data entry in MS Excel. Reliability test using Cronbach's alpha was done to measure the internal consistency of the scale; the value = 0.910 shows that the scale is highly consistent. The data was exported to Statistical Package for the Social Science (SPSS) for Windows Version 16.0 Chicago, SPSS Inc. for statistical analysis. Chi-square test was applied to find association of sociodemographic characteristics and level of satisfaction and to assess the difference in satisfaction scores of contractual and regular staff. Overall level of job satisfaction was calculated by recoding the five-point Likert scale data into two categories: 0 and 1 (0 = extremely dissatisfied, dissatisfied, not sure and 1 = extremely satisfied and satisfied) and thus computing the sum of the scores for answer to each of the variables. Overall satisfaction score was categorized into three, i.e., highly satisfied (>60%), moderately satisfied (40%-60%), and least satisfied (<40%). Multiple linear regression models (stepwise method) were used to test predictive power of independent variable on overall job satisfaction. Wilcoxon one-sample signed-rank test was applied on all 49 items to test whether a sample median differs significantly from a hypothesized value, which reduced the number of variables from 49 to 36. Pearson's correlation coefficient was computed for each of the nine domains to find out the strength of association of overall job satisfaction with nine domains. All analyses were conducted at

Volume 6 : Issue 2 : April-June 2017

95% confidence interval with allowable a margin of error as 5%. Level of significance for inferential statistics was set at P < 0.05.

#### Inclusion/exclusion criteria

All health-care workers listed under "Study population" employed at health-care facilities in Chandigarh and contractual employees with at least 6 months experience at the post and regular employees with over 2 years' experience in government service were included in the study. Administrative staff and all other health-care workers who do not provide clinical health-care services were excluded from the study.

#### Results

In the study, 247 (69.8%) contractual and 107 (30.2%) regular health-care staff participated. Of all the participants,

Table 1: Background profile of health-care workers in government health-care facilities of Chandigarh, 2015 (n=354)

(II=35 <del>4</del> )				
Study variables	Number of respondents (%)			
Category of staff				
Contractual	247 (69.8)			
Regular	107 (30.2)			
Category of organization				
SC	29 (8.2)			
PHC	22 (6.2)			
CHC	47 (13.3)			
CD	231 (65.3)			
Polyclinic	11 (3.1)			
GH	14 (4.0)			
Age (years)				
<25	61 (17.2)			
25-35	145 (41.0)			
36-45	91 (25.7)			
>45	57 (16.1)			
Gender				
Male	87 (24.6)			
Female	267 (75.4)			
Designation				
ANM/staff nurse/LHV/TBHV/MPHW	168 (47.5)			
Laboratory technician	19 (5.4)			
Pharmacist	83 (23.4)			
MO/DO/AMO/HMO	78 (22.0)			
Public health consultants	6 (1.7)			
Educational qualification				
Undergraduate	86 (24.3)			
Graduate	242 (68.4)			
Postgraduate	26 (7.3)			
Experience (years)				
<2	56 (15.8)			
2-5	114 (32.2)			
6-10	71 (20.1)			
>10	113 (31.9)			
Total	354 (100.0)			

SC: Sub-center; PHC: Primary health center; CHC: Community health center; CD: Civil dispensary; GH: Government Hospital; ANMs: Auxiliary nurse midwives; LHV: Lady health visitor; TBHV: Trained birth attendant; MPHW: Multipurpose health worker; MO: Medical officer; DO: Dental officer; AMO: Ayurvedic medical officer; HMO: Homeopathic medical officer

231 (65.3%) were employed in civil dispensaries, 47 (13.3%) in CHCs, 29 (8.2%) in subcenters, and 22 (6.2%) in PHCs. Over three-fourth (75.7%) were graduate and above and over half (52%) had more than 6 years of experience at health facility. Majority of the contractual staff were in the age group of 25–35 years (54.6%) and had <10 years' experience (90%) while 57% regular staff were above 45 years of age and had over 10 years' experience (82.2%). Other sociodemographic characteristics of contractual and regular staff were statistically similar [Table 1].

Table 2 shows that majority (86.9%) of the regular health-care staff were highly satisfied with overall health-care facilities while contractual staff were moderately satisfied (55.9%). Employees above 45 years of age (86%), those having experience of over 10 years (74.3%), and male respondents (52.9%) were found to be highly satisfied as compared to their counterparts. As per designation, ANMs, MPHWs, staff nurses, LHVs, TBHVs were found to be moderately satisfied (51.8%) whereas doctors (44.9%) and pharmacists (54.2%) were highly satisfied.

Variables such as work-related issues (0.750) and organizational facilities (0.730) have very strong positive relationship with overall level of satisfaction. Other variables such as privileges attached to the job (0.576), chance of promotion (0.541), interpersonal relations (0.505), attention to the suggestions (0.498), and relationship between management and employees (0.417) have moderately positive relationship while career development (0.333) and human resource issues (0.231) have weakly positive relationship with level of satisfaction [Table 3].

The stepwise regression model showed that work-related matters ( $\beta = 1.370$ , P < 0.01), organizational facilities ( $\beta = 1.586$ , P < 0.01), privileges attached to the job ( $\beta = 0.530$ , P < 0.01), attention to the suggestions ( $\beta = 0.515$ , P < 0.01), chance of promotion ( $\beta = 0.703$ , P < 0.01), and human resource issues ( $\beta = 1.0721$ , P < 0.01) are strong predictors of overall satisfaction level. However, other dimensions, i.e., interpersonal relations, relationship between management and its employees, and career development, were not found to be significant as their P values were 0.127, 0.671, and 0.711, respectively (i.e., more than 0.05) [Table 4].

The regression equation so formed can be written as:

$$y = \alpha + \beta_1 \alpha_1 + \beta_2 \alpha_2 + \beta_3 \alpha_3 + \beta_4 \alpha_4 + \beta_5 \alpha_5 + \beta_6 \alpha_6$$

Where  $\alpha$  is constant and  $\alpha_1 - \alpha_6$  are independent variables,  $\beta_1 - \beta_6$  are regression coefficients of all the variables, and y is overall level of satisfaction (dependent variable).

Thus, the overall level of satisfaction can be written as:

Overall job satisfaction level = -32.908 + 1.3 (work-related issues) +1.586 (organizational facilities) +0.530 (privileges attached to the job) +0.515 (attention to the suggestions) +0.703 (chance of promotion) +1.072 (human resource issues).

Volume 6 : Issue 2 : April-June 2017

Table 2: Association between the level of job satisfaction and sociodemographic variables among health-care workers

Study variables	Overall level of satisfaction					
	≤40% (least 40%-60% (moderate		>60% (highly	Total		
	satisfied), $n$ (%)	satisfied), n (%)	satisfied), n (%)	$\chi^2$	P	
Type of staff						
Contractual	83 (33.6)	138 (55.9)	26 (10.5)	196.275	0.001**	
Regular	9 (8.4)	5 (4.7)	93 (86.9)			
Age						
<25	19 (31.1)	34 (55.7)	8 (13.1)	144.506	0.001**	
25-35	55 (37.9)	78 (53.8)	12 (8.3)			
36-45	12 (13.2)	29 (31.9)	50 (54.9)			
>45	6 (10.5)	2 (3.5)	49 (86.0)	19.256	0.001**	
Gender						
Male	17 (19.5)	24 (27.6)	46 (52.9)			
Female	75 (28.1)	119 (44.6)	73 (27.3)			
Designation						
ANM/staff nurse/LHV/TBHV/MPHW	44 (26.2)	87 (51.8)	37 (22.0)	73.442	0.001**	
Laboratory technician	0 (0.0)	19 (100)	0 (0.0)			
Pharmacist	18 (21.7)	20 (24.1)	45 (54.2)			
Doctors (MO/DO/AMO/HMO)	29 (37.2)	14 (17.9)	35 (44.9)			
Public health consultants	1 (16.7)	3 (50.0)	2 (33.3)			
Experience						
<2	22 (39.3)	28 (50.0)	6 (10.7)	151.902	0.001**	
2-5	50 (43.9)	41 (36.0)	23 (20.2)			
6-10	14 (19.7)	51 (71.8)	6 (8.5)			
>10	6 (5.3)	23 (20.4)	84 (74.3)			
Total	92 (26.0)	143 (40.4)	119 (33.60)			

<sup>\*\*</sup>P=0.001 highly significant. ANMs: Auxiliary nurse midwives; LHV: Lady health visitor; TBHV: Trained birth attendant; MPHW: Multipurpose health worker; MO: Medical officer; DO: Dental officer; AMO: Ayurvedic medical officer, HMO: Homeopathic medical officer

Table 3: Correlation of variables with the level of satisfaction among regular and contractual health-care workers

Study variables	Pearson correlation coefficient (P)			
	Overall	Contractual	Regular	
Organizational facilities	0.730	0.679	0.762	
Privileges attached to the job	0.576	0.092	0.430	
Interpersonal relations	0.505	0.559	0.580	
Work-related matters	0.750	0.723	0.714	
Relationship between	0.417	0.447	0.374	
management and employees				
Career development	0.333	0.388	0.393	
Chance of promotion	0.541	0.527	0.386	
Human resource issues	0.231	0.250	0.212	
Attention to the suggestions	0.498	0.479	0.462	

All values are highly significant (\*\*\*P=0.001)

In-depth interviews of respondents revealed that most of the contractual health-care staff were dissatisfied with privileges attached to the job, particularly, salary and allowances, maternity leave benefits, residential accommodation, pension benefits, transportation reimbursement, excessive workload, children education assistance, lack of promotion opportunities, and attention not paid to their suggestions. However, contractual staff was relatively more satisfied with certain domains such as attitude of boss towards work and other staff (interpersonal relations). The verbatims of respondents in the study are presented in Box 1.

#### Discussion

The present study revealed significant difference in the level of satisfaction between regular and contractual health-care workers with respect to sociodemographic determinants and factors influencing the job satisfaction level. The majority of the regular health-care staff (86.9%) were highly satisfied as compared to only 10.5% contractual health-care workers, who were however moderately satisfied (55%). These results were found to be consistent with the results of studies by Kumar et al. and Bhandari et al. conducted at primary urban health centers and central government health scheme dispensaries, Delhi, respectively. [18,19] These findings may be attributable to the greater degree of independence associated with the work of the regular staff as compared to contractual staff. Sathyajith et al in their study regarding job satisfaction among nurses of private hospitals in Kerala found that 15% are highly satisfied on their job, 72% are moderately satisfied, and 13% shows low level of satisfaction. [20]

The results of our study showed that employees above 45 years of age and those having experience of over 10 years were highly satisfied as compared to their counterparts. Similar results were found by Brown *et al.*, (1993), Clark *et al.* (1996), and Al Juhani and Kishk (2006). <sup>[21-23]</sup> Al-Eisa *et al.* attributed the higher levels of satisfaction among older employees to better adjustment at work, greater rewards, less conflict between work and personal life. <sup>[24]</sup> Another quantitative study conducted by Liu *et al.* in China (2010) observed that eight domains, viz., job significance (88.2), job competency (87.9), and

#### Box 1: Verbatims of respondents in the study

"Humne apne paiso se heater khreeda hai jabki sarkaar ko ye suvidha deni chahiye" (We have bought heaters with our own money though its government's duty to provide us basic facilities - ANM (civil dispensary)

"Humare liye peene ko paani nahi hai yahan, saaf paani toh door ki baat hai" (We do not even have facility for drinking water, how can we get safe drinking water then?) - ANM (civil dispensary)

"Humne apne subcenter mein bathroom saaf krne ke liye khud ek kaamvali rakhi hai aur hum sab usko apni salary mein se paise dete hau" (We have hired a sweeper for cleaning of washrooms and we pay her from our own salaries) - MPHW (Subcenter)

"Bathroom to bane hai par inhe use nahi kar sakte, paani ki koi suvidha nahi hai" (We have utilities in our organization but they are not functional as there is no water facility) - ANM (civil dispensary)

"Humari salary regular valo ke brabar honi chabiye, humse double kaam liya jata hai aur salary aadhi bhi nae hai" (Our salary should be equivalent to regular staff salary as we are made to do double work than regular staff and our salary is not even half of their salary) - ANM (contractual, civil dispensary)

"Humein maternity leave sirf teen mahine ki milti hai, meri nuclear family hai, kaise kaam par aaye bache ko chod ka" (We get maternity leave of only 3 months and mine is a nuclear family so how can I come for work leaving my baby at home) - ANM (contractual, civil dispensary)

"Humein rebne ke liye atleast accommodation deni chabiye, mein itni door ropar se aati hun, roz ka bahut kharcha hai" (We should be provided with residential accommodation, I come daily from Ropar, and there is a lot of expenditure on transport every day) - ANM (contractual, subcenter)

"Humein medical leave ya emergency leave nahi milni chahiye" (We should get medical or emergency leave) - A group of ANM's (subcenter)

"Extra clerical staff rakhna chahiye, clerk wala kaam bhi humse karwaate hai" (Extra clerical staff should be appointed, we are made to do clerical work also) - pharmacist (regular, civil dispensary)

"Hamara kaam bahut boring hai, sara din register hi bharte hai" (Our work is very monotonous as we keep on filling registers whole day) - ANM (contractual, civil dispensary)

"Meetings toh doctors ke liye hai, hamari toh koi ni suntan" (Meetings are meant only for doctors, nobody listens to us)

"Saanu ta kade bulaya nae koi meeting vaaste" (We have never been called for any meeting)-pharmacist (regular, civil dispensary)

"Sade toh clerk wala kamm v lende aa par sadi koi promotion nae hegi" (We are made to do clerical work also, but there is no chance of promotion for us) - pharmacist (contractual, civil dispensary)

"Hamare suggestions sirf sune jaate hai, laagu nahi hote" (Our suggestions are just heard and not at all implemented) - ANM (contractual, civil dispensary)

"Agar hum meeting mein bolte hai toh hamein ya ttoh daant dete hai ya ek kaan se sunkar doosre kaan se nikaal dete hai" (If we suggest in meetings, we are either being scolded or our suggestions are left unheard) - ANM (contractual, civil dispensary)

ANMs: Auxiliary nurse midwives; MPHWs: Multipurpose health workers

Table 4: Stepwise multiple linear regression for various determinants affecting overall level of job satisfaction									
Study variables	Unstandardized coefficients		Standardized coefficients	t	Significant	95.0% CI for B			
	В	SE	Beta			Lower bound	Upper bound		
Constant	-32.908	2.281		-14.430	0.000	-37.394	-28.423		
Work-related matters	1.370	0.108	0.356	12.701	0.000	1.158	1.582		
Organizational facilities	1.586	0.100	0.411	15.884	0.000	1.390	1.783		

Privileges attached to the job 0.530 0.046 0.275 11.493 0.000 0.439 0.621 Attention to the suggestions 0.747 0.515 0.109 0.000 0.283 0.118 4.369 Chance of promotion 0.703 0.202 0.090 3.470 0.001 0.304 1.101 Human resource issues 1.072 0.374 0.068 2.863 0.004 0.336 1.809

SE: Standard error; CI: Confidence interval

teamwork (87.7), as compared with work reward (72.9) and working conditions (79.7) were important parameters for satisfaction. [25] Further, the findings of the study by Khamlub *et al.* (2013) in Lao PDR also reiterated the fact that health-care workers who put in longer hours accumulate more experience and maturity, which tends to foster a better adjustment to the work environment. [26]

In consonance with other studies, [27] our study shows that males were significantly satisfied (52.9%) as compared to females. This can be due to the fact that women tend to have higher expectations and insecurity than men.

The results of the present study showed that organizational facilities have statistically significant influence on the level of job satisfaction. Similar findings was found in a study conducted by Sharma *et al* in ESI dispensaries where doctors were found to be dissatisfied with the working conditions.<sup>[28]</sup> Another study by Khamlub *et al*. in Lao PDR indicated that health-care workers

were generally satisfied with their job, primarily due to comfortable working environment, good infrastructure, and a convenient life. Agyepong *et al.* stressed the lack of essential tools and equipment as major barriers of satisfaction for health-care workers. [29]

Dissatisfaction with one's salary in our findings seems to be a common issue that is also evident in several other studies which suggest that health-care systems should provide a suitable salary and fringe benefits to satisfy their workers. Tran *et al.* in their study conducted in Vietnam demonstrated that respondents were least satisfied with salary and incentives (24.0%), benefit packages (25.1%), equipment (35.7%), and environment (41.8%).<sup>[30]</sup> However, Franco *et al.* found that being intrinsically satisfied (work recognition by seniors/colleagues or social recognition and reward) increases the overall satisfaction even in the absence of extrinsic factors such as working conditions, salary and other benefits.<sup>[31]</sup>

Volume 6 : Issue 2 : April-June 2017

The effect of interpersonal relations on the level of job satisfaction was observed in present study was in consonence with other study by Kumar et al. in Delhi in 2014. [18] More concerns were shown by contractual staff as compared to regular staff which has led them to find better job opportunities in other organizations. Ramasodi et al in South Africa and Jathanna et al. found that job satisfaction was associated with good interpersonal relations. [32,33] Similarly, Khamlub et al. in their study conducted at Vientiane found that conflict resolution at work, support from one's supervisor, and relationship with coworkers influence health-care workers' overall job satisfaction. [26] Julian Montoro-Rodriguez and Chen et al also concluded that job satisfaction can be achieved by adopting participative leadership styles that encourage the workers to do decision-making. [34,35] Also, another study by Sharma et al found that attitude of immediate boss, salary incentives and attention paid to the suggestions are the leading indicators for estimating satisfaction or dissatisfcation of physicians.[36]

A highly significant relationship between factors such as work recognition, working hours, travelling time, flexibility in scheduling, paid vacation, and satisfaction was observed. Bodur *et al* in his study at health centers of Turkey had observed a positive relationship between job satisfaction score of midwives with items such as salary, getting along with coworkers, putting health policy into practice, work recognition, freedom of self-judgment, and trying their own methods.<sup>[37]</sup> Al Juhani and Kishk highlighted that lack of professional opportunities, patient care, and financial rewards were primary deterrent for physicians while nursing staff were dissatisfied with lack of professional opportunities, overload of work, and lack of appreciation.<sup>[23]</sup> Bonenberger *et al.* in Ghana revealed that health workers were found to be least satisfied with the remuneration, career development, management, and work environment.<sup>[38]</sup>

The study results after regression analysis of factors influencing job satisfaction concluded that work-related matters, organizational facilities, privileges attached to the job, attention to the suggestions, chance of promotion, and human resource issues play a major role in enhancing job satisfaction level. Similarly, Blegen *et al.* meta-analyzed factors influencing nurses' job satisfaction namely stress, commitment, communication (with supervisor and peers), autonomy, recognition, routinization, and fairness.<sup>[39]</sup> Mohite *et al.* in their study at Krishna Hospital, Karad, found that majority of nurses were highly satisfied with respect to all jobs reinforcing factors<sup>[40]</sup> Another study by Shinde *et al.* in Maharashtra found social service, supervision, working conditions, compensation, and independence to be major factors for higher satisfaction among health care professionals.<sup>[41]</sup>

A study by Kumar et al. among nurses in Pakistan showed that most (86%) respondents were dissatisfied because of poor working environment, fringe benefits, lack of dignity and responsibility at workplace, and time-pressure concerns. [42] Jaiswal et al. in their study in Maharashtra concluded nine critical factors, viz., communication, pay/salary, working conditions, organization supervision system, coworkers, workload, benefits, career aspects,

and rewards impact level of satisfaction among health-care workers. [43] Jain *et al.* in their study found that dentists had significantly higher job satisfaction scores than dental auxiliaries for income, recognition, opportunity to develop professionally, and quality of care. [44] Saini *et al.* found workload, inadequate supervisor support, less learning opportunities, and inappropriate feedback to be significant predictors of stress among nurses, thus affecting the overall job satisfaction. [45] Another study conducted among community health workers in Haryana concluded that non-financial motivators such as interpersonal relations, family support, skill and career development opportunities are key factors influencing their job satisfaction. [46]

#### Conclusion

Majority of the regular health-care staff was highly satisfied (86.9%) as compared to contractual staff (10.5%) who were however moderately satisfied (55.9%). The lack of job satisfaction was primarily due to poor organizational facilities, disparity in salary and allowances, pension benefits, residential accommodation, transportation facility, lack of promotion, and future career opportunities. Under the NHM, contract appointments have improved the overall availability of health-care staff; however, their level of motivation needs to be enhanced to improve the effectiveness and efficiency of health-care services. The principle of "equal pay for equal work" should be exercised wherein contractual health-care workers should get similar salary as regular health-care workers. Formal and informal meetings should be held on regular basis and suggestions of all the employees must be given due importance. There should be equal promotional opportunities for all regular and contractual health-care workers.

The results of the present study should be seen in the light of few limitations. Since it was a cross-sectional study, it provided a snapshot of health-care workers perspectives. Further, the causal relationships between job satisfaction and various determinants influencing level of satisfaction may not be established. The data might also be affected by social desirability bias as respondents might have answered questions in a way that would be viewed favorably by the interviewer. However, the study has the strength of enrolling all the major categories of health-care workers in proportionate to their size. Moreover, the study tool was comprehensively designed taking into view global and local contextual factors affecting job satisfaction.

Volume 6 : Issue 2 : April-June 2017

# Financial support and sponsorship

Nil

#### **Conflicts of interest**

There are no conflicts of interest.

#### References

- 1. Toh SG, Ang E, Devi MK. Systematic review on the relationship between the nursing shortage and job satisfaction, stress and burnout levels among nurses in oncology/haematology settings. Int J Evid Based Healthc 2012;10:126-41.
- 2. Romig B, O'Sullivan Maillet J, Denmark RM. Factors affecting allied health faculty job satisfaction: A literature review. J Allied Health 2011;40:3-14.
- 3. Onyett S. Revisiting job satisfaction and burnout in community mental health teams. J Ment Health 2011;20:198-209.
- Caers R, Du Bois C, Jegers M, De Gieter S, De Cooman R, Pepermans R. Measuring community nurses' job satisfaction: Literature review. J Adv Nurs 2008;62:521-9.
- Van Ham I, Verhoeven AA, Groenier KH, Groothoff JW, De Haan J. Job satisfaction among general practitioners: A systematic literature review. Eur J Gen Pract 2006;12:174-80.
- 6. Lu H, While AE, Barriball KL. Job satisfaction among nurses: A literature review. Int J Nurs Stud 2005;42:211-27.
- Bahalkani HA, Kumar R, Lakho AR, Mahar B, Mazhar SB, Majeed A. Job satisfaction in nurses working in tertiary level health care settings of Islamabad, Pakistan. J Ayub Med Coll Abbottabad 2011;23:130-3.
- Haas JS, Cook EF, Puopolo AL, Burstin HR, Cleary PD, Brennan TA. Is the professional satisfaction of general internists associated with patient satisfaction? J Gen Intern Med 2000:15:122-8.
- 9. Buciuniene I, Blazeviciene A, Bliudziute E. Health care reform and job satisfaction of primary health care physicians in Lithuania. BMC Fam Pract 2005;6:10.
- 10. Hoogendoorn WE, Bongers PM, de Vet HC, Ariëns GA, van Mechelen W, Bouter LM. High physical work load and low job satisfaction increase the risk of sickness absence due to low back pain: Results of a prospective cohort study. Occup Environ Med 2002;59:323-8.
- 11. Fahrenkopf AM, Sectish TC, Barger LK, Sharek PJ, Lewin D, Chiang VW, *et al.* Rates of medication errors among depressed and burnt out residents: Prospective cohort study. BMJ 2008;336:488-91.
- 12. Freeborn DK. Satisfaction, commitment, and psychological well-being among HMO physicians. West J Med 2001;174:13-8.
- 13. Asegid A, Belachew T, Yimam E. Factors influencing job satisfaction and anticipated turnover among nurses in Sidama Zone public health facilities, South Ethiopia. Nurs Res Pract 2014;2014:909768.
- Government of India. Report of the National Commission on Macroeconomics and Health. Ministry of Health and Family Welfare, Government of India, New Delhi; 2005.
- Peiró JM, Silla I, Sanz T, Rodríguez J, García JL. Work Satisfaction of health professionals in Primary Care. Psiquis Rev Psiquiatr Psicol Méd Psicosom 2004;25:5-16.
- 16. Kumar P, Khan AM. Transition in human resource for health: Challenges ahead. Int J Sci Res 2012;1:138-9.
- 17. Kaur S, Sharma R, Talwar R, Verma A, Singh S. A study of job satisfaction and work environment perception among doctors in a tertiary hospital in Delhi. Indian J Med Sci 2009;63:139-44.
- 18. Kumar P, Mehra A, Inder D, Khan AM. A study of human resource policies and practices for primary health care system in Delhi. Int J Med Public Health 2014;4:430-5.

- Bhandari P, Bagga R, Nandan D. Levels of job satisfaction among health care providers in CGHS dispensaries. J Health Manag 2010;12:403-22.
- 20. Sathyajith S, Haridas R. Job Satisfaction among Nurses of Privet Hospitals of Kerala. IJM; March-April, 2013. Available from: http://www.iaeme.com/ijm.asp. [Last cited on 2014 Jan 02].
- 21. Brown Steven P, Peterson RA. Antecedents and consequences of salesperson job satisfaction: Meta-analysis and assessment of causal effects. J Mark Res 1993;30:63-77.
- 22. Clarke AE, Oswald AJ, Warr P. Is job satisfaction U shaped in age? J Occup Organ Psychol 1996;69:57-81.
- Al Juhani AM, Kishk NA. Job satisfaction among primary health care physicians and nurses in Al-madinah Al-munawwara. J Egypt Public Health Assoc 2006;81:165-80.
- Al-Eisa IS, Al-Mutar MS, Al-Abduljalil HK. Job satisfaction of primary health care physicians at capital health region, Kuwait. Middle East J Fam Med 2005;3:2-5.
- 25. Liu JA, Wang Q, Lu ZX. Job satisfaction and its modeling among township health centre employees: A quantitative study in poor rural China. BMC Health Serv Res 2010;10:115.
- Khamlub S, Harun-Or-Rashid M, Sarker MA, Hirosawa T, Outavong P, Sakamoto J. Job satisfaction of health-care workers at health centers in Vientiane Capital and Bolikhamsai Province, Lao PDR. Nagoya J Med Sci 2013;75:233-41.
- 27. Herrera G, Manrique FG. Working Conditions and Job Satisfaction among Nursing Professionals. Aquichan 2008:8:243-56.
- 28. Sharma AK. Study on factors affecting satisfaction from employees state insurance corporation services provided at the dispensaries, New Delhi. J Health Popul Perspect Issues 1997;20:3.
- 29. Agyepong IA, Anafi P, Asiamah E, Ansah EK, Ashon DA, Narh-Dometey C. Health worker (internal customer) satisfaction and motivation in the public sector in Ghana. Int J Health Plann Manage 2004;19:319-36.
- 30. Tran BX, Van Hoang M, Nguyen HD. Factors associated with job satisfaction among commune health workers: Implications for human resource policies. Glob Health Action 2013;6:1-6.
- 31. Franco LM, Bennet S, Kanfer R, Stubblebine P. Health Worker Motivation in Jordan and Georgia: A Synthesis of Result. Vol. 1. Bethesda, Maryland, USA: Partnership for Health Reforms, ABT Associates; 2001. p. 1-29.
- 32. Ramasodi JM. Factors Influencing Job Satisfaction among Healthcare Professionals at Southrand Hospital. Published Master Thesis 2010; University of Limpopo, Faculty of Health System Management and Policy; 2010.
- 33. Jathanna R, Melisha RD, Mary G, Latha KS. Determinants of job satisfaction among healthcare workers at a tertiary care hospital. Online J Health Allied Sci 2011;10:5.
- 34. Montoro-Rodriguez J, Small JA. The role of conflict resolution styles on nursing staff morale, burnout, and job satisfaction in long-term care. J Aging Health 2006;18:385-406.
- 35. Chen HC, Baron M. Nursing directors' leadership styles and faculty members' job satisfaction in Taiwan. J Nurs Educ 2006;45:404-11.
- 36. Sharma M, Goel S, Singh SK, Sharma R, Gupta PK. Determinants of Indian physicians' satisfaction and

- dissatisfaction from their job. The Indian Journal of Medical Research. 2014;139:409-17.
- 37. Bodur S. Job satisfaction of health care staff employed at health centres in Turkey. Occup Med (Lond) 2002;52:353-5.
- 38. Bonenberger M, Aikins M, Akweongo P, Wyss K. The effects of health worker motivation and job satisfaction on turnover intention in Ghana: A cross-sectional study. Hum Resour Health 2014;12:43.
- 39. Blegen MA, Vaughn TE, Goode CJ. Nurse experience and education: Effect on quality of care. J Nurs Adm 2001;31:33-9.
- 40. Mohite N, Shinde M, Gulavani A. Job satisfaction among nurses working at selected tertiary care hospitals. Int J Sci Res 2014;3:358.
- 41. Shinde MB, Durgawale PM. Nursing audit of health workers providing health services in rural area with special emphasis to community satisfaction in Satara district. Int J Sci Res

- 2014;3:94-104.
- 42. Kumar R, Ahmed J, Shaikh BT, Hafeez R, Hafeez A. Job satisfaction among public health professionals working in public sector: A cross sectional study from Pakistan. Hum Resour Health 2013;11:2.
- 43. Jaiswal P, Gadpayle AK, Singhal AK, Sachdeva S, Modi RK, Padaria R, *et al.* Job satisfaction among hospital staff working in a government teaching hospital of India. Med J DY Patil Univ 2015;8:131-7.
- 44. Jain M, Mathur A, Joshi S, Goklani P, Kothari BP, Rabu D, *et al.* Job satisfaction assessment among dentists and dental auxiliaries in India. Internet J Dent Sci 2009;7:2.
- 45. Saini R, Kaur S, Das K. Assessment of stress and burnout among intensive care nurses at a tertiary care hospital. J Mental Health Hum Behav. 2011;16:43–8.
- 46. Tripathy, J.P., Goel, S. & Kumar, A.M.V. BMC Health Serv Res 2016;16:366. doi:10.1186/s12913-016-1614-0.