International Journal of Community Medicine and Public Health
Sossa CJ et al. Int J Community Med Public Health. 2024 Feb;11(2):700-706
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20240257

Original Research Article

Staff motivation and associated factors in a health district hospital in Benin

Charles Jerome Sossa[1]*, Colette Azandjeme[1], Mamadou S. A. Balde[2], Theodore Soussia[3], Moussiliou N. Paraiso[1]

[1]Regional Institute of Public Health, Ouidah, Benin
[2]Quality Assurance and Risk Management Division, Ministry of Health, Guinea
[3]National Medico-Sanitary Institute, Cotonou, Benin

Received: 30 November 2023
Accepted: 17 January 2024

***Correspondence:**
Charles Jerome Sossa,
E-mail: sossajero @yahoo.com

ABSTRACT

Background: The aim of this study was to find out about staff motivational related factors at Ouidah's district hospital in southern Benin.
Methods: This was an analytical cross-sectional study involving 108 agents randomly selected with proportional allocation by department. Motivation was measured, as were the intrinsic and extrinsic factors associated with it, using a questionnaire based on a Likert scale. Factors associated with motivation were investigated using the following tests: t-student, ANOVA, post hoc, and logistic regression.
Results: The median age of those surveyed was 39 (33.50; 47.50) years, predominantly female (58.30%). Of the staff surveyed, 30.6% had an insufficient level of general motivation. Women were much more motivated by "collaboration" than men (p=0.004). The "achievement" factor was more motivating for staff with university-level education than for those with primary-level education (p=0.001). Those aged between 35 and 50 were less motivated than those under 35 [OR=0.19; 95% CI (0.04; 0.88)]. The opportunity to develop skills at work (p=0.018) and participation in decision-making (p=0.019) were associated with the general level of staff motivation. Reasons for demotivation were dominated by insufficient work materials (24.24%).
Conclusions: Staff motivation can be improved through interventions that take into account identified factors.

Keywords: Motivation, Staff, Associated factors, Hospital, Benin

INTRODUCTION

Hospital plays an important role in healthcare provision Nowadays, there is growing concern about improving hospital performance.[1] Motivated human resources are useful for enhancing the performance of the healthcare system.[2] Motivation is a significant factor in ensuring that medical professionals maintain their professional skills, stay in the workplace, and make a positive contribution to their place of work.[4-6] Motivation is closely linked to job satisfaction, and neither is directly observable, but both are essential to the retention and performance of healthcare workers.[7] Work demotivation is a universal phenomenon that also affects healthcare professionals, particularly in developing countries.[1] In sub-Saharan Africa, the management and organization of hospital services are focused on material and financial resources and health information systems as the source of work motivation. This ignores the ultimate role of human resources and their interrelationship in job satisfaction and hospital performance.[8] There is still little research on the determinants of professional motivation in Benin's

first-level referral hospitals. This study aimed to investigate the factors associated with staff motivation at Ouidah District Hospital in 2019.

METHODS

Study framework

Ouidah District Hospital is one of the first-level referral hospitals in Atlantic County, in the south of Benin. It covers three municipalities: Ouidah, Kpomassè and Tori-Bossito.

Population and study type

This was an analytical cross-sectional study held from March 25 to April 19, 2019, at Ouidah District Hospital. Agents from all socio-professional categories consenting during the survey were included in the study.

The sample size was determined using the Krejcie and Morgan formula with an estimated prevalence of motivation of 50%; a margin of error chosen at 5% and a precision of 3%.[9] Out of a population of 119 hospital staff, the optimal sample size was 108 people to be surveyed.

The probability sampling method, using the simple random selection technique with proportional allocation in all departments, was employed.

Variables

The dependent variable was represented by the staff's level of general motivation and was via the question assessed on a Likert scale a question "what is your level of general motivation at work independent of intrinsic and extrinsic factor items" as carried out by Zedini and Coll in 2014.[2]

Independent variables

Socio-professional variables such as gender, age, place of residence, place of birth, occupation, level of education, sector of activity, job tenure, work schedule, family situation, number of dependents, and professional status.

Variables related to intrinsic factors of work motivation, including job attribute factors and job fulfillment factors.

Variables linked to extrinsic work motivation factors, including remuneration and collaboration factors.

Measuring instruments

Operationally, the measurement of the level of general motivation and that of intrinsic and extrinsic factors was based on the Likert scale with four levels: not motivated, little motivated, motivated, and highly motivated. Likewise, the 29 motivational factor items were measured on a scale of 1 to 4, equivalent to totally disagree, disagree, agree and agree respectively. Each item was operationally defined and served as a guide for the interviewers. The mean values of the 4 motivational factors were presented on a scale of 1-4, with the highest values corresponding to a significant influence of the factor on work motivation.

Data collection procedures

A one-day pre-test of the questionnaire was carried out on 16 workers at the Ouidah District Health Center. The reliability and internal consistency of the questionnaire were tested using Cronbach's alpha coefficient 10-11. This coefficient was 0.71 for the 29 items on the 16 agents surveyed.

Data entry and analysis

The t student and ANOVA tests were used to compare the mean scores of the four motivational factors (compensation, collaboration, accomplishment and job attributes) as a function of socio-professional variables. The post-hoc test was used when the ANOVA test was significant. Bivariate analysis was performed using the Chi^2 test; the strength of association was sought through odds ratios (OR) and their 95% confidence intervals [IC 95%]. In multivariate analysis, logistic regression was used to search for factors associated with the level of general staff motivation.

RESULTS

Characteristics of the studied population

Out of a general population of 119 workers at Ouidah District Hospital, the survey covered 108 workers. Most respondents (58.33%) were women. Their median age was 39 (33.50; 47.50) years. The median job tenure was 11 (6.50; 14) years, and the median number of dependents was 4 (3; 6). The orderly and nurse professions were most highly represented (35.19% and 18.52%). Staff working in care and management departments accounted for the majority, with a frequency of 53.70%. In terms of professional status, government contract workers and service providers were the most numerous, with proportions of 61.11% and 21.30% respectively.

General motivation levels and staff motivation factors

Overall, 30.56% had an insufficient level of general motivation (Table 1). Job attributes and collaboration were the most motivating factors, ranking first and second respectively (Table 2). The proportions of the items in the different motivational factors are presented in Table 3.

Factors associated with staff motivation

Collaboration is a factor that motivates women much more than men (p=0.004) (Table 4). The factor

accomplishment at work motivates more university-educated staff than those with primary education (p=0.001). In terms of sector of activity, the collaboration factor was more motivating for agents working in diagnostic support services, compared with those working in care/management and other services (p=0.001). Agents working during the day were more motivated by the remuneration factor than those working during the day and night (p=0.003). The job attribute factor motivates doctors much more than nurses and administrators (p=0.002). Agents residing in Ouidah's municipality are more motivated by the remuneration factor than those residing outside the area (p=0.011). Agents with more than 2 dependents were more motivated by the job attribute factor than those with no more than 2 dependents (p=0.048).

Table 1: General motivation level of Ouidah District Hospital staff in 2019 (n=108).

General motivation level	Headcount	Proportion
Not motivated (a)	8	7.41
Little motivated (b)	25	23.15
Motivated (c)	64	59.26
Highly motivated (d)	11	10.19
Insufficient general motivation (a+b)	33	30.56
General level of motivation sufficient (c+d)	75	69.44

Table 2: Ranking of motivational factors according to their mean scores (n=108).

Factors	Mean	Standard deviation	Rank
Job attribute	2.97	0.32	1st
Collaboration	2.77	0.25	2nd
Accomplishment	2.61	0.52	3rd
Remunerations	2.32	0.35	4th

Table 3: Distribution of intrinsic and extrinsic factors as a function of work motivation (n=108).

Motivational factors	Totally disagree	Disagree	Agree	Totally agree
	N (%)	N (%)	N (%)	N (%)
Intrinsic factors				
Job attribute factor				
Margin of freedom to organize work	2 (1.85)	7 (6.43)	87 (80.56)	12 (11.11)
Participation in decision-making	9 (8.33)	11 (10.19)	82 (75.93)	6 (5.56)
Opportunity to develop skills at work	2 (1.85)	14 (12.96)	81 (75.00)	11 (10.19)
Responsibility for task(s) or function within the department	0 (0.00)	12 (11.11)	76 (70.37)	20 (18.52)
Social recognition of work	1 (0.93)	20 (18.52)	68 (62.96)	19 (17.59)
Recognition by line manager	2 (1.85)	12 (11.11)	72 (66.67)	22 (20.37)
Accomplishment factor				
Participation in training and development sessions. Staff	42 (38.89)	23 (21.30)	40 (37.04)	3 (2.78)
Respondent's pride in their work	1 (0.93)	8 (7.41)	63 (58.33)	36 (33.33)
Opportunities for promotion and advancement	19 (17.59)	19 (17.59)	62 (57.41)	8 (7.41)
Extrinsic factors				
Remunerations factor				
Clarity of work organization rules	9 (8.33)	21 (19.44)	74 (68.52)	4 (3.70)
Availability of work resources	27 (25.00)	49 (45.37)	31 (28.70)	1 (0.93)
Assured workload	32 (29.63)	34 (31.48)	37 (34.26	5 (4.63)
Safety devices* available	14 (12.96)	27 (25.00)	67 (62.04)	0 (0.00)
Suitable working environment	25 (23.13)	44 (40.74)	39 (36.11)	0 (0.00)
Salary received for work performed	19 (17.59)	46 (42.59)	42 (38.89)	1 (0.93)
Allowances and bonuses received	13 (12.04)	29 (26.85)	66 (61.11)	0 (0.00)
Collaboration factor				
Flexible administration policy	4 (3.70)	16 (14.81)	87 (80.56)	1 (0.93)
Induction policy for new agents	33 (30.56)	19 (17.59)	55 (50.93)	1 (0.93)
Interpersonal relations within the department (cohesion, etc.)	2 (1.85)	8 (7.41)	80 (74.07)	18 (16.67)

Continued.

Motivational factors	Totally disagree	Disagree	Agree	Totally agree
	N (%)	N (%)	N (%)	N (%)
Family closeness	12 (11.11)	20 (18.52)	65 (60.19)	11 (10.19)
Supervisor's management style	7 (6.48)	14 (12.96)	80 (74.07)	7 (6.48)
Supervisor's technical ability	3 (2.78)	15 (13.89)	84 (77.78)	6 (5.56)
Impartial application of internal regulations	8 (7.41)	18 (16.67)	81 (75.00)	1 (0.93)
Distribution of tasks among all department employees	2 (1.85)	16 (14.81)	82 (75.93)	8 (7.41)
Transparent management of financial resources	10 (9.26)	40 (37.04)	54 (50.00)	4 (3.70)
Handling of professional conflicts	2 (1.85)	17 (15.74)	82 (75.93)	7 (6.48)
Hospital staff support for social cases	4 (3.70)	7 (6.48)	76 (70.37)	21 (19.44)
Community support for social cases	3 (2.78)	13 (12.04)	90 (83.33)	2 (1.85)
Appropriate supervision	10 (9.26)	14 (12.96)	80 (74.07)	4 (3.70)

*See complete wording of item in methods.

Table 4: Average scores for the four motivational factors according to socio-professional data (n=108).

Socio-professional variables		Job attribute		Collaboration		Accomplishment		Remunerations	
		Mean score[a] ±standard deviation	P	Mean score[a] ±standard deviation	P	Mean score[a] ±standard deviation	P	Mean score[a] ±standard deviation	P
Sex	Female	2.94±0.30	0.207	2.83±0.18	0,004	2.62±0.46	0.794	2.28±0.35	0.227
	Male	3.02±0.35		2.67±0.31		2.59±0.59		2.37±0.36	
Instruction level	University	3.04±0.32	0.117	2.79±0.33	0,601	2.85±0.45	<0.001	2.37±0.39	0.815
	High school	2.90±0.32		2.78±0.20		2.58±0.49		2.30±0.33	
	Primary	3.03±0.32		2.71±0.20		2.21±0.52		2.28±0.39	
	No schooling	3.11±0.20		2.68±0.31		2.44±0.58		2.29±0,36	
Department	Care services	2.97±0.33	0.349	2.81±0.15	<0.001	2.65±0.47	0.209	2.28±0.38	0.443
	Diagnostic services	3.08±0.23		2.98±0.10		2.67±0.45		2.46±0.31	
	Administrative services	2.74±0.37		2.74±0.27		2.76±0.54		2.35±0.36	
	Other	3.03±0.28		2.59±0.35		2.43±0.61		2.31±0.32	
Work schedule	Day shift	3.03±0.28	0.190	2.78±0.24	0.820	2.63±0.57	0.710	2.45±0.30	0.003
	Day+Night shift	2.94±0.34		2.76±0.26		2.59±0.49		2.24±0.36	
Profession	Senior Technician	3.05±0.34	0.002	2.80±0.48	0.190	2.79±0.50	0.200	2.39±0.41	0.960
	Nurse	2.82±0.28		2.83±0.13		2.68±0.48		2.27±0.36	
	Midwife	3.04±0.08		2.90±0.20		2.75±0.32		2.18±0.21	
	Orderly	3.00±0.30		2.78±0.18		2.55±0.49		2.32±0.38	
	Doctor	3.31±0.31		2.77±0.31		2.78±0.40		2.31±0.49	
	Administrator	2.74±0.37		2.74±0.27		2.76±0.54		2.35±0.36	
	Other	3.06±0.28		2.63±0.24		2.35±0.62		2.32±0.25	
Residency	Ouidah municipality	3.00±0.33	0.279	2.76±0.22	0.588	2.58±0.55	0.345	2.38±0.31	0.011
	Other	2.92±0.29		2.79±0.30		2.68±0.45		2.19±0.42	
Dependants	≤ 2	2.86±0.37	0.048	2.81±0.22	0.413	2.59±0.52	0.887	2.30±0.31	0.858
	>2	3.00±0.30		2.76±0.26		2.61±0.52		2.32±0.37	

[a]presented on a scale of 1-4 with higher values corresponding to a strong influence of the factor on motivation; p: p value for t-test and ANOVA.

Table 5: Final model of multivariate analysis on factors associated with staff motivation at Ouidah District Hospital in 2019 (n=108).

Explanatory variables	Head count	OR adjusted	CI 95%	P value
Age (years)				
<35	30	1		
35-50	62	0.19	[0.04; 0.88]	0.033
> 50	16	0.07	[0.01; 0.47]	0.006
Profession				
Senior technician	11	1		
Nurse	20	0.26	[0.03; 2.50]	0.243
Midwife	4	0.02	[0.00 ; 0.46]	0.014
Orderly	38	0.12	[0.01; 1.31]	0.082
Doctor	6	0.36	[0.02; 2.66]	0.463
Administrator	11	0.33	[0.03; 3.15]	0.335
Other	18	0.08	[0.01; 1.11]	0.060
Instruction level				
University	32	1		
High school	56	6.49	[1.34; 8.28]	0.020
Primary+no schooling	20	15.61	[11.57; 26.08]	0.002
Participation in decision-making				
Agree to totally agree	88	1		
Disagree to totally disagree	20	0.19	[0.05; 0.75]	0.019
Opportunity to develop skills				
Agree to totally agree	92	1		
Disagree to totally disagree	16	0.17	[0.04; 0.73]	0.018

In the final model, those aged between 35 and 50 were less motivated than people below 35 [OR=0.19; 95% CI (0.04; 0.88)] (Table 5). In addition, agents with a high school education were 6.49 times more likely to be motivated than those with a university education. The opportunity to develop skills at work (p=0.018) and participation in decision-making (p=0.019) were associated with the general level of staff motivation.

Reasons for staff demotivation at Ouidah District hospital were dominated by insufficient working materials (24.24%); overwork and staff shortages (18, 18%).

DISCUSSION

Four factors were analyzed in the present study to explore respondents' motivation: two related to intrinsic motivation and two to extrinsic motivation. Job attributes, which is an intrinsic factor, emerged as the most motivating factor for staff. This result corroborated that found by Zakaria et al in Morocco in 2013, where in a study of motivating factors for healthcare workers, they found that work motivation was essentially linked to non-financial factors, notably recognition of efforts made by the hierarchical superior.[1] However, this result diverged from several studies which had shown that remuneration was the primary motivating factor for healthcare professionals.[2-12] In this study, remuneration came fourth, which could be explained by low satisfaction with the working environment and the inadequacy of salary about the cost of living, the number of years of training and the workload.[13] Collaboration, which ranked second, was also an important factor in motivating Ouidah District Hospital staff. Within this factor, interpersonal relations within the department (cohesion, respect, absence of conflict, exchanges and assistance) and the support of hospital staff for social cases (financial, material or moral) were the most influential, with frequencies of 90.74% and 89.81% respectively.

The study showed that 30.56% of Ouidah District Hospital staff had an insufficient level of general motivation. This result was markedly different from that of Chekib et al in Tunisia, who found that 65% of the participants in their study had an insufficient level of general motivation (little to no motivation).[2] This difference can be explained by the fact that, in their study, the 1st motivating factor was remuneration, i.e., salary and allowances/bonuses, whereas research has shown that financial incentives were unreliable over time to sustain motivation.[14]

We found that collaboration is a much more motivating factor for women than men (p=0.004). This finding differed from that found by Chekib et al in Tunisia in 2014, who noted that the collaboration factor (source of satisfaction with relational aspects in the job) is a satisfaction factor among male paramedics (p=0.02).[2] In Benin, women's motivation by the collaboration factor can be explained by the fact that family care is shared

between men and women, and therefore pushes women to forge more interpersonal relationships to obtain possible financial opportunities. Furthermore, in terms of sector of activity, the collaboration factor was more motivating for agents in diagnostic assistance services than for those working in care/management and other services (p=0.000). On the other hand, in Tunisia, Chekib et al reported that, in terms of sector of activity, accomplishment was more motivating for paramedics working in the medical sector than for those working in the laboratory and medical imaging sector (p=0.012).[2] This discrepancy can be explained by the difference in socio-cultural realities between Benin and Tunisia.

In multivariate analysis, three socio-professional factors - age, profession, level of education, as well as two items from the job attributes factor, namely participation in decision-making within the department or hospital, and the opportunity to develop skills at work, were associated with the overall level of motivation of hospital staff. Those aged between 35 and 50 were less motivated than those younger than 35 [OR=0.19; 95% CI (0.04; 0.88)]. This result diverges from that of Lambrou et al who found among employees of a public hospital in Cyprus in 2010 a higher degree of motivation among respondents aged over 55.[15] This discrepancy can be explained by the fact that, in Benin, young people newly recruited in a context of galloping unemployment consider that they have security for their professional career and, above all, that they were integrated into social life, whereas dissatisfaction among older employees was fueled by the low level of salary about the cost of living, as well as the stress associated with approaching retirement age. In addition, agents with a high school education were 6.49 times more likely to be motivated than those with a university education. Similarly, those with primary or no schooling were 15.61 times more likely to be motivated than those with university education. This could be explained by the fact that higher-level managers in Benin consider themselves to be poorly treated, due to the inadequacy of salary in relation to the cost of living, the number of years of training, the workload, as well as the lack of satisfaction with elements linked to achievement at work, notably advancement in rank and continuing training, whereas secondary or lower-level staff are proud to have had a job, and therefore to have a means of survival and social recognition.[13] The opportunity to develop one's skills at work (p=0.018) and participation in decision-making (p=0.019) were associated with the level of general staff motivation were two items in the job attribute factor that were significantly associated with general staff motivation. These results were similar to those found by Danny et al in Australia in 2018 and Nguyen et al in Vietnam in 2015, who found that intrinsic motivators were more motivating for healthcare staff.[4-16] It should be noted that of the 29 motivational factor items used in this study, only 2 were significantly associated with the level of general motivation in the multi-variate analysis. However, this result should not obscure the fact that the other 27 items were taken into account by the Ouidah District Hospital administration and decision-makers at national level, insofar as their non-association with the dependent variable was linked to the lack of action directed at them. The reasons for staff demotivation at Ouidah District Hospital were inadequate working materials (24.24%), overwork and staff shortages (18.18%). This finding corroborates that of Sayed et al in Pakistan in 2016, who found that inadequate remuneration, poor working environment, inadequate medical supplies and facilities are factors that undermine doctors' motivation to work.[17]

CONCLUSION

The findings of this research show a high proportion of Ouidah District Hospital staff with an inadequate level of general motivation. Staff motivation measures implemented by the hospital administration need to be strengthened, taking into account the factors identified.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Belrhiti Z, Chagar H. Les facteurs de motivation des soignants. Casden. 2013;529:34-7.
2. Chekib Z, Asma BC, Limam M, Henrichi Y, Mellouli M, Mariem EG, et al. Les facteurs de motivation au travail chez les cadres paramédicaux dans un hôpital tunisien. Santé Publique. 2016;28(5):613-22.
3. Tripathy JP, Goel S, Kumar AM. Measuring and understanding motivation among community health workers in rural health facilities in India-a mixed method study. BMC Health Serv Res. 2016;16(366):1-10.
4. Thu NT, Wilson A, McDonald F. Motivation or demotivation of health workers providing maternal health services in rural areas in Vietnam: findings from a mixed-methods study. Human Resour Health. 2015;13(91):1-11.
5. Re'em Y. Motivating public sector employees. Hertie School Gouver. 2011.
6. Borghi J, Lohmann J, Dale E, Meheus F, Goudge J, Oboirien K, et al. How to do (or not to do)...Measuring health worker motivation in surveys in low- and middle-income countries. Health Policy Plan. 2017;33(2):192-203.
7. Ojakaa D, Olango S, Jarvis J. Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. Human Resour Health. 2014;12(33):1-13.
8. Sopoh EG, Nzingoula MFK, Sossa CJ, Glèlè YHA, Agueh VD, Ouédraogo TL, et al. Facteurs associés à la force de la culture organisationnelle dans un hôpital du bénin. Santé Publique. 2018;30(1):105-13.

9. Krejcie RV, Morgan DW. Determining sample size for research activities. Educat Psycholog Measure. 1970;30:607-10.
10. Louadi ME. Le coefficient de fiabilité et de multidimentionalité des mesures en système d'information. Université de Tunis. 2001.
11. Peterson RA. A meta-analysis of Cronbach's coefficient alpha. J Consum Res. 2013;21(2):381-91.
12. Sassor O, Daouda D, Abdul D, Kouassi A, Yao B, Tania B, et al. Travailler en zones mal desservies en côte d'ivoire: motivation des étudiants et personnel de santé. Santé Publique. 2018;30:127-39.
13. Bénin PNUD. Evaluation des progrès accomplis par le Bénin dans la réalisation des. Cotonou Ministère du plan et du Développement. 2016.
14. Robert D, Pierre C. De la reconnaissance à la motivation au travail. Santé Publique. 2013;150(3):104-12.
15. Lambrou P, Kontodimopoulos N, Niakas D. Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. Hum Resour Health. 2010;26(8):1-9.
16. Kinsella D, Fry M, Zecchin A. Motivational factors influencing nurses to undertake postgraduate hospital-based education. Nurse Educ Pract. 2018;31:54-60.
17. Sayed MS, Shehla Z, Jamil A, Shafiq UR. Motivation and retention of physicians in primary healthcare facilities: a qualitative study from Abbottabad, Pakistan. Int J Health Policy Manag. 2016;5(8):467-75.

Cite this article as: Sossa CJ, Azandjeme C, Balde MSA, Soussia T, Paraiso MN. Staff motivation and associated factors in a health district hospital in Benin. Int J Community Med Public Health 2024;11:700-6.