Impact of Human Resource Management on Hospital Performance: The Case of the University Hospital Center of Befelatanana

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ABSTRACT: Human resource management is a key element to optimize the quality of care offered by a health institution The primary objective of this study are to determine the quality and quantity of staff of the University Hospital Center of Befelatanana. This is a retrospective, transversal and descriptive study, from August 2018 to July 2019 in the University Hospital Center of Befelatanana. Concerning the results, the number of staff is insufficient according to 65.9% of respondents. 44.4% of administrative staff said that their work does not correspond to their training or qualifications. Equipment, working conditions and remuneration are the most demotivating factors for staff. More than half of the staff (60.2%) received continuous training, but no evaluation was made after each training according to 62.3% of respondents. This study showed that 80.7% do not benefit from any evaluation, either after or outside of training. The majority of services as well as the personal service do not have a competency framework. In brief, the existence of plethora of problems in the personnel management of CHUJRB comes from the absence of GPEECC plan.

Keywords - Health, Hospital Personnel, Management, Motivation

1. INTRODUCTION

"No health without human resources". This "universal truth" declared by the WHO in November 2013, on the occasion of the 3rd world forum on human resources in health, illustrates the problem with which nations are confronted today: the global shortage of personnel in health [1]. The deficit in human resources is estimated at more than 4.3 million caregivers worldwide [2]. In developed countries, the demographic shock, due to the retirement of many health personnel, causes many problems in hospitals. To avoid these problems, French hospitals have used the concept of forecast management of professions and skills [3]. In Africa, human resource problems are due to poor distribution of health personnel, poor training and limited opportunities for job improvement, especially in rural areas [4]. The decrease in personnel in hospitals is due to the deterioration of infrastructure and equipment, the insufficiency of drugs and other materials, and the drop in staff salaries. Similarly, health personnel in public hospitals will leave their jobs to go to private hospitals [5,6]. In Madagascar, in the field of the Forecast Management of Workforce, Jobs and Skills and Careers also called GPEECC (Gestion Prévisionnelle des Effectifs, Emplois et Compétences et Carrières), efforts have been made by the Ministry of Public Health to improve the management of human resources. But there is still no forward

planning of jobs and skills due to insufficient resources [7]. At the Center Hospitalier Universitaire Joseph Raseta Befelatanana (CHUJRB), insufficient staff is one of the major problems in the management of human resources. Thus, the objectives of this study are to determine the quality and quantity of staff, to determine the use and effectiveness of the GPEECC and to determine the motivating factors and their effects on the quality of the work of the staff.

2. METHODS

This study took place at the CHUJRB. This is a retrospective cross-sectional and descriptive study between 2012 to 2017. All technical and administrative medical staff working in the CHUJRB from 2012 to 2017 working in the medical departments were included in this study. Volunteers, trainees and staff on assignment outside the CHUJRB hospital during the study period were excluded. 30% of the personnel working in the medical departments have been selected. Sampling was stratified random. Thus, the sample size is set at 88 including 4 professors, 27 doctors, 30 paramedics and 27 administrative staff. The study parameters were represented by the socio-professional profile of the staff, the motivation factors, the determination of the use and the effectiveness of the GPEECC. The data was collected from a pre-established observation grid for the analysis of administrative files, and from a survey sheet for the interview with staff. Then, the data were analyzed on epi info 7. The chi2 or Fisher test were used to compare the proportions. The significance level chosen was p <0.05.

3. RESULTS

3.1. Socio-professional profile of staff

Regarding age, the median age of all staff is 44.5 years. It is 41 years for administrative staff, 36.5 years for paramedics, 50 years for doctors and 50.5 years for teachers. In addition, 53.4% of staff are between 35 and 54 years old. Regarding gender, a female predominance was observed with a proportion of 58%, especially among paramedical staff (70%) and doctors (63%). Regarding years of experience, 22.2% of administrative staff have less than 5 years of experience. On the other hand, 43.3% of paramedics, 59.3% of doctors and all professors have more than 10 years of experience. Regarding the recruitment procedure, most professors and paramedics were recruited through competition. On the other hand, the recruitment of doctors and administrative staff is done by file selection. In addition, 44.4% of administrative staff said that their work does not correspond to their training or qualifications. Regarding the quality of work, 22.2% of administrative staff, 16.7% of paramedics and 3.7% of doctors said that their roles as health personnel are underqualified. However, 16.7% of paramedics and 11.1% of doctors said their roles are overqualified. In addition, 65.9% of staff said that the number of staff is insufficient in their department.

3.2. Motivating factors

Regarding staff motivation, 60.2% of respondents, including 48.1% of administrative staff, 56.7% of paramedics, 77.8% of doctors and 50% of teachers are not motivated when they work. The female gender was more motivated than the male gender. Indeed, 70.3% of men are not motivated. Regarding working conditions, more than half of the staff including 40.7% of administrative staff, 66.7% of paramedics, 59.3% of doctors and 75% of teachers were dissatisfied with their working conditions. 53.4% of staff, including 40.7% of administrative staff, 53.3% of paramedics, 63% of doctors and 75% of teachers, expressed their dissatisfaction with equipment. 54.50% of the staff including 59.3% of the administrative staff, 66.7% of the paramedics 33.3% and 75% of teachers were moderately satisfied with the hygiene of the hospital. Most of the staff including 74.1% of administrative staff, 63.3% of paramedics, 59.3% of doctors and 75% of teachers liked the distribution of tasks. More than half of the staff, including 59.3% of administrative staff, 53.3% of paramedics, 59.3% of doctors and 50% of teachers, affirmed the existence of good social relations between health personnel. In addition, 61.40% of the staff including 59.3% of the administrative staff, 53.3% of the paramedics, 66.7% of the doctors and 100% of the teachers affirmed the insufficiency of their remuneration. Regarding training, 60.20%, including 66.7% of administrative staff, 63.3% of paramedics, 27.8% of administrative staff

received training once every two years, 47.4% of paramedics receive training irregularly, 33.3% of doctors receive training every year and 100% of teachers receive training every three months. However, 80.7% do not receive any evaluation, either after or outside of the training.

3.3. Determination of the use and effectiveness of the GPEECC

This study showed that 85.71% of departments have a staffing table. 42.86% of departments do not have job descriptions. All services have a service organization chart. On the other hand, 71.43% of the services do not have personal records. In 78.57% of cases, the services do not have a skills reference. This study also showed that 85.71% of services do not have turnover. On the other hand, all services have a leave table. The age pyramid does not appear in any service. The leave table is available in all departments. The rate of staff absenteeism could not be calculated because absenteeism is not documented, neither in the medical departments nor in the personnel department of the hospital. Only the guard tour table is displayed. Most of the other absences are made either by written requests addressed to the head of department, or by a verbal request. In addition, the number of patients hospitalized at the CHUJRB has increased by 21.7% in 10 years because in 2008, it was 12,583 patients and in 2017 it was 15,314 patients. However, the proportion of patients cured from 2008 to 2017 decreased by 3.74% and the proportion of patients who died increased by 1.01%.

4. **DISCUSSION**

According to age, the median age of staff within CHUJRB is 44.5 years. It is relatively high compared to that of Turkey and that of France. Indeed, Mehmet and team found in 2013 a median age of 36.64 years in two Turkish hospitals [8]. In 2009, in Metropolitan France, the median age is 41 years [9]. The age range was 35 to 54 years old. People in this age group are dynamic and hardworking. However, 44.4% of doctors are already over 55, so close to retirement. In France, in 2009, in half of the French regions, healthcare professionals aged 50 to 60 represent more than a quarter of employees aged 20 to 60. The non-medical staff of health establishments in France is relatively old, in particular the non-medical staff, among whom the 50 years and over are more represented. This situation will lead to many retirements in the years to come [10]. In a study carried out in Germany, the aging of the staff is an important indicator causing the absence of qualified personnel. Therefore, recruitment planning is important to avoid skill losses [3].

According to gender, more than 58% of staff are women. The sex ratio was 0.7. This proves the non-existence of discrimination in recruitment which could be classified as quality. This sex ratio was 0.8 in Al Farabi hospital in Morocco.¹⁰ In Algeria, at the University Hospital of Tizi-Ouzou, in 2013, a study also showed a female predominance in 55% of cases, especially medical personnel [11,12].

According to seniority, 48.1% of administrative staff, 43.3% of paramedics, 59.3% of doctors and all professors have more than 10 years of seniority. Seniority means that staff have been able to acquire a lot of experience. At Al Farabi hospital in Morocco, the majority of the staff has more than 20 years of experience (41.70% of respondents) [10].

According to the method of recruitment, most professors were recruited through competition. The recruitment of doctors and administrative staff is done by file selection. Concerning the recruitment of paramedics, they pass a competition to be able to follow their paramedic training. At the end of their studies, they no longer pass competitive examinations but are assigned directly by the Ministry of Public Health to their posts. At the CHU Tizi Ouzou, in Algeria, the recruitment method was mainly by competitive examination, which is the case for 42.30% of the staff [11].

According to job profile in the workplace, the majority of administrative staff felt that their job profile did not match their training or qualifications. This could be due to digital replacement, an old method of recruitment in which an employee could be replaced by one of his children. Likewise, the lack of employment for new graduates or the lack of an exact profile for job offers may be responsible for this situation. Thus, the quality of

human resources is often insufficient. In Algeria, 40% of administrative staff were also dissatisfied with their profile according to the study carried out at the CHU Tizi-Ouzou [11].

According to the number of staff, the majority of staff said that there is insufficient staff in their department. In fact, 78.4% of staff need the help of students in order to make up for the lack of staff. However, most doctors say the presence of students can disrupt their work. In addition, there is a disproportion in the number of the medical profession (doctors and professors) in each service. However, the insufficient number of doctors is the first cause of patient dissatisfaction [13].

According to motivation, 60.2% of respondents are not motivated when they work. According to their studies, in Turkey, Mehemet Top et al, suggested that the social relationship between workers and the good distribution of tasks promote staff motivation [8]. In Algeria, 75% of respondents are not motivated. In 49% of cases, staff are not at all satisfied with the working conditions [11].

Regarding training, more than half of the staff (60.20%) received continuous training. This is an indicator of quality. However, no evaluation was done after each training according to 62.3% of beneficiary staff. This situation could have a negative effect on the competence. Indeed, "the competence of the staff represents an essential asset for the hospital to be able to develop a quality approach"[12]. Furthermore, the criteria for appointing or selecting personnel who can undergo training are not defined. Some staff claim to have never received any training since their recruitment. In fact, according to an interview with the SAFC (Service d'Appui à la Formation Continue), continuing training exists, but the number of staff who can benefit from it and the rate of training received by each staff depend on the budget given by the State and by the Technical and Financial Partners. At Al Farabi hospital, the staff is still dissatisfied (87.50%) despite the existence of continuing education sessions [10]. Furthermore, continuing education in Algerian health establishments is incomplete [11]. In France, health personnel regularly receive training thanks to funding from the Ministry of Health [14].

Regarding the forward management of jobs and skills (GPEECC), the majority of medical services are unaware of this notion. Only the personnel department has the following tools: staffing table, job descriptions, personal files for each agent, job map, organization chart for each department, turnover, and age pyramid. These tools are not known to medical services. Only one of the medical services has all these tools. However, their updates should be communicated to each service concerned. The service organization chart and the leave table are the only tools available in each service. The majority of services as well as the personal service do not have a competency framework. However, according to a study by Ewan OIRY et al in 2013, in France, GPEECC practices are relatively heterogeneous according to four ideal-types studied. However, the competency frameworks remain the most emblematic tools of the GPEECC [15]. At the CHU of Tizi-Ouzou in Algeria, there is no forward management but an annual human resources management plan [11].

According to performance, 59% of administrative staff, 63.3% of paramedics, 74.1% of doctors and 100% of professors have never been rewarded for their performance. In addition, several factors have demotivated all the staff working at CHUJRB. Performance is measured on the basis of the cure rate, reduction in mortality and improvement in patient care. However, according to the results of this study, the proportion of patients cured from 2008 to 2017 decreased by 3.74% and the proportion of patients who died in the same period increased by 1.01%. Consequently, the postulate put forward by Roussel P. et al, which says "performance depends on the motivation and capacities of the individual" is true [16]. However, this increase in the mortality rate does not make it possible to assess performance because several parameters also exist. Indeed, because of poverty and other factors such as the use of traditional medicine, people come late to the hospital when they are sick. They present a serious clinical picture leading to an increase in the mortality rate.

5. CONCLUSION

This study highlighted the various problems encountered in the management of human resources at the CHUJRB. These problems are mainly represented by the insufficiency in quality and quantity of the staff, the demotivation of the staff, the absence of management tools and the absence of a GPEECC plan. Thus, continuous professional development should be implemented at the CHUJRB by the human resources department at the Ministry of Public Health. Indeed, the European Union of Medical Specialists (UEMS) states

in the declaration of Basel in 2001 that "Continuing Professional Development, based on its defined objectives of updating and improving the practice by physicians of their knowledge, skills and attitudes, is essential to ensure that physicians maintain and improve their performance in their professional life [17].

6. **R**EFERENCES

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