

## **The Strengths and Needs of Healthcare Professionals in Healthcare Provision: A Case Study of Boguila Health Facility in the Central African Republic**

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### **Abstract**

The objective was to understand the individual strengths and needs of healthcare professionals in healthcare provision at Boguila health facility, in Central African Republic. A descriptive design was used for this study. Data were collected using a structured questionnaire; 19 Nurses-Aids were interviewed (86% sample). The data were double entered, cleaned, and analyzed using excel. The problem this study aims to address is that in the past 7 years the medical staff at Boguila health center did not receive training for continuous professional development due to insecurity which caused a phase out of the international staff who were in charge of this task. 75% of the nursing staff in health center by which the survey has been conducted have between six and eight years of working experience suggested to have continuous

professional development in terms of make the daily report, obstructed labor, management of patients with TB/HIV, pediatric dose calculations, use of computer and data management, anatomy and physiology, care of a pregnant woman at work, and sexual gender based violence management. They show their strength in Out Patient Department (OPD) consultations, triage of patients, IEC provision, treatment for malaria, and caring for patients affected by malnutrition.

**Keywords:** Strengths, Needs, Healthcare, Professional, Healthcare Provision, Nurse.

## Introduction

Healthcare organizations face major challenges keeping healthcare accessible and affordable to their customers. However, they obliged to overcome the barriers to satisfy their stakeholders. This requires transformation and improvement on their performance and staff satisfaction. Therefore, it is necessary to know key elements of job performance and satisfaction in healthcare and how these elements can be improved in terms of workflow and continuous professional development <sup>(1)</sup>.

Employee satisfaction has a strong correlation with organizational reputation and practices for organization. For instance, intention to continue working with the organization, company or organization are reflected into employee wellbeing. Therefore, productivity, and organizational culture to get the most out of the employees, there is a need for ensuring that there is a strong focus on employee satisfaction and track employee satisfaction. <sup>(2)</sup>

Nursing job satisfaction assessment provides information on how nurses feel about their job <sup>(3)</sup> and it is used to improve the patients' 'quality of care. Moreover, nursing job satisfaction is an important factor in healthcare for staff retention and it does affect quality of care which impacts the patient satisfaction as well <sup>(4)</sup>. When staff

members feel satisfied with their workplace, they also tend to feel satisfied with their job <sup>(5)</sup>.

Nursing education assessment helps to identify educational needs for nursing staff which planners based on in providing training for continuous professional development <sup>(6)</sup>

Job satisfaction is one of the important variables in workplace and organizational psychology status is regarded as an indicator of working-life quality. The wellbeing of the staff is a crucial variable used to determine the quality of health-care systems <sup>(7)</sup>.

This article aims to assess the individual strengths and needs of healthcare professionals in healthcare provision, in Boguila health facility, in the Central African Republic.

## Background

In April 2014, the Central African Republic, specifically in the Ouham prefecture, District of Nanga-Boguila, the security became more precarious in the north towards the Chadian Border, as well as towards the west due to multiple armed groups staying in this region which limits the population to have access to care. There is chronic and acute food insecurity, which further deteriorate during the “lean season”. This increases the number of malnutrition cases seen in June-Aug, overlapping with the seasonal Malaria peak. This insecurity status, healthcare staff of Boguila do not benefit from training since the tragedy. Before the tragedy, the healthcare services were provided by the international staff and trained national staff. Training for continuous professional development was one of the responsibilities of international staff. However, the international staff left the area to Bossangoa and the national staff kept maintaining health services under projects as skeleton team with indirect supervision of Bossangoa as national staff, 75% of healthcare providers are first-

aiders. In Central African Republic, the nurse-aids are personnel who finished secondary school in any option different from nursing, for instance education, literature, etc. able to speak basic French and receive onsite or bedside nursing training to take care of patients. The system of using nurse aids was for responding to the primary healthcare needs in villages of the Central African Republic due to shortage of nurses countrywide. This kind of healthcare staff members triggered researchers to assess their satisfaction in terms of work and training, and how they are performing nursing tasks, as well as continuous professional development, considering their low level of education in nursing profession as 75% are nurse-aids.

## Method

This study was descriptive design. Descriptive design was used to help researchers to systematically obtain information to describe the situation of the individual strengths and needs of healthcare professionals in healthcare provision at Boguila health facility, in Central African Republic <sup>(8)</sup>.

## Place

The study was undertaken in the Health center of Boguila, located in the Health District of Nangha-Boguila consists of 6 health zones with 34 Health facilities, Ouham prefecture. It is one of 16 prefectures of the Central African Republic. The city of this prefecture is Bossangoa, and its landscape is about 32,100km<sup>2</sup> with 430,506 inhabitants.

## Population and Sample Size

The research population was Nurse-aids working in one selected health center of district of Nanga Boguila, in the Central African Republic. The research participants have been working in OPD, Nutrition, Vaccination, TB/HIV, minor surgery, and maternity. Yamane formula:  $n = N / (1 + N(e)^2)$ , was used to calculate the sample size,

which equals to 19 nurse-aids; where  $n$ =sample size,  $N$ : Population size which is equal to 20 nurse-aids,  $e$  = “standard” “error with 0.05 which reliability level of 95% or  $e$  = level of precision; always set the value of 0.05.

### The Formula Application

$$n = 20 / (1 + 20(0.05)^2)$$

$$n = 20 / (1 + 20(0.0025))$$

$$n = 20 / (1 + 0.05)$$

$$n = 20 / 1.05$$

$$n = 19.04$$

$$n = 19$$

### Sampling

The researcher used simple random sampling, each member of population was equally likely to be chosen as part of the sample through the method of lottery<sup>(9)</sup> by which the researcher numbered each member of population in a consequent manner, writing numbers in separate pieces of paper. These pieces of papers have been folded and mixed into a box. Lastly, samples have been taken randomly from the box by choosing folded pieces of papers in a random manner. As  $N$  was equal to 20 and  $n$  equal to 19, only the participant who choose number 20 has been excluded and definitely the researchers remain with 19 participants (simple size) as mentioned above and participated voluntarily.

### Validity and Reliability

The researchers conducted Pre-testing of 5 subjects (nurse-aids) from nearest health center located in Nangha Boguila District by a questionnaire using a Likert Scale showing levels or degree of satisfaction previously presented to Medical team

management. The questionnaire was developed in English then translated in French as the participants are French speakers. The respondents approved that the questionnaire was clear, the minor typing and errors of language translation have been corrected and cleared.

### **Data Collection**

The data has been collected by introducing the study in different services, Distribution of questionnaires randomly distributed to 19 participants then there was a Collection of answered questionnaires. Duration of data collection was 4 weeks.

### **Data Analysis**

Qualitative and quantitative analysis uses Graphical tool “graphs” in combination with participants ‘written report about their job satisfaction and suggestion to improve the healthcare system and workflow. After receiving an ethical clearance from Ministry of Health, Boguila Health District the verbal consent has been obtained from study participants after description of the purpose of the study. The data has been anonymous and all data has been stored confidentially and securely.

The questionnaire was made to capture information about the individual strengths and needs of healthcare professionals in healthcare provision at Boguila health facility, in Central African Republic to rule out their job satisfaction in terms of Satisfaction with the distribution of tasks, daily work, general meeting transfer of patients, management of materials, communications between nursing staff, communication between staff and their managers , it shown experience , knowledge and skills (strengths and weakness).

## Results

### a. Satisfaction with the distribution of tasks, daily work, general meeting transfer of patients, management of materials, communications between nursing staff, communication between staff and their managers

Tasks	Daily work	General meeting	Patients transfer	Management of materials	Communications between nursing staff	Communication between staff and their managers
1=0%	1=10%	1=0%	1=10%	1:10%	1:0%	1=10%
2=5%	2:5%	2=20%	2:15%	2=20%	1=5%	2=5%
3=25%	3:15%	3=10%	3=10%	3=15%	3=40%	3=10%
4=35%	4:15%	4=20%	4=10%	4=20%	4:35%	4:25%
5:25%	5=40%	5=40%	5=20%	5=15%	5=15%	5:25%

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

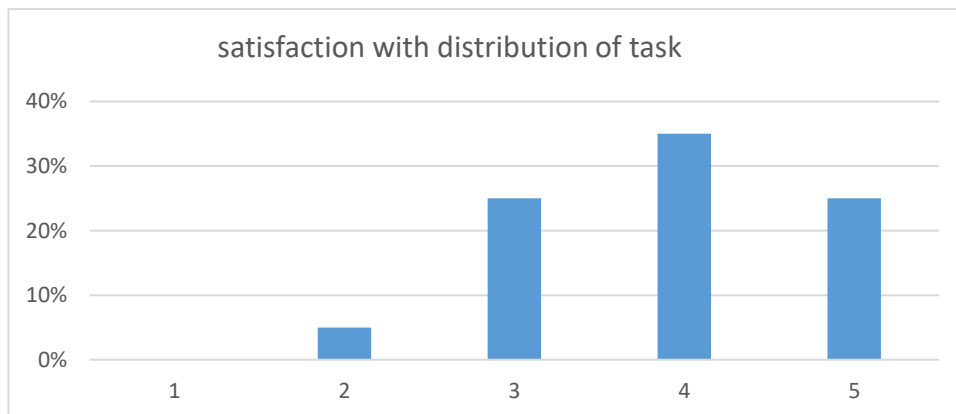


Figure (1): Satisfaction of medical staff of Boguila health center with the distribution of tasks

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied



Figure (2): Satisfaction of medical staff of Boguila health center with the daily work

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

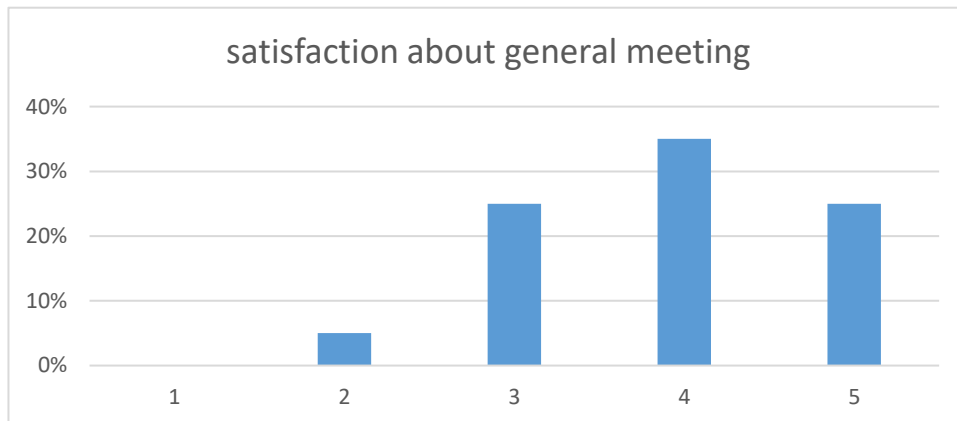


Figure (3): Satisfaction of medical staff of Boguila health center with the general meeting

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied



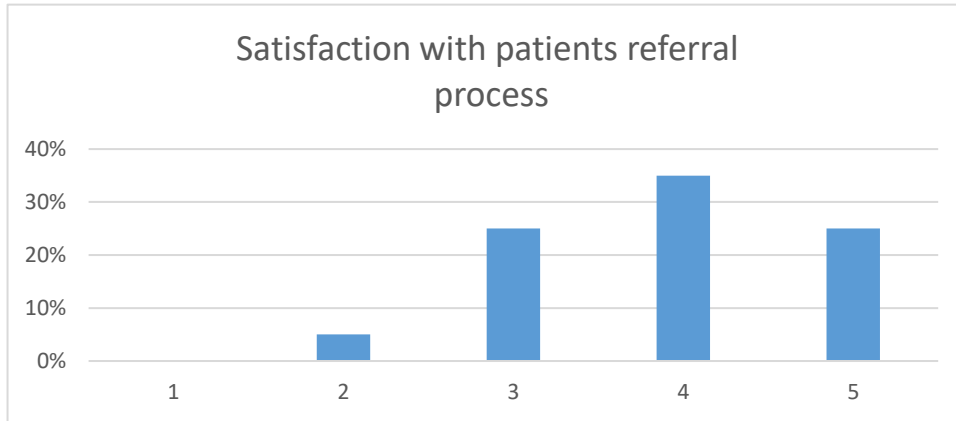


Figure (4): Satisfaction of medical staff of Boguila health center with the patients referral process

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

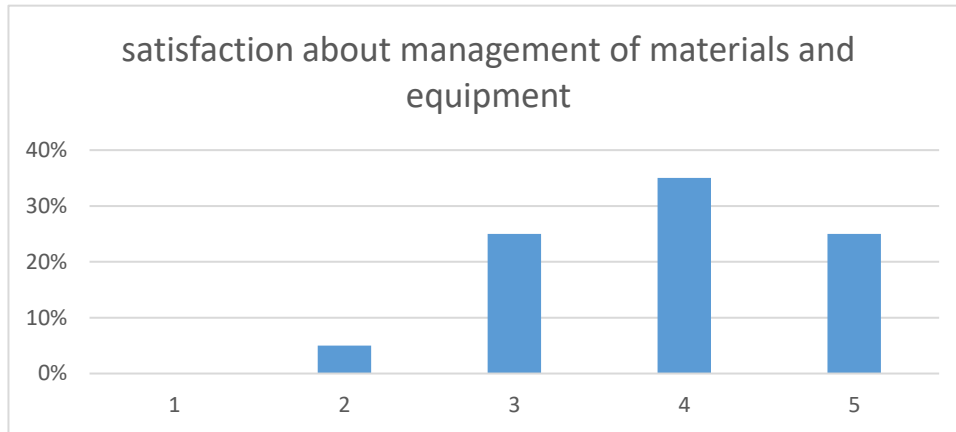


Figure (5): Satisfaction of medical staff of Boguila health center with the management of materials and equipment

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

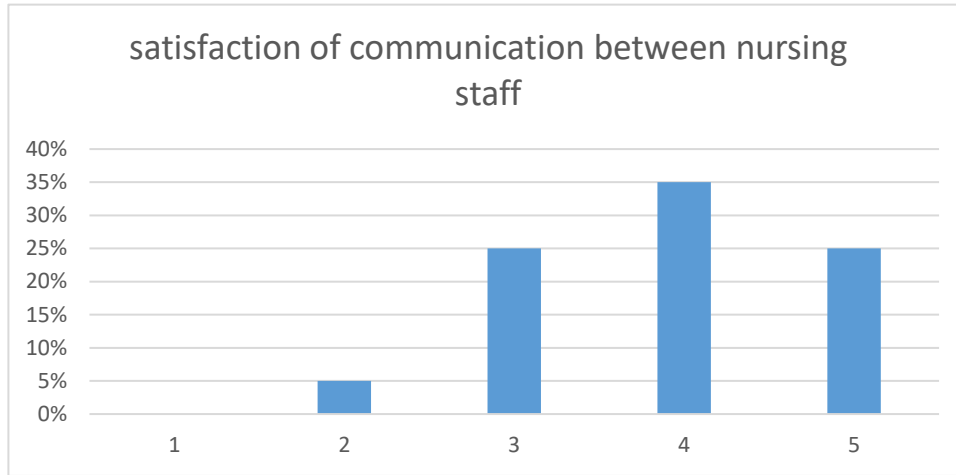


Figure (6): Satisfaction of communication between nursing staff of Boguila health center

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

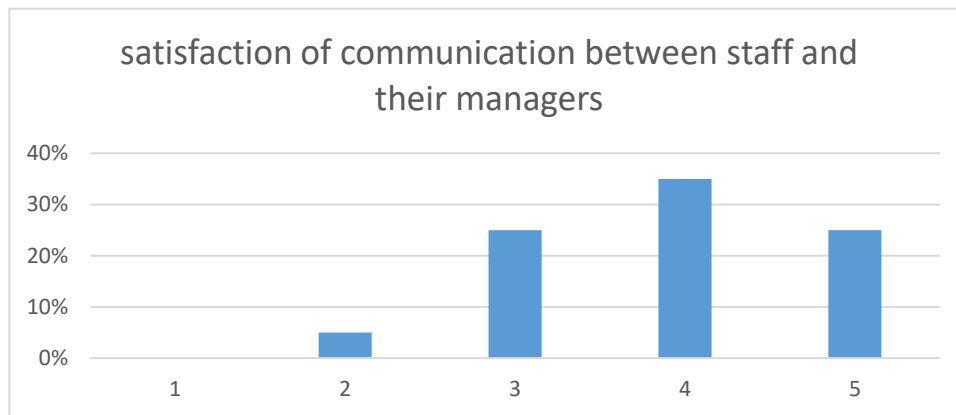


Figure (7): Satisfaction of communication between nursing staff of Boguila health center and their managers

Legend: 1. Very dissatisfied. 2. Rather dissatisfied. 3. Neither satisfied nor dissatisfied. 4. Rather satisfied. 5. Very satisfied

**Considering the table above:**

**a. Comments on the level of satisfaction with distribution of tasks**

There is a good distribution of work tasks, unfortunately, the number of staff is insufficient, especially at maternity ward considering the workload, which means that the work becomes heavy, for this reason it is suggested to increase the number of staff, to improve the distribution of tasks at the maternity department.

To carry out our tasks well, we must avoid drug shortages because with this we cannot accomplish our tasks properly.

For the importance of mastering and or having knowledge to use all the medical services, it is suggested that the staff to rotate from one service to another after a certain fixed time.

To carry out our tasks well, we need training, especially in pediatrics and counseling.

There is a good progress of accomplishment of the tasks in the dispensation of the drugs, but sometimes the medical prescriptions are not well filled it is suggested the team to fill this with all the details

There is a good task distribution system, especially at the patient triage level.

**b. Comments on the level of satisfaction with distribution of daily work**

Daily work is good, however it is suggested to be done in rotation from one department to another,

It is suggested the patients to be assessed at the triage level.

We have training needs to improve health care and perform daily work.

We note the non-respect of the maternity request concerning the increase in the number of staff to do better our job.

We need a psychologist to counsel patients especially TB / HIV and at the level of SGBV service.

It is suggested that the Nanga-Boguila hospital be able to start the pediatric service, surgery, improve the night duty service for better patient care.

The work is done transparently, we have had an improvement in the level of availability of ARV drugs, we have not had any shortages of ARVs, which is to be appreciated, and confidentiality has been respected.

The men are requesting to have rotation in maternity ward to acquire more knowledge in maternity.

#### **c. Monday Morning Meeting Comments**

Monday morning meeting is good and satisfying, unfortunately not much time for further discussion. We see that it helps to improve the quality of the work, it is also the time to receive additional information about security, we suggest that it continues because it also helps for the monitoring the activities of the services and contributes to the good collaboration of the staff.

#### **d. Comments at patient transfer level**

The process of transferring patients from the Boguila health center to the hospital is well organized, However at the hospital where we refer our patients there is inadequate follow-up of patients. there is no necessary equipment to be used to care of severely ill patients and also the lack of qualified personnel which causes unexpected deaths of patients at the hospital level (abnormal

result) due to poor supervision, it is suggested that the hospital to be supported to improve the follow-up of patients.

It is also suggested that the hospital to have intensive care and strengthen the emergency department finally to provide the qualities of care to the patients.

The conditions for transferring patients to hospital are difficult because of the road conditions which are not good.

#### **e. Management of stocks and emergency materials**

Some staff have no idea about stock management and emergency materials, which is why we need a briefing on this.

We have experienced material breakages; this will have to be avoided

There is a lack of sufficient space in the pharmacy; the medicines are not well maintained, we need new pharmacy building.

It is suggested to review the resuscitation room by increasing the quantity of materials and improve on the registration of drug consumption.

A register for consumption of medication is needed at the level of the health center to properly justify the drugs consumption.

It is suggested to review the system for managing medicine at emergency.

There is a need for x-ray machine to examine patients with surgical emergencies or other diseases.

#### **f. Comments on communication satisfaction between caregivers and their managers**

There is good collaboration between nursing staff and their managers, we are satisfied, we suggest encouraging managers to comply to the objectives of the project.

Service managers always share information, which is good however; managers sometimes don't give staff the opportunity to express themselves. It is better to improve their communication.

#### **g. Experience and training**

Concerning about the experience of the staff the researcher noticed that 75% of the nursing staff in health center by which the survey has been conducted have between 6 and 8 years or more of experience in MSF and 75% were able to follow the training that their nursing supervisor gave however it has not ended, the team suggested that it can continue for continuous professional.

#### **h. Team's area of improvement**

The research participants have identified the following areas for improvement:

- Make the daily report.
- Obstructed labor.
- Management of patients with TB/HIV.
- Pediatric dose calculations.
- No computer knowledge.
- Unable to save data in computer, Health center data report.
- Anatomy, care of a pregnant woman at work, care of injured women.

#### **i. The strengths of the team**

During research, the participants believed that they have strengths in different areas including

- Patients consultations at OPD.

- Practice the patients triaging system.
- Give advice to the patient (IEC).
- Malaria treatment.
- Managing malnutrition cases.

## Discussion

The study shown that 75% of the nursing staff in health center by which the survey has been conducted have between six to eight years or more of experience and 75% were able to follow the training that their nursing supervisor gave; however, they were unable to come to the end the training session, and the team suggested that the training could continue as part of the continuous professional development. Inadequate training at workplace can lead to poor performance, especially in the increased stress environment like Boguila <sup>(10)</sup>.

Concerning about the satisfaction in distribution of the task 60% of the staff were really satisfied with the distribution of the tasks, 25% of the staff are neither satisfied nor dissatisfied and 5% they rather dissatisfied; however, none is very dissatisfied. Balancing care responsibilities makes work easier for employees and the employees become more satisfied with working environment <sup>(11)</sup>. To improve on staff satisfaction about task distribution the managers of Boguila health facility need to increase staff number especially in maternity as they are overloaded by high workload due to insufficient number of staff in different department. The managers should also focus on regular staff rotation in order to facilitate everyone to have a chance to gain experience from different department.

Concerning satisfaction on daily work, the study has shown that among nurse aids working at Boguila health facility 10% were very dissatisfied, 5% rather dissatisfied, 15% neither satisfied nor dissatisfied, 15% rather satisfied, 40% very satisfied, the

results has shown that 55% of those nurse aids are at the level of satisfaction however 45% are not satisfied. According to the report given by the participants that un-satisfaction was due to: lack of staff rotation in different department, lack of vital signs on patients cards from triaging department which creates difficulties in managing those patients at emergency department, and that is why the team was suggesting those vitals to be taken at triaging department, without forgetting to mention the findings on patients' cards to facilitate the daily work. Staff rotation was brought out by different people, for instance, the male staff felt not satisfied with their daily work as they do not have exposure to maternity department to gain knowledge and skills to respond to maternity cases, they are requesting to have rotation to maternity ward to acquire more knowledge. Even though there is no conclusive evidence on which extent the job rotation can increase the performance, it has been documented that job rotation can bridge the gap between job requirements and employees' abilities to perform <sup>(12)</sup>.

As reported, the lack of continuous professional development or training was among causes of un-satisfaction in performing daily work that is why the employees need more of CPD to refresh their knowledge and skills for better performance of their daily work. Additionally, the employees feel unsatisfied at their daily work due to shortage of staff while they are facing high workload and are not able to respond efficiently to the departmental needs that is why they were suggesting additional staff to respond efficiently. Heavy workload and insufficient staff can lead to increased likelihood of burnout and productivity decreases <sup>(13)</sup>.

Multidisciplinary work environment which has team members with various skills is needed to some fields so that employees feel more supported in their daily work. At Boguila, multidisciplinary approach is not available due to lack of staff. For instance, there is lack of a psychologist to provide better counselling to the patients in need especially in TB/HIV department and at the level of SGBV services. The research



participants solicitate having a qualified counsellor to do the counselling job efficiently. The shortage of specialized personnel affects job satisfaction of the employees. <sup>(14)</sup>

Concerning about the satisfaction with the general meeting the team reported that none was Very dissatisfied, 20% rather dissatisfied, 10% neither satisfied nor dissatisfied, 20% rather satisfied and 40% were very satisfied. Monday morning general meeting is good and satisfying as shown above 60% were really satisfied however 20% were dissatisfied due to the leaders who do not provide much time for further discussion. The general meeting helps to improve the quality of the work, is also the time to receive additional information about security, helps for monitoring the activities of the services, and contributes to the good collaboration of the staff. General meeting and pre-round meeting for nurses and doctors have an important impact on quality of patient care <sup>(15)</sup>.

The needs have been identified in healthcare system, especially in referral process. The process of patients referral from Boguila health center to the hospital is well organized. However, at the hospital where the patients are referred to there is inadequate follow-up of patients. There is no necessary equipment to be used to care for severely ill patients and the lack of qualified personnel, which cause unexpected deaths of the high number of referred patients at the hospital level (abnormal outcome), and it is also due to poor supervision. The hospital needs to be supported to improve the follow-up process for their patients. Though we appreciate the referral system, the conditions for transferring patients to hospital are difficult because of the road conditions which are not good. Moreover, the hospital does not have the intensive care unit, even their emergency department needs to be strengthen to finally provide the quality of care to the patients. These conditions contribute to increased mortality rate. Within two years back, 5.6% of the entire population died in the

Central African Republic. Currently the Central African Republic has a crude mortality rate equals to 1.57/10,000 per day <sup>(16)</sup>.

Quality and coverage of healthcare services in African countries, including the Central African Republic is low <sup>(17)</sup>. There are needs for knowing stock management, emergency materials, how to fix and replace broken stuff, increasing space in pharmacy, medicine maintenance, and management of emergency medicines. These needs are to be addressed by stakeholders to improve the quality of patient care and uplift the staff motivation for working at Boguila.

Though to work in the area the employees face multiple challenges, the team reported that the work is done transparently, no shortages of ARVs medication, and the confidentiality has been respected. There is good collaboration between nursing staff and their managers.

## Conclusion

By conclusion, there are strengths that continuously influence the quality of patient care and needs to be addressed to improve the quality of care delivered to the patients.

Considering the weak points/areas of improvements of the team, the staff of Boguila need training on different topics, such as to make the daily report, attend to breech childbirth, manage patients with TB/HIV, calculate pediatric dose, compute data (Data encoding), care for the wounded patients, and to have a refresher on anatomy.

We can not end without making recommendations related to workflow. We recommend the facility to revise policies on tasks and staff distribution and innovation, how the management plan and provide training based on identified need, increase of staff especially in maternity department, distributing task equally in all department especially in maternity, staff rotation to acquire new skills and knowledge, improvement of completeness of medical prescription, considering

appointing a psychologist to the TB/HIV department, increase time for general meeting for further discussion, and time for operating theatre at Nangha Boguila Hospital to respond to surgical emergencies.

For patients referrals, we recommend the following: Improve the follow-up of patients referred to district hospital, to open intensive care at district Hospital to provide holistic care to critically ill patients, to strengthen the emergency department in order to provide the qualities of care, and to avail X-ray machine at the hospital.

On identified issues in management of stocks and emergency materials, we recommend to brief all medical staff about management and use of emergency medications and equipment, improve on availability of consumables and medications, build a new pharmacy warehouse for the safety of medication, increase the quantity of materials and the consumption at Emergency department, and improve the system drug consumption registration.

Finally, we offer recommendations on personnel and their managers as follow: Maintain good collaboration between nursing staff and their managers, encourage managers to focus on objectives of the project, and invest on continuous professional development.

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