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Pediatric Nursing Care and Its Practices in Three Health Care Facilities

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Abstract

Introduction: Pediatric nursing cares are among the most important care needed referring to the category of patients. A gap of the best practice in Pediatric Nursing Care (PNC) had been publically a major problem of health and raises the rate of morbidity and mortality. The lack of nursing guidelines, low level of studies, experience at work and low economic status of Health Care Facilities (HCFs) were the main problems assessed in these three HCFs (HUCK, VNC and MHK) in this study. The purpose of this study is to assess the knowledge of nurses during their practices in Pediatric Wards of HCFs and to provide a better contribution. **Method:** A descriptive study design was used in this study during the period of one month. 43, 25 and 30 nurses were selected among 98 nurses by using Dilman formula. A questionnaire with 5 parameters was distributed. Data were typed using Microsoft ward and analyzed using Statistical Package for Social Scientists version 16 software (SPSS). **Results:** The current study found that the majority of nurses don't know to make the best nursing diagnosis neither the factors related to the implementation of EBP in PNC. The nurses have shown different barriers often met during their practices. The all process of nursing diagnosis was not recognized with the average of 97.6% of nurses. **Conclusion:** Even if the nurses have some experience at work they express their weakness based on low level of study, lack of knowledge and trained professionals on work and the pediatric nursing guidelines.

Keywords

Pediatric Nursing, Nursing Theories, Pediatric Nurse, Role of Pediatric Nurse, Evidence Based Practice

1. Introduction

Pediatric Nursing Care (PNC) is defined as a specialization of the nursing profession which deals with pediatrics and medical care of children from infancy to the teenage years [1]. However, some studies carried out demonstrated that there is a gap in the implementation of evidence based practice (EBP) in pediatric ward using research model oriented on nursing theory (NT) [2]. The lack of best nursing practices, deficient value of research, lack of experience in nursing cares, inadequate nursing leadership and management, lack of knowledgeable mentors, insufficient time and inaccessibility on pediatric nursing research and journal papers related PNC were also assessed as the major difficulties during the PNC implementation [3].

The studies conducted on Pediatric nursing in the developed countries like United States (US) and Australia showed that the PNC was oriented based on nursing theories referring to the steps of EBP [4].

Developing countries like Rwanda and Kenya, however, the studies conducted on quality of health care highlighted the lack of necessary resources to promoting the nursing care in pediatric wards as one of the major causes of high risks to the patients. The same studies demonstrated that the nurses are not able to apply the NT during the inquiry based practices (IBP) and EBP (Evidence Based Practice [5].

Burundi, even if the nursing care is conducted in the pediatric services of health care facilities (HCFs), some misunderstanding still rises as well as there is no any standard has been set out for helping the nurses to do the practices in the same way [6]. In addition, no study has been carried out on PNC assessment in (HCFs). This shows that the nursing practices are conducted in most of pediatric services of HCFs without any evidence as well as there is a lack of studies that could help the nurses to improve them. This current situation reveals that the investigation could be an emergency situation for avoiding the high risks to the patients. It is important to conduct a study into the HCFs especially for the pediatric wards for assessing the knowledge of nurses based nursing theory (NT) during the practices.

Therefore, this study can be used to help the Burundi government to enhance the quality of pediatric nursing practice in health care facilities (HCFs) and minimize the potential risks related to the mortality by revealing problems and weaknesses for pediatric nursing practice.

Conceptual Framework

The current study was oriented on the use of theory during the practice in PNC because they can predict, define and demonstrate the phenomenon of nursing by showing and maintaining the limits and boundaries. Theories are also useful in terms of knowledge guidance, good education, research based practice, and the environmental theory of Florence Nightingale is our first choice for this study because it shows the holistic approach during the nursing care in the pediatric

ward. This theorist also identifies the major concepts (ventilation and warming, light and noise, cleanliness, variety, offering hope and advises food and observation) as fundamental for helping the nurses by making the inquiry [7].

2. Methods

2.1. Design, Study Area

It is a descriptive study conducted in Bujumbura city the capital of Burundi during the period of one month from 28th November to 28th December 2019 in pediatric wards of three HCFs: Van Norman Clinic (VNC), Military Hospital of Kamenge (MHK) and Hospital University Center of Kamenge (HUCK). Burundi has an area of 27,834 km^2 and is located in central Africa between 2˚45' and 4˚25' latitude south, 28˚C 50' and 30˚53'30" longitude east. It is bordered north by Rwanda, west by democratic republic of Congo and east south by Tanzania. Its population is estimated to 8.05 million in 2008 with 50.8% female and 49.2% male, annual population growth is 2.4% and density is 310 persons per km^2. Burundi is ranked among the African countries most densely populated which the fertility rate is 6.4 children per woman [8]. The average temperature is 23˚C and annual precipitations are 1274 mm [9].

Bujumbura has primary and secondary health care services with three levels of administration of health care system at national, provincial and district levels [10]. About 22 HCFs (Health Care Facilities) with inpatient services located in Bujumbura, 3 HCFs were selected for this study assess the knowledge of pediatric nurses during the PNC. The chosen HCFs were Van Norman Clinic, Kamenge Hospitalo-University Centre and Military Hospital of kamenge respectively and they are all located in north area of Bujumbura (**Figure 1**).

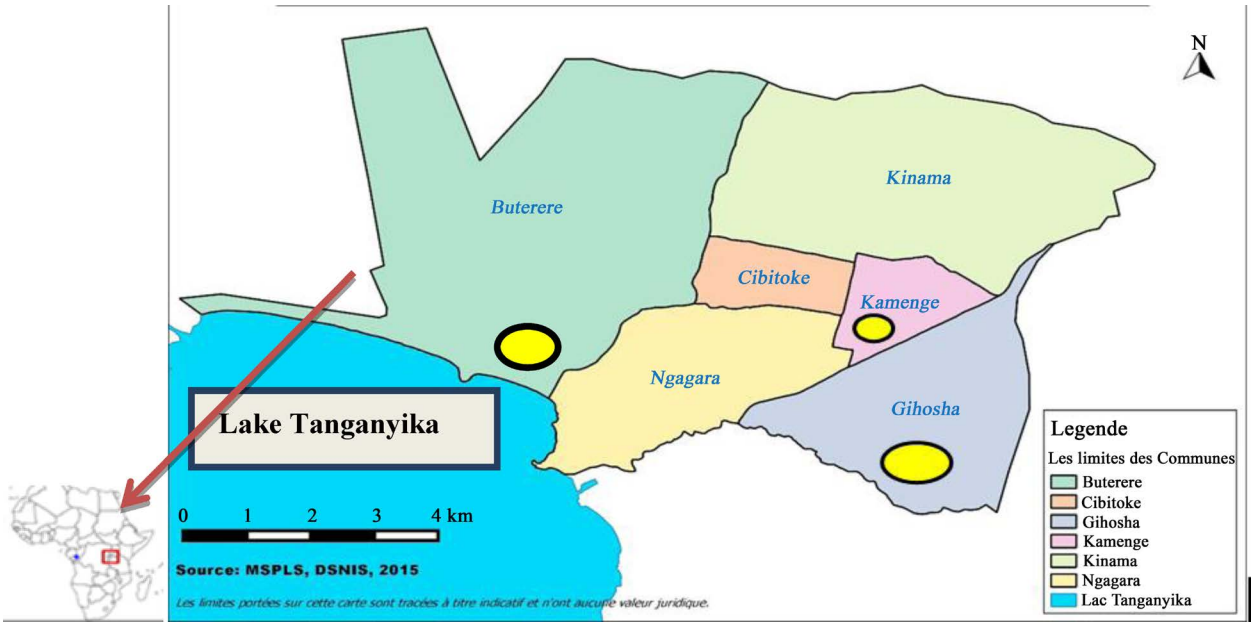

Figure 1. Map showing the health care facilities selected to assess the generation and management status of HSMW in Bujumbura, Burundi [11].

2.2. Characteristics of Health Care Facilities

Three HCFs selected for this study, two of them are public and one private HCFs, which have different attributes such as clinic, military, and university. All three HCFs are located in the same health district (North district of Bujumbura) (**Figure 1**). These HCFs share the similar target for teaching mission, where all nursing students and medical students are trained, and more advanced care is delivered. Behind that mission, most small primary HCFs in Bujumbura transfer their patients in these three HCFs and they have high accommodation capacity and treat the largest number of patients.

2.3. Population, Inclusion and Non-Inclusion Criteria

Population

The total population for these three HCFs was 98 nurses. The specific number for each hospital was 43 nurses, 25 nurses and 30 nurses for VNC, MHK, and HUCK respectively. The sampling was made by convenience and Dillman formula was used for sample calculation [12].

Inclusion Criteria

For making better a study without any difficult about the sample, the following criteria were applied such as: being a worker of the HCFs in the pediatric nursing department, holding a post in the area of study, and accepting to participate in the study. Nurses working all shifts could be included in the study.

Non Inclusion Criteria

The following elements were the basic of determining the non-inclusion criteria such as: Not to be: part of the flying team; nurses from other departments, and nursing trainee.

2.4. Data Collection and Tool

The questionnaire was developed in French as a language currently used by the majority of nurses, and the kirundi version contained the questions related to the nursing theory was used for helping the nurses to understand better the questionnaire. The data were collected by researcher through the questionnaire that has been distributed to the nurses face to face. At the same time, the nurses proceeded by completing the questionnaire. For conducting better the research, a pilot study was done by 3 nurses at PRCH (Prince Regent Charles Hospital) to pretest the tool. The main components for the questionnaire were the following parameters: demographic data, the study level of nurses, experience at work, nursing diagnosis formulation, barriers related to the best practices and nursing theory implication. The answers given by the nurses were translated in English accordance to the above parameters mentioned.

2.5. Sample Size and Sampling Technique

Sampling

In this study, the sample was calculated using the Dillman formula [12].

$$N_s = \frac{N_{p(p)(1-p)}}{\left(N_{p-1}\right)\left(\frac{B}{C}\right)^2 + (P)(1-P)}$$

Where:

N_s = completed sample size needed (notation often used is n).

N_p = size of population (notation often used is N).

p = proportion expected to answer a certain way (50% or 0.5 is most conservative).

B = acceptable level of sampling error (0.05 = ±5%; 0.03 = ±3%); C = Z statistic associate with confidence interval (1.645 = 90% confidence level; 1.960 = 95% confidence level; 2.576 = 99% confidence level).

1) By using the formula the sample at HUCK was obtained as follow:

$$N_s = \frac{(43)(0.5)(1-0.5)}{(43)\left(\frac{0.05}{1.96}\right)^2 + (0.5)(1-0.5)} = 39$$

2) By using the formula the sample at VNC was obtained as follow:

$$N_s = \frac{(25)(0.5)(1-0.5)}{(25)\left(\frac{0.05}{1.96}\right)^2 + (0.5)(1-0.5)} = 24$$

3) By using the formula the sample at MHK was obtained as follow:

$$N_s = \frac{(30)(0.5)(1-0.5)}{(30)\left(\frac{0.05}{1.96}\right)^2 + (0.5)(1-0.5)} = 27.8 = 28$$

The total sample size for three HCFs (HUCK, VNC, and MHK) was 91 nurses during this study.

Sample technique

The randomization process was applied in all HCFs where the nurses were divided into the groups referring to their level study, and then the number was written in the shift paper from one to 100. The nurses who picked the impair number was accounted to be taken in the sample during the study. For avoiding the bias in all HCFs, the extra numbers were added in the shift papers for replacing whose could be absent during the survey.

2.6. Data Analysis

The questionnaires were checked for completeness of the data based on the developing questionnaires as mentioned at the end of each day and were then given serial numbers and coded before entering into the computer. A statistical Package for Social Scientists version 16.0 software (SPSS) was used to analyze the data which were presented as frequency table, bar graphs.

2.7. Assessment Tool

During the assessment, the diagnostic assessment type was chosen among the

forms of assessments (diagnostic, formative and summative) referring on the elements shown in the table below and basing on the parameter of the survey [13]. Each criteria was quoted out 10.

2.8. Ethical Consideration

After that the research committee of hope Africa University approved the research protocol (N/Ref: DP/132/2019). The permission of data collection obtained from the authorities of the same school who gave us the letter asking the access to the investigation in the 3 HCFs (N. Ref: CVN/071/2019 and N/2019/DGCHUK.3026/M.5). Before the collection data process, we ensured to the nurses that the information collected from them won't be anytime used in order to affect them negatively. Verbal informed consent was obtained individually from nurses who were concerned by the study. The study was voluntary, and the confidentiality was assured during all process of data collection considering the ethical consideration.

3. Results

3.1. Demographic Data

The demographic data of participants are represented in Table 2. The range of years varied from 20 to 60 years old at the average of 33.33%. Among all participants females were found at high level (65%) against male participants (34%).

Table 1. Type of assessment.

Type of assessment	Parameters evaluated	Criteria of evaluation by questioning	Rational
Diagnostic assessment	Best nursing diagnosis in pediatric nursing care	Skills	It includes both formal measurements which uses aspects like aptitude test and fitness test and informal measurements include observation during practice, discussions and questioning
		Abilities	
		Interests	
		Experiences	
		Levels Of Achievement	
	Barriers of nursing practice in pediatric unit.	Skills	
		Abilities	
		Interests	
		Experiences	
		Levels Of Achievement	
	Factors related to the implementation of EBP in pediatric wards	Skills	
		Abilities	
		Interests	
		Experiences	
		Levels Of Achievement	

3.2. Study Level

The study levels of nurses in three HCFs were represented in Figure 2. The levels A_3 (nurse who had done 2 years of high school), A_2 (nurses who had done paramedical high school), A_1 (nurses who had done 3 years of university in ancient system), A_0 (nurses who did a school of nursing 3 years at university in new system of BMD) were reported with at 15.6%, 64.1%, 10.9% and 8.4% respectively.

3.3. Experience at Work

The experience at work for the nurses was represented in Figure 3. 15.6% (14) of nurses were accounted to have an experience between a month to one year, one year to three years and four years to seven years found in the same range of 20.3% (19). Another side 17.2%(16) was obtained for both 8 years to 11 years and 12 years to 15 years and 9.4% (9) has an experience of 15 years and more.

3.4. Comparison of Steps of IBP during Nursing Diagnosis by HCF

The steps of IBP during the nursing diagnosis process in three HCFs are represented in Figure 4. All steps were not recognized by the majority of nurses with 84.6% (33), 87.5% (21), and 89.3% (25), respectively for CHUK, VNC, and MHK.

Table 2. Demographic data of study participants.

Characteristics		Frequency (N = 91)
Age	Range	20- 60 years
	Mean	33.33
Sex	Female	60 (65%)
	Male	40 (34%)

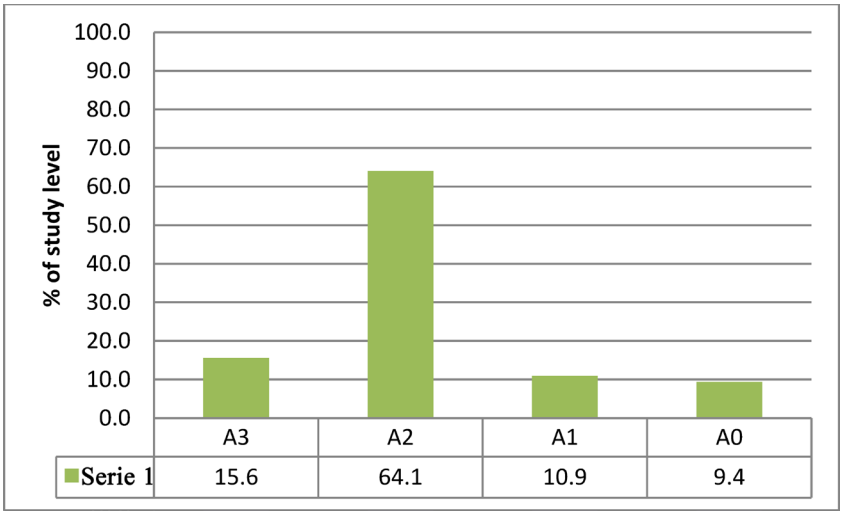

Figure 2. Study level of nurses in two health care facilities.

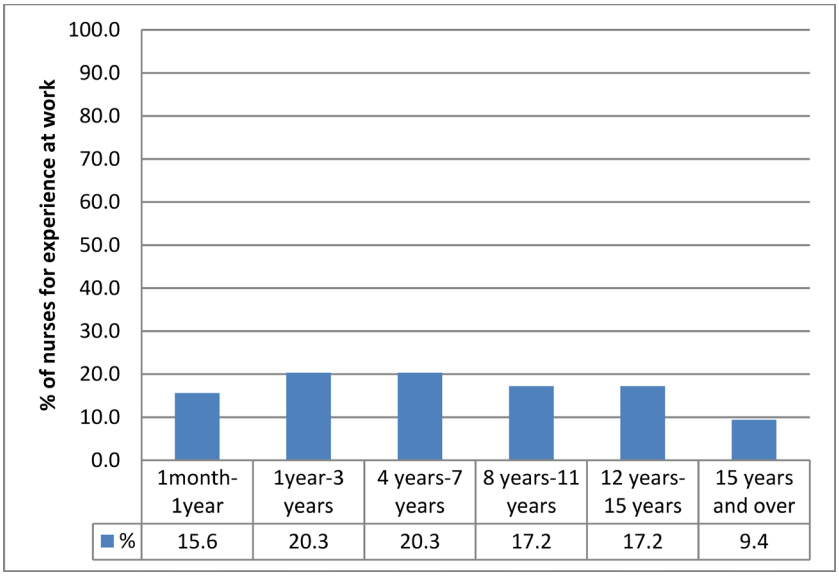

Figure 3. Experience at work for nurses in the pediatric unit at three HCFs.

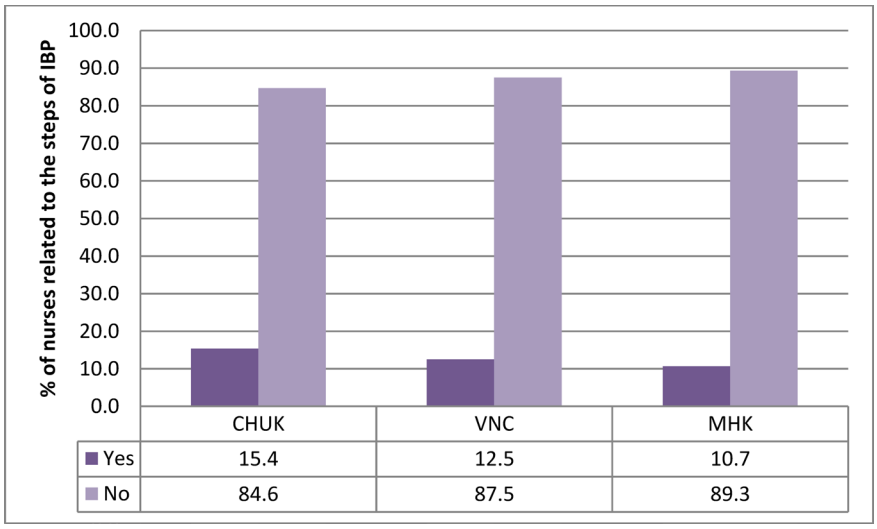

Figure 4. Comparison of steps of IBP during the nursing diagnosis in three HCFs.

3.5. Barriers Related to the Nursing Practices for PNC

Barriers which affect the best practice in pediatric unit were represented in Figure 5. 20% (18) of concerned nurses don't have freedom in decision making, 30% (27) complain the lack of good communication, and 20% (18) of nurses don't have adequate time to do well the practice. The specification was obtained at 4% (4); bad care management at 30% (27). Only 6% (6) can discover a problem of children. Other characters like relation between nurse and patient and gap in professional judgment were not recognized with 85% (77) and 65% (59) respectively.

3.6. Implementation of EBP in HCFs

Figure 6 shows the knowledge level of nurses about the using of NT in

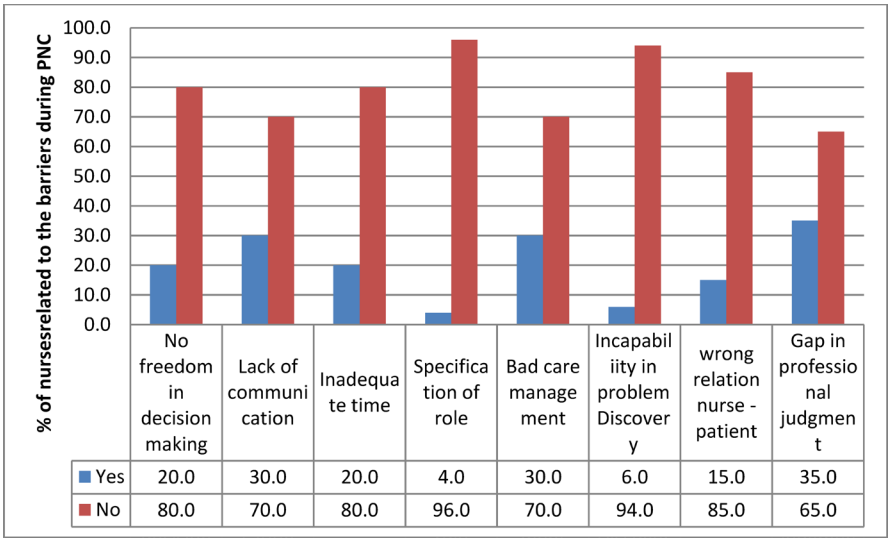

Figure 5. Barriers which affect the best practice in the pediatric unit.

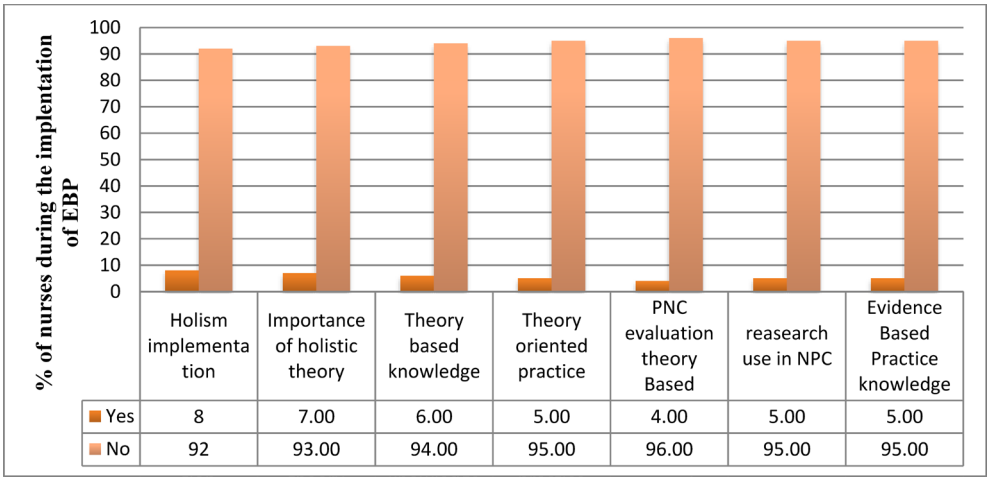

Figure 6. Factors related to the implementation of EBP in three HCFs.

nursing practices. 92% (94) don't implicate a holistic approach during their practice, and 93% (85) do not know the importance of holistic theory. The orientation based on theory was found at 5% (5), compared to the evaluation of PNC that comes with 4% (4). In the same orientation, the use of research in pediatric inpatient was quoted with 5% (5) of nurses only. In other sides, the evidence based practice (EBP) was recognized by 5% (5).

3.7. Assessment

Type of assessment	Parameters evaluated	Criteria of evaluation	Score	%
Diagnostic assessment	Best nursing diagnosis in pediatric nursing care	Skills	2	30%
		Abilities	2	
		Interests	4	
		Experiences	4	

Continued

	Levels Of Achievement	3	
Barriers of nursing practice in pediatric unit.	Skills	2	
	Abilities	3	
	Interests	4	32%
	Experiences	3	
	Levels Of Achievement	4	
Factors related to the implementation of EBP in pediatric wards	Skills	5	
	Abilities	4	
	Interests	3	40%
	Experiences	4	
	Levels Of Achievement	4	
Total average			**34%**

4. Discussion

4.1. Demographic Data

Female nurses were represented with high number at 65% of the participant against male participants at 35% (Table 1). Even if the number of women looks high, it could not cause high risk to the practice. This high number could be caused by culture where men used to say that the nursing role concerns females only contrary to eelier centuries where it is said that even the first nurse was a man [14]. Ersilia continued to confirm that the best practice has no relation gender.

Age, the results reveal that the range of ages was reported in intervals between 20 years to 60 years. This is caused by the fact that some of the HCFs of the study dated many years ago. This could cause problems if nurses could keep working with experience at work without enough knowledge about the best practice in PNC. It is also a matter for young workers because even if they still have enough force to work but they did not study all processes of nursing cares based on EBP due to the poor curriculum developed by schools of nursing. The similar study conducted by David on the place of the patient and his family in the process of nursing care in hospital area has found the same contribution [15].

4.2. Study Level

The A_2 level was represented with a high percentage (65%) in all three HCFs compared with other levels. Burundi since 1945 to 1997, the nursing skills were taught only at high school, and the majority of nurses were accounted to having A_3 and A_2 levels, but among them the A_2 nurses were working in the HCFs with a big package. However, the A_3 level was considered as a help professional in the nursing practices system and are located in the small HCFs et health district

hospitals [10]. This was explained by the fact that there was no other level with high competencies compare A_2. For these three HCFs, the CHUK and MHK are accounted among the HCFs do have several years for delivering nursing cares than CVN. The same reason can be applied for these two HCFs that were accounted with the majority of A_2 and A_3 level 60% (55). In other side, the CVN is new clinical affiliated to the private university and its activities do have a total of 9 years, therefore, the majority of A_0 and A_1 were assessed in this clinic with 15% (14) out of 18 nurses. This explains the reason related to the existing of new levels (A_1 and A_0) in the health system of Burundi from 1997. In the case of the PNC could depend on the levels, all three HCFs could fail by taking care the patients, however, the previous comparison doesn't explain that the four levels have the same capacity to develop skills and competencies in pediatric unit because their curriculum is totally different, adding also the experience especially for A_2 and A_3 levels.

Currently, the three HCFs concerned by this study are the reference hospitals do not allow the A_3 and A_2 levels, because their competencies are low than nursing care outcomes. The findings in this study, however, show the contrary as well as the majority of nurses are the A_3 et A_2. In the case of the PNC could depend on the level, these three HCFs could be assessed without PNC competencies.

The economic crisis in the country could be one among the weaknesses that can contribute by limiting the access of nurses with high level in the HCFs services regarding to their salaries [16]. This could cause the inadequate number of highly qualified nurses in the pediatric unit of the two hospitals.

Considering the previous situation as above mentioned, all three HCFs should give a chance of a job for the A_0 In addition the universities in collaboration with the government should put in place the masters program and A_0 for increasing the number of nurses who have a high degree in nursing skills for the PNC and help the nurses to develop their maturity during the nursing skills in the HCFs [17]

4.3. Experience at Work

In this study, a lot of years of experience were assessed to be held by 17% and 17%, respectively with 8 to 11 years, and 12 to 15 years, but it was accounted with average of 16.7 years for all nurses in the three HCFs. This could be a chance for the three HCFs for being the excellent during the PNC even the nurses do not have the background required for developing better the nursing cares inpatients pediatric wards (**Figure 2**). The same explanation as above mentioned based on the years of existing HCFs could be related with this current situation. In the case of the practices of PNC could be based on the experience, one among the two hospitals (VCN) could meet some difficulties for ensuring the quality of nursing cares. However, the studies conducted in other countries like Australia and Canada about a systematic approach to maximizing nursing

scopes of practice, show that the experience at work can play a major role in making good practice in terms of making a good nursing care plan based on EBP [18]. The lack of this study (limitation) is that it doesn't focus on the comparison of experience at work and practices for making the correlation between these two aspects. For improving more this study in the perspectives, it is important to assess the practice conducted by the nurses if the quality is based on the experience. Based on the contribution developed by other authors [12], it is important for these three HCFs to consider the experience during the PNC. In spite of other studies, which was conducted has found different propositions: the best practice is successful when qualities like trust, diversity, mindfulness, interrelated, respect and effective communication are recognized during the accomplishment of the work [19].

4.4. Best Nursing Diagnosis in PNC

The nursing practices need the competencies and advanced nursing skills. However, when the nurses do not have an orientation based on nursing evidences (IBP and EBP) [20]. The results in this study, however, they showed the contrary situation because the majority (97.5%) of nurses were not able to know the nursing plan, the involvement of parents, the diagnosis formulation, the nursing theory application and the importance of nursing monitoring and assessment that constitute the nursing practices process. It is explained by the lack of involvement of all stakeholders especially the head of HCFs and the responsible of services in the HFCs investigated in this study. The gap of nursing theory application and the poorest curriculum developed at universities could be also the main obstacles for ensuring to nurses in these to realize the nursing practices in the pediatric services of these HCFs, in the case of all nurses were not able to know the process of nursing theory into practices. The consequences could raise up in the pediatric services of these HCFs, as well as the improvement of nursing practices can be stopped according to the lack of nurses facing on the practices. The main consequences could be the increasing of incidence of patients in these HCFs, even the mortality could be assessed in that situation. The same consequences were assessed in different countries, where the lack of best nursing practices in pediatric services was analyzed to be the main causes [21]. High school level in nursing (A_2 and A_3) in the three HCFs where higher than other levels (A_1 and A_0). The process of nursing diagnosis was not recognized with the average of 97.6% of nurses in all HCFs referring to the experience at work. This overall pattern did not vary by HCF, but differed depending on the type of level. The experience behind the level of study could be the parameters that can help to orient the HCFs by making decision for the promotion of the PNC in these HCFs. Therefore, for getting the best results during the PNC, it is important to consider nurses based on their curriculum and competencies at work. It is also important to take account on nurses who are able to orient the nursing skills during practices referring to the holistic nursing; working environment, the best

educational system and the fact of encouraging nurses with different motivational factors play a big role in the implementation of holistic care dispensation [22]. For that it is an emergency situation for the government to revise the process in which the nursing care is offered into HCFs. In addition, a specific committee in the pediatric unit should be set in these two hospitals regarding to the training system.

The studies that may help to orient the information above mentioned related to the lack of nursing schedule into the services of HCFs were developed by Hamilton of state for the science review about the primary care where it was found that nurses are considered as the backbone of pediatric care that administer the vaccines, manage the ventilators in the PICU (Pediatric Intensive Care Unit), educate parents on how to care their own children. In addition, they provide the continuity of care across the specialists, therapists and techs of modern medicine [23]. This was also considered as the obstacles during the PNC in these three HCFs investigated. To resolve this problem it is important to consider all nurses who work in pediatric unit as the managers of PNC and to allow them to be able for becoming empowered and make good and best practices by considering children and their families in all process of nursing care in the hospitalization [24].

4.5. Barriers Which Affect the Best Nursing Practice in Pediatric Unit

During the implementation of PNC some barriers can be assessed as the obstacles that can block the progress of nurses for taking carefully the patients. In this context, the consequences can be assessed immediately for the patients and the families of these later. In this study, the barriers which affect the best nursing practices in pediatric ward were assessed. For all nurses in the three HCFs, the absence of freedom in decision making, the lack of communication, the inadequate time and the specification of roles were recognized by the majority of nurses as the barriers for the first step of nursing practices in their service with 80%; 70%; 80% and 96% respectively.

It is due by the fact that the nurses do not have job description. This may cause some problems during the nursing implementation in pediatric ward, because there is no any orientation for providing the nursing care of quality The monitoring and assessment of nursing care conducting in the services could not be carried as well as each nurse has its specific orientation. This could affect directly the patients through the lack nursing cares based on poor investigation referring to the inadequate evidence nursing tasks. Because the nurses do not enough time for using nursing theories during the nursing cares in pediatric service adding also the little time recorded for nurses during the practices by staying together with the patients and their families; the worst care management, the incapability in problem discovery, bad relation nurse-patient and the gap in professional judgment were assessed by the nurses also as the main barrier in

nursing pediatric practices with 70%, 94%, 85% and 80% respectively. The same situation with similar explanation were developed by other authors in different studies, where the lack of organization into the service, the lack of leadership management were assessed as the fact that influencing negatively the orientation of nursing practices in the pediatric unit [22]. For avoiding these current issues in the pediatric service, it is important for the leaders of HCFs to establish the job description for each nurse based on its specific level.

The same studies were conducted in America, heavy workload of hospital in pediatric service, nurses experience, inadequate supply of nurses, reduced staffing and increased overtime, and reduction inpatient length of stay was assessed in the study carried out as the main causes of lack PNC in the HCFs [25].

For increasing the quality of PNC in three HCFs of Bujumbura, the tracking system of patients from their entrancing in the hospitalization (pediatric ward), their evolution during the nursing care administration, they exist from the service, and their returning at home could be planned in the PNC steps or process for ensuring the outcomes of each patients during the period determined.

Poor communication between nurses and other health care providers was assessed by some authors as the causes that can influence negatively on the quality of PNC especially for the patient safety, quality of care, patient outcomes, and staff satisfaction [25]. The communication could be also, one of mechanisms that could help the leaders and nurses to conduct well the PNC, through the mode of communication by developing some strategies like the assessment report cares for each patient into the hospitalization, and the communication on time between nurses, leaders, and the patient's families.

4.6. Factors Related to the Implementation of EBP Pediatric Unit

The EBP is the final stage of nursing care inpatients service, where the nurses are supposed to take care a patient based on the deepest investigation (IBP) that may occur the nursing diagnosis. In addition, the EBP phase helps the nurses to do the plan where all nursing care approaches should be realized referring to the EBP process [26]. The results in this study, however showed that the holism implementation, the importance of holistic theory, the knowledge-based on theory were not recognized by 92%, 93% and 94% respectively. In addition the practices oriented on nursing theory, the PNC evaluated by using nursing theory, the application research in NPC and the evidence-based practices knowledge were not recognized by the nurses average of 96% (87), 95% (86), and 95% (86), respectively. It is explained that the nurses do not recognize the nursing theory. In addition, the health public system of Burundi do not have the national guidelines related to the nursing practices and the regulation order of nurses committee that could help the nurses to ensure the monitoring and assessment of nursing care in the pediatric services in the HCFs [25]. Considering this mismanagement, the consequences could raise for the nursing care implementation in the pediatric ward as well as the nurses follow the wrong diagnosis and wrong

EBP. The same information was developed by Cooke in his study carried out in US

[4]. To avoid this, it is important to the government to establish the guidelines related to nursing practices in HCFs, and to put on place a national order regulation for nurses in Burundi. It is also required for the HCFs to establish the norms for helping the nurses during practices and to put on placing the committee that could help for ensuring the PNC in HCFs. For that the impact will be recorded directly to the patient by the worst assistance during the inpatient process.

4.7. Assessment

After that the nurses have been evaluated, it was found that their level of knowledge was too low at 32%. this could be the major impact for implementing best nursing care in PNC which could result the delay in hospitalization, high risk of mortality and or morbidity which affects the families economic status of sick children. This could be also caused the lack of assistances by professional mentors; education not based theories of nursing, low income of health care facilities which do not supply the needed materials in services. The solution of this problem could be successful if HCFs leaders recruit experienced nurses and give the needed requirements for the best practice. It is better to prepare the workshops about PNC for the purpose of updating the knowledge level of nurses. The study conducted by Fraser mentioned that diagnostic assessment is more applied in education to assess student knowledge when learning; this could mean a lot about nurses that they could be assessed day by day as continued training in order to help nurses stay updated [27].

5. Conclusion

The results of this study demonstrate that the low study levels for nurses and their experience at work play the major impact on the best practice often offered in pediatric unit. EBP based knowledge affects the diagnosis formulation which is the origin of not being successful during the treatment of sick children. The current study confirms that the lack of freedom in decision making, lack of communication, inadequate time, absence of role specification, bad care management, and incapability in problem discovery, wrong relation nurse-patient and gap in professional judgment are the barriers of best practice based on evidences which are the factors of non satisfaction at work. Therefore, the current study gives the contribution that nurses have to develop the spirit of reading journals about nursing pediatric care, good collaboration, participating in nursing workshops and respecting the rules elaborated by Ministry of Health as recommended.

6. Limitations

The author needed to expand the study in all HCFs of 9 provinces including Bu-

jumbura as specific and trusted information to generalize all country but time and economy were important barriers.

7. Suggestions

- Pediatric Nurses should develop the spirit of self-evaluation, the spirit of reading pediatric, Journals about theories and EBP applied in nursing;
- To consider and value the implication of parents in the care of sick children;
- Schools should revise their curriculum installing the use of EBP in practice;
- The Bachelors (A_0) and Masters Holders should be given opportunity to work than A_2 levels.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix

A: Questionnaire

I. Identification

1. Demographic data

Gender

Male □ Female □

Age

20 years to 30 years old □ 31 years to 41 years old □

41 years to 50 years old □ 51 years to 60 years old □

1. What is your level of education?

A_3 □ A_2 □ A_1 □ A_0 □ Masters □

2. What is your experience at work?

1 months - 1 year	□ Yes	□ no
1 yr - 3 years	□ Yes	□ no
4 years - 7 years	□ Yes	□ no
8 years - 11 years old	□ Yes	□ no
12 years - 15 years	□ Yes	□ no
15 years and over	□ Yes	□ no

II. Formulation of a Pediatric Rational Diagnosis

1. Do you know pediatric nursing planning?
   □ Yes □ no
2. Do you involve the parents or family of the sick child in pediatric nursing planning?
   □ Yes □ no
3. Do you know the wording of a rational diagnosis?
   □ Yes □ no
4. Do you apply theory in collecting, analyzing and interpreting in the pediatric nursing process?
   □ Yes □ no
5. Do you know the importance of monitoring and evaluation in pediatric nursing planning?
   □ Yes □ no

III. The obstacles related to practice in your "unit".

1. You are not free to make important decisions about patient care.
   □ Yes □ no
2. Communication between nurses in your unit is not good.
   □ Yes □ no
3. You do not have enough time and opportunity to discuss patient care issues with other nurses.
   □ Yes □ no

4. In your unit, nurses are not enough to provide quality patient care.
   □ Yes □ no
5. The nurse manager in your unit is a bad manager and a bad leader.
   □ Yes □ no
6. You are not able to discover a special problem of the patient in your unit.
   □ Yes □ no
7. Your manager does not help you make clinical decisions.
   □ Yes □ no
8. In your unit, you are asked to do things against your professional judgment.
   □ Yes □ no

IV. Factors related to the core competencies of pediatric nursing

1. Do you practice holism in your pediatric nursing practice?
   □ Yes □ no
2. Holism is important for the patient, his family and his society.
   □ Yes □ no
3. Does the theory guide you during your practice?
   □ Yes □ no
4. Do you use theory to predict your pediatric nursing (nursing plan)?
   □ Yes □ no
5. Does the theory help you evaluate your pediatric nursing practices?
   □ Yes □ no
6. Do you understand the self care theory to evaluate yourself during your pediatric nursing practice?
   □ Yes □ no
7. Does the research help you to understand theories of nursing and EBP very well?
   □ Yes □ no
8. Do Evidence Based Practice (EBP) and Theory work together to establish a good Nursing diagnosis and help you plan good nursing care in your unit?
   □ Yes □ no