

# Nurses' practice of patient education and perception of its facilitators and barriers in healthcare facilities in Buea, Cameroon

## Abstract

This study was conducted to assess nurses' practice of patient education in clinical settings and to explore their perception of how this could be facilitated in their hospitals. Nurses makeup majority of the health force and they also spend more time with patients and their families. Thus they have as one of their most important roles to educate patients and their families about their healthcare related issues. A quantitative cross-sectional study design was employed for this study. The study was conducted in 4 main hospitals in Fako division of the South West Region of Cameroon. Most of the study participants were females (89.3%) and their ages ranged between 18-64 years, with a majority (75%) ranging between the ages of 18-35. Most of the nurses (65.7%) had a Diploma in nursing, with just a few (7.1%) with masters degrees. A good number of them (73.6%) had worked between 1-9years. Results of our study also found inappropriate patient environment as a potential barrier to patient teaching. The findings of this study suggest that if nurses are provided with educational aids, patients' education process guidelines, refresher courses on patient education, and some supervision during the teaching process, patient teaching practice could be enhanced.

**Keywords** Patient education, Nurses, healthcare facilities, Cameroon

## Introduction

The increasing prevalence of chronic diseases, the ageing worldwide population<sup>[1]</sup> and the increasingly need from patients and their families to participate in healthcare decision making<sup>[2]</sup>, raises the need for effective patient education in

healthcare institutions. Patient education, which is a process encompassing a set of planned educational activities is aimed at improving patients' knowledge and health behaviors <sup>[1,3]</sup>. Patient education in clinical settings is quite important to both patients and healthcare institutions. Patients have expressed the view that starting treatment depends on understanding the rationale behind it <sup>[4,5]</sup>. Thus with effective education patients will have improved understanding of their health condition and are empowered to take an active role in their care. This contributes towards an enhancement in their physiological and psychological outcomes, improved health related quality of life, reduction in treatment expenditure in patients' readmission and improved satisfaction with care <sup>[6-8]</sup>. On the other hand, healthcare institutions benefit from rendering quality services, fewer outpatient visits and improved patient and healthcare provider satisfaction <sup>[9]</sup>.

Nurses make up majority of the health force and they also spend more time with patients and their families. Thus they have as one of their most important roles to educate patients and their families about their healthcare related issues <sup>[7]</sup>. The role of the nurse in patient education spans the gamut from an emergency lifesaver to nurturing companion. Literature suggests that some nurses regard patient education as a significant part of everyday practice and as a specific responsibility <sup>[10]</sup>, and that nurses who perceive higher levels of responsibility in their teaching roles tend to perform patient teaching activities more frequently.

Nonetheless, studies have shown a lack of patient education by nurses<sup>[6,11]</sup> and suggests that the patient education efforts of nurses are of poor quality and fail to convey the necessary knowledge and skills to patients<sup>[3,12]</sup>. In a study by Kalisch<sup>[11]</sup> with nurses working in a medical-surgical unit, patient education was identified as one of the nine aspects of care that is frequently missed out by nurses. Another study carried out on medication education in Israel found that only 40% of the patients reported receiving medication counseling during hospitalization and 42% were interested in receiving more comprehensive counseling related to medication therapy<sup>[6]</sup>. It is stated that some nurses are reluctant to be involved in patient education and often abandon the responsibility of patient education to physicians<sup>[13,14]</sup>. Friberg et al.<sup>[15]</sup> found an uncertainty about the accomplishment of educational tasks among nurses. This poor practice of patient education by nurses have been mostly explored in resource rich settings and have been linked to many challenges including increased workload, lack of knowledge about patient education, lack of educational resources, lack of motivation and rewarding systems and lack of guidelines for patient education<sup>[16-22]</sup>. The practice of this important nursing role and nurses' views about how this could be facilitated in a resource-poor setting like Cameroon is not well understood. Thus this study was conducted to assess nurses' practice of patient education in clinical settings and to explore their perception of how this could be facilitated in their hospitals.

## Methods

A quantitative cross-sectional study design was employed for this study. The study was conducted in 4 main hospitals in Fako division of the South West Region of Cameroon. These health facilities were selected on the basis of their high patient turnover and higher nursing staff capacity.

The study included a sample of 140 nurses, purposively selected from the participating hospitals. The nurses who took part in this study were those who had been practising for at least 1 year.

Data collection was by the use of a structured questionnaire. The questionnaire was divided into 3 parts. The first part was designed to collect demographic data such as age, sex, professional qualification and number of years in active service. The second part consisted of questions that explored the practice of patient education by nurses and the third part had questions that examined nurses' perception of what could facilitate or hinder patient education in their healthcare facility. Data was analysed descriptively, with the aid of SPSS version 17.0

## **Ethical Considerations**

Authorization to conduct the study was obtained from the Regional Delegation of Public Health for the South West Region. Permission for data collection was also obtained from the administration of each study hospital. Verbal consent

was obtained from participants and autonomy and confidentiality was maintained.

## Results

### 4.0 Demographic Characteristics of Participants

Most of the study participants were females (89.3%) and their ages ranged between 18-64 years, with a majority (75%) ranging between the ages of 18-35. Most of the nurses (65.7%) had a Diploma in nursing, with just a few(7.1%) with masters degrees. A good number of them (73.6%) had worked between 1-9years (Table 1).

Most (124, (88.6%)) of our participants reported to have received some formal training on patient education. Among the nurses who had training on patient education, 9(7.3%) reported it was part of a continuing education program in the form of a seminar or workshop while 115(92.7%)said it was during their preregistration nursing program.

<b>Demographic characteristics</b>	<b>Options</b>	<b>N</b>	<b>%</b>
Gender	Male	15	10.7
	Female	125	89.3
Age	18-35	105	75.0
	> 35	35	25.0
Qualification	Diploma	92	65.7
	Bachelors degree	38	27.1
	Masters degree	10	7.1
Number of years in service	≤9 years	103	73.6
	≥10years	37	26.4

## Table 1: Demographic Information

### NURSES' PRACTICE OF PATIENT EDUCATION

A total sample of 133 nurses (95%) reported that they taught their patients routinely as part of their every day job. However 84(60.0%) nurses reported that most of their patient teaching activities were informal while 56 (40.0%) said it was predominantly formal. A good number of the nurses (40.7%) estimated that they used more than 20minutes per 8 hour shift for patient teaching activities, while some nurses (27.9%) said it was between 10-20 minutes and others (31.4%) said it was between 1-10minutes in a shift.

With respect to teaching patients upon admission, some nurses reported that they always taught patients about: how to dispose of waste (60.7%), the hospital environment (53.6%) and hospital policies (46.4%). The rest of the nurses reported that they either only sometimes or never taught these contents to their patients at the time of admission (table 2). With regards to teaching during hospitalisation, up to half of the nurses reported that they always taught patients about: their disease condition (53.6%), personal hygiene (52.9%), and how to maintain healthy lifestyle (52.9%). Moreover, some (45.0%) said teaching about food-drug interactions during hospitalization was only sometimes done.

There were equally a few (16.4%) who reported never implementing teaching about food-drug interactions. With regards to discharge teaching most nurses reported that they always informed patients about their next appointments (70.7%), and taught them how to continue their drug therapy (68.8%). On the other hand, teaching on special diets and exercise was only sometimes carried out by 49.3% of the nurses, as shown on table 2.

Concerning the documentation of teaching in the patients' case file, a good number of nurses (45.7%) reported that they never documented their patient teaching activities while 20.0% said they sometimes documented what they taught patients and 34.3% said they always documented what they taught patients.

**Table 2: Practice of Patient education**

Category	Never	Sometimes	Always
<b>On admission</b>			
I teach patients about the hospital environment	11(7.9%)	54 (38.6%)	75(53.5)
I teach patients about the various hospital policies	14(10%)	61(43.6%)	65(46.4%)
I teach patients where and how to dispose of their waste	9(6.4%)	46(32.9)	85(60.7%)
<b>During hospitalization</b>			
I teach patients about their disease conditions	6(4.3%)	59(42.1%)	75(53.6%)
I teach patients about their medications	19(13.6%)	58(41.4%)	63(45.0%)
I teach patients on food-drug interaction	23(16.4%)	62(44.3%)	55(39.3%)
I teach patients on personal hygiene	10(7.1%)	56(40.0%)	74(52.9%)
I teach patients how to maintain a healthy lifestyle	14(10%)	52(37.1%)	74(52.9%)
<b>On discharge</b>			
I teach patients how to continue their drug therapy	7(5%)	37(26.4%)	96(68.6%)

I inform patients about their next appointments	13(9.3%)	28(20.0%)	99(70.7%)
I teach patients about special diets and exercise	12(8.6%)	69(49.3%)	59(42.1%)
I teach patients how to continue care at home	24(17.1%)	45(32.1%)	71(50.7%)

### **Nurses' perception of barriers to patient education in their healthcare facilities**

The study participants reported a wide range of factors that hindered the implementation of patient education in their hospital and this mostly included: increased workload (78.6%), shortage of nurses on duty (76.4%), Lack of incentives (72.1%) and lack of educational materials (68.6%). The least perceived barriers included the view that patient teaching is not a nursing responsibility (15.7%) and the lack of competence to teach patients (26.4%) as shown on table 3.

Table 3: Barriers to Patient Education in Hospitals in Fako

<b>Perceived Barrier</b> ( <i>What hinders your practice of patient teaching? Select all that apply</i> )	<b>Agree</b>	<b>Disagree</b>
Increased workload	110(78.6%)	30(21.4%)
Shortage of nurses during shift	107(76.4%)	33(23.6%)
Lack of motivation	101(72.1%)	39(27.9%)
Lack of educational materials	96(68.6%)	44(31.4%)
Lack of patient education guidelines in the patients' files	94(67.1%)	46(32.9%)
Nonconductive ward environment for patient teaching	88(62.9%)	52(37.1%)
Severe medical condition of the patient	82(58.6.7%)	58(41.4%)
Lack of time to teach patients	81(57.9%)	59(42.1%)
Lack of competence to teach patients	37(26.4%)	103(73.6%)
Patient teaching is not a nursing responsibility	22(15.7%)	118(84.3%)



## Nurses' perception of how Patient Education could be enhanced

The nurses in this study identified a good number of factors that could facilitate the implementation of patient teaching in their hospitals, which includes: adding a patient education process guide in patients' hospital files(75%), increasing availability of educational materials like charts, videos, and leaflets (75.0%), providing In-service training of nurses to improve their patient teaching skills(70.7%), and increasing the number of nursing staff per shift(66.4%) (Table 4). Enhancing the supervision of nursing staff was the least perceived factor that could facilitate the practice of patient education (37.3%).

**Table 4: Nurses' perceptions of patient education enhancement strategies**

<b>Perceived Facilitators</b> ( <i>What can help you to teach patients?</i> <i>Select all that apply</i> )	<b>Agree</b>	<b>Disagree</b>
Availability of educational materials like charts, videos and leaflets	105(75.0%)	35(25.0%)
Availability of patient education process guide in patients hospital files	105(75%)	35(25.0%)
In-service training on patient teaching	99(70.7%)	41(29.3%)
Increased number of nursing staff per shift	93(66.4%)	47(33.6%)
Increased financial motivation	71(50.7)	69(49.3%)
Enhanced supervision for patient education	53(37.3%)	87(62.1%)

## DISCUSSION

Patient education is a vital component of nursing care <sup>[7]</sup>. It has been proven to be beneficial to the patients overall health and quality of life. Some of the benefits include compliance with care, understanding of patients' health condition, adaptation and prevention of disease and complications. The findings

of this study suggest that although a majority of the nurses were involved in patient teaching and taught patients about important aspects of care from the time of hospitalisation to discharge, a considerable number only did so sometimes. This differs from results of the study by Garshasbi et al<sup>[23]</sup> in Iran where more nurses (84.9%) reported that they always taught their patients. In the current study, most of the nurses implemented patient teaching as an informal activity, with a consequent poor documentation of the activity in patients' hospital files. The poor documentation of care by nurses has been reported by a previous study in this setting<sup>[24]</sup> and therefore is a call for concern. Also other studies<sup>[3,6,25]</sup> noted poor documentation of patient education because it occurred in an informal setting, which could also be another reason for the results seen in this study. There is an urgent need for interventions to improve not only the quantity but the quality of documentation of nursing care by nurses in this study setting. This can be ensured by considering patient education as a whole process which requires assessment, planning, implementation and evaluation.

This study like many other studies in the literature<sup>[25]</sup> showed that during hospitalization, nurses do teach patients about their disease conditions, how to maintain personal hygiene and healthy lifestyle as well as food drug interaction. These, together with discharged teaching on how to take medication, self-care at home and patients' next appointment, are important

components of patient teaching that nurses need to continually provide and improve on its provision, as need arises to ensure optimal benefits of the intervention.

. Workload, inadequate nursing staff and motivation stood out as barriers affecting patient education, which is similar to previous studies [3,5,27,28]. It is worth noting here that the nurse-patient ratio in Cameroon is quite low [29], and this explains the concern raised by the nurses, which is the case in many low income countries like ours. The shortage of nurses leads to increased workload for the available few, and consequent lack of time for this important nursing care activity, which were all reported by participants of this study. Also, the routine functioning and multitasking of nurses in our setting, resulting from poor job descriptions and insufficient support staff, has left nurses carrying out nonprofessional tasks to ensure the smooth running of hospitals. This consumes time and increases their workload, which they would have spent with patients. This is not different from the case in other settings [5,8]. Moreover, nurses in Cameroon, as in most sub-Saharan African countries are not well paid. This has a potentially negative impact on nurses' motivation for their job, coupled with their overwhelming workload. This hinders the practice of patient teaching which plays a key role in patient recovery [5]. On the other hand, similarly to study by Oyatunde et al [28], the fact that nurses acknowledged patient education as their duty and that they felt competent to educate patients was not the case

with Moonaghi et al <sup>[5]</sup>. Nurses embracing this role in our setting is a good step to complete acceptance and implementation of this role.

<sup>[8]</sup>. Results of our study also found inappropriate patient environment as a potential barrier to patient teaching. Overcrowded wards, which is sometimes the case in the study setting, due to lack of adequate hospitalization facility, prevents education on very sensitive topics. Nevertheless, nurses should strive to always create a comfortable and private environment for patients and ensure that patient education needs are always met.

The findings of this study suggest that if nurses are provided with educational aids, patients' education process guidelines, refresher courses on patient education, and some supervision during the teaching process, patient teaching practice could be enhanced. These have also been echoed by other researchers <sup>[1,5,25,27,28]</sup> and are all vital to the teaching and learning process in terms of its enhancement. It should therefore be given due consideration by hospital administrators in the study setting.

## **Conclusion**

The practice of patient education was not a routine practice for a majority of the nurses in this study, and this needs to be improved. Improving the availability of educational materials, patient education process guides, staff education as well as increasing the number of nurses per shift and financial motivation will go a long way to improve on patient education by nurses in the study setting. For this

to be effective leaders of institutions need to prioritize patient education and take into account suggestions from nurses as it requires a team effort for successful implementation of patient education.

### **Ethical approval and consent to participate**

Authorization for this study was gotten from the Regional Delegation of Public with the following reference R11/MINSANTE/SWR/RDPH/PS/919/626. The directors of the various hospitals gave authorization for the study. Participants gave consent and participation was voluntary

### **Reference list**

- 1) Sayedin H, Goharinezhad S, Vatankhah S, Azmal M. Patient education process in teaching hospitals of Tehran University of medical sciences. Med J Islam Repub Iran.2015;29:220.
- 2) Abdi A, Izadi A, Vafaei K, Lorestani E. Assessment of patient education barriers in view point of nurses and general physicians. Intl Res J Appl Basic Sci.2014;8(12):2252-2256.
- 3) Abo Gad R, Obied H. effect of intervention guide on staff nurses', role in patients' education. IOSR-JNHS. 2018;7(4):88-98.
- 4) Labhardt ND, Schiess K, Manga E, Langewitz W. Provider-patient interaction in rural Cameroon- how it relates to the patients' understanding of diagnosis and prescribed drugs, the patients concept of illness and access to therapy. Patient Educ Couns.2009;76(2):196-201.
- 5) Moonaghi HK, Zeydy AE, Mirhaghi A. Patient education among nurses: bringing evidence into clinical applicability in Iran. Invest Educ Enferm 2016;34(1):137-157.
- 6) Livne Y, Peterfreund I, Sheps J. Barriers to patient education and their relationship to nurses' perception to patient education climate. Clinical Nursing Studies 2017;5(4):65-72.

- 7) Heidari MR, Norouzadeh R. Factors affecting patient education from cultural perspectives. *J Adv Med & Prof.* 2013;1(4):136-139.
- 8) Farahani MA, Mohammadi E, Ahmadi F, Mohammadi N. Factors Influencing patient education: a qualitative research. *Iran J Nurs Midwifery Res.* 2013;8(2):133-139.
- 9) Keifi S, Shahriari M, Baghersad Z, Sheibani-Tehrani D, Rejalian F. Effects of patient education program on the quality of nursing care and inpatient satisfaction in surgical wards of selected hospitals in Isfahan, Iran. *Hosp Pract Res.* 2016;1(4):129-134.
- 10) Oyetunde M, Akinmeye A. Factors influencing practice of patient education among nurses at the University college Hospital, Ibadan. *Open journal of Nursing* 2015;5:500-507.
- 11) Kalisch BJ. Missed nursing care: a qualitative study. *J Nurs Care Qual.* 2006;21(4):306-13.
- 12) Abbasi M, Rabiei L, Masoudi R. Experience of nursing students about the barriers to patient education: a qualitative study in Iran. *Korean J Med Educ.* 2018;30(4):327-337.
- 13) Park MY. Nurses' perception of performance and responsibility of patient education. *Taehan Kanho Hakhoe Chi.* 2005;35(8):1514-1521.
- 14) Hekmatpou, D, Mohammadi E, Ahmadi F, Arefi SH. Lack of sensitivity to readmission: A grounded theory study for explaining the process of readmitting patients suffering from congestive heart failure. *Eur J Cardiovasc Nurs.* 2009;8(5):355-363.
- 15) Friberg F, Bergh A, Lepp M. In search of details of patient teaching in nursing documentation--an analysis of patient records in a medical ward in Sweden. *J Clin Nurs.* 2006;15(12):1550-1558.
- 16) Jahromi ZB. A study of the barriers and facilitators of patient education from the viewpoints of nursing students at Jahrom college of nursing. *BJMS*[internet]. 2016;15(3):471-476.

- 17) Ghorbani R, Soleimani M, Zeinali M, Davaji M. Iranian nurses and nursing students' attitudes attitude on barriers and facilitators to patient education: a survey study. *Nurs Educ Pract.* 2014;14(5):555-556.
- 18) Jahromi MK. The Effective Factors in Patient Education from the Perspective of Nurses Working in Critical Ward. *Adv Environ Biol.* 2014;8(12):1280-1284.
- 19) Lupón J, González B, Mas D, Urrutia A, Arenas M, Domingo M et al. Patient's self-care improvement with nurse education intervention in Spain assessed by the European Heart Failure Self-Care Behaviour Scale. *Eur J Cardiovasc Nurs.* 2008;7(1):16-20.
- 20) Dehkordi LM, Salahshorian A., Mohammad-Alayah J, Hosseini F. Nurses' perception of patient teaching, enhancing and inhibiting factors. *Iran. J. Nurs.* 2005;17(40):18-27.
- 21) Koivunen, M., Hätönen H, Välimäki M. Barriers and facilitators influencing the implementation of an interactive internet-portal application for patient education in psychiatric hospital. *Patient Educ. Couns.* 2008; 70(3): 412-419.
- 22) Aghakhani N, NiaHS, Ranjbar H, Rahba N, Beheshti Z. Nurses attitudes to patient education barriers in educational hospitals of Urmia University of medical sciences. *Iran J Nurs Midwifery Res.* 2012;17(1):12-15.
- 23) Garshasbi S, Khazaeipour Z, Fakhraei N, Naghdi M. Evaluating knowledge, attitude and practice of health-care workers regarding patient education in Iran. *Acta Med Iran.* 2016;(1):58-66.
- 24) Ebob-Anyah B, Bassah N, Palle JN. Management of cellulitis and the role of the nurse: a 5-year retrospective multicenter study in Fako, Cameroon. *BMC Res Notes.* 2019. 12,452.
- 25) Tabrizi JS, Farahsa S, Ashghari G, Alizadeh G. Patient education improvement: an interventional study in Iran. *International journal of hospital research.* 2016; 5(4):126-131.

- 26) Talebi S, Shahrabadi H, Sabzevar AV, Asadi R. Nurse's activities and viewpoints about motivational factors, facilitators and barriers to patient education. *JBH*. 2017;2(1):59-65.
- 27) Rahimibashar F, Miri M, Savadkahi AA, Khabirikhatiri MA, Seifi S, Shakibazadeh E et al. Iranian Nurses' perspective of barriers to patient education in intensive care unit: a qualitative study. *Arch Crit Care Med*. In press:2015;1(3):e7323.
- 28) Oyetunde MO, Akinmeye AJ. Factors influencing practice of patient education among nurses at the university college hospital, Ibadan. *Open journal of nursing*. 2015;5:500-507.
- 29) Tandi, TE., Cho, Y., Akam, AJ., Afoh, CO., Ryu, SH., Choi, MS., et al. 'Cameroon public health sector: shortage and inequalities in geographic distribution of health personnel'. *Int J Equity Health* . 2015;14:43.