International Journal of Research in Medical Sciences
Ezinna EE et al. Int J Res Med Sci. 2017 Sep;5(9):3798-3806
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20173952

Original Research Article

Creating and sustaining healthy work environment for professional advancement in health care institutions: a case study of nursing students' clinical posting in Abia State

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Received: 11 June 2017
Revised: 10 July 2017
Accepted: 18 July 2017

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ABSTRACT

Background: The need for nursing students to care and support patients especially those living positively with HIV and AIDS as well as those with terminal diseases should not be underestimated. By training, nursing students are expected to interact cordially with patients and other health care professionals but most times, the reverse is the case. Inter-professional and interpersonal education prepare nursing students on clinical posting to provide quality health care services to all patients irrespective of their ages and health conditions. Therefore, creating healthy work environment by encouraging team work, integrating treatment and prevention services to promote good health is imperative in ensuring patients' safety, and enhanced inter-professional relationship.
Methods: A two-day pre-clinical seminar which centered on professionalism, teamwork, interpersonal and inter-professional relationships, as well as effective communication to guarantee healthy work environments was carried out. The pre-clinical seminar was also used to prepare 186 nursing students on their expected roles during the twelve weeks' clinical posting in health institutions. At the end of the students' posting, two days post-clinical seminar aimed to harness students' experiences, views and performances, as well as the teachers' observations during the clinical posting was conducted. Thereafter, all comments on performances, observations, experiences and other remarks from the teachers and students were grouped together and analyzed qualitatively and quantitatively.
Results: A good proportion of the students 142 (76.3%) established good interpersonal relationship with the patients who are HIV positive while 135 (72.6%) had effective inter-professional interaction with health care workers. Also 135 (72.6%) had good team work relationship with other health care professionals. There were better health care services to clients as evidenced by 95 (51.1%) of students who shared case managements with the health care workers and 122 (65.6%) of the students who used mobilization and advocacy to identify pressing challenges like inter-professional conflicts, poor uptake of messages about treatment and referrals as well as malnutrition among children. A respectable number of the students, 144 (77.4%) collaborated with colleagues to provide nutrition to malnourished children to improve their nutritional status, while 75 (40.3%) assisted in resolving some inter-professional conflicts.
Conclusions: Students' initiatives in management of cases, inter-professional and interpersonal learning experiences during clinical postings increased students' understanding of teamwork and professionalism as well as promoted friendlier environments that guaranteed better health care services to patients.

Keywords: Advocacy, Clinical posting, Case management, HIV positive, Mobilization, Teamwork

INTRODUCTION

There is need for nursing students to understudy, interact and work with the clinicians, support staff and patients especially those with terminal diseases including HIV positive and AIDS clients. Studies have shown that for enhanced skills in good interpersonal and inter-professional relationships, advocacy, community mobilization, monitoring and evaluation are needed.[1-7]

Nursing students require trainings in inter-professional and interpersonal education to prepare them for effective and quality health care services during clinical postings. These trainings are necessary to reduce the unhealthy work environments that contribute to medical errors, ineffective health care delivery, conflicts and stresses among health care professionals.[8-11] Therefore, creating healthy work environment is imperative in ensuring patients' safety, and enhanced cordial relationships. The need to achieve improved inter-professional and inter-personal collaborations for quality health care services during students' clinical placements motivated this study.

Studies have shown that inter-professional education is one way of preparing students in the health profession including nursing students to function as effective team members in health care institutions.[12-15] The need to make inter-professional practice the panacea for professional advancement should not be underestimated.[16,17] Therefore, encouraging cordial relationship between students and other health workers is a step in achieving professional advancement.[18-21] This study aimed to educate nursing students on the benefits of good inter-professional and interpersonal relationships in treatment and prevention services during clinical postings.

Evidence has shown that if nursing students are optimally provided with support services during clinical exposures, the likelihood of developing effective models and work ethics will be guaranteed.[21-26] However, each healthcare organization has a system of using team members to prioritize the needs of patients and that of their family members. In effect, health workers' cordial interactions with each other are emphasized during health care services to clients irrespective of the fact that some health workers render more clinical services than others.[27-31] The health care system advocates sharing accommodation to ensure better interaction and enhanced skills for professional advancement.[36,37]

This study aimed to introduce nursing students on clinical experience to relevant skills that can promote inter-professional and interpersonal relationships for professional advancements in hospital settings. The study examined how inter-professional collaboration can enhance students' clinical performances. The novelty of this study is that the students collaborated with health professionals to identify and evaluate the constraints on effective provision of health care services to clients.

METHODS

Qualitative and quantitative approaches were adopted in this study. Two days pre-clinical seminar which centered on case management, interpersonal relationships, and communication skills that would guarantee healthy work environment were carried out to prepare 186 nursing students for twelve weeks clinical posting. Advocacy skills that will integrate treatment and prevention for true collaboration, decision-making, and accountability were emphasized during pre-clinical seminar. The pre-clinical seminar afforded the students the opportunity of learning counseling skills and the techniques of giving and receiving messages to the benefit of the target audience. Further, the implications of positive and negative interactions were stressed. Positive interaction was viewed as communication that reveals valuable lessons learned, while negative interaction was one.

At the end of the students' clinical posting, a two-day post-clinical seminar or clinical conference was also conducted to harness the teachers' and students' views, experiences and performances in the field. The standards in this seminar responded to the university's call for professional groups to serve as advocates for change in the society.

The university ethical committee approved the study. The consents of the three healthcare administrators of the selected institutions and that of the patients were sought and approval was got before its commencement of the study.

Five steps taken in the posting of the 186 students to health institutions are diagrammatically illustrated below. Before the clinical posting, academic and non-academic staff were mobilized to carryout advocacy in other to identify health institutions with adequate health care facilities that would enable students provide quality services to clients.

Three organizations which met the conditions were chosen and students were posted to them. The students were rotated bi-weekly. The consents of the healthcare administrators of the selected institutions were sought. Following the approval of the consents, the administrators were requested to adopt organizational strategies that would enable students acquire skills in collaborative decision-making, mutual goal setting, negotiation, facilitation, conflict management, and health care service performance improvements. This was aimed to enable the students benefit maximally from the institutions' clinical contents.

After the posting, staff were allotted time to supervise, teach and evaluate the students' ability to acquire relevant skills that would permit them function effectively in clinical settings. The relevant skills included accurate assessment of situations, equitable sharing of fact-based information, and clarity in communicating professional

opinions. The five steps taken in posting the students are diagrammatically illustrated below.

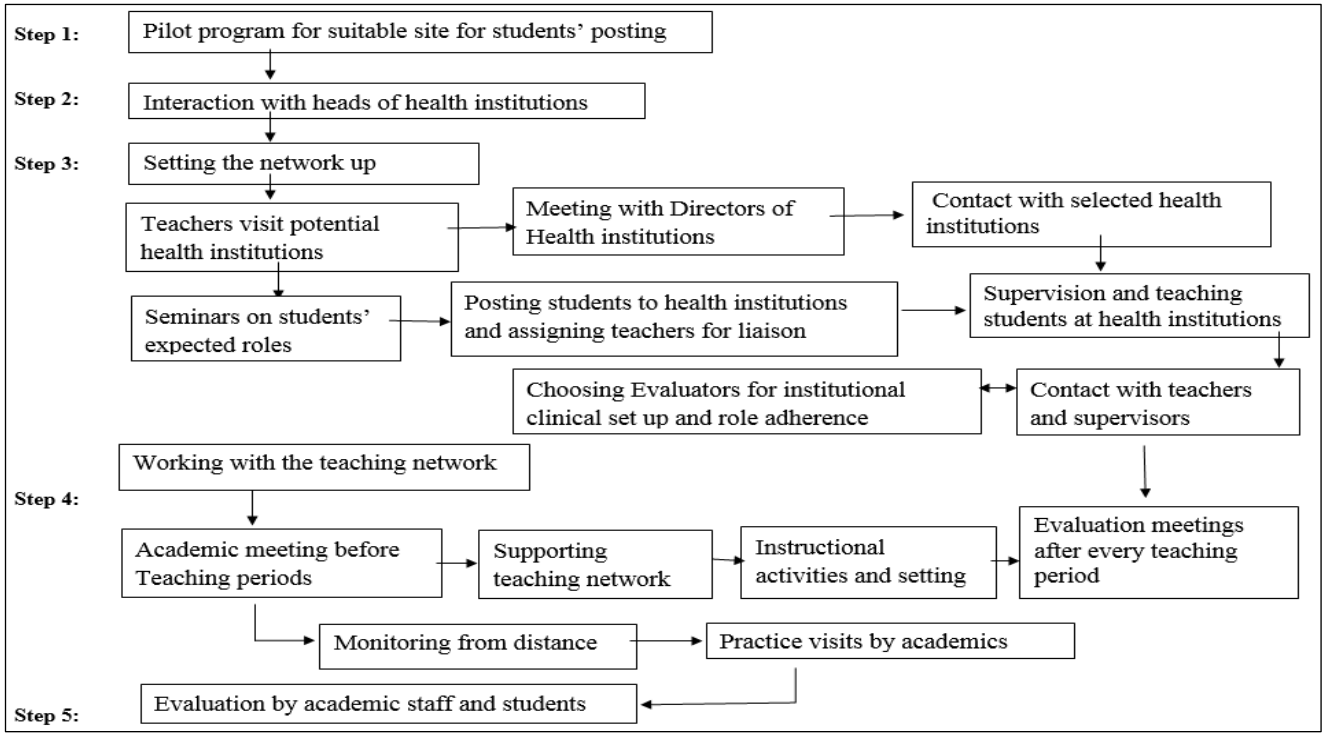

Figure 1: Steps taken in students' posting.

RESULTS

Demographic characteristics

The respondents consisted of male and female students as shown in Table 1.

Table 1: Demographic characteristics of the respondents.

Sex	Number of respondents	Percentage
Male	61	32.7%
Female	125	67.3%
Total	186	100%
Age in years		
20-24	71	38.2%
25-29	50	26.9%
30-34	30	16%
35-39	20	10.8%
40-44	7	3.8%
45 and above	8	4.3%
Total	186	100%

Out of the 186 students studied, 61 (32.7%) are males, while 125 (67.3%) are females. A good number of the students were in the age range of 20-29 years. The results of this study are presented in three major themes. One is the students' professional initiatives and activities; two is the inter-professional interactions with other health care professionals; and three is the interpersonal interactions with the patients including those HIV positives.

The students' professional initiatives and activities were viewed by noting the services each student carried out to promote quality services to clients during clinical posting. The services the students rendered are contained in Table 2.

From Table 2, the students rendered several services to assist the clients but the most common service 144 (77.4%) rendered by the students was providing food and care for malnourished children. See Table 2 for details of the students' responses.

Further the HIV prevention services the students rendered to children and the precautions they took were explored. The responses are contained in Table 3. From this Table, students assisted other health care workers in providing meaningful services to vulnerable children during clinical postings.

Further, the type of relationship the students maintained with patients during clinical posting was examined. Table

4 shows the type of interpersonal relationship the students had with patients, Table 4 contains the details.

Table 2: Students and type of professional initiatives and activities provided to clients.

Professional initiatives and activities done	Frequency	Percentage
Encouraged women to access PMTCT antiretroviral therapy (ART) in pregnancy	102	54.8
Carried out immunization services for children	142	76.3
Helped to identify women who seroconvert late in pregnancy or during breast-feeding	135	72.6
Counselled women to adhere to ART in the long term	126	67.7
Ensured that HIV-exposed infants received antiretroviral prophylaxis	95	51.1
Assisted in identifying and initiating early treatment for those infected	75	40.3
Ensured the uptake of antiretroviral therapy for children younger than 15 years	95	51.1
Participated in caring for clients with health conditions like respiratory infections, diarrhea, malnutrition, malaria and measles that are responsible for most deaths among children	135	72.6
Helped to plan and provide adequate food and care for malnourished children	144	77.4
Assisted in the performance of HIV polymerase chain reaction (PCR) test for HIV and rapid tests for HIV antibodies	106	57
Counselled breast-feeding mothers to test for HIV every 3 months throughout the breast-feeding period	134	72

Multiple choice is expected

Table 3: Students' HIV services to children and precautions taken during services.

Child's Status	Services	Precautions
At birth	All HIV-exposed neonates and those with a positive birth were given HIV PCR test initiated on ART after birth	These infants were regarded as high-risk cases
10 weeks	All HIV-exposed infants were given prompt HIV PCR test	This was done whether or not they earlier tested negative
18 weeks	Infants who received 12 weeks of nevirapine prophylaxis were tested	HIV PCR test was used
6 weeks after ending breast-feeding	All breast-fed infants were given age appropriate HIV test	If less than 18 months of age, HIV PCR test was given, if more than 18 months of age, HIV rapid antibody test was used
Children from families with HIV or who died from HIV	If mother, father, brother, or sister has HIV infection or died from HIV, age appropriate HIV test was given	If less than 18 months of age, HIV PCR test was administered, if more than 18 months of age, HIV rapid antibody test was used
Any time a child has symptoms suggesting HIV infection or acute severe illness, or sexually assaulted or breast-fed by HIV positive mother	Age appropriate HIV test was administered	If less than 18 months of age, HIV PCR test was given, if more than 18 months of age, HIV rapid antibody test was used

Table 4: Respondents and type of interpersonal interactions with patients.

Had good interpersonal interactions with patients	Frequency	Percentage
Yes	142	73.3%
No	24	12.9%
Cannot say	20	10.8%
Total	186	100%

A good number of the students 142 (73.3%) established good interpersonal relationships with the patients. Using the report of twelve students, "we were mindful of protecting the dignity of the patients especially those that were HIV positive. We respected their rights, accepted them as they were, acknowledged their responsibilities, needs and contributions during treatment". Three other students said "because we were optimistic that for us to succeed in patients' treatments, the care environments must be safe, healing and humane, as a result, we interacted in a friendly way with all clients including those HIV positives who seemed to be discriminated against. In short, we made the patients especially those HIV positives to realize that they are important in the society. We even bought some gifts for some of them ".

Also from this Table, 24 (12.9%) could not establish good relationship while 20 (10.8%) were unable to identify the type of relationship they had.

In rating the nature of inter-professional relationships, the students had, the reports of the teachers who supervised them in the field were used. From the reports of the teachers, 135 (72.6%) of the students had good inter-professional interaction with health care professionals. This was adjudged by the number of students who successfully collaborated with other health workers in case managements and routine services.

However, 44 (23.7%) of the students were reported to have had poor inter-professional relationship while the nature of interaction for 7 (3.7%) of others was not ascertained. From the reports of the teachers, those who experienced poor inter-professional relationship were the categories of students that experienced slight conflicts with other workers because of either lateness to work, insubordination, inability to adhere to the regulations of the workplaces especially the dress code and authorized movements to some areas. Table 5 contains the responses as submitted by the teachers.

Table 5: Respondents and types of inter-professional interactions with health workers.

Had good inter-professional interaction with health workers	Number of respondents	Percentage
Yes	135	72.6
No	44	23.7
Cannot say	7	3.7
Total	186	100

The finding in Table 5 showed that 135 (72.6%) of the students had uninterrupted inter-professional interactions with the health workers. The reports of the teachers showed that those who enjoyed good inter- professional relationship were those who uniquely avoided some unhealthy behaviors like coming late to the clinic, unfriendly disposition, non-adherence to work schedules and irritability. These behaviours if not checked could result to unsafe work environments that would make organizations unable to achieve their goals and objectives remarkably.

In the words of two teachers, "some of the students need to be commended for working hard to maintain healthy work environments. They were punctual to work, carried out all instructions given by senior colleagues, maintained good rapport with both health workers and patients." In the words of one of the lecturers, "the students' performances were encouraging. Their behavior demonstrated new levels of respect for senior health professionals both in and outside their disciplines. Moreover, a respectable number of them avoided irritability which was one of the challenges noted in the students' work environments."

In the words of three students, "we now have insight into how our roles can partner with others' roles to gain expertise". The remarks made by most teachers showed that "a respectable number of the students functioned effectively as team members probably because of the extent of inter-professional education provided to the students during the pre-clinical seminar".

Most teachers expressed satisfaction with the way and way the students conducted themselves during the period of supervision. Using the report given by one of the teachers "the students carried out functions assigned to them to the satisfaction of other healthcare professionals. This behavior endeared them to the professionals".

Later, the students who carried out immunization services narrated the extent to which the HIV infected children were also immunized during their posting. The students reported that vaccines were administered to the children based on their ages and health status. Table 6 contains the status of children immunized, procedures for their immunization and the vaccines used.

From this Table, it is obvious that the HIV infected children were immunized according to the normal schedules for immunizing other children. Later the views of the students on strategies for improving students' clinical experiences were sought. The views of the students are stated below. Views of the students on strategies for improving clinical experiences:

The views of the students on how to make clinical postings proactive for the benefit of patients and health workers were harnessed.

From the students' views, seven relevant factors for establishing and sustaining clinical experiences to achieve healthy work environment for professional advancement were suggested as follows:

- More seminars to highlight clinical contents that are capable of increasing students' competencies in current medical practices to create homogenous group of students be given
- Patients' needs are to be the driving factor for excellence in health care services. Health workers are to be actively involved in providing solutions to patients' problems
- Patients with acute and chronic cases are to be reassured that their problems can be successfully managed. This will encourage excellence in acute and critical care of patients
- Innovative and promising cases to be highlighted and scaled up to facilitate learning during clinical experiences
- Advocacy and community mobilization campaigns to be sustained for solving work place and patients' challenges
- Cordial inter-professional and interpersonal relationships to be the vital tools in patients' care

- Antepartum, intrapartum, and infant antiretroviral prophylaxis to be maintained.

Table 6: Vaccines, procedures and the health status of children immunized.

Schedule for vaccine administration		Child's health status and action taken	
Vaccines	**Child's age**	**Asymptomatic HIV-infected child**	**Symptomatic HIV-infected child**
Bacille Calmette-Guerin (BCG)	At birth	Vaccinated	Did not vaccinate
Diphtheria, tetanus, acellular pertussis, inactivated polio, haemophilus influenza type b, and hepatitis B vaccine (DTP-IPV-HBV-Hib)	At 6, 10, 14 weeks and 18 months	Vaccinated	Vaccinated
Oral poliovirus (OPV)	At birth, and 6 weeks	Vaccinated	Did not vaccinate
Pneumococcal conjugated vaccine (PCV)	6, 14 weeks and 9 months	Vaccinated	Vaccinated
Rotavirus (RV)	Administered when 6 and 14 weeks but did not administer after 24 weeks of age	Vaccinated	Did not vaccinate
Measles	Administered on children 6 and 12 months of age. This was administered alone without other vaccine	Vaccinated	Did not vaccinate
Tetanus and reduced-strength diphtheria (Td)	6 years and 12 years of age	Vaccinated	Vaccinated
Influenza	Given once a year to children older than 6 months	Vaccinated	Did not vaccinate
HPV	9 years old		Vaccinated

From this table, it is obvious that the HIV infected children were immunized according to the normal schedules for immunizing other children. Later the views of the students on strategies for improving students' clinical experiences were sought. The views of the students are stated below.

DISCUSSION

Conscious of the fact that the work environment should be safe, healing and humane to respect the rights, responsibilities, needs and contributions of patients and their families as well as other health care professionals, the students worked hard to maintain cordial inter-professional relationship. This was seen by the extent of competencies for collaborative practice the students exhibited. For instance, the students assisted in the administration of antiretroviral therapy (ART) to pregnant clients to reduce perinatal transmission as well as participated in infant antiretroviral prophylaxis and nutrition supplements.

The argument is that undergraduate students on clinical exposure should be assisted to embrace the professional workforce with awareness on roles and responsibilities. Otherwise, they might encounter difficulties in effective patient care delivery and the efficient use of resources which could lead to workplace conflicts. This view is in consonant with earlier studies.[5,8] Studies recommend that for students' effectiveness, they should be properly guided in clinical contents during training.[27,29] A collaborative approach is therefore, critical in assisting the students to provide better patient care and safety services to guarantee professional advancement.

A good number of the students 110 (59.1%) demonstrated new levels of respect for health professionals outside their disciplines and by so doing, their roles blended with that of other health care professionals. This helped the students to draw from each other's expertise during the posting. Drawing from others' expertise encouraged better health care services to clients especially those HIV positives whom the students supported financially and emotionally. This was evidenced by the extent to which the students contributed money and food items as well as the frequency to which they shared case management of patients with others. The students' positive attitudes during their clinical experiences helped in the noticeable positive changes in the health seeking behaviour of some of the clients especially those living with HIV and AIDS. This agrees with earlier findings.[34,37]

The students' exposure to inter-professional clinical practice helped them to widen the scope of their knowledge and skills as well as gaining the experiences of working with other professionals. The periodic and repetitive structure of the seminars provided to the students before and after clinical experience, enhanced awareness on their expected roles while on posting. This contributed to the improved quality of services the students provided to patients.

The study identified that team-based and collaborative models of care contributed to the students' improved service delivery. The fact that the teachers supervised, corrected and taught the students while on clinical posting throughout the twelve weeks period of clinical experience, helped to create a homogenous group of students with explicit aims and objectives. This motivated them to contribute their views on how to make clinical postings beneficial to both the health workers and the patients.

The study showed that for sustainability to be achieved in students' clinical experience, that perfect and constant collaboration which would influence safe, and quality health care services must be adopted. In addition, sustained advocacy and community mobilization campaigns should be initiated. The study identified advocacy, community mobilization, collaboration and communication in tandem with effective health care services. Communication was specifically used to relate with the patients especially those that are HIV positive.

Inter-professional education in this study proved to be a useful way of preparing students on clinical experience as effective and functioning team members in the institutions where they are posted. Based on this, the usefulness of inter-professional practice has become a topical issue in the curriculum of nursing education in the university. The fact that a good number of the students had good inter-professional interactions with others helped to transform relationships among health care professionals. As a result, students began to view themselves as part of the health care service team.

Also, the fact that the students and the supervisors after the clinical experiences, will be expected to evaluate field performances encouraged a good number of the students to adopt good inter-professional and inter-personal relationships. This made a good number of the students to participate actively in teamwork approaches during the clinical postings. The novelty of this procedure is that the students assisted in identifying and evaluating difficulties and constraints in health care services as well as helped to proffer solutions to them.

CONCLUSION

Collaboration guaranteed mutual respect among health workers and as such, acted as a strong predictor of empowerment. Therefore, knowledge and competence which influence quality patient care are the keys for sustainable development in health care services. As a result, healthcare organizations should provide health workers with education programs that can develop their collaboration skills. Consequently, providing students with inter-professional training can increase the students' understanding of professionalism and teamwork, thereby, enhance the collaborative models of health care services

Since ART can reduce perinatal transmission including lowering maternal antepartum viral load, and pre-exposure as well as the post-exposure prophylaxis for the infants, it is recommended that prevention of perinatal transmission of HIV, should be combined with antepartum, intrapartum, and infant antiretroviral prophylaxis. Improving the nutritional status of children to control the viral replication and to reduce the proportion of children with HIV infection is recommended.

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

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Cite this article as: Ezinna EE, Martina CE, Kelechi OE. Creating and sustaining healthy work environment for professional advancement in health care institutions: a case study of nursing students' clinical posting in Abia State. Int J Res Med Sci 2017;5:3798-806.