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College of Health Sciences,
Ladake Akintola University of Technology, Ogbomosho, Nigeria*

ENHANCING INTER-PROFESSIONAL COLLABORATION IN INTENSIVE CARE UNIT: A QUALITATIVE STUDY OF NURSES' PERSPECTIVES

SALIHU ABDULRAHMAN KOMBO, DALHAT KHALID SANI, ADDAKANO UMAR BELLO, IDRIS ABDULRASHID, AKHIME OYAKHILOME, SANI MOHAMMED SANI

Abstract

Intensive Care Unit (ICU) rely on an inter-professional approach for holistic care. Critical care Nurses (CCN) has an association with all the professional that cares for critically ill patients. The hierarchical structures of Modern medicine often place nurses in a subservient role. The degree to which these patterns affect inter-professional collaboration in healthcare facilities may vary, yet it is unlikely that even if the most progressive facilities, these patterns are completely not clear despite several efforts to improve interprofessional collaboration. The aim of this study is to explore the means of promoting inter-professional collaboration as perceived by critical care nurses. The study adopted a qualitative research method, and for the purpose of the study, a phenomenological research approach was adopted. The population of the study comprised of critical care nurses (CCN) working in intensive care unit (ICU) of Ahmadu Bello University Teaching Hospital (ABUTH), Zaria. Purposive sampling was the sampling technique adopted for this study and data was collected until saturation was attained. The research made use of semi structured interview. Collaboration from perspective of CCN was seen as a tripod approach; the nurse, the nurse leader/manager and the employers' approach/role. Findings of this study revealed that actions to be taken to improve inter-professional collaboration in-service training/update course on critical care nursing, improvement in physical work environment, improvement in communication skills among team members, adequate remuneration/motivation, provision of adequate ICU specific equipment and institution of interprofessional unit discussion/round. It is therefore recommended that mutual respect, effective means of communication, adequate remuneration of workforce, provision of ICU guidelines will be needed to maintain effective collaboration amongst CCU team members.

Key Words: Intensive care Unit, Phenomenology, Collaboration, Inter-professional, Ahmadu Bello University, Zaria Nigeria

Background

The intensive care unit (ICU) provides care to the most critically ill hospitalized patients and increasingly relies on inter-professional teams to provide critical care. However, little about actual teamwork in the context of ICUs is well understood. The team membership in ICUs is typically comprised of physicians or intensivists, clinical pharmacists, respiratory therapists, dieticians, nurses, nurse interns, nurses in training, clinical psychologists, and physicians-in-training (Ervin, Kahn, Cohen, & Weingart, 2018).

Critical care nurses by virtue of specialized training or experience provide care to all patients admitted to the ICU (Potter, Perry, & Stockert, 2013). The nurse employs sound scientific knowledge in using the nursing process while delivering nursing care to patients. The nurse needs to be available to meet all emergencies that may occur in the unit to ensure adequate supplies and equipment in optimal working condition. The nurse is also responsible for the maintenance of records and reports which are used in the unit and also serves as a liaison between the patient, family, and other members of the team. As such, critical care nurse has a multifaceted role to play because the critically ill patient has life-threatening or potentially life-threatening health problems that require continuous monitoring and intervention to prevent complications and to restore health. Hence, continuous patient surveillance and interventions to tackle and prevent complications along with participating in the treatment and care becomes the major role of the nurse in the ICU. Nurses provide round-

the-clock and continuity of care while other health care professionals visit the patient, by virtue of this, nurses become the coordinator of patient care activities. The question is, are all these roles being play by the ICU nurses in real sense, either below or above expectation as their competency and situation may dictate.

Ndundu (2015) documented that, nurses felt that some of their roles overlapped creating confusion as to who was supposed to do what, and as a result; it became difficult to maintain effective collaboration amongst team members, compromising the delivery of patient care.

Varieties of interventions such as inpatient medical team, the institution of daily ward rounds, case discussions, and electronic access to inter-professional information among others to promote collaboration in CCU has been suggested though in most cases were from physician perspective in some quantitative studies(Vazirani et al., 2005). This implies that, despite nurses who supposedly are part of the ward round, suggestions on ways to promote collaboration are not coming from nurses' perspectives in this very study.

Generally, Interventions designed to improve teamwork in hospitals include localization of physicians, daily goals of care forms and checklists, teamwork training, and interdisciplinary rounds (O'Leary, Sehgal, Terrell, & Williams, 2012). This current study wish to contribute additional interventional techniques in promoting collaboration.

This paper is personally informed by the complexity of the phenomenon of inter-professional collaboration and health care practice in Nigeria as may be created by hospital policy document or scheme of service, especially, by some limiting role experience that can be discharged by critical care nurses despite passing through knowledge and practice-based curriculum coupled with over-dependence on some professionals before offering basic clinical intervention and this is further complicated by the absence of an intensive care unit practice protocol in most teaching hospitals in Nigeria.

In a global sense, the significance of this research is to bring about improvement in the health care given to patients by the nursing workforce in the ICU setting.

And as the realities of the healthcare environment change, so do the needs of the patients entrusted to the care of those closest to the bedside who impact the quality of care to a great degree (Bittner & Gavlin, 2009) Positive interactions between nurses and other team members can make a difference as they treat patients who require complex care in emergent and critical situations as well as in a more routine, daily care.

Fundamentally, with proper collaboration from team members in Intensive care unit (ICU), the nursing workforce shall offer their best to the patient with life-threatening conditions. In the absence of which make the patient receive less quality care and thus nursing care objectives become less fulfilled.

Nurses' experience of inter-professional collaboration at the ICU in a Nigeria Teaching Hospital through a phenomenology is essential because Ahmad Bello University Teaching Hospital is the only tertiary health care facility in Kaduna state that offers critical care services. The study is of a motive of providing information on common or shared experiences of a phenomenon to develop practices or policies or to develop a deeper understanding of the features of the phenomenon(Creswell, 2007).

Jacob (2017) posited through a qualitative study among Medical doctors, Nurses, Health Information Managers, and Management staff in Federal Tertiary Hospitals in Nigeria that, inter-professional collaboration usually predicted quality health service delivery in the hospitals in general without specification to ICU. This also points to the fact that there is a paucity of information scientifically what will become of ICU when interprofessional collaboration is implemented.

From the foregoing, the real situation of nurses' experience of collaborative practices in critical care settings in Nigeria is not well explored and

documented qualitatively which may pose a risk of poor workforce performance.

MATERIALS AND METHODS

Study Design:

A qualitative hermeneutic phenomenological design was utilized in the study. The study was conducted in Ahmadu Bello University Teaching Hospital (ABUTH) in Zaria as a first-generation teaching hospital in Nigeria.

The ICU at Ahmadu Bello University Teaching Hospital in Zaria, Nigeria, has 5 beds and accepts all critically sick patients except neonates. An ICU that is both medical and surgical in nature (Platteau, Engelhardt, Moodley, & Muckart, 1997).

Philosophical assumption and interpretive framework

The interpretive framework that relates back to the philosophical premise will be used to make clear the qualitative studies.

Ontological assumption refers to the nature and features of reality, the researcher must employ multiple realities as evidenced by multiple forms of themes based on the actual words of various individuals and presenting perspectives. This is more appropriate for phenomenological studies where the writer compiles how individuals participating in the study view their experiences differently (Mouskas, 1994). As a result, the philosophy underpinning this current investigation was Ontological assumption.

The study populations for the study are nurses working in the Critical care unit of Ahmadu Bello University, Teaching Hospital, Nigeria. They were eleven (11) in number as at the time of data collection.

In-depth interview (IDI) in form of a semi-structured interview (*SSI*) using guiding questions and a tape-recorder to ensure the reliability of recorded answers. The tapes will then be fully transcribed.

Scientific Rigor of the tool

Confirmability- participants were given back interview transcripts and findings.

Credibility researcher captures and expresses the reality of how things are from the perspective of others (informants and fellow researchers).

Dependability- adequate facts concerning inter-professional collaboration in the setting of the critical care unit are provided, as well as the capacity for readers to independently validate their interpretive inferences.

Transferability- The researcher provides rich, detailed descriptions of the Inter-professional collaboration ("thick description"), as well as a thorough description of the structures, assumptions, and processes revealed by the data, allowing readers to independently assess whether and to what extent the reported findings are transferable to other settings.

Data Collection

Before recruiting respondents, the Ethical Review Board (ERB) of Ahmadu Bello University, Zaria, was consulted with reference number ABUCUHSR/2021/008.

End of Data Collection

When the researcher reached data saturation, the researcher stopped collecting data.

Qualitative researchers employ the principle of data saturation, which occurs when themes and categories in the data become repetitive and redundant to the point where further data gathering yields no new information (Denise & Polit, 2012)

ATLAS.ti, was used to ease the laborious task of analyzing text-based data through rapid and sophisticated searches and line-by-line coding.

The benefit of a qualitative approach to this study is that the research focuses on nurses' experiences and the meanings they attach to events, processes, and structures in their ICUs as social settings (Skinner, Tagg & Halloway, 2000).

Using a qualitative technique demands extensive and direct engagement with nurses in their everyday contexts, providing a complete

view through the participants' own words and perceptions of how they comprehend, account for, and behave in these situations (Miles & Huberman, 1994).

RESULTS

Socio-demographic Characteristics of Participants.

Participants were all female (100%); predominantly age 31-40 yrs (36%); 45.5% had worked for 8-15yrs in the ICU; majority (63%) are certified critical care nurses.

Table1: Profile of the key informants

Name	Gender	Rank	Critical Care Nurse Certification	Age (years)	Duration in ICU
Participant 1	F	CNO	Yes	51-60	12 years
Participant 2	F	NOII	No	20-30	2 years
Participant 3	F	NOI	Yes	31-40	2years
Participant 4	F	PNO	Yes	31-40	8years
Participant 5	F	NOI	No	31-40	1.5 years
Participant 6	F	ADNS	Yes	51-60	15 years
Participant 7	F	PNO	Yes	31-40	8 years
Participant 8	F	SN	No	20-30	8 Months
Participant 9	F	CNO	Yes	41-50	10 years
Participant 10	F	CNO	Yes	51-60	20years
Participant 11	F	PNO	No	41-50	4months

Note: **NOII**-Nursing Officer II, **NOI**- Nursing Officer I, **PNO**-Principal Nursing Officer, **SN**- Staff Nurse, **CNO**-Chief Nursing Officer, **ADNS**- Assistant Director of Nursing.

Interventions to enhancing inter-professional collaboration between critical care nurses and other health professionals in intensive care unit

Inter-professional collaboration among healthcare professionals who work in intensive care unit (ICU) is central to achieving better outcomes among patients in ICU. The findings derived from the data showed the various variables that should be considered for improvement of inter-professional collaboration in ICU.

Themes

Three key themes capture the possible interventions to enhance inter-professional collaboration.

These are Individual nurses' approach; Employer/management approach/role; and ICU Leadership approach/role.

Individual nurses' approach/role

Participant self-report showed that every team member in intensive care unit has a role and responsibility to stick to in order to achieve a functional inter-professional collaboration, these roles and responsibilities were suggested differently by the participants:

a. Be dutiful

P111: To improve inte-rprofessional collaboration,... I'll want us to always be focused. Shows the forecast. to be diligence. Very very observant, very observant. very observant. observant, you notice everything in the change of color. Changing vital signs, change in every condition of your patient. And that's what the secret to being a good intensivist.

Another participant provided different perspective on the nurses' role

PV: The first one is for them to be their patient advocate. This patient, some of them most of

them they don't even know their rights from left. So, you as a nurse that you are closer to the patient will be the one to let them know, you explained the condition to them, what can be the outcome of their care and everything to them. And for collaborative inter-professional collaboration to improve you try to suggest ways to other professionals on better approaches to patient condition.

Different participant corroborated this

PVI: Number one they should be patience, they should have a manner of talking to people in a low tune.

Another participant stated,

PIX: To improve collaboration in ICU, each member should have the fear of God. The second thing is, you as the nurse intensively should know what you are doing [know your responsibility], you should be ready to work, you should be ever ready to attend to emergencies. And at any time, you should be able to know that the patient can just arrest [cardiac arrest] at any time, you should be conversant and should remain updated educationally.

It means clear of self and professional role can promote successful inter-professional collaboration as typified by the above candidate.

Another typical response on way to improve collaboration from participant include,

PIV: Well whatever thing you do, you do with your conscience and then as you care for the patient, you also care for yourself. Because most times we usually come down with back aches and all that. And sometimes the work can be traumatizing it can be psychologically draining. You also need to give yourself psychotherapy. And also,..... So, you take care of yourself, your health and all that so, that you too will be healthy and strong.

In the absence of adequate self-care, energetic and hard- working staff will find difficult to cope in a demanding environment such as ICU, above narrative amplifies that.

Employer/management role

Inter-professional collaboration requires a shared goal, dedication, and respect for one another. Leading this task requires a lot from employers.

Participants opined that nurse leaders/managers contribute in many ways to the success of inter-professional collaboration. Typical narrative include,

PIII: I think to improve collaboration, ICU nurses, being the eyes of the hospital, they should be paid more because for now, nothing special is added to our salary. Nothing special, which is not supposed to be so, because you go home very tired.

Another participant narrate the below,

PVI: ICU is supposed to be a well-equipped, friendly and accommodative, the team of the ICU supposed to be loving, friendly, and empathetic.

ICU Leadership role

Perception of the role of ICU Leaders/managers in effective inter-professional collaboration

Gaining the trust of your team will enhance morale. Employees are reassured that the leader believes they can fulfill the organization's vision and mission. Low staff turnover and high morale encourage employees to focus their efforts on achieving organizational objectives.

Participants suggested that nurse leaders have a role to play in creating positive environment for collaboration by being supportive nurses and other ICU team members and organizing regular/formal meetings to help inter-professional collaboration work well in ICU.

PVIII: My advice to improve inter-professional collaboration is, timely meeting or we should be having some meeting may be once in a week or just depend sha... we should just try and be having meeting, Meeting as aa, ...with other professionals. All ICU staff. We Should be

having meeting time to time in order to discuss patient management, our challenges what we are facing, ...in terms of relationship working with ourselves and even in terms of our equipment, Yes, timely meeting.

PVI: Unit/sectional heads need care and intervene more if there is any misunderstanding between any nurses and other ICU members for amicable resolution so that it does not escalate and affect our patient care as a team.

DISCUSSION

Critical care nurses commonly interact with different health care team members have to adapt their behavior and approaches in order to successfully inter-professional collaboration into practice environment.

Various actions to be taken to improve inter-professional collaboration according to the participants view in the study setting were proffered, these include in-service training/update course on critical care nursing, improvement in physical work environment, improvement in communication skills among team members, adequate remuneration/motivation, provision of adequate ICU specific equipment and institution of interprofessional unit discussion/round.

Below are various studies with similar stand points and the reasons;

A significant part of nurses have rated their performance below the expected level, but the closure of skill and knowledge gaps through in-service training can boost performance to the expected level (Tesfaye & Abera, 2015). This is essential as a significant part of participants for this study have no formal training in intensive care.

Due to the presence of psychosocial factors, working conditions, and physical environment, the ICU workforce tend to have health-related problem which can result to productivity, burnout, and absenteeism (Esin & Sezgin, 2017), this will certainly affect collaborative practices and patient care.

Kreps, (2016), posited that Part of the challenge of working effectively in collaboration among health care professionals is an issue of learning how to interact effectively with others [colleagues and health care consumers], this is important because team members come typically from different professional and cultural backgrounds, educational level, age, and gender which can make team interaction complicated.

A study has it that to elicit positive consequences in terms of nurses' dedication to duty of care, a well-packaged payment has the potentials to induce satisfaction, productivity motivation, and even retention (Hamid &, Hariyati 2018). This will be a welcome development as currently, no special allowance is approved by the Nigerian Salary and wages commission to nurse intensivists.

Pay-for-performance has been recognized as an approach with potentialities for improving performance among ICU staff (Kahn, 2011).

It has been identified by Kieft, Brouwer, Francke, Delnoij (2014) that, provision of adequate and clinically competent nurses and managerial support through the provision of adequate and suitable equipment would promote the delivery of quality nursing care with a corresponding positive experience by the patient. Positive experience would only be achieved when the unifying factor of collaboration is applied within the ICU.

A schedule discussion among various health care providers through inter-professional rounds allows for review and discussion of clinical information and development of concise care plans for critically ill patients that consequently reduces misunderstandings in communication and promotes belongingness by various professionals through their respective contribution inpatient care (Sharma, Hashmi, & Friede, 2021).

IMPLICATION OF FINDINGS FOR NURSING PRACTICE, EDUCATION AND POLICY

Findings have implications for nursing education, practice, administration and policy.

Findings have implications for nursing education, practice, administration, and policy. In the light of the findings, Strategic implementation of specific programmes and interventions may be of benefit to support Critical Care Nurses in effective implementation of inter-professional collaboration into the practice environment as a major key players in healthcare. Such strategies should focus on building team members assertiveness, human relations, and competence in practice. Coping with negative experiences and challenges by resorting to keeping to yourself and yes Sir/Ma irrespective of the instruction (has found in this study) has implication to nursing administration.

Organizations and nurse leaders must understand that development of proficiency and high-functioning critical thinking skills among nurses occurs over time. Therefore, nurse leaders should strategically and proactively support new critical care nurses (especially the younger ones) through the levels of development from novice, advanced beginner, competent practitioner, and proficient practitioner to expert in collaboration. They should also provide mentoring support to young professionals in order to ensure smooth inter-professional collaboration from novice to expert roles. Nurse managers need to create a supportive practice environment to make the inter-professional collaboration experience more meaningful and satisfactory for CCN. They must be aware of the transition needs of new entrants into the profession and develop/implement appropriate strategies to support transition and increase retention rates. Creating a welcoming environment; emotional support during highly stressful times; scheduling; building caring relationships; and monitoring subordinates for compassion

fatigue, enhance workforce readiness and have implication for successful integration in the workplace.

CONCLUSION

Collaboration between CCN and other professionals is attributed to each professionals understanding their roles, mutual respect, effective means of communication, adequate remuneration of workforce, provision of ICU guidelines and practice of multiprofessional ward round. All of these will either encourage or discourage inter-professional collaboration in ICU environment.

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