



Doctor-Nurse Conflict in Nigerian Hospitals: Causes and Modes of Expression

Ademola T. Olajide¹, Michael C. Asuzu¹ and Taiwo A. Obembe^{2*}

¹Department of Community Medicine, Faculty of Clinical Sciences College of Medicine,
University of Ibadan, Ibadan, Nigeria.

²Department of Health Policy and Management, Faculty of Public Health College of Medicine,
University of Ibadan, Ibadan, Nigeria.

Authors' contributions

This work was carried out in collaboration between all authors. Authors ATO and MCA designed the study, wrote the protocol. Author ATO collected data and performed data analysis. Author TAO managed the literature searches, and wrote the first draft of the manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/BJMMR/2015/15839

Editor(s):

(1) Crispim Cerutti Junior, Department of Social Medicine, Federal University of Espirito Santo, Brazil.

Reviewers:

(1) Robert Cooper, College of Business and Public Administration, Drake University, USA.

(2) Eliane Da Silva Grazziano, Nursing Department, Federal University, São Carlos, Brazil.

(3) Anonymous, University of Campinas (UNICAMP), Brazil.

(4) Anonymous, University of Port Harcourt, Nigeria.

(5) Anonymous, University of Sao Paulo, Brazil.

(6) Anonymous, University of Ghana, Ghana.

Complete Peer review History: <http://sciencedomain.org/review-history/10206>

Original Research Article

Received 21st December 2014

Accepted 4th July 2015

Published 16th July 2015

ABSTRACT

Background: Conflict within the health team is a recognized problem known to hinder quality health care service delivery. In order to achieve the objective for which a hospital is set up, interactions between all members within a medical team must be conducted in such a way that conflicts are minimized as much as possible.

Aims: To examine conflict issues between doctors and nurses and to determine the causes and modes of expression of such conflicts in Nigerian hospitals.

Methods: A cross-sectional study with quantitative and qualitative approaches was carried out in 2 tertiary hospitals in Ekiti State, Nigeria. Data was collected over 4 weeks in April 2005.

Pre-tested semi-structured questionnaires were self-administered to 323 participants (Response

*Corresponding author: Email: tobems@yahoo.com;

rate=96.4%) recruited. Focused group discussions (FGDs) were conducted with three groups each of doctors and nurses in the selected hospitals. Data were analyzed using frequencies, percentages and logistic regression.

Results: Majority of our respondents were females (81.7%); below 40 years (53.0%); married (75.9%); nurses (84.5%) and with less than 15 years of professional experience (50.3%). Odds of conflicts were significantly higher with limited opportunities for staff interaction (OR=1.8, CI=1.1-2.9); desire for power (autonomy) by doctors (OR=3.2, CI=1.9-5.2) and desire for more influence by nurses (OR=12.5, CI=4.8-41.3). Chances of expressing conflicts were significantly higher as strikes (OR=2.1; 1.3-3.5) but less with physical assaults (OR=0.1, CI=0.03-0.41).

Conclusion: Doctor-nurse conflict is associated with a combination of socio-economic and interpersonal-intergroup factors. Hospital management must understand the interplay of these factors and recognize its role in the handling of such conflicts. Doctors and nurses must also acquire the understanding of team building and group dynamics through training.

Keywords: Conflict; health team; doctors; nurses; hospital; burnout.

1. INTRODUCTION

Conflict is an inevitable consequence of human interaction [1,2] which can be described as behaviour (by organization or team members) that is expended in opposition to other members, the process which starts when one party perceives that the other has frustrated or is about to frustrate some concern of his/her or merely when incompatible activities occur [3]. "It may also be described as a social situation where two parties struggle with one another due to incompatibilities in perspectives, beliefs, goals, or values; this struggle impedes the achievement of predetermined goals or objectives"[4]. Conflict between the knowledge and values of the professionals or hierarchical authority is apparent in many organizations, which appears most critical in hospitals [5].

The hospital is an organization that mobilizes and uses the skills and expertise of a number of widely varied groups of professionals, semi-professionals and non-professionals to provide highly personalized care to patients [5]. Therefore, a hospital requires effective performance by many professional and semi-professional personnel with highly specialized knowledge and skills [6] that should ultimately serve to promote patient care and satisfaction of family members and health care providers [7]. The functions and duties of health care workers within a hospital however are not performed in isolation; it is understandable that there are potential sources of conflict between the various professionals in the hospital. The achievement of set goals depends on effective and efficient management of all resources, which includes the maintenance of an enabling environment for constructive interaction among the workforce of the organization.

Conflicts may occur between various players in health care settings; nurses-family conflicts [8]; resident physician-attending physician conflicts [9,10]; physician-patient/family members conflict [11,12] and nurse-physician conflict [13]. For this reason, it is extremely important that the nature of conflict be understood and managed properly [14,15]. Researchers have extensively compared positive against negative effects of conflicts. The occurrence and effects of conflicts within workplace environments of healthcare institutions have been documented to a greater extent the setbacks to delivery of optimal care delivery and patient outcomes [16]. Nevertheless, despite a greater consensus on the detrimental effects over constructive effects of conflicts in workplace, it is established that positive effects of conflicts exists and if managed properly can result in better understanding and adoption of effective teamwork. In other circumstances that are characterized by cooperation and joint resolutions, conflict can enable a diverse environment that nurtures growth and improves relationships [4].

For instance, conflicts over decision-making and lack of role definition for nurses were observed to contribute significantly to stress and subsequent burnout amongst health care professionals in a neonatal intensive care unit [16], whilst in other peculiar circumstances, professional groups may in fact become antagonistic or estranged in extreme conditions, neither of which is beneficial or conducive to good patient care [17]. A study conducted in tertiary hospital Abia State demonstrated a high prevalence of workplace violence amongst healthcare workers in which, "patients and their relations were the main perpetrators of physical assault and threats while senior colleagues were the main workplace bullies" [18]. A resulting burnout of such violence

or stress in the health care setting was observed to stem from needs for personal competence or recognition by colleagues. These, consequently result in negative and undesirable consequences towards other colleagues, work, family, patients and ultimately self [19,20]. Burnout – a usual consequence “is typically characterized by emotional exhaustion (depletion of emotional resources and diminution of energy), depersonalization (negative attitudes and feelings as well as insensitivity and a lack of compassion towards service recipients) and a lack of personal accomplishment (negative evaluation of one’s work related to feelings of reduced competence)”. Notably, doctor-nurse conflicts accounted as significant predictors of burnout in the areas of emotional exhaustion and depersonalization amongst nurses of a state hospital in Oyo state, Nigeria [21]. The same accounted for the third most rated cause of stress amongst paediatric consultants and nursing sisters in a neonatal intensive care unit [16]. Tagliacozzo and colleagues (1982) in a Michigan hospital were able to establish an association between smoking and perception of stress which was induced by nurse-doctor conflicts and role ambiguity [22].

Impairment in effectiveness and efficiency of a health care system that may occur as a result of conflict between doctors and nurses [23] is undesirable in sub-Saharan countries like Nigeria as it further undermines delivery of optimal health care in a health system that is already confronted with challenges ranging from persistent underfunding by the federal government to poor health system performances which are reflected in key health indices of the country [24]. In-depth investigations into causes of conflicts amongst these key professionals in health care settings is highly desirable to reduce the occurrence of incessant strike actions of health care workers; improve national health indices and help to place the country on the path to achievement of post-2015 agenda [25]. The objective of this study is therefore to determine perceived causes and modes of expression of such conflicts amongst health care professionals in public hospitals in Nigeria.

2. METHODS

Respondents were selected from two federal health care facilities: the Federal Medical Centre (FMC), Ido-Ekiti and the State Specialist Hospital (SSH), Ado-Ekiti, both in Ekiti -State, Nigeria. The Federal Medical Centre, (FMC) Ido-Ekiti is a

tertiary health facility situated at the headquarters of Ido-Osi Local Government Area of Ekiti State. The medical centre has staff strength of 306 including 58 nurses and 11 doctors, and with 14 departments, 54 beds, and is headed by a chief medical director.

The State Specialist Hospital (SSH), Ado-Ekiti, headed by a Chief Medical Director, is also a tertiary health care delivery facility situated in the state capital of Ekiti State - Ado-Ekiti. The facility has a bed capacity of 252 (65 of which are paediatric cots) with twelve (12) departments, and staff strength of 456 consisting of 30 doctors and 236 nurses. All doctors and nurses from the two hospitals were invited to participate on this study. Data collection and analysis were performed by quantitative and qualitative approaches. Out of 335 professionals, 323 volunteered to participate (Response rate = 96.4%). The research involved both quantitative and qualitative methods of data collection through questionnaires and focus-group discussions respectively.

Data was collected with self-administered semi-structured questionnaires that were pretested on fifty doctors and nurses (over a tenth of our desired sample size) at the State Specialist Hospital, Akure Ondo State before being finally administered to the respondents at the study area. Reliability of questionnaire was ensured before administration (Cronbach Alpha = 0.84). Focus group discussions (FGDs) were also conducted in groups of doctors and nurses respectively for each of the study areas. Nine groups with five discussants per group were set up to achieve a degree of homogeneity based on gender and age. In all, twenty-four (24) of the discussants were female while twenty-one (21) were male.

Quantitative data was analyzed with the Statistical Package for the Social Sciences (SPSS Version 15) using frequencies and percentages. Respondents’ perceptions of the causes of conflict between doctors and nurses were analyzed using logistic regression at 95% level of confidence. The qualitative data was analyzed using thematic analysis [15]. Ethical approval was sought from Ethical Review Committee of Ekiti State Ministry of Health after which permission was obtained from the Chief Medical Directors of the Federal Medical Centre, Ido-Ekiti and the State Specialist Hospital, Ado-Ekiti, through letters of introduction from the Department of Community Medicine and University of Ibadan.

3. RESULTS

Out of the 335 respondents that were targeted, (being the total doctor and nursing staff strength of the two hospitals) 323 (96.4%) respondents completed and returned the questionnaire 255 (79.0%) from State Specialist Hospital, Ado-Ekiti and 68 (21.0%) from Federal Medical Centre, Ido-Ekiti (Table 1). Respondents were mainly females (81.7%); below 40 years (53.0%); married (75.9%); nurses (84.5%), with majority of respondents practicing for less than 15 years of professional experience (50.3%).

Table 1. Socio-demographic characteristics of respondents

Characteristics	Freq. (N)	Percentage (%)
Age (N=323)		
24-39yrs	171	53.0
40 and above	152	47.0
Marital status (N=323)		
Single	60	18.6
Married	245	75.9
Separated	2	0.6
Divorced	3	0.9
Widower	9	2.8
Others (Co-habiting)	4	1.2
Respondent distribution per facility (N= 323)		
State Specialist Hospital, Ado-Ekiti	255	79.0
Federal Medical Centre Ido-Ekiti	68	21.0
Professional distribution (N=323)		
Doctors	50	15.5
Nurses	273	84.5
Sex (N=323)		
Males	59	18.3
Females	264	81.7
Respondents distribution by year of practice (N=323)		
0-15 years	163	50.3
15years and above	160	49.7

3.1 Causes of Doctor/Nurse Conflict

This study identified a number of causes and sources of doctor-nurse conflict, which include differences in wages, differences in social status, poor interpersonal-intergroup communication, limited opportunity for staff interaction, doctors' desire for too much power, and nurses' desire for more influence.

3.2 Differences in Wages

Of the 217 respondents that acknowledged the existence of conflict in the hospital environment, 153 (70.5%) believed that 'differences in wages' was a major factor responsible for occurrence of conflicts in the work environment (Table 2).

3.3 Differences in Social Status

Amongst those participants that agreed to the existence of conflict in the work environment (217), majority of participants 164 (75.6%) perceived conflict to be as a result of differences in social status affirming that doctors enjoyed a higher status in society (Table 2).

3.4 Poor Interpersonal/ Intergroup Communication

A comparison between the perception of the respondents on interpersonal-intergroup communication between doctors and nurses and the existence of conflict was also assessed. The chances of a conflict was many times more likely amongst those who agreed there were poor interpersonal-intergroup communication compared to those that disagreed (OR =291.9; CI=54.9-5919.7) [¶] (Table 2).

3.5 Limited Opportunity for Staff Interaction

Amongst respondents that admitted to the presence of conflict (63.0%), 101(55.5%) attested that the chances of a conflict were higher when opportunities for staff interaction within the hospital were limited. The rate of chance for existence of conflict was almost twice more likely amongst those who agreed there were limited opportunities for staff interaction compared to those that disagreed. The odds of a conflict being significant (OR = 1.8, CI=1.1-2.9) (Table 2).

3.6 Desire for Power (Autonomy) by Doctors

Amongst respondents that admitted to the presence of conflict (67.4%), 167 (77.0%) attested that the chances of a conflict were higher when autonomy of doctors within the hospital was challenged. The rate of chance for existence of conflict was about thrice more likely amongst those who agreed that doctors desired a preservation of their autonomous rights compared to those that disagreed. The odds of a

conflict being significant (OR = 3.2, CI=1.9-5.2) (Table 2).

3.7 Desire for more Influence by Nurses

Amongst respondents that admitted to the presence of conflict (67.4%), 72 (33.2%) attested that the chances of a conflict were higher when nurses sought influence within the hospital. The rate of chance for existence of conflict was twelve times more likely amongst those who agreed that nurses seek more influence in the hospital setting compared to those that disagreed. The odds of conflict being significant (OR = 12.5, CI = 4.8-41.3) (Table 2).

3.8 Modes of Expression of Doctor-Nurse Conflict

Four major modes of expressing doctor-nurse conflict were identified which include: strike

actions, physical assaults, absenteeism and resignation.

3.8.1 Strikes

The chance of a strike occurring was twice likely among participants that agreed to the presence of a conflict compared to those who disagreed. Odds of a strike action as a result of conflict was found to be significant (OR = 2.1, CI = 1.3 - 3.5) (Table 3).

3.8.2 Physical assaults

The chance for physical assaults to occur was about 10 times less likely amongst participants that agreed to the presence of a conflict compared to those who disagreed. Reduced odds of physical assault as a result of conflict were found to be significant (OR = 0.1, CI = 0.03 – 0.41) (Table 3).

Table 2. Comparison of respondents’ perception of causes of doctor/nurse conflict

Perceived possible causes of doctor/nurse conflict	Conflict exists		Total	Odds ratio (OR)	95% confidence interval
	Yes	No			
Differences in wage (N=322)*					
Agreed	153 (100.0)	0 (0.0)	153 (100.0)	**NG	-
Disagreed	64 (37.9)	105 (62.1)	169 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		
Difference in social status (N=322)*					
Agreed	164 (100.0)	0 (0.0)	164 (100.0)	**NG	-
Disagreed	53 (33.5)	105 (66.5)	158 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		
Poor interpersonal-intergroup communication (N=322)					
Agreed	160 (99.4)	1 (0.6)	161 (100.0)	291.9 [¶]	54.9-5919.7 [¶]
Disagreed	57 (35.4)	104 (64.6)	161 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		
Limited opportunities for staff interaction (N=289)*					
Agreed	101 (69.7)	44 (30.3)	145 (100.0)	1.8	1.1 – 2.9
Disagreed	81 (56.2)	63 (43.8)	144 (100.0)		
Total	182 (63.0)	107 (37.0)	289 (100.0)		
Desire for power (Autonomy) by doctors (N=322)*					
Agreed	167 (75.6)	54 (24.4)	221 (100.0)	3.2	1.9 – 5.2
Disagreed	50 (49.5)	51 (50.5)	101 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		
Desire for more influence by nurses (N=322)*					
Agreed	72 (94.7)	4 (5.3)	76 (100.0)	12.5	4.8-41.3
Disagreed	145 (58.9)	101 (41.1)	246 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		

*Numbers may not add up to 323 for every characteristic because of incomplete data; ** NG – Not Generated; [¶] - Estimates less reliable as cells may not be comparable

Table 3. Comparison of respondents’ perception on modes of expression for the doctor-nurse conflict

Possible modes of expression for doctor/nurse conflict	Conflict		Total	Odds ratio (OR)	95% confidence interval
	Agree	Disagree			
Strikes (N=322) *					
Yes	91 (77.1)	27 (22.9)	118 (100.0)	2.1	1.3-3.5
No	126 (61.8)	78 (38.2)	204 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		
Physical assaults (N=68) * (At FMC alone)					
Yes	9 (45.0)	11 (55.0)	20 (100.0)	0.1	0.03-0.41
No	42 (87.5)	6 (12.5)	48 (100.0)		
Total	51 (75.0)	17 (25.0)	68 (100.0)		
Absenteeism (N=312) *					
Yes	9 (100.0)	0 (0.0)	9 (100.0)	**NG	-
No	208 (68.6)	95 (31.4)	303 (100.0)		
Total	217 (69.6)	95 (30.4)	312 (100.0)		
Resignation (N=322) *					
Yes	15 (100.0)	0 (0.0)	15 (100.0)	**NG	-
No	202 (65.8)	105 (34.2)	307 (100.0)		
Total	217 (67.4)	105 (32.6)	322 (100.0)		

* Numbers may not add up to 323 for every characteristic because of incomplete data; ** NG – Not Generated

3.8.3 Absenteeism

A good proportion, 95.9% (208) of the respondents who had perceived conflict (217) admitted that doctor-nurse conflict would not result in members abstaining from work (Table 3).

3.8.4 Resignation

A good number, 93.1% (202) of the respondents that agreed that conflict existed (217) reported that it had never been the sole cause leading to resignation of any doctor or nurse in the hospital (Table 3).

3.9 Reports from Focus Group Discussion (FGD) of Doctors

According to reports from the FGD from doctors, most of the doctors had a uniform opinion that nurses instead of respecting are threatening and challenging the position-roles of the doctor within the hospital environment.

Some of the comments of the focus group discussions with doctors include:

- “The salary differential is right and proper but the other groups want to earn as much as the doctors which is unacceptable”.

- “Society gives more respect to doctors and it is the right and proper thing to do. While appreciating the other professionals within the health system the privileged position of the doctors must be recognized and respected”.
- “Nurses always want to take charge of the whole hospital. They control the wards, theatre, clinics and especially the ward orderlies. That is why they want to control the doctors as well”.

Other doctors however felt that close working relationships and similar work duties compounded by communication lapses maybe the cause of incessant conflicts between the two professional groups.

- “Communication between doctors and nurses is more professional and semi-professional at best. Effort is being made to make it impersonal as possible to avoid undue familiarity, which is one of the causes of doctor-nurse conflict”.
- “The tension is more prominent between doctors and nurses because they are the two groups in the system that work closest together. If doctors and pharmacists begin to work more closely we would see increased conflict between them too”.

It was also reported by the doctors' group that nurses express this conflict through;

- *"Verbal outbursts usually without violence and lack of cooperation"*.
- *"Strike actions especially with regards to wages and salary differentials"*.
- *"Absenteeism – simple procedures like the resetting of intravenous fluid lines that nurses could actually perform are being left for the doctors in an attempt to increase doctors' workload"*.

In summary, doctors suggested that each group of professionals should be well informed by training schools on their roles and responsibility. Also, nurses and all other members of the health team must know their limits and confine themselves to those limits.

3.10 Reports from Focus Group Discussion (FGD) of Nurses

Contrary to the doctors, nurses in their focus group discussions opined that conflict between doctors and nurses was not an issue of wages or remuneration; rather, it was a case of lack of respect and rudeness from the doctors that is also aggravated by close proximity in the workplace and lack of proper communication. Others felt the quest for complete autonomy by doctors in the workplace might be a little superfluous and incommensurate. Some of the comments are highlighted below:

- *"Differentials in wages are not a problem as long as government pays a fair wage for every worker based on the ability of that group to negotiate"*.
- *"Society also give due respect to nurses. The problem is with those male nurses who impersonate doctors in the society"*.
- *"Communication is fine but there are some doctors that are quite rude and this can be painful especially when they are young enough to be one's children"*.
- *"Things may actually be better if we do not work directly with each other. There are problems with other health workers once in a while but it is with the doctors that it is more pronounced because we interact more in the course of our work"*.
- *"Doctors sometimes act as if everyone in the hospital are there to serve and merely support them. They want to have the last say about everything in the hospital even where they are non-professional issues"*.

It was also reported by the nurses' group that these conflicts are expressed through strikes but seldom through resignation:

- *"Resignation is not out of the question. How can one group leave for the other what everyone is supposed to do?"*
- *"The strikes happen because sometimes the government favours one group over the other"*.

It was suggested by the nurses' group that;

- *"The two groups must sit down at all levels, talk things over, deliberate and agree on certain crucial issues. The two groups must begin to respect themselves. This should involve those still at school."*
- *"The doctors, especially the young ones, must show more respect for other health workers including nurses"*.

4. DISCUSSION

Majority of the respondents were females and this probably explains the large proportion of nurses in the study relative to the doctors which mimics greatly the distribution found almost globally as females seem to predominate in the nursing profession [26]. Generally, the predominance of females in the nursing profession could be attributed to antediluvian notions that nursing was an extension of the domiciliary responsibilities of women or the demeaning effects on a man's prestige or social status especially in patriarchal inclined societies [27], such as Nigeria. The growing trend of feminism has however led to an increase in more females opting to be doctors rather than nurses [28,29].

Differentials in wages between doctors and nurses being identified as a contributory factor to conflicts within the hospital (Table 2) is not alarming, as discrepancies with wages have lingered over many years in various institutions/nationalities [30]. When left unresolved, differentials in wages possess the propensity not only to generate conflicts but also facilitate "brain-drain" [31,32]. Nurses interviewed in the FGDs prefer that each group negotiate its wages in order to secure for themselves what will be in their own view a fairer deal. This agrees with earlier expressed opinions - identifying disparity in economic compensation as a facilitating factor in doctor-nurse conflict [33,34]. Wage controls have been deliberated as a

remedy for improving the impact of wages on conflicts amongst health care workers, however, this has been also argued on a long-term basis as counter-productive, as it may “prevent the needed short and long-run labor supply responses from developing countries” [35].

The view of doctors as supreme and wishing that it remains that way is a finding that is synonymous with other studies [28,29]. The general opinion of doctors as supreme to other professions is a foremost kind of group conflict referred to as “in-group ethnocentrism” – a phenomenon in which one group view themselves as superior based on that group membership [36]. Studies have continued to reiterate the importance for not only an effective communication style, but also a need for equity and inter-professional monitoring, in a bid to attain best practices within the individual professions in the health care setting [37,38]; and the end to stereotypes of the ‘omnipotent physician’ or ‘subservient nurse’ cultures which are believed to be obsolete now [39]. This will help to placate the effects of poor interpersonal communication or differences in social status that are observed in various health care settings and confirmed by the findings of this study. Increased frustration with poor professional communication and dysfunctional work environments are founded and significant contributors to doctor-nurse conflicts, stress and burnout [40,41]. Further studies are required to establish and explore advantages of partnership style of communication over paternalistic communication style [42,43] between doctors and nurses in Sub-Saharan Africa.

Interestingly the desire for much power in the healthcare system is also reported where tendencies for physicians to intimidate and discriminate other professions have been found to be established causes of conflict in other tertiary hospitals in Nigeria [44]. The possibility of in-group ethnocentrism coupled with “power-inequity or ambiguity” further complicates the issue of supremacy that is perceived by doctors – a general belief that doctors give orders and nurses carry them out [45]. This undue desire and use of power to exert influence is an established cause of relational conflicts that is often observed between doctors and nurses [14,28,46]. With regards to the modes of expression of doctor-nurse conflict, higher chances of a strike in the presence of doctor-nurse conflict (Table 3), is in concordance with the views expressed by earlier writers [47,48].

The low probabilities of absenteeism and resignation as possible outcomes of doctor-nurse conflicts may be explained by the fact that the two studied hospitals are government owned hospitals whose job appointments are relatively more stringent to secure coupled with the prevailing socio-economic conditions in the country.

Furthermore, reduced opportunities for staff interaction (Table 2) depicts that the conflict reduction approach [49,50], which is hinged upon adequate staff interaction, is not widely supported by management. The FGDs also described a manner of interaction that was deliberately minimal and impersonal, a situation that runs counter to the conflict reduction approach. Many of the statements mentioned by the nurses like courtesy, respect of others and airs of immoderate superiority, especially by younger doctors are issues which can be easily controlled by improved training in ethics in the medical schools as well as their monitoring and enforcement locally and nationally by professional associations rather than waiting for external bodies like the Medical and Dental Councils to enforce it, as these are unlikely to happen. Ogbonnaya and colleagues [44] validated this standpoint by emphasizing a need for “mutual respect for each other’s competence, proper remuneration, clear delineation of duties and an appreciation of differentials in salary as means of effectively resolving the conflicts”. Indeed, several factors were agreed in the study to be responsible for doctor-nurse conflicts. Though, most were not in consonance with findings from Okhakhu and colleagues where sources of conflicts ranged from gender differences to gaps in education and socio-economic status, lack of understanding and sympathy [51]. Undesirable outcomes such as emotional exhaustion and burnouts from conflicts in the work environment have been studied to show deleterious effects on patient outcomes and suboptimal medical care [52].

This study nevertheless had some limitations. The goal for which two different levels were selected for the study may not have been totally achieved because the level, type and quality of services and care provided by both facilities are not quite similar in terms of tertiary health facilities. Also, there are significant confounders such as effects of the activities of other health professionals or peculiar socio-political circumstances of the work environment could not be captured in the study. In addition, the

methodology of the study does not take cognizance of the different factors that modify human perception, which have a significant impact on intergroup conflict, as well as the external sources of conflict. Therefore, though the findings of the study can be applicable to any doctor-nurse relationship, there are other factors at work in a teaching hospital that may not have been captured at the selected facilities. Nevertheless, the study provides baseline statistics for explanation of recurrent and incessant strike actions that have continued to impede dispensation of quality care within our tertiary health facilities.

Deeper knowledge and awareness of emotional intelligence [53] is highly recommended to address conventional doctor-nurse inter-personal relationships within healthcare settings. A health promoting hospital programme with implementing guidelines to encourage inter-personal and inter-group respect, cooperation, teamwork in activities like a hospital health week, intergroup sports, joint cleanup programmes will help to reduce conflicts and unnecessary antagonisms. In-depth knowledge of conflict styles, their management and application to reduction of conflicts within the health care setting is of paramount interest to achieving improved patient outcomes [54]. Recommendations for improving inter-professional collaboration and reduction of conflicts in the workplace include: development of formal strategies for inducing new members into health team; re-establishing new formal processes for information sharing; developing training in teamwork processes by engaging teams through active and relevant programmes amidst recognizing role of leadership and clarifying roles and team member capabilities; establishing formal processes for sharing concerns, decision making and priorities [55,56].

5. CONCLUSION

The study conducted amongst doctors and nurses in the State Specialist Hospital, Ado-Ekiti and the Federal Medical Centre, Ido-Ekiti, establishes the fact that professionals in healthcare agree to existence of conflicts that stem from factors such as desire for power and influence, poor interpersonal communication, inadequate opportunities for staff interaction, differences in wages, and differences in social status. According to this study, the most

prevalent cause of conflict amongst health care workers was desire for more influence by nurses while strike actions constituted the most prevalent mode of expression. The study has revealed an association between the above factors and doctor-nurse conflict in the study area. Furthermore, the study supported some modes of expression of doctor-nurse conflict that include, strike actions, physical assaults, absenteeism, and resignation.

In view of these findings, hospital management must recognize the implications of doctor-nurse conflict for the health system and adopt a team attitude in the pursuit of their duties. It is critical to orientate the various professional groups within the health system in order for them to adopt a team attitude towards one another. Medical and nursing students must be taught to develop mutual respect for each other while opportunities for short inter-departmental postings for these students should be explored. Measures must be put in place to improve both formal and informal communication channels between doctors and nurses.

Interdependence of work is a sine-qua-non for achieving the set goals and desirable hospital outcomes; therefore staff development must be targeted at attitudinal changes, which would engender true professionalism amongst not just doctors and nurses but all the professional groups in the health care system. Management should begin to take firm and prompt steps at conflict management by employing the use of several strategies, which would promote effective communication and collective bargaining. Lastly, further studies should be carried out to identify other factors that may facilitate doctor/nurse conflict especially the role of other groups of workers/professionals in the health sector.

CONSENT

All authors declare that 'written informed consent was obtained from approved parties for publication of this report and accompanying images.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Tjosvold D. Making Conflict Productive. *Pers Admin.* 1984;46(2):29–33.
2. Adesina J. Towards the Reconstruction of Industrial Relation Theory. In *Further Readings in Nigerian Industrial Relations.* 1992;1–2.
3. Oloyede O. African Factory Management: A Study of Some Factories in Southern Nigeria. *African Sociol Rev.* 1999;3(1):94–110.
4. Ogunyemi D, Fong S, Elmore G, Korwin D, Azziz R. The Associations Between Residents' Behavior and the Thomas-Kilmann Conflict MODE Instrument. *J Grad Med Educ.* 2010;2(1):118–25.
5. Kazimoto P. Analysis of Conflict Management and Leadership for Organizational Change. *Int J Res Soc Sci.* 2013;3(1):16–25.
6. West M, Poulton B. A Failure of Function: Teamwork Care. *J Interprof Care.* 1997;11(2):205–16.
7. Breen CM, Abernethy AP, Abbott KH, Tulsy JA. Conflict associated with decisions to limit life-sustaining treatment in Intensive Care Units. *J Gen Intern Med.* 2001;16(5):283–9.
8. Kohr R, Creses L, Gray V, Wamock L. Defusing family conflicts. *Nursing (Lond).* 1998;28:54–7.
9. Shreves JG, Moss AH. Residents' ethical disagreements with attending physicians: an unrecognized problem. *Acad Med.* 1996;71:1103–5.
10. Winkenwerder W. Ethical dilemmas for house staff physicians. The care of critically ill and dying patients. *JAMA.* 1985;254:3454–7.
11. Prendergast TJ, Luce JM. Increasing incidence of withholding and withdrawal of life support from the critically ill. *Am J Respir Crit Care Med.* 1997;155:15–20.
12. Keenan SP, Busche KD, Chen LM, McCarthy L, Inman KJ, Sibbald WJ. A retrospective review of a large cohort of patients undergoing the process of withholding or withdrawal of life support. *Crit Care Med.* 1997;25:1324–31.
13. Forte PS. High cost of conflict. *Nurs Econ.* 1997;15:119–23.
14. Numerof RE. Expanded Nurse Role from the Perspective of the New Medicine. 1978;45–51.
15. Oloyede O. Coping Under Recession Workers in a Nigerian Factory. *Almqvist and Wicksell, Stockholm;* 1991.
16. Astbury J, Yu VYH. Determinants of stress for staff in a neonatal intensive care unit. *Arch Dis Child.* 1982;57(2):108–11.
17. Kennedy GD. The role of the speech and language therapist in the assessment and management of dysphagia in neurologically impaired patients. *Postgrad Med J.* 1992;68(801):545–8.
18. Ogbonnaya GU, Ukegbu AU, Aguwa EN, Emma-Ukaegbu U. A study on workplace violence against healthworkers in a Nigerian tertiary hospital. *Niger J Med.* 2012;21(2):174–9.
19. Phipps L. Stress among doctors and nurses in the emergency department of a general hospital. *CMAJ [Internet].* 1988;139(5):375–6.
20. Khamisa N, Peltzer K, Oldenburg B. Burnout in relation to specific contributing factors and health outcomes among nurses: A systematic review. *Int J Environ Res Public Health.* 2013;10(6):2214–40.
21. Lasebikan VO, Oyetunde MO. Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors. *ISRN Nurs.* 2012;(402157):1–6.
22. Tagliacozzo R, DrNatSci, Vaughn S. Stress and smoking in hospital nurses. *Am J Public Health.* 1982;72(5):441–8.
23. Drucker P. *The Practice of Management.* Pan Books, London; 1968.
24. Ejughemre UJ. Accelerated Reforms in Healthcare Financing: The Need to Scale up Private Sector Participation in Nigeria. *Int J Heal Policy Manag [Internet].* 2014;2(1):13–9.
25. Lomazzi M, Borisch B, Laaser U. The Millennium Development Goals: Experiences, achievements and what's next. *Glob Health Action.* 2014;7(SUPP.1):1–9.
26. Landivar LC. Men in Nursing Occupations: American Community Survey Highlight Report. *US Census Bur.* 2013;1–7.
27. Evans J. Men nurses: a historical and feminist perspective. *J Adv Nurs.* 2004;47(3):321–8.

28. Radcliffe M. Doctors and nurses: new game, same result. *BMJ* [Internet]. 2000;320(7241):1082.
29. Davies C. Doctors and nurse: changing family values? *BMJ*. 1999;319:463-4.
30. Kovac C. Polish nurses strike for better wages. *BMJ*. 2001;322(7277):10.
31. Siringi S. Kenya government promises to increase doctor's salaries to curb brain drain. *Lancet*. 2001;358(9278):307.
32. Mayta-Tristan P, Dulanto-Pizzorni A, Miranda JJ. Low wages and brain drain: an alert from Peru. *Lancet* [Internet]. 2008;371(9624):1577.
33. Salvage J, Smith R. Doctors and nurses: doing it differently. *BMJ* [Internet]. 2000;320(7241):1019-20.
34. Aiken LH, Blendon RJ, Rogers DE. The shortage of Hospital Nurses: A new perspective. *Am J Nurs*. 1981;81(9):1612-8.
35. Buerhaus PI. The potential imposition of wage controls on nurses: a threat to nurses, patients, and hospitals. *Nurs Econ*. 2008;26(4):276-9.
36. Kaufman J. Conflict Management Education in Medicine: Considerations for Curriculum Designers. *Online J Work Educ Dev*. 2011;5(1):1-17.
37. Crossley T, Abedin L. Doctors and nurses should monitor each other's performance. *BMJ*. 2000;320:1070-1.
38. Skelton J. Patient centered care of diabetes in general practice: Doctors and nurses must understand meaning of "communication". *BMJ*. 1999;318:1621-2.
39. Greenfield LJ. Doctors and nurses: a troubled partnership. *Ann Surg* [Internet]. 1999;230(3):279-88.
40. Kutzin JM. Communication and Teamwork Focused Simulation-Based Education for Nursing Students [Internet]. Doctor of Nursing Practice (DNP) Capstone Projects. Paper 4. 2010.
Available:http://scholarworks.umass.edu/nursing_dnp_capstone/4
41. Oates RK, Oates P. Stress and mental health in neonatal intensive care units. *Arch Dis Child*. 1995;72(2):F107-10.
42. Claramita M, Utarini A, Soebono H, Van Dalen J, Van der Vleuten C. Doctor-patient communication in a Southeast Asian setting: the conflict between ideal and reality. *Adv Health Sci Educ Theory Pract* [Internet]. 2011;16(1):69-80.
43. Gill E. Doctors and Nurses. Doctors and Nurses need to collaborate. *BMJ*. 2000;321(7262):700-1.
44. Ogbonnaya LU, Ogbonnaya CE, Adeoye-Sunday IM. The perception of health professions on causes of interprofessional conflict in a tertiary health institution in Abakaliki, southeast Nigeria. *Niger J Med* [Internet]. The Association. 2007;16(2):161-8.
45. Frederich ME, Strong R. Physician-nurse conflict: can nurses refuse to carry out doctor's orders? *J Palliat Med*. 2002;5(1):155-8.
46. Wicks D. *Nurses and Doctors at Work: Rethinking Professional Boundaries*. Open University Press, London; 1998.
47. Aiken LH, Smith HL, Lake ET. Lower Medicare Mortality among a set of Hospitals known for Good Nursing Care. *Med Care*. 1994;32(8):771-87.
48. Lazarus R, Folkman S. *Stress, Approval and Coping*. Springer, New York; 1984.
49. Gray J, Starke F. *Organisation Behaviour: Concepts and Applications*. 4th Edition. Merrill, Columbus; 1988.
50. Stoner A. *Management* 6th Edition. Englewood Cliffs, New Jersey, Prentice-Hall; 1989.
51. Okhakhu EE, Okhakhu AL, Okhakhu JOO. Managing Organizational Conflicts: A Phenomenological Study of Nurse/Physician Conflicts in Nigerian Hospitals and their Impact on Managed Care Delivery. *J Entrep Organiz Manag*. 2014;3(2):1000115.
52. Cimiotti JP, Aiken LH, Sloane DM, Wu ES. Nurses staffing, burnout and healthcare-associated infection. *Am J Infect Control*. 2012;40(6):486-90.
53. Asuzu M. *The Importance and Problems of Emotional Intelligence in the Medical and Health Services Management--What to do?* Oyo State Government Printing Press, Secretariat Ibadan. 2008;1-29.
54. Brestovacki B, Milutinovic D, Cigic T, Grujic V, Simin D. Conflict Styles observed in doctors and nurses in health care organization. *Med Pregl*. 2011;64(5-6):262-6.
55. Weller JM, Barrow M, Gasquoine S. *Interprofessional collaboration among*

- junior doctors and nurses in the hospital setting. Med Educ [Internet]. 2011; 45(5):478–87.
56. Smith CNC, Quan SD, Morra D, Rossos PG, Khatibi H, Lo V, et al. Understanding interprofessional communication: a content analysis of email communications between doctors and nurses. Appl Clin Inform [Internet]. 2012;3(1):38–51.

© 2015 Olajide et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://sciencedomain.org/review-history/10206>