

## Original Paper

## Nurses Beliefs And Attitudes Towards Visiting Policy In The Intensive Care Units Of Ghanaian Hospitals

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## ABSTRACT

**Background:** Research and evidence supporting open and liberalized visiting policy have resulted in many hospitals adopting these policies. However, ICU nurses' beliefs and attitudes about flexible and open visiting policy vary. Hence open visitation has not always been implemented by nurses who are the ward owners. It is vital to evaluate nurses' beliefs about and attitudes towards visiting policy. **Methods:** A descriptive, cross-sectional quantitative survey was conducted in 4 public hospitals in Ghana, with a sample of 140 nurses. Data were collected with a validated scale – BAVIQ to assess the nurses' beliefs and attitudes toward visitation. **Results:** Generally, nurses' preferred restricted visiting policy based on their attitudes, however, the beliefs of nurses about visiting policy were skeptical (neither agree nor disagree). The study also showed a meaningful relationship between nurses' beliefs and their sex ( $p=0.02$ ), experience ( $p=0.00$ ), educational level ( $P=0.00$ ), employment status ( $p=0.00$ ) and executive position ( $p=0.00$ ). It also indicated a meaningful relationship between nurses' attitudes and their sex ( $p=0.00$ ), experience ( $p=0.00$ ), educational level ( $p=0.00$ ), and executive position ( $p=0.00$ ). Chi-square was used to compute the test. **Conclusions:** Based on the findings, ICU nurses' beliefs and attitudes toward visitation support the universal concern of the restricted visiting policy in Ghana. These are essential factors in the implementation of flexible visiting policy in intensive care units; the beneficial effects of open visiting policy for the nurse, the patient, and the family because it enhances patient-centered care and optimal health. Therefore the need for drafting a protocol and guidelines for intensive care units visiting policy in Ghana is recommended. Qualitative research in specific areas of visiting policy is recommended.

## INTRODUCTION

Globally, the intensive care unit (ICU) is a department of the hospital in which patients who are dangerously ill are under vigilant and constant observation (1). This is an environment where patients with multi-organ failures are partially or fully assisted, and the causes of poor systemic functions eliminated. It is considered as a special unit in which advanced technology is practiced by highly skilled and experienced healthcare professionals (2). Admission into the intensive care unit is usually stressful. This stress affects both the family and nursing staff. The family is usually worried about the prognosis of the disease affecting their loved one who is receiving treatment in this highly sophisticated environment.

Many studies have demonstrated that some of the symptoms of stress among family members who have had their relatives admitted into the ICU are anxiety, depression, and posttraumatic stress disorders (3–5). Because of the unexpected manner of ICU admissions, families are usually not prepared and are often anxious (4). The intensive care unit (ICU) nurses also experience stress due to the eventfulness of ICU admissions (6). They work in a stressful environment as they know that at any minute, another patient can come through the door, and so they experience high levels of stress with every new admission and the loud atmosphere of the unit (7). The interplay of stress experienced by the nurses and the family can result in poor communication, bad manners, and dissatisfaction among family members, especially in regard to the frequency of visitation (8).

A research conducted in Italy by Giannini A. et al. (2013) on the partial liberalization of visiting policies in the ICU posited that burnout among nurses (adjusted  $p = 0.002$ ) and doctors was significantly increased after one year of the institution of the policy. Even though the policy was positively viewed and maintained for one year, it was negatively correlated with staff burnouts (9).

Generally, visiting policies are divided into restrictive and open (liberal). A restrictive visiting policy allows family to visit during certain periods of the day and restricts the number of visitors per period. An open visiting policy permits access to family at all times (24 hours) with or without restriction on the number of family members and significant others during a given period (10). Many studies have posited that nurses' opinions about the open visiting policy is that visitors obstruct nursing and medical care, exhaust patients, interfere with healing and/or cause negative physiological effects, pose an infection risk, jeopardize patients' privacy, and create unsafe environments (11, 12).

Many other studies encouraged an open and liberalized visiting policy because of its beneficial effects, which include decreased patient anxiety, an increased level of family satisfaction, improved communication between healthcare providers and families, and increased patient relaxation. Furthermore, most families believe that the patient felt safer and more supported if they were present (13). Flexible visitation can help in creating a healing environment where optimal patient outcomes are achieved. A randomized study conducted by Fumagalli S. et al. (2006) associated open visitation policies with a decrease in patient anxiety, improvements in their hormonal profiles, and a decrease in cardiovascular complications (10). An open visiting policy also improves the interactions between healthcare professionals, including nurses, and visitors, and this ensures effective communication and an overall positive impact on satisfaction and the quality of care (8). It has also been suggested in other literature that flexible visiting policies serve as reassurance of safe care to patient and visitors, reduces their anxiety, and helps them integrate more effectively into the complicated and hostile ICU environment (14).

An important part of an individual's health is the social factor of family and significant others. In the case of African communities, are characterized by the prevalence of collectivism as opposed to individuality. There is pure cohesion and love for the neighbor is held in high esteem. Every individual shares the sadness and the joys. One is never left alone in their misfortunes and ill health (15, 16). On the other hand, a study conducted in Turkey reported (99%) that nurses think that visitors to the ICU should be first-degree relatives (2). However, the family is the bedrock of Ghanaian society. It transmits cultural heritage and serves as the first level of social security. In the Ghanaian context, every person is a member of two families, a nuclear family and an extended family.

In Ghana, no studies have been conducted in terms of visiting policy in the ICU. Hospital visits are common due to the tradition of visiting the sick in relation to religious and cultural beliefs, so restricted visiting policy can produce major conflicts between nurses and visitors.

Research findings elsewhere have also shown that the views, beliefs, and attitudes towards visiting among healthcare professionals, including nurses, are restrictive (17–19). While most ICU nurses prefer a closed door policy, visitors have rated the nearness to their loved ones who are admitted into the hostile and unfamiliar ICU environment as vital. The perspective of Ghanaian nurses towards visiting policies, whether opened or closed, is unknown. Therefore, the purpose of this study is to evaluate and gain an in-depth understanding of the beliefs and attitudes of nurses in terms of visiting policies at the ICUs in Ghana.

## METHODS

### Study Design

A descriptive cross-sectional quantitative design was used for this study. This study was carried out in 4 intensive care units from Ghana. Two were University Teaching Hospitals (Komfo Anokye Teaching Hospital-from the south and Tamale Teaching hospital-from the north) and two were public regional hospitals (Bolgatanga regional hospital- from the north and Tema General hospital- from the south). The study population included nurses working at the intensive care units of the identified settings. Consensus sampling method was the sampling procedure used with a confidence interval of 95% and power test 90% and according to the sampling method. This sampling technique was used because of the specific criteria of involving all critical care nurses and RNs working at the ICU of the study area. This procedure gave the researcher an opportunity to use all the available participants because of the small and limited population of nursing subjects. The sample size for the study was 150. A power analysis was done to estimate the minimum sample size necessary to obtain significant results. Data were collected between June, 2017 to December 2017. The demographic information for nurses included nine questions about gender, age, and years of RN experience, employed in (i.e., regional hospital, tertiary, university, public), ethnicity, religion, and highest degree attained (i.e., Certified State RN, diploma, bachelor, master, and doctorate), Type of intensive care unit and I having an executive position. Data were collected with the use of a standard instrument called Beliefs and Attitudes Visitation Questionnaire (BAVIQ) developed by Berti. Et al. (2007), permission to use the instrument was granted by Dr. Philip Moons (Academic Centre for Nursing and Midwifery, University of Leuven). The BAVIQ was developed by Berti et al. (2007) (11) to assess nurses' beliefs and attitudes regarding visiting policy in the ICU. Ongoing and current research attested that the BAVIQ remains a useful instrument to guide educational efforts and measure change over time. The structured questionnaires consisted of 20 items assessing beliefs and 14 items assessing attitudes). The Questions elicited responses according to a five-point Likert scale format representing answers ranging from strongly agree to strongly disagree. According to Berti et al. (2007) 'content validity was obtained by submitting the questionnaires to a panel of ten experts (seven ICU head nurses and three Masters-prepared ICU nurses).

Subsequently, eight intensive care nurses checked the new questionnaire to assess its face validity, i. e., evaluating clarity and ease of use'. It was a self-reported questionnaire and where necessary, the questions were clarified to those who could not understand certain lines.

The questionnaire contained both positively and negatively formulated questions. To calculate an overall score for the families' beliefs, some of the responses were reversed coded and the questions negatively formulated. Subsequently, the average score over all the belief items was computed. A score of zero corresponded with beliefs that are strongly opposed to open visitation and a score of 4 corresponded with beliefs that are strongly in favor of open visitation.

In the scoring system, 'agreed' and 'strongly agreed' and likewise disagreed and strongly disagreed were added up for the purposes of determining believe status or the attitude status of respondents for each item they responded to, however, neither agreed nor disagree was not computed but was considered neutral. A score of at least more than fifty percent was considered to be of high value and reported. The inclusion criteria of the study included Registered nurses working in ICU and accepted to participate in the study. The exclusion criteria included other clinicians who are not nurses working at the ICU, healthcare assistants, and orientation nurses. Data was analyzed with descriptive and analytical statistical test using Statistical Package for Social Sciences program (SPSS) version 16. Ethical approval to undertake the study was obtained from the research and planning unit of Tamale Teaching Hospital (TTH/R&D/SR/17/54), Komfo Anokye Teaching Hospital (CHRPE/AP/573/17), Bolgatanga regional Hospital (TTH/R&D/SR/17/54), Tema General Hospital (TGH2/1/18) and Tehran University of Medical Sciences Ethics (IR.TUMS. FNM.REC.1396.2703) and institutional review board. Appropriate institutional and unit permissions were obtained. Individual written informed consent was obtained from all nursing participants. The World Health Organization (WHO Ethical Review Committee) informed consent form was adopted for this study(20). Confidentiality and anonymity were explained to participants and they were assured of the chance to opt-out at any time during the study if they so desire and that such withdrawal will not affect their employment status.

## RESULTS

A total of 140 nurses completed and returned the questionnaires out of the 150 distributed representing 93.3% response rate. In this study (Table 1), the  $M \pm SD$  31.14 $\pm$ 3.88. It reported the minimum and maximum age of participants to be 25 and 55years respectively and the majority (52.1%) being females. From the study, it was clear that majority (87.1%, n=122) the participating ICUs practiced restricted visiting policy.

From the (Table 3),  $P$ -value  $< 0.05$  shows a meaningful relationship. Hence from the table above, there was a meaningful relationship between nurses' beliefs and their sex ( $p=0.02$ ), experience ( $p= 0.00$ ), educational level ( $p= 0.00$ ), employment status ( $p=0.00$ ) and executive position ( $p=0.00$ ). It also indicated that, there was a meaningful

**Table 1.** Nurses' demographic characteristics (N=140)

Variable	N (%)
Gender	
Male	67 (47.9)
Female	73 (52.1)
Age	
25-35	121 (86.4)
39-44	18 (12.9)
45-55	1 (0.7)
Age (Mean $\pm$ SD)	31.14 $\pm$ 3.88
Religion	
Muslim	79(56.4)
Christian	61(43.6)
Employment level	
Regional hospital	18 (12.9)
University hospital	122 (87.1)
Ethnicity	
Dagomba	31 (22.1)
Asante	33 (23.6)
Ewe	7 (5)
Frafra	4 (2.9)
Gonja	10 (7.1)
Other	55(39.3)
Level of education	
Diploma & SRN	74(52.9)
Certified nurse	4(2.9)
BSc nursing	39(27.9)
Post-Basic ICU	20(14.2)
Masters' level nurse	3(2.1)

relationship between nurses' attitudes and their sex ( $p=0.00$ ), experience ( $p=0.00$ ), educational level ( $p=0.00$ ), and executive position ( $p=0.00$ ). Chi - square was used to compute the test. Chi - square was used to compute the test.

## DISCUSSION

This study seeks to evaluate beliefs and attitudes regarding visiting policies in the Ghanaian ICUs in the perspective of nurses. Regarding the type of visiting policy practiced by the participating intensive care units, from Table 2, it can be seen that most of the nurses (87.1%) indicated that a restricted visiting policy was what is being practiced. This study is supported by a survey done by Hunter, J. D. et al. (2010). In a survey of over 200 intensive care units in the United Kingdom, 80% of the represented 165 ICUs practiced a restricted visiting policy. Another document that supports this finding is the study conducted by the American Association of Critical-Care Nurses (2011) practice alert; the AACN estimated that 70% of active hospital ICU policies in the US were restricted. Further, according to Afien and Marieke (2011), the majority of Dutch ICUs (85.7%) have restricted visiting policies (21–23). This is probably because the history and traditional nature of intensive care unit visiting policies entails restricted visitation policies.

The most important revelation in this study was that while nurses believed in the beneficial effects of an open visiting policy for patients, they believed that this hinders the patient's rest and that may cause physiological stress for the patient. The present study is consistent with several studies in that no evidence has been found that family visits cause physiological stress (10, 24, 25). Further, as seen in Table 2, they also did not believe that an open visiting policy could cause adverse haemodynamic responses in the patient. Interestingly, from the findings it can be seen that most nurses did not believe that an open visiting policy was important in terms of the recovery of the patient. This is probably because most patients admitted to the ICU are unconscious and do not need the benefits of support and presence from the visiting families. This was supported by the findings of Berti et al.'s (2007) study, which describes the beliefs and attitudes of intensive care unit (ICU) nurses towards visiting, visiting hours, and open visiting policies in critical care settings (11).

In this study, it was found that, nurses believe that while visitors could help the patient interpret information, open visitation infringes on the privacy of patients and does not provide comfort to the patient. According to Dehghan-Nayeri and Aghajani (2010), an important aspect of patient privacy is solitude (26). These current assertions are supported by several studies carried out in Europe and Western United States (7, 27, and 28). The findings of this current study indicate that the majority of the nurses (57.9%) believe that an open visiting policy decreases the family's anxiety and that it does not exhausts the family. This assertion contradicts Drumright and Julkenbeck's (2012) study, which found that nurses believe that open visitation causes undue stress and increased anxiety and fatigue among patients and their families (29).

From Table 2, it can be seen that the nurses also believe that an open visiting policy interferes with direct nursing care and that this policy hampers the adequate planning required in the nursing care process. In the context of Tayebi et al.'s study (2017), the impact of open visiting policies on the effectiveness of nursing care was questioned as well as the fact that there are times when the presence of visitors and relatives is not necessary when dealing with emergency procedures, and their presence was believed to interfere with care services and planning (30). Furthermore, participants did not believe that an open visiting policy makes nurses nervous because they are afraid of making errors and that nurses believe that an open visiting policy makes them feel controlled. This is probably because most visitors tend to go beyond the privileges given to them and, in turn, try to instruct nurses in their attempt to make sure that their loved one who is admitted to the ICU is free from pain miraculously. However, nurses from our study do not believe that an open visiting policy interferes with the relationship between nurses and visitors. This is consistent with the fact that nurses provide patients with support and information while maintaining a level of professional distance and objectivity (31). This is because nurses are able to maintain a balance and remain professional and ethical. The nurses from our study believe that an open visiting policy makes nurses spend more time in providing information to the family.

Results from the study of Berti et al. (2007) concur with our study in terms of providing information (82.3%) (11). They also did not believe that an open visiting policy increases the risk of errors. This is supported by da Silva Ramos et al.(2013) in their study, which evaluates the perceptions of physicians, nurses, and respiratory therapists (RTs) on an open visiting policy; nurses expressed positive reactions to an open visiting policy and stated that it could not make nurses nervous, feel controlled, and afraid to make errors (10).

They also did not believe that an open visiting policy increases the risk of errors. This is supported by da Silva Ramos et al.(2013) in their study, which evaluates the perceptions of physicians, nurses, and respiratory therapists (RTs) on an open visiting policy; nurses expressed positive reactions to an open visiting policy and stated that it could not make nurses nervous, feel controlled, and afraid to make errors (10). Nurses did not believe that visitation is helpful to the care givers. They also did not believe that an open visiting policy contributes to the improvement of patient-centered care. This is again supported by the work of Laura Marco (2011); nurses are unanimous in their belief that the family gives emotional support to the patient and increases their desire to live (32). This maybe the reason why nurses in Ghana partially support the fact that family members should be given open access to the ICU. Statements like "we are going to give medication to the patient, so please wait" imply that nurses do not believe that open visitation contributes to patient-centered care.

Regarding the attitudes in this study, most of the nurses disagreed with the ideas that patients should be allowed to approve visitation for everyone, that the number of visitors in a time range of 24h should have limitations (82.9%) and that the length of a visit should not be limited (86.6%). They also did not think that the number of people visiting the patient at the same time should not be limited (72.1%). Numerous literature has attested to these attitudes; the old-fashioned attitude of limiting the number of persons visiting the patient was apparent in the study. This could be due to the fact that nurses want to limit noise levels and have enough space to work, considering the limited space in ICUs.

In the analysis of the results, it was found that the nurses also think that strict visiting hours must be adapted when the family has practical problems in adhering to the policy (62.9%). However; they stated that a strict visiting policy must not be implemented when the patient has emotional problems. This attestation is supported by a study conducted in Dutch by Afien and Marieke (2011). There were no visiting restrictions for family members when the patient was very ill, unstable and had emotional needs (21–23). They were allowed a 24-hour visit. This was probably done to allow the family members to have access to the ICU to help comfort the patient psychologically and emotionally. Nurses also disagreed with the idea of giving patient control of the visiting policy. Nurses from this study (47.8%) did not think that a flexible visiting policy must be allowed for the first 24 hours of admission. The nurses, however, agreed that a visiting policy must be adapted when the patient is dying. This is in line with Maité et al.'s (2008) study who found that a larger number of visitors were allowed if the patient was dying. In the same work, it was found that visitors were given a rather flexible visiting time only when patient was unstable and no matter the time of hospitalization, once the patient was improving,

**Table 2.** Beliefs and attitudes of nurses

Beliefs Questions	Scores (%)				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I believe that visitation has a beneficial effect on the patient.	0	0	2.9	45.7	51.4
I believe that visitation hinders the Patient's rest.	0	32.9	18.6	32.1	16.4
I believe that visitation causes physiological stress for the patient	1.4	57.9	20.7	10	10
I believe that visitation creates adverse hemodynamic responses in patients.	0.7	50.9	19.3	28.6	0.7
I believe that an open visiting policy is important for the recovery of the patient.	25.7	47.9	5	17.9	3.6
I believe that visitation causes psychological stress for the patient	17.9	46.4	12.9	19.3	1.7
I believe that visitors can help the patient interpret information.	1.4	25.7	10.7	53.6	8.6
I believe that an open visiting policy infringes upon patient's privacy	17.9	36.4	5	35	5.7
I believe that an open visiting policy offers more comfort to the patient	19.3	39.3	12.9	23.6	5
I believe that an open visiting policy decreases family's anxiety.	12.1	7.1	7.1	57.9	15.7
I believe that an open visiting policy exhausts family, because they feel forced to be with the patient.	14.3	62.1	6.9	8.6	8.6
I believe that an open visiting policy interferes with direct nursing care.	15.7	5	0.7	25.7	52.9
I believe that an open visiting policy makes nurses nervous, because they are afraid to err.	4.2	57.1	7.9	7.9	22.9
I believe that an open visiting policy makes nurses feel controlled	9.3	22.1	23.6	25	20
I believe that an open visiting policy hampers adequate planning of the nursing care process	18.6	18.6	0	31.4	31.4
I believe that an open visiting policy interferes with humor between nurses	1.4	57.1	12.1	28.6	0.7
I believe that an open visiting policy makes nurses to spend more time in providing information to the family.	3.6	35.7	7.9	52.1	0.7
I believe that an open visiting policy increases the risk of errors.	3.6	56.4	7.9	32.1	0
I believe that visitation is a helpful support for the care givers.	45	6.4	45.7	0	2.9
I believe that an open visiting policy contributes to the improvement of patient- centred care.	15	44.3	0.7	32.1	7.9
Total score * Mean±SD	1.45±0.84				
Nurses attitudes	Scores (%)				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think that everyone is allowed to visit, if it is approved by the patient.	18.6	62.9	0	7.9	1.7
I think that the number of visitors in a time range of 24h should not be limited	29.3	53.6	15	1.4	0.7

(Contd)

**Table 2. (Continued)**

Nurses attitudes	Scores (%)				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think that the length of a visit should not be limited.	29.3	57.3	0	15.7	0.7
I think that the number of people who are visiting the patient at the same time should not be limited.	12.1	60	12.1	0	15.7
I think that an open visiting policy should be carried out in our unit.	40.7	47.1	1.4	9.3	1.4
I think that strict visiting hours must be adapted when the family has practical problems adhering to the policy.	7.9	15	14.3	23.6	39.3
I think that strict visiting hours must be adapted when the patient has emotional needs.	8.6	42.1	2.9	37.9	8.6
I think that when the patient is capable, he/she should have control in when, how long and how many visitors he/she can have	0.7	67.1	1.4	22.9	7.9
I think that the visiting policy must be adapted to the culture/ethnicity of the patient.	4.3	46.4	10	21.4	17.7
I think that a strict starting hour is important, but the length of a visit can be flexible.	14.3	38.6	7.9	21.4	17.9
I think that the visiting policy must be flexible during the first 24h of hospitalization.	10.7	37.1	12.9	31.4	7.9
I think that the visiting policy must be adapted when the patient is dying.	14.4	25.9	6.5	46	7.2
Total score * Mean±SD	1.45±0.84				

**Table 3. Relationship between nurses demographic and beliefs and attitudes**

Demographic characteristics beliefs and attitudes	Age	Sex	Experience	Education level	Employment status	Executive position	Test
Nurses' beliefs	$\chi^2=9.34$ P=0.15	$\chi^2=9.30$ P=0.02	$\chi^2=82.37$ P=0.00	$\chi^2=93.72$ P=0.00	$\chi^2=51.01$ P=0.00	$\chi^2=41.33$ P=0.00	$\chi^2$
Nurses' attitudes	$\chi^2=9.93$ P=0.27	$\chi^2=27.93$ P=0.00	$\chi^2=78.39$ P=0.00	$\chi^2=62.60$ P=0.00	$\chi^2=20.22$ P=0.06	$\chi^2=53.59$ P=0.00	

the family had to follow the existing visiting policy again (33). However, the majority (50.7%) of the nurses did not think that a visiting policy must be adapted to the culture/ethnicity of the patient. This study is supported by Baharoon et al.'s (2014) study that analyzed the impact of a visitation policy (open versus restricted) on family satisfaction. It was stated that open visiting hours may not be suitable in all clinical settings and cultures. This may be due to the cultural variations and different ethnic groups in Ghana. Another finding that supported this current study was found in the work of Soodabeh and Joolae, 2017. In that work, it was stated that visiting policies differ from one country to another, based on culture, hospital atmosphere, geographical location, facilities, technology, and the personnel's preparedness to accept new policies (34).

The findings of the current study also revealed that about 38.6% of the nurses who completed the questionnaires stated that just three people should be allowed to visit patient in a 24-hour time period" or "patient in the first 24 hours. This finding was consistent with the findings of Baharoon et al.'s (2014) study, in which it was suggested by respondents that two visitors should be allowed at a time (35).

Regarding the relationship between demographic variables and nurses' beliefs and attitudes towards a visiting policy, studies have shown different results. In the present study, the findings were that the nurses' beliefs and their gender, experience, educational level, employment status, and executive position have a meaningful relationship. A similar observation was made in a study from Greece in which positive correlations were found between the variable work experience and the first belief scale ( $r = 0.19$ ;  $P = .02$ ) (36). The study also indicated a meaningful relationship between nurses' attitudes and gender, experience, educational level, and executive position (Table 2.). In the same study, conducted in Greece, the variables of work experience and ICU work experience were positively correlated to the attitudes' scale as ( $r = 0.21$ ;  $P = .01$ ) and ( $r = 0.31$ ;  $P = .001$ ), respectively (36).

## CONCLUSION

The purpose of the study was to evaluate nurses' beliefs and attitudes towards visiting policies in selected hospitals in Ghana. The findings from this study indicated that

nurses' beliefs about open visiting policies were sceptical; however, it also indicated that nurses preferred a restricted visiting policy. The results of this study support the universal concern in terms of restricted visiting policies and more specifically, nurses' negative attitudes towards open visiting policies in ICUs in Ghanaian hospitals. Findings from the study also revealed that the restricted visiting policy is identified as the most common type of visiting policy, practiced in Ghanaian intensive care units. This study offers evidence to improve upon visiting policies in Ghana to ensure that guidelines are developed as a national policy in terms of visiting policies in the ICU as improving on visiting policies means improving the satisfaction of family members and the overall health outcomes and optimal health of patients. However, future studies to measure the ethnographic or cultural impact of visiting policy are needed.

## DECLARATIONS

### *Ethical Approval*

*The study was approved by the Institutional Ethics Committee in Tehran University of Medical Sciences Ethics committee (IR.TUMS.FNM.REC.1396.2703) and institutional review board of Komfo Anokye Teaching Hospital Ghana (CHRPE/AP/573/17), Bolgatanga regional Hospital (TTH/R&D/SR/17/54), Tema General Hospital (TGH2/1/18).*

## AUTHORS' CONTRIBUTIONS

YHY, EN and ME designed the study, YHY collected data, and prepared the Manuscript ME designed the study and did the statistical analysis. EN contributed in the review and proofread. All authors read and approved the final manuscript.

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School of Nursing and Midwifery, Tehran University of Medical Sciences – International Campus, nurses and family members who consented to participate in the study.

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