

Relationships of Nurses with Midwives in Their Working Area and Associated Factors at Jimma Medical Center, Jimma, Southwest Ethiopia

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Eneyew Melkamu Andualem, MSc¹ , Desalew Tilahun Beyene, MSc²,
Tsiyon Mekoya Jemaneh, MSc² and Diriba Wakjira Abose, MSc¹ 

Abstract

Background: Good relationships among healthcare professionals in general and nurses and midwives, in particular, are vital in creating a smooth working environment and producing the best services from these two backbones of healthcare. Unfortunately, no studies have been conducted in Ethiopia that assesses the relationship between nurses and midwives in health facilities and the possible associated factors. Thus, this study aimed to assess the relationship between nurses and midwives in their working areas and factors associated with their relationships.

Methods: An institution-based cross-sectional study was conducted among 358 nurses at Jimma medical center, Jimma, Southwest Ethiopia. The sample size was calculated using a single-population proportion formula, and a simple random sampling technique was used to select individual study participants. Data were collected using a semistructured self-administered questionnaire prepared in the local language. Data were entered into epi-data version 4.2, and the analysis was conducted using the statistical packages for social sciences version 23. The level of significance was declared at a p -value less than .05 in the final multivariable logistic regression model. The results are presented in a figure, tables, frequencies and percentages, and narratives.

Results: This study indicated that 284 (79.60%) nurses had good relationships with midwives in their work area, and the remaining 74 (20.40%) had poor relationships. The rules and regulations of the hospital ($p = .009$, adjusted odds ratio [AOR] = 0.478, confidence interval [CI]: (0.274, 0.833)) and years of experience ($p = .039$, AOR = 8.391, CI: (1.120, 9.845)) were found to have statistically significant associations with relationships between nurses and midwives.

Conclusion: It could be concluded that there is a relatively good relationship between nurses and midwives at Jimma medical center. Although there is a good relationship, it is vital to make nurses aware of the importance of good relationships. Enabling hospital rules and regulations to be helpful in fostering relationships between nurses and midwives and working with nurses with few years of experience to develop good relationships with midwives is recommended.

Keywords

relationship, nurses, midwives, working area, Jimma, Southwest Ethiopia

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Introduction

Relationships and communication among healthcare providers are of paramount importance in healthcare and are affected by human factors, such as interpersonal relations (Lee & Doran, 2017). However, discussions on interpersonal relationships and communication are lacking in the healthcare team literature (Lee & Doran, 2017). Nurses notably make the connections between the practices of the health teams and mediate the relationships established between health professionals to improve care practices (Santos et al., 2016). It is not hidden that nurses and midwives are part of the multidisciplinary

health workforce and large holders of responsibilities in healthcare (Dawson et al., 2015).

¹School of Midwifery, Faculty of Health Sciences, Institute of Health, Jimma University, Jimma, Southwest Ethiopia

²School of Nursing, Faculty of Health Sciences, Institute of Health, Jimma University, Jimma, Southwest Ethiopia

Corresponding Author:

Eneyew Melkamu Andualem, School of Midwifery, Faculty of Health Sciences, Institute of Health, Jimma University, Jimma, Southwest Ethiopia.
Email: enemelkamu@gmail.com



Teamwork and good relationships exist when midwives and nurses work together (Kennedy & Lyndon, 2008). Nurses and midwives experience day-to-day challenges in developing relationships and thereby providing optimal care (Kennedy & Lyndon, 2008). Lasting and good relational coordination between nurses and other healthcare professionals in general and with midwives, in particular, emphasizes the value of high-quality relationships exemplified by shared goals, shared knowledge, and mutual respect, with high-quality communication that is timely, frequent, accurate, and problem-solving (Havens et al., 2010). Teamwork and good relationships have been pointed out as a strategy for the effective organization of health care services as the complexity of healthcare requires the integration of knowledge and practices from different professional groups (Sangaleti et al., 2017).

It has been illustrated in one study that there are two themes describing the nature of nursing–midwifery relationships: tension and teamwork (Kennedy & Lyndon, 2008). Tension exists in philosophical approaches to care, definitions of safe practice, communication, and respect. Teamwork exists when midwives and nurses work in partnership with women to develop a plan of care (Kennedy & Lyndon, 2008). A study conducted in Turkey reported that nurses and midwives most of the time remained silent on organizational and administrative issues (as only 8.8% of them said they never remained silent), which could be resulted from a lack of developing good relationships and working together for the rights of both (Yurdakul et al., 2016). A study in Nova Scotia illustrated how positive interaction experiences could influence a new way for midwives and nurses to work together (Macdonald & Etowa, 2021).

It is then clear that to accomplish these emerging and innovative roles, nurses and midwives need to collaborate and build good relationships in their working areas. In Ethiopia, no studies have been conducted on the relationship between nurses and midwives in healthcare in general and patient care, in particular. However, evidence has shown that nursing and midwifery service quality standards are low and do not meet the Ministry of Health's standards (Habte et al., 2020). The low quality of services provided by these two professionals as one reason could be due to the low level of interaction and relationship between them. This study will thus bring attention to this crucial aspect of healthcare in assessing the relationships between nurses and midwives and identifying factors associated with hampering or enhancing the relationship.

Literature Review

Good relationship among healthcare professionals in general and midwives and nurses, in particular, is very crucial for building a smooth working environment and thus providing quality patient care (Flatau-Harrison et al., 2022). In a study conducted

in Northern California, USA, there were two themes classified considering the nature of nurses' and midwives' relationship: tension and teamwork. Tension existed in philosophic approaches to care, definitions of safe practice, communication, and respect. Teamwork existed when the midwives and nurses worked in partnership with the woman to develop a plan of care (Kennedy & Lyndon, 2008).

It is reported that nurses and midwives commonly face a variety of challenges and difficulties in their everyday work. Stress, pressure, fatigue, and anxiety are acknowledged sources of workplace hardship (McDonald et al., 2013). It is reported in a study conducted in Japan that building a good relationship between nurses and midwives is beneficial for nurses to develop competence and learn from other professionals including midwives (Takase et al., 2015).

As nurses and midwives move away from traditional roles, it is increasingly being recognized that they need to behave in an assertive manner and build long-lasting professional relationship (Timmins & McCabe, 2005). Another study had indicated that nurses and midwives mainly remain silent in organizational affairs, which could be attributed to less interaction and undeveloped relationships between these two professionals that hinder them not to act in common and stand for their rights and roles (Yurdakul et al., 2016).

It is clearly depicted in an Australian study that many nurses and midwives thrive through exercising self-efficacy and coping skills, which is supported by well-established and smooth working area relationships between these two professionals (McDonald et al., 2016). Even though there are no studies clearly stipulated the relationship between nurses and midwives and the factors associated with this relationship in Africa, few studies (Dynes et al., 2016; Hosey et al., 2016; McCarthy & Riley, 2012; Michaels-Strasser et al., 2018) indicated the importance of collaboration between healthcare professionals in general and nurses and midwives, in particular.

To the best of the author's knowledge and searching with known databases and search engines, it is hardly difficult to get studies conducted in Ethiopia on this topic of healthcare service. Thus, this study could be taken as a first impression in shedding light on this untouched but critical topic of healthcare interaction and bring some points to the surface for researchers, healthcare professionals, and other stakeholders in this regard.

Objectives of the Study

1. To assess the relationships of nurses with midwives in their working area at Jimma medical center, Jimma, Southwest Ethiopia
2. To identify factors associated with the relationships of nurses with midwives at Jimma medical center, Jimma, southwest Ethiopia

Methods and Materials

Study Area and Period

This study was conducted from October 29, 2021, to November 19, 2021, at Jimma medical center located in Jimma town 352 km southwest of the capital of Ethiopia, Addis Ababa. Currently, it is the largest and the only teaching and referral hospital in the southwestern part of the country, providing services for approximately 15 million people of its catchment population. It has 566 nurses and 82 midwives. The hospital also has 800 beds and provides many health care services in gynecology and obstetrics, internal medicine, pediatrics, emergency, radiology, surgery, and other departments.

Study Design

Institution-based cross-sectional study was conducted.

Study Population

The study population consisted of nurses working in Jimma medical center who met the following inclusion criteria: nurses with a length of service of six months and above (as they are considered to have more experience working with midwives in addition to being considered full employees by the civil service law of Ethiopia) and being available during the study period.

Sample Size and Sampling Procedure

The sample size (n) was calculated by using the following formula to estimate the proportion of a single population:

$n = (Z\alpha/2)^2 p(1-p)/d^2$. The minimum sample size: $n = (1.96)^2 (0.5)(0.5)/(0.05)^2 = 384$, taking $p = .5$ as there was no published study comparable to this study whose proportion value could be used to calculate the sample size. By adding 10% for the nonresponse rate, the final sample size was calculated to be: $n = 384 + 38.4 = 422.4 \approx 422$. A simple random sampling technique was used to select individual study participants.

Operational Definitions

Good relationship with midwives: Nurses who answered “yes” to 4 or more items on the relationship measuring items were considered to have a good relationship with midwives in this study.

Poor relationship with midwives: Nurses who answered “yes” to 3 or less items on the relationship measuring items were considered to have a poor relationship with midwives in this study.

Data Collection Instrument and Procedure

The relationships of nurses with midwives were assessed using six items: Experienced any noncompliant behavior with midwives in the work area, greet midwives when meeting in the work area, supported each other with midwives during patient care, exchanged ideas with midwives about work-related matters, show concern for each other when either of you are in need of the other, and respond to each other’s call when either of you are in need during patient care. Those items have options “YES” or “NO” and were prepared by the authors after reviewing related works of literatures (Havens et al., 2010; Kennedy & Lyndon, 2008; Lee & Doran, 2017; Santos et al., 2016). Sociodemographic characteristics were assessed using semistructured questions. The questionnaire was first prepared in English and translated into Amharic and Afan Oromo (the local languages spoken by the majority of the population) by language experts in the three languages. Back translation was performed to maintain the consistency and validity of the questionnaire. Data collection was conducted by five trained data collectors who are BSc degree holders and supervised by two MSc degree holders. Data were collected by administering a written questionnaire to the study participants.

Data Quality Control

To maintain the quality of the data, a pretest was performed on 10% of the sample size in a different hospital found in Jimma city, South West Ethiopia and necessary modifications including wordings, clarification of some items, and rearrangements of items were made on the questionnaire before it was applied to the study population. The questionnaires were checked for completeness prior to data entry. Data were entered in Epi data version 4.2 to automatically point out errors made during data collection. Furthermore, training was provided to the data collectors and supervisors, and the overall data collection process was monitored by supervisors.

Data Processing and Analysis

The collected data were entered into Epi-data version 4.2 and exported into SPSS version 23 for cleaning and further analysis. Binary and multivariable logistic regression analyses were run to assess the association between dependent and independent variables. Again, a p -value of less than .25 and .05 in binary and multivariable logistic regression, respectively, was considered as significant at a 95% confidence level. The results are presented in frequency tables, percentages, figures, and narratives.

Results

Sociodemographic Characteristics of the Study

Respondents

The overall response rate of this study was 85% as there were respondents who missed filling the dependent variable section, and thus the resulting questionnaires were not subjected to entry and analysis. This response rate is considered to be good as an 80% and above response rate in epidemiologic studies is acceptable, and most importantly, a 10% nonresponse rate was considered in the sample size calculation of the study.

As it is shown in Table 1, 178 (49.73%) nurses were between the ages of 20 and 30. Two hundred seventy-three (76.30%) nurses had a BSc degree in nursing and 180 (50.28%) of them

Table 1. Sociodemographic Characteristics of the Study Participants at Jimma Medical Center, Jimma, Southwest Ethiopia ($n = 358$).

Item	Frequency	Percentage
Sex		
Female	148	41.30
Male	210	58.70
Age		
20–30	178	49.73
31–40	132	36.90
41–50	34	9.49
>50	14	3.92
Religion		
Orthodox	177	49.40
Muslim	97	27.10
Protestant	73	20.4
Catholic	9	2.5
Others	2	-
Ethnicity		
Oromo	160	44.70
Amhara	91	25.40
Tigray	20	5.60
Gurage	21	5.90
Others	66	18.40
Marital status		
Married	216	60.30
Single	135	37.70
Divorced	6	1.70
Widowed	1	-
Educational status		
Diploma	81	22.60
BSc degree	273	76.30
MSc degree and above	4	-
Years of services		
≤5 years	180	50.28
6–10 years	106	29.60
11–15 years	33	9.22
>15 years	39	10.89
Job category in the hospital		
Ordinary staff nurse	344	96.10
Have head positions at different levels	14	3.90

have less than five years of experience as nurses. The remaining sociodemographic data are indicated in Table 1.

Number of Patients' Nurses Cared for, Adequacy of Nurses and Midwives at the Administrative Level, Time for Building a Relationship, and Number of Client's Nurses Give Care in a Day at Jimma Medical Center

Table 2 above indicated that 175 (48.90%) participants reported that they provided care for an average of 21–40 clients per day. Moreover, 216 (60.30%) of nurses believed that there are enough number of nurses and midwives at the administrative level of the hospital.

Relationship of Nurses with Midwives in their Work Area

As indicated in Figure 1, 284 (79.60%) nurses had good relationships with midwives in the working area, while the rest had poor relationships.

Responses of Nurses to Each Relationship Assessing Items

In Table 3, 156 (43.30%) of nurses experience noncompliant behavior with midwives at least once in their working area. Again, 239 (66.90%) of them responded that they exchanged ideas with midwives about work-related matters, and 98

Table 2. Nurses Responses on their Daily Activities and Hospital Situation at Jimma Medical Center, Jimma, Southwest Ethiopia ($n = 358$).

Item	Frequency	Percentage
Rules and regulations of the hospital are helpful to build good relationship with midwives		
Yes	233	65.10
No	125	34.90
There are enough number of nurses and midwives at the administrative level of the hospital		
Yes	142	39.70
No	216	60.30
Average number of patients you give care per a day		
≤20 clients	86	24.00
21–40 clients	175	48.90
41–60 clients	74	20.70
≥61 clients	23	6.40
Have adequate time to build good relationship with midwives		
Yes	215	60.06
No	143	39.94

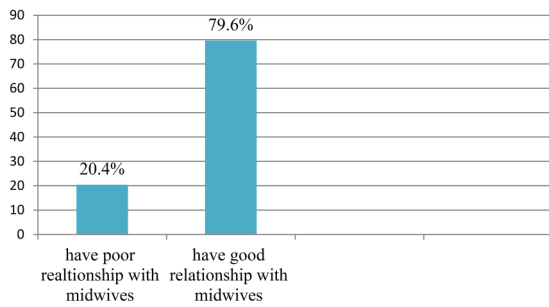


Figure 1. Relationship of nurses with midwives in their work area at Jimma medical center, Jimma, Southwest Ethiopia (n = 358).

Table 3. Item Wise Responses of Nurses to the Relationship Measuring Items at Jimma Medical Center, Jimma, Southwest Ethiopia (n = 358).

Item	Frequency	Percentage
Experienced any non-compliant behavior with midwives in the work area		
Yes	156	43.30
No	203	56.70
Great midwives when meeting in the work area		
Yes	313	87.4
No	45	12.6
Support each other with midwives during patient care		
Yes	266	74.30
No	92	25.69
Exchange ideas with midwives about work-related matters		
Yes	239	66.90
No	119	33.10
Show concern for each other when either you are in need of the other		
Yes	260	72.60
No	98	27.40
Respond to each other's call when either of you are in need during patient care		
Yes	311	87.10
No	47	12.90

(27.40%) of them said that they did not show concern for one another when either of them was in need of the other.

Factors Associated with Relationship of Nurses with Midwives

In the bivariate logistic regression analysis, variables including: age ($p = .123$), rules and regulations of the hospital ($p = .010$), experiencing any noncompliant behavior from midwives ($p = .078$), time to develop good relationships ($p = .034$), number of nurses at the administrative level ($p = .184$), and years of experience ($p = .111$) were found to

be associated with nurse's relationships with midwives. However, in the final multivariable logistic regression model, only hospital rules and regulations being helpful for a good relationship with midwives ($p = .009$) and year of experience ($p = .039$) were found to have statistically significant associations with nurse's relationships with midwives.

As illustrated in Table 4, nurses who said that hospital rules and regulations are not helpful in building good relationships with midwives were 52.20% less likely to have good relationships than their counterparts ($p = .009$, adjusted odds ratio [AOR] = 0.478, confidence interval [CI]: (0.274, 0.833)). Again, nurses with 11–15 years of experience were 8.391 times more likely to have good relationships with midwives when compared with nurses with less than 5 years, 5–10 years, and greater than 15 years of experience ($p = .039$, AOR = 8.391, CI: (1.120, 9.845)).

Discussion

Nurses and Midwives, as key personnel in healthcare delivery, play a promising role in the provision and harmonization of care, prevention of adverse events, and optimization of health service productivity and patient outcomes (Oldland et al., 2020). Nurses and Midwives want to work in health systems that enable them to provide quality care (Nove et al., 2021). Hence, a good relationship between nurses and midwives plays a key role in creating a conducive work environment (Sangaleti et al., 2017). This is the first study in the area in particular and in Ethiopia in general that assessed the relationship of nurses with midwives in their working area and associated factors.

This study revealed that (79.60%) of nurses had good relationships with midwives in their working areas. This means that nurses choose interdependence of professional actions, focus on consumer-centered care, negotiation between professionals, shared decision-making, mutual respect and trust among professionals, acknowledgment of the role and work of different professional groups, and job satisfaction (Muluneh et al., 2021). Eventually, they can direct their skills toward organizational goals and their motivation, productivity, quality of service, and institutional successes (Ertekin Pinar et al., 2017) altogether with a good patient outcome. This clearly implicates how nurses value the importance of a smooth relationship with the healthcare team in general and midwives in particular which could, in turn, lead to productive and quality health care practice and patient care.

This study indicated that the rules and regulations of the hospital were negatively associated with nurses' and midwives' relationships. This implies that the lack of midwives/nurses at the administrative level is considered to be a barrier to collaboration with nurses and midwives or other professionals. Therefore, it is necessary that there is a need to have nurses at the top administrative level who could help better in enabling the rules and regulations of the hospital to be more conducive to building good

Table 4. Multivariable Logistic Regression Analysis of Variables Associated with Relationship of Nurses with Midwives at Jimma Medical Center, Jimma, Southwest Ethiopia ($n = 358$).

Variable	Relationship with nurses		COR (95% CI)	AOR (95% CI)	p value
	Good	Poor			
Age in years					
20–30	140	38	1.895(0.542, 6.629)	0.455(0.052, 3.990)	.477
31–40	105	27	1.926(0.539, 6.876)	0.411(0.052, 3.227)	.398
41–50	6	28	3.500(0.711, 7.217)	1.946(0.364, 10.404)	.438
>50	6	8			
Rules and regulations of hospital are helpful for good r/ship with midwives					
No	90	35	0.504(0.299, 0.850)	0.478(0.274, 0.833)	.009
Yes	194	39			
Experience any non-compliant behavior with midwives					
No	154	48	0.617(0.361, 0.826)	0.580(0.330, 1.019)	.058
Yes	130	26			
Have adequate nurses at administrative level of the hospital					
No	176	40	1.421(0.846, 2.386)	1.750(0.997, 3.073)	.051
Yes	108	34			
The time is enough to build good relationship with midwives					
No	105	38	0.571(0.340, 0.958)	0.603(0.344, 1.059)	.078
Yes	179	36			
Years of experiences in years					
≤5	141	39	1.273(0.571, 2.837)	3.861(0.637, 4.410)	.142
6–10	84	22	1.379(0.582, 3.270)	4.006(0.707, 4.711)	.117
11–15	27	6	3.103(0.771, 2.492)	8.391(1.120, 9.845)	.039
>15	29	10			

Bold values indicate that they are variables significantly associated with nurse's relationship with midwives.

relationship (Behruzi et al., 2017). Nurses believed that most decisions are made by people who don't really know about nursing profession, so they make decisions about things that they don't know. That is the reason why sometimes you can have misunderstanding and poor collaboration because decisions at the higher levels are not sound, and then the lower levels are not able to follow (Behruzi et al., 2017). Many nurses stated that a vision of promoting inter-professional and interorganizational collaboration does not exist between midwives and other professionals at the administrative level in their hospital which makes it quite difficult and challenging (Behruzi et al., 2017). What is more, poor leadership styles affect working relationships among health care professionals. Leaders lack of support for staff welfare and staff performance, lack of mentorship for new staff and junior colleagues, and inadequate supportive supervision. All this led to frustrations, diminished motivation, lack of interest in their job, and withdrawal from work (Chipeta et al., 2016). Finally, the quality of comprehensive patient care, communication, and patient safety can also be affected negatively and medical errors can occur (Ertekin Pinar et al., 2017).

This study also found that nurses with 11–15 years of working experience had increased odds of good relationships with midwives. This indicates that the more nurses get

experienced, they may get experienced with working environment and get to know each other and other professionals. With increased years of experience, they may get a chance of training like continuous professional development (CPD), be skillful, knowledgeable, leaders and have increased salary which in turn increases the general satisfaction that will lead them to easily develop good relationships. The researchers had difficulties discussing the findings of this study in comparison with the findings of other previous studies as there is not sufficient literature relevant to this work. But the authors tried to discuss and justify the relevant findings of this study based on logical considerations and taking a few related studies.

It is clearly implicated from this study and previous studies (though rare) that healthcare teams value most of their interactions and relationships which are further evidenced by its impact on patient care and satisfaction. This study also undoubtedly thought about how important is a good relationship among nurses and midwives for better nursing and midwifery practice in the entire healthcare system.

Strengths and Limitations

This research could be considered as an initial study in the area in particular and in Ethiopia in general. This study is

not without limitations. As there were shortages of similar studies done in the area, the researchers couldn't discuss exhaustively in comparing the findings of this study.

Implication for Practice

The objectives addressed in this study are of paramount importance in the implications to the clinical practice of nurses and midwives. It is clearly implicated in the findings of this study that well-flourished and positive relationship of nurses with midwives plays a key role in making the clinical environment smooth and helping them better collaborate for enhanced and quality patient care.

Conclusions and Recommendations

It could be concluded from this study that there is a relatively good relationship between nurses and midwives. But, it should not be overshadowed that a considerable number of nurses also have poor relationships, which could have a huge impact on patient care. It is important for nurses to move forward in developing good and smooth relationships with midwives so that they could share duties, improve patient care, and work for the benefit of both together. Stakeholders including Jimma medical center and other nongovernmental organizations working in health work force should better focus on this issue and provide consecutive relationship-building trainings and workshops so that nurses will have better interactions with midwives. Furthermore, further research is recommended on this burning healthcare issue to explore more factors and address the problem better.

Abbreviations

AOR	Adjusted odds ratio
BSc	Bachelor of Science degree
CI	confidence interval
COR	Crude odds ratio
CPD	Contentious professional development
MSc	Master of Science degree
SPSS	Statistical packages for social sciences

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Authors' Note

Ethical approval and clearance were obtained from the research ethics committee. Permission to collect data was obtained from Jimma medical center. Moreover, the purpose of the study was

explained to the study participants, and verbal informed consent was taken before data collection begun. To keep the confidentiality of the participants, personal identifiers like name of the participant were anonymous, and this was ensured throughout the research process. Again the information obtained was utilized only for research purposes. Participation was entirely on voluntary basis. All relevant raw data supporting the findings and conclusions of this study can be freely available from the corresponding author through email: enemelkamu@gmail.com or with other means without breaching participant confidentiality upon reasonable request. There will not be any concern on the ethical aspect for this as participant data were made anonymous.

Author's Contribution

EM designed and conceptualized the study, analyzed and interpreted the data, discuss the findings of the study, draft the manuscript, and approve the final submission. DT, TM, and DW contributed to analyzing and interpreting the data, discussing the findings of the study, drafting the manuscript, and approving the final submission.

Declaration of Conflicting Interests

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ORCID iDs

Eneyew Melkamu Andualem  <https://orcid.org/0000-0003-3059-085X>

Diriba Wakjira Abose  <https://orcid.org/0000-0002-9140-5198>

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