

# Investigating Iranian Midwifery Students' General and Professional Communication Skills and Their Viewpoints on the Ways of its Improvement using Data Triangulation

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ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p>	<p><b>Background &amp; aim:</b> Midwives need to have knowledge and skills of human communication to provide their professional services in the most efficient way. The purpose of this study was to investigate the general and professional communication skills of Iranian midwifery students and to explore their viewpoints on the ways of its improvement.</p>
<p><i>Article History:</i> Received: 01-Jan-2022 Accepted: 29-May-2022</p>	<p><b>Methods:</b> This cross-sectional study using a data triangulation approach was conducted on 343 midwifery students who were selected using convenience sampling from Ahvaz Jundishapur University of Medical Sciences and Semnan Azad University, Iran, in 2020. Data were collected using Queendom Communication Skills Test-Revised (CSTR) and Professional Communication Skills Assessment Questionnaire. There was an open-ended question at the end of the questionnaire that assessed students' views on improving communication skills. The quantitative data were analyzed by SPSS version 22, and qualitative data by qualitative content analysis.</p>
<p><i>Key words:</i> Communication Skills Student Midwifery Triangulation</p>	<p><b>Results:</b> The mean scores of the students' general and professional communication skills were <math>64 \pm 4.3</math> (poor) and <math>92 \pm 3.1</math> (moderate), respectively. No significant relationship was found between demographic or academic characteristics of midwifery students and their general and professional communication skills. Analysis of students' experiences and perceptions resulted in two main categories indicating the need to promote direct training and to control the impact of hidden curriculum.</p> <p><b>Conclusion:</b> Most students had poor general communication skills while their professional communication skills were at a moderate level. Communication skills training in the midwifery curriculum needs to be revised. Results reflected the need to empower instructors and students in terms of their communication skills.</p>

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## Introduction

Health care providers need to be knowledgeable and skillful in human communication in order to be able to provide their professional services efficiently (1). Effective communication with patients leads to greater satisfaction, reduces anxiety, and increases their honest responses to questions (2). Ineffective communication, on the other

hand, is considered as an important barrier in healthcare delivery, so in recent years, more emphasis has been placed on communication skills training (3). The focus of medical services is on the patient's body, which is not sufficient in providing efficient health care services (4). While proper communication has positive effects on patients (5) such as reduced pain and

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anxiety, increased satisfaction, promotion of outcomes, and a better participation in treatment plan, impaired communication is associated with misdiagnosis, reduced patient participation in treatment, and reduced exchange of information between patients and healthcare providers (6). Therefore, the assessment of health care providers' communication skills has gained importance in an attempt to improve the quality of health care (7). In fact, poor communication between healthcare providers and patients can limit the patients' understanding of their illness or treatment, leading to adverse outcomes and complaints against health care providers and staff. Poor communication and lack of an understanding of the patient's perspective have been reported as the most common causes of complaints against health care providers (8).

Several studies have reported that health care providers have many problems in communicating with their patients (9, 10). In a review study, it was found that health care providers working in educational and medical centers have poor communication skills and often do not establish a proper relationship with their patients (11). The results of a study in Spain also showed that students have poor communication competencies with patients, and most of them become anxious and act less skillfully while communicating with patients (12). Yazdanparast et al. found that communication skills training leads to improvement in giving bad news and expressing empathy with patients under critical conditions (13). In another study in Turkey, communication skills of midwifery students were reported to be moderate, and it was suggested that efforts should be made to improve their communication skills (14).

The nature of midwifery profession is based on emotion. Relationships between midwives and women require working on emotions. Establishing relationships and managing personal emotions and those of women are a fundamental part of midwifery practice. Midwife-woman relationship is full of challenging situations that can generate positive (e.g., joy and calmness) or negative (e.g., fear and frustration) emotions. Midwives and the pregnant women may get involved in private

and intimate work where there is disclosure of personal information (15).

Previous studies assessing communication skills in midwives (16) and midwifery students (17) in Iran indicated that they are not equipped with necessary knowledge and skills to communicate effectively and positively with women. Few studies have addressed communication skills of midwifery students in Iran and they have been concerned only with a quantitative analysis of this topic. Therefore, the objectives the present study were to evaluate the general and professional communication skills of midwifery students and to explore their viewpoints in this regard.

## Materials and Methods

A data triangulation design was adopted to carry out this study. In fact, the qualitative-quantitative triangulation used in this study was aimed to permit the breadth and depth of the subject matter and to enable data collection within a short period (18).

Quantitative and qualitative data were collected and analyzed concurrently, then the results were integrated in a single interpretation.

The study protocol was approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (IR. AJUMS. REC. 1398. 319). All ethical principles were observed in this study. The participants were briefed on the purpose of the research and were also assured about the confidentiality of their personal information.

The quantitative phase of the study was a cross-sectional study while the qualitative phase involved qualitative content analysis.

Data was collected from a public university (Ahvaz Jundishapur University of Medical Sciences) and a private university (Semnan Azad University) in Iran between February and May 2020.

Midwifery students whose first language was Persian and who were studying in undergraduate (at seventh and eighth semesters), or postgraduate (master's or doctoral) programs were included. Exclusion criteria were unwillingness to participate in research and provision of incomplete answers to questions.

The sample size was calculated to be 312, based on the findings of previous studies and using Med-calc software, with 80% power and 5% error. Taking into account 10% attrition, the final sample size was set to be 343. Data were collected using convenience sampling strategy.

$$n = \left( \frac{z_{1-\frac{\alpha}{2}} + z_{\beta}}{\frac{1}{2} \ln \frac{1+r}{1-r}} \right)^2 + 3$$

The questionnaires were completed by the participants under the supervision of the first researcher. The demographic questionnaire included age, marital status, level of education, and grade point average of the participants.

Queendom Communication Skills Test-Revised (CSTR) was used to assess general communication skills of midwifery students. It involved 34 items scored based on a five-point Likert scale and divided into three subscales of emotional management (12 items), insightfulness (12 items) and assertiveness (10 items). The options for each item are almost never, rarely, sometimes, most often, and almost always, scored from 1 to 5, respectively. The total score range is between 34 and 170. Higher scores indicate better interpersonal communication skills and vice versa. A score between 34 and 68 indicates poor communication skills, a score between 68 and 102 indicates moderate communication skills, and a score above 102 indicates strong communication skills. Validity and reliability of this instrument have been evaluated by Peyman et al. (19) and Vakili et al. (20) in Iran. The reliability of this questionnaire was 0.91 based on Cronbach's alpha method (21).

To assess students' professional communication skills, a professional communication skills questionnaire developed by Javaher et al. was used (22). The questionnaire contains 28 items in five areas of "conscious initiation" (3 items), "verbal and non-verbal communication skills" (9 items), "external and internal coordination" (6 items), "respect for the client" (5 items), and "unconditional acceptance of client" (5 items). The instrument is scored based on a five-point Likert scale (always, usually, sometimes, rarely, and never, to which scores of 5, 4, 3, 2, and 1 are given, respectively). Some items are negatively worded, for which reverse scoring is used.

Students' communication skills are then categorized according to the score obtained. Students who obtain less than 50% of the total score have poor professional communication skills, those with a score between 50 and 75% have moderate skills, and those scoring above 75% have good professional communication skills. Psychometric analysis of the questionnaire was performed by Javaher et al, by evaluating face validity (qualitatively and quantitatively), and measuring the CVR and CVI for qualitative and quantitative analyses of content validity based on the minimum score proposed by the Lawshe table at a significant level of 0.05, with a minimum score of 0.79 for each item. To determine the reliability, the internal consistency test method was used by calculating Cronbach's alpha ( $\alpha = 0.89$ ) and by split-half method ( $r = 0.73$ ) (22).

To explore the students' views and experience on improving communication skills, we added an open-ended question for the qualitative data collection asking them: "How can the communication skills of midwifery students be improved?"

Quantitative data were analyzed using the SPSS software version 22. Descriptive statistics (mean, standard deviation, and percentage.) and analytical statistics (correlation coefficient Spearman, Mann-Whitney and Kruskal-Wallis tests) were used to analyze the data. The level of significance was set at  $< 0.05$ .

To ensure the trustworthiness of the qualitative findings, the initial draft of qualitative analysis conducted by the first author, was reviewed by the second author, an expert in qualitative data analysis. A peer review on the coding and presentation of the results was also utilized. We asked a peer to verify the authenticity of the results. The changes were incorporated accordingly.

## Results

The mean age of the participants was  $26 \pm 4.6$  and most of them were single (78%). Most of the students were undergraduates (83%), and their mean of grade point average was 17.32 (Table 1).

## Quantitative Findings

**Table 1.** Frequency distribution of demographic and academic characteristics of the participants in the study

Variable	Mean ± SD
Age	26±4.6
Grade point average	17.32±1.9
<b>Marital status</b>	<b>N (%)</b>
Single	267(78%)
Married	76(22%)
<b>Study program</b>	<b>N (%)</b>
Bachelor's	285(83%)
Master's	42(12%)
PhD	16(5%)

The mean of the students' score of general communication skills was  $64 \pm 4.3$ , with 55% of the students having poor communication skills, 33% having moderate skills, and 12% having good general communication skills.

The general communication competencies of most students were poor in terms of the subscales of insightfulness and assertiveness, but in the subscale of emotional management, most students were placed within the moderate range.

As far as professional communication skills were concerned, our findings showed that the

mean of students' professional communication skills was  $92 \pm 3.1$ , with 26% of them having low scores, 46% having moderate scores and 28% having high scores.

The scores of most students were good or moderate in terms of the subscales of conscious initiation, verbal and non-verbal skills, external and internal coordination, and respect for the client. However, when it comes to the subscale of unconditional acceptance of client, most students had poor professional communication skills (Table 2).

**Table 2.** Statistical mean of general and professional communication skills of midwifery students and the related subscales

Variable	Poor N (%)	Moderate N (%)	Strong N (%)	Statistical mean of communication skills score
Emotional management	154(45%)	177(51%)	12(4%)	
Insightfulness	181(53%)	141(41%)	21(6%)	
Assertiveness	159(46%)	156(45%)	28(9%)	
<b>General communication skills</b>	<b>190(55%)</b>	<b>112(33%)</b>	<b>41(12%)</b>	<b>64±4.3</b>
Informed initiation	82(24%)	152(44%)	109(32%)	
Verbal and non-verbal skills	73(21%)	133(39%)	137(40%)	
Internal and external coordination	69(20%)	176(52%)	98(28%)	
Respect to the client	31(9%)	149(43%)	163(48%)	
Unconditional acceptance of client	213(62%)	128(37%)	2(1%)	
<b>Professional communication skill</b>	<b>88(26%)</b>	<b>158(46%)</b>	<b>97(28%)</b>	<b>92±3.1</b>

There was no significant relationship between general communication skills of midwifery students and their age ( $p = 0.260$ ), marital status ( $p = 0.072$ ), grade point average ( $p = 0.131$ ), and study program ( $p = 0.081$ ).

Also, there was no significant relationship between students' professional communication skills and their age ( $p = 0.019$ ), marital status ( $p = 0.069$ ), grade point average ( $p = 0.128$ ), and study program ( $p = 0.052$ ). (Table 3).

**Table 3.** Relationship between personal and academic characteristics of the midwifery students and their general and professional communication skills

Variable	Age (Spearman)	Marital status (Mann-Whitney)	Grade point average (Spearman)	Study program (Kruskal-Wallis)
General communication skills	P=0.260 r=-0.112	P=0.072	P=0.131 r=-0.075	P=0.081
Professional communication skills	P=0.190 r=-0.098	P=0.069	P=0.128 r=0.041	P=0.052

**Qualitative Findings**

Of the 343 participants in the study, 322 answered the open-ended question. The 21 students who did not answer the qualitative part of the research question were all undergraduate students.

Through data reduction process, 31 codes, four sub-categories, and two main categories were extracted.

Students' experiences and opinions on communication skills indicated not only the

need to promote direct instruction, both theoretically and practically, but also the impact of the hidden curriculum. Promotion of training on direct communication skills includes promoting theoretical and practical training and skill training. The impact of the hidden curriculum involves the impact of indirect education and social learning, and paying attention to the underlying factors.

The process of data reduction and consolidation is illustrated in Table 4.

**Table 4.** Students viewpoints regarding ways to improve communication skills in midwifery students

Codes	Subcategories	Main Categories
- Including specialized content on communication skills in the educational curriculum		
- Training in general communication skills		
-Need to training in general communication skills, prior to professional communication skills		
-Need to Provide theoretical foundations of the principles of professional communication		
The need for students to be familiar with the basics of - communication psychology	Improvement of theoretical training	
Use of expert teacher to teach the theoretical foundations of - professional communication		
Use of specialized references in teaching professional - communication		
Teaching professional communication skills from the first - semester		
Lack of priority in professional communication skills - training		Promoting direct training
- Severe deficiency of the topics presented in the relevant lesson		
-The need to make professional communication courses mandatory		
-The importance of the role of the instructors in communicating properly with the clients		
-Improving the relationship between instructor and student		
-Providing opportunities to communicate with clients		
-Giving the students the opportunity to communicate independently with the clients	Improving practical and skills training	
-Encouraging proper communication		
-Observation of communication skills by the instructors -- Providing feedback to the students by teachers		



"Teachers should allow students to deal with patients independently during internships, give the necessary advice, and point out their shortcomings at the end." (P158, 21 years old, Bachelor's)

Students emphasis on the use of techniques such as role-playing and considered it very effective for learning communication skills correctly and effectively. In this regard, a student said:

"It would be great if my classmates and I would play the role of midwife and patient in front of the teacher in pairs, and the teacher would give us feedback." (P219, 22 years old, Bachelor's)

Due to the fact that complete and comprehensive communication skills training is not provided in the midwifery curriculum, some students found the workshop useful for this purpose.

"In the present situation, to improve our communication skills, it is good to have more workshops in this field." (P287, 29 years old, Masters)

### **Impact of hidden curriculum**

Students' opinions indicated another important category of factors affecting general and professional communication skills. These factors include the impact of indirect education such as the behavior of teachers and professors with patients and students, and students' role modeling of instructors and other midwives in learning environments. In this regard, the students urged that instructors and professors with high communication skills should be used in classes and internship programs.

This category includes two subcategories: Impact of indirect training and Paying attention to the underlying factors.

It seems that promoting faculty members' knowledge in this regard and employing instructors with high communication skills for internship programs can have a positive result. This in itself requires the training of such instructors. In this regard, a participant commented:

"In my opinion, in addition to the fact that students' knowledge of communication skills should be improved, the information of some teachers should also be enhanced and updated." (P302, 23 years old, Bachelor's)

Most of the participants in this study considered the presence of an experienced instructor in the field of communication skills in internship programs as a prerequisite for the students' success in this regard. One of the participant said:

"It is better to use an instructor with high communication skills in internships." (P98, 36 years old, PhD)

This was justified by the fact that many students take example from their teachers in how to communicate with others, including the clients, and believe that teachers' feedback on how students should act can improve their communication skills. According to one of the participants:

"Students set their teachers' behavior and communication skills as a role model for their own behavior, meaning that students subconsciously become like their teachers in this way, now for better or worse." (P310, 25 years old, Master's)

Another important issue mentioned by the students was to pay attention to the underlying factors in this regard. According to them, in order to improve the general and professional communication skills of midwifery students, some underlying factors such as cultural differences and individual differences should be taken into account. A participant stated:

"Clients with different cultures; we need to be able to establish good communicate with them." (P95, 21 years old, Bachelor's)

One of the most interesting and recurring points raised by the students was the paramount importance to increase the midwifery students' self-confidence in order to improve their communication skills. To this end, in addition to teaching communication skills, scientific awareness and practical midwifery skills should also be promoted because these two increase students' self-confidence, which in turn improves communication skills.

"I think that students' self-confidence can also greatly affect their relationship with clients, so it is a good idea to hold training workshops to increase our self-confidence." (P228, 30 years old, PhD)

## Discussion

The aim of this study was to investigate the general and professional communication skills of midwifery students and to explore their viewpoints in this respect.

Quantitative findings of the present study showed that most students had poor general communication skills while their professional communication skills were moderate. Previous studies in Iran (10, 24), Spain (12) and Turkey (17) which examined general and professional communication skills in nursing or midwifery students reported that most students have poor communication skills as attested by their mean communication score. An Iranian study showed that healthcare providers do not establish proper relationships with patients and are not sufficiently aware of the importance of effective communication with patients (25). Khadivzadeh et al. also concluded in their study that the average score of professional communication skills of midwives working in hospitals are lower than the average score expected (16). The results of the above studies are consistent with ours. While in most countries, life skills including effective communication skills are taught to children in schools from an early age, in Iranian schools, teaching communication skills to students- like other life skills- does not receive due emphasis and attention.

Inconsistent with our results, Ryan et al. in Ireland reported that the communication skills of medical and nursing students ranged from moderate to strong (26). This discrepancy in the results could be due to differences in the statistical population, the target population, or data collection tools. Unlike our study, in Ryan's study, students' communication skills were assessed through role-playing and live video images. In addition, cultural differences play a pivotal role in assessing communication skills. Another important reason may be the difference in the educational curriculum, the difference in the way the midwifery students are educated and the content that is taught in the two countries.

Another aim of the present study was to examine the relationship between the academic characteristics of midwifery students and their general and professional communication skills. According to our results, the general and

professional communication skills of midwifery students had no significant relationship with age, marital status, grade point average, and study program. This calls for the need for better training on these skills. In the study of Namazi et al. (24), no significant relationship was observed between the nursing and midwifery students' general communication skills and their age, educational status, and marital status. The results of Kuzu et al.'s study on nursing students also showed that there is no direct relationship between students' age and their communication skills (27).

The total number of theoretical courses for the undergraduate midwifery students in Iran is 98 credits, of which only a part of one course is dedicated to communication skills. Unfortunately, communication skills training is not included as a discrete course in the curriculum but in the course "Communication, Health Education and Counseling in Maternal and Reproductive Health" (Health 3), which is a one-credit course in which the client-patient relationship is briefly discussed (28). A discrete course on communication skills training is offered in the PhD programs of midwifery in Iran. However, a very small percentage of midwives reach this level, and even if they do, it is too late for them to learn this skill. Thus, such trainings should start from bachelor's and master's programs. It is recommended that theoretical principles of such trainings be taught more consistently, and effective evaluation as well as clinical training and practice of this skill be based on modern teaching methods. Communication skills training should be done in a practical fashion, preferably from undergraduate programs, and then continue in form of in-service courses after graduation.

As far as the participants' answers to the open-ended question of the qualitative phase of the study were concerned, our results indicate the need to empower students and clinical instructors in this respect. According to this study, the empowerment of professors and students will be made with promoting direct and indirect education.

Theories in the field of health promotion and healthcare define empowerment as the strengthening of beliefs, increasing knowledge and skills, improving psychological



characteristics, and improving the situation so that people can work with maximum efficiency and effectiveness in an organization (29, 30).

Students in the present study acknowledged that effective education through short-term training courses and the inclusion of this subject in undergraduate curriculum will have a significant impact on improving their communication skills. This is consistent with the results of Kee et al. who came to the conclusion that in order to improve patient-physician interactions, it is better to include courses on general and professional communication skills in students' curricula (4). In this regard, Biglou et al. also highlighted the role of professional communication skills of healthcare providers in patient satisfaction, and called for relevant training courses to improve the communication skills of healthcare providers (31). According to the study by Ganca et al., professional communication skills training should be part of the curriculum and be taught in medical schools during the internship courses (32). In the study of Choudhary et al., the positive attitude of students towards learning general and professional communication skills indicated the need to teach these skills in undergraduate programs (33).

In the present study, students also stated that in addition to education, practicing communication skills will improve their skills. Based on the results of a study by Douglas et al., students valued experiential learning and skill acquisition for the development of communication skills and called for the extension of teaching this skill to clinical years (34). Appropriate training courses should be offered to improve communication skills. The use of educational techniques such as role-playing, teaching in small groups and the use of simulated patients can improve the results (35). The use of simulated patients was effective both in education and in evaluating the effectiveness of communication skills (36).

The second category extracted in the present study was the impact of hidden curriculum. Impact of hidden curriculum such as indirect trainings and contextual factors are effective in empowering students and educators to improve communication skills. The students believed that instructors with high communication skills

could have a positive effect on students, since many students subconsciously imitate their instructors in how to communicate with clients and their families, and their colleagues. In this regard, according to the study of Sigalit et al., the general and professional communication skills of clinical instructors play an important role in students' satisfaction with teachings offered in clinical settings (37). The study of Modi et al. also showed that teachers should be aware of the hidden curriculum in relation to general and professional communication skills (38).

Students also believed that individual and cultural differences could also affect their communication skills, so paying attention to these points and planning to improve them could be effective. Sharafzadeh et al. showed that psychological and personal characteristics of individuals are related to their communication skills (39). According to the results of studies by Mansour et al. (40) and Serap et al. (41), increasing students' self-confidence is a way to improve their communication skills.

This study provides good information on ways to improve the communication skills in midwifery students in Iran. Some limitations, however, may affect generalizability of the findings. We collected students' views only by an open-ended question; some of the participants do not answer or had superficial or cursory answers. Other qualitative data gathering methods may provide more accurate and in-depth data.

## Conclusion

The results of the present study indicate that most midwifery students are weak in both general and professional communication skills. This can hinder establishing positive relationship with their clients and negatively affect their success in quality care delivery. Thus, professional communication skills training should receive more attention in midwifery education in Iran. Revising midwifery curricula should be put on the agenda and novel teaching methods should be adopted to improve students' communication skills. Also increasing teachers' skills is required. General communication skills could be enhanced through life skills training beginning at schools and continuing in academic education.

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## Conflicts of interest

Authors declared no conflicts of interest.

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