

# MEDICAL SCIENCE

## To Cite:

Arbabisarjou A, Ghabimi M, Miandoab NY, Mohammad AA. Lived experiences of management intern nursing students in the clinical settings of the quality of educational services using the SERVQUAL model: A descriptive phenomenology study. *Medical Science* 2023; 27: e227ms2996.

doi: <https://doi.org/10.54905/disssi/v27i135/e227ms2996>

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## Peer-Review History

Received: 28 March 2023

Reviewed & Revised: 31/March/2023 to 08/May/2023

Accepted: 12 May 2023

Published: 20 May 2023

## Peer-review Method

External peer-review was done through double-blind method.

Medical Science

pISSN 2321-7359; eISSN 2321-7367

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# Lived experiences of management intern nursing students in the clinical settings of the quality of educational services using the SERVQUAL model: A descriptive phenomenology study

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## ABSTRACT

SERVQUAL model is a popular remarkable tool for assessing the quality of educational services. The main of this research is exploring lived Experiences of Management Intern Nursing Students in the Clinical Settings of the Quality of Educational Services Using the SERVQUAL Model. *Methods:* This is a qualitative study was conducted by using a phenomenological approach. The study population consisted of the 8th semester nursing students spending management internships in the wards of teaching hospitals of Zabol and Zahedan located in southeastern Iran. The study participants were selected by using both the convenience sampling and the purposeful sampling. The participants were 22 eligible students. Interviews were conducted in a secluded and open environment for collected data. *Results:* The analysis results of the interviews can be divided into five main themes and 15 sub-themes. Main themes are Conflict over physical resources, the inadequacy of facilities and equipment, Lack of coordination among employees, Challenges of responsiveness in the ward, Conflict in confidence, Double empathy. *Conclusion:* It is therefore recommended that research to be conducted in several teaching hospitals with different facilities at the same time in order to generalize the results.

**Keywords:** Lived Experiences, Management Intern Nursing Students, Educational Services, SERVQUAL.

## 1. INTRODUCTION

The management of an organization faces challenges in the service quality (SQ), which can contribute to the sustainable success and growth of an organization (Aboubakr and Bayoumy, 2022). The SQ can be defined as how service users assess based on what they have experienced (Onditi and Wechuli, 2017). In other words, it is the balance between the customer satisfaction and expectations from an organization and also customer satisfaction can be described as a potential indicator for competition among the educational institutions. Moreover, the SQ is a standard for building and maintaining a good relationship with customers and therefore it can be considered as an introduction to the customers' satisfaction (Jahantab et al., 2018).

Recently, the quality of educational services (QES) has received much attention worldwide and also an educational institution is trying to achieve the performance standards to compete in the field of education and accordingly both maintaining and promoting the QES are necessary for the existence of an educational institution. Given that students are the major customers of higher education institutions; therefore, there is a direct correlation between perceived service quality and students' satisfaction (Sibai et al., 2021). In addition, the perception of the high-quality services and students' satisfaction with educational services could be explained as the most critical strategic factors for attracting new students to higher education institutions worldwide and this requires that universities operating in a highly challenge environment should consider how to provide the high-quality services to meet and exceed the expectations of the beneficiaries and also provide the basis for developing the appropriate programs to promote the QES by analyzing the gap between the collegians' expectations and perceptions of the QES delivered to them (Abu-Rumman and Qawasmeh, 2022; Mwiya et al., 2019).

Several models have been developed so far to evaluate the satisfaction with the QES so as to create motivation for promoting the quality of education. SERVQUAL model is a popular remarkable tool for assessing the QES (Lizarelli et al., 2021). SERVQUAL is a scale for measuring the five dimensions of the QES developed by Pena et al., (2013). This scale measures the customers' perception in five dimensions: Tangibility (the appearance of physical facilities, supplies, staff and communication materials), assurance (the knowledge and courtesy of personnel and their ability to convey trust and confidence), responsiveness (willingness to cooperate and help the customer), reliability (the ability to perform the promised service dependably and accurately) and empathy (the caring, individualized attention the firm provides its customers) (Pena et al., 2013).

High reliability and validity for comparing the customers' perception and expectations are among the advantages of the SERVQUAL model (Tofighi et al., 2011). The expectations, perceptions and views of students concerning all dimensions of the services provided in educational institutions, including educational methods, adequacy and availability of physical facilities, the relationship between curriculum and services, etc., should be evaluated periodically and considered as a very important factor for the continuous improvement of quality in universities (Jahantab et al., 2018). Khandan et al., (2015) evaluated the QES among students of Kerman Nursing and Midwifery School according to the SERVQUAL model and demonstrated that it has seen a negative gap in all domains of the QES and also the greatest gap was seen in the domains of tangibility and responsiveness and the lowest gap was found in the assurance dimension. Shahrودي et al., (2019) conducted a study on 477 students of Zahedan University of Medical Sciences to investigate the quality of QES" the SERVQUAL model and according to their results, only 1% of the participants described the quality of educational services as favorable.

Daryazadeh et al., (2022) employed the SERVQUAL model to evaluate the QES from the perspective of medical students and clinical teachers of Kashan University of Medical Sciences. The expectations (optimal status) of the medical students and clinical teachers for the total score of SQ and all its dimensions were significantly higher than their perception (current status). In other words, from participants' point of view, there was a gap in all domains of QES and their total score, the greatest gap was seen in the assurance dimension and also the smallest gap was related to empathy dimension (Daryazadeh et al., 2022).

Previous study concluded that the higher education in Thailand did not provide the expectations of undergraduate collegians. There was a gap between perceptions and expectations of undergraduate collegians in all five domains of the SQ and also the scores of students' perceptions were lower than those of their expectations, indicating that many efforts should be made to promote the SQ (Yousapronpaiboon, 2014). The failure of students' expectations from QES is such that they were willing to drop out of education. Similarly, a study conducted in Australia showed that students' expectations of QES were not provide so that they were willing to drop out of university (Peter et al., 2000).

In summary, the existing studies showed that the different domains of the SERVQUAL model vary depending on the different conditions in teaching hospitals and in this regard, there is no qualitative study evaluating students' experiences in different domains of the SERVQUAL model during management internships. Academic research in similar fields is also quantitative. However, a qualitative research method is more suitable for gaining in-depth experiences of nursing students. The target of the

study was to explore the live experiences of management intern nursing students in the clinical settings of the QES using the SERVQUAL model.

## 2. MATERIALS & METHODS

This study quality research that was conducted by using a phenomenological approach. Phenomenological research seeks to answer the question, what is the structure and nature of the experience of a phenomenon by people? The main problem in applying phenomenology is the answer to the question "whether the phenomenon in question needs to be clarified or not?" The practical context of the phenomenon of nursing students' management internship training, for all its importance, has not yet been sufficiently elucidated in previous studies from the perspective of those who have experienced it. The samples were nursing students spending management internships in the wards of teaching hospitals of Zabol and Zahedan located in southeastern Iran.

This research was carried out in the second half of 2022. The research samples were selected by using both the convenience sampling and the purposeful sampling. The study inclusion criteria: 8th semester nursing students, management internship, training in a teaching hospital, under the training of SERVQUAL model and willingness to take part in the research. The samples that were unwilling to take part in the research were excluded from the research.

The study population consisted of 22 (8th semester) nursing students spending their management internship in the clinical setting. Participants were recruited with great diversity of gender, age, residency in dormitory and non-dormitory, doing internships in morning, evening and night shifts. The data were gathered using a semi-structured interview.

Interviews were conducted in a secluded and open environment with the coordination and willingness of the participants one month after the completion of the management internship. Participants were introduced to the SERVQUAL model before entering management internships. Prior to the interview, participants completed the SERVQUAL questionnaire. Ethical principles were observed by providing oral and written information in the field of reading to the participants, the optionality of the company and by completing the written informed consent form. Participants were reassured that the interviews were confidential.

By providing his contact number and e-mail address, the researcher made it possible to inform the researcher of their withdrawal from the study at any stage. If desired, the results of the research will be provided to them. The exploratory questions, such as "Talk about the difference between expectations and existing conditions based on the SERVQUAL model" and "Describe your experiences from spending time as a management intern in different wards of the hospital regarding the five dimensions of the SERVQUAL model". Next, more clarifications were required like "tell me more about that. During these interviews, speech and face changes, such as an increase or a decrease in tone of the cases" voice, pauses were also recorded. Each interview was between 30 and 45 minutes in length. All interviews were recorded and immediately after each session, word-for-word analyzed simultaneously to form the format of the following interview.

Data collection and analysis were performed simultaneously and sampling was continued until data saturation. After conducting 18 interviews with the participants, no new data were obtained and also the previous data were repeated, but four other interviews were conducted to raise the quality of the study. The data were analyzed simultaneously to show the evolution of the nature of the challenges as it was formed based on the experiences. Data analysis involved the use of Coliazzi's (1978) methodological seven-stage framework. This framework was chosen as it provided clarity in the steps of analysis.

1. Read and re-read all the participants' descriptions of the phenomenon under study.
2. Extract significant statements from each description that is directly related to the phenomenon.
3. Formulate meanings from these significant statements.
4. Organize these formulated meanings into themes.
5. Integrate the results of the data analysis into a description of the phenomenon under study.
6. Return the results to the participants for the validation.
7. Incorporate any new, relevant data into the fundamental structure of the phenomenon.

Goba and Lincoln criteria were used to provide the study rigor. For this purpose, based on this method, four criteria of the credibility, confirmability, dependability, transferability were used (Chowdhury, 2015). Therefore, to ensure the credibility and confirmability, continuous engagement with the data, researcher bracketing and verification of the data by the participants, colleagues of the research team and two faculty members outside the research team.

In order to determine the dependability, two members of the research team coded the interviews and there was a great deal of agreement between the opinions. Extreme care was also taken in collecting, implementing and recording data and allocating sufficient time for data collection. Regarding the transferability, the data obtained by two faculty members outside the research

group and experts in the field of qualitative research were reviewed and confirmed. In addition, the concept of death was described and also the necessary explanations and the use of direct quotations from the participants were done in this regard.

### 3. RESULTS

A total of 22 participants (including 16 females and 6 males) collaborated in the study. The average age of the study participants was 22.4 years and also their age range was between 21 and 24 years. All participants were in the 8th semester of education. The analysis results of the interviews can be divided into five main themes and 15 sub-themes which are provided (Table 1).

**Table 1** Themes and sub-themes

Themes	Sub-themes
Conflict over physical resources	The inadequacy of facilities and equipment
	Lack of coordination between employees
	Being far from the ideal in the field of facilities and equipment management
Challenges of responsiveness in the ward	The unavailability of guide/ leader when the management intern nursing student needs him/her
	Welcome failure for the management intern nursing students' opinions by the ward management
	The unavailability of information resources to solve the problems
Double empathy	Respectful behavior of the ward head and the personnel showing concern and regard the management intern nursing students
	The lack of cooperation from the ward heads the commuting students and their meal plan
	Inflexibility of the ward head and personnel in facing the management intern nursing students
	Assigning a lot of related and unrelated work to the management intern nursing students
Conflict in confidence	Having no confidence in the management intern nursing students to assign the job tasks to them
	Having no regular work schedule to perform the jobs tasks by the head of the ward
	The satisfaction of the head of the ward instead of other personnel for grading
The meaninglessness of the assurance for the students' future career	A management internship does not guarantee a future career
	Lack of sufficient study resources to increase the student's specialized knowledge

#### Conflict over physical resources

Implementing the management system in clinical settings depends on the physical conditions and facilities and equipment used in the wards. What is in the nursing students' mind is not ready to deal with that situation. Inadequate number of hospital beds and lack of the standardized space for each patient can lead to the non-implementation of management principles. Hospital should be managed based on the conditions and facilities of the wards.

#### The inadequacy of facilities and supplies

The inadequacy of facilities and supplies is a sub-theme that has received attention from the nursing students who have theoretical knowledge for implementing management. The lack of equipment considering the number of the patients and the moving and

transport of them by the personnel can be regarded as a factor contributing to disease transmission. Continuous use of equipment and not having the opportunity to check it while performing the procedures can lose its accuracy.

"...A blood pressure monitors for all patients or a DC shock that cannot be replaced if it has a problem during cardiopulmonary resuscitation (CPR), and it causes harm to a patient and non-implementation of the ward' management principles... Head nurse is most concerned about it "(Participant 2)

### **Lack of coordination between employees**

Lack of coordination between employees is another sub-theme. The nursing students who spend a short-term internship program cannot establish a good coordination between the employees. Also, the personnel react to the nursing students and do not want to be responsive. Despite the introduction of the ward managers to the nursing students and their obligation to obey the nursing students, ward managers do not implement the nursing students' orders. Each one tries to implement the division of labor.

Said, "...Due to being a nursing student, the personnel do not obey me and this causes them not to do any task if you ask them to do it and they force you to perform it..., indicating a communication problem" (Participant 5).

### **Being far from the ideal in the field of facilities and equipment management**

The ideal, if we consider it based on books, is a dream. The nursing students are faced with both the deficiencies and the inappropriate physical conditions, which are far from the ideal when entering hospital ward. Maybe there is hardly any equipment that you need, which becomes problematic if it breaks down. The rules and regulations of management are not usable with respect to these conditions which are most defective; you must implement the rule and regulations of management considering such conditions.

"...Management is not subjective and you deal with objective conditions. When you are a management intern nursing student, you have a lot of anxiety due to having no ideal conditions and everyone tells you that a good manager works under difficult conditions..." (Participant 3)

### **Challenges of responsiveness in the ward**

One of the needs of the ward management is responsiveness to the nursing students, patients and their companions. If the management intern nursing students have any uncertainty, there are no information resources and personnel to provide their necessities in relation to the ward, patients and doctors. The management intern nursing students' opinions are not welcomed to improve the processes because the head of the ward and personnel are too busy and also the deficiencies at higher levels make it difficult to improve things and the students' suggestions are not welcomed.

### **The unavailability of guide/ leader when the management intern nursing student needs him/her**

Based on the type of management internship, the management intern nursing students works only in the hospital ward under the supervision of the head of the ward. Ward staff have empirical knowledge, but no scientific knowledge. Also, the management intern nursing students may have no connection with trainer who is not always available, so they do not need a reliable and responsive resource when a problem arises. Due to their busy schedule, ward personnel are also reluctant to cooperate with a management intern nursing student working as a trainer.

"...Regarding how to attend the patient to the radiology department, take laboratory samples or the patient's clinical problem, I needed information to do the work more correctly at this time, but the head of the ward had gone to the meeting and the personnel were not very helpful guide because they had no information or if they had, they did not want to share it with others..." (Participant 10)

### **Welcome failure for the management intern nursing students' opinions by the ward management**

The responsive ward has a lot of activities in relation to higher officials, colleagues, and patients. The management intern nursing student is more likely to see as an interloper who may do things to create responsibility in the ward or convey the ward information to higher managers. The ward managers believe that the management intern nursing students attempt to fill their time, pass the internship and receive a score for the given course more than learning; therefore, opinions from the management intern nursing students are not taken seriously.



"... There are a lot of problems faced by the ward and the head of the ward did not pay attention to my opinions. Finally, he told me that you got your score for the given course and left there... because there are not enough budgets and nursing personnel... even a lot of requests may lead to my dismissal.... " (Participant 13)

#### **The unavailability of information resources to solve the problems**

When our trainer is not available to management intern nursing students, no one is responsible for solving their problems. The nature of the management internship is also the independence of the students in managerial activities. If any problem arises, we cannot count on the ward head and the personnel.

"... I had a question about a medicine one day, but I realized that the information obtained from the ward head and the personnel was not enough, and also the trainer was not available ..." (Participant 7)

#### **Double empathy**

Developing empathy and support for the management intern nursing students encourages them to work effectively. However, the practical behavior of the ward head is contradictory in this regard. When the trainer is present, he/she welcomes the student and when the trainer is not present, the ward head expects the student to work for him/her instead of the personnel. Otherwise, the ward head does not have good relationships with the student and applies the strictures that are not necessary.

#### **Respectful behavior of the ward head and the personnel showing concern and regard for the management intern nursing students**

Respectful behaviors as mutual and bilateral respect in the workplace underpin good relationships. The management intern nursing students also learn to respect their colleagues and patients. Therefore, the ward head is trying to respect the students and behave well.

"... The ward head is trying to respect the students and teach the personnel a culture of mutual respect in order to encourage them to respect the management intern nursing students." (Participant 10)

#### **The lack of cooperation from the ward heads the commuting students and their meal plan**

The management internship program is internships for the more difficult period for nursing students so that according to the schedule and curriculum, the head nurse should start her/his shift on the morning and leave the hospital ward after the personnel leave there and finally deliver tasks and duties related to the ward to the management intern nursing students. Given that the students' class program and their meal plan disrupt and cannot be coordinated; therefore, the head of ward does not cooperate with them.

"... We failed to keep up with all our other programs when selecting the management internship program, the head of the ward did not cooperate with us and we were forced miss our classes and our breaks and meal plan were disrupted" (Participant 14)

#### **Inflexibility of the ward head and personnel in facing the management intern nursing students**

As the first experience, the management intern nursing student who is entrusted with the responsibility faces difficulties in dealing with problems due to not having enough experience. The routine of work in each ward poses a challenge for people who are not familiar with the tasks. Sometimes, the negative perception of the head of the ward results in the fact that he/she should be strict with the student to learn the work, that it may discourage the student from working in the future. Therefore, the head of the ward applies a stubborn and inflexible attitude to show the seriousness of the work to the students.

"...I think that being strict with the students sometimes does not work and it is better to treat them kinder so that they can solve problems more easily" (Participant 11)

#### **Assigning a lot of related and unrelated work to the management intern nursing students**

The idea of having a management intern nursing student working in the ward is wrong for the ward head. The ward head thinks that when he/she has management intern nursing students working in the ward, they must perform all the tasks that are backward or not related to the job description. The warehouse and used equipment, etc., which have not been visited for several years, will now be cleaned and sorted by a management intern nursing student in one day. This takes the student away from learning and experiencing the main tasks.

"...One day I, as a management intern nursing student, was told to take a patient for an ultrasound. There was a crowd in the ultrasound department and it took me an hour. When I returned to the ward, the main tasks like visiting patients were almost finished and I felt that it was not important for the head of the ward" (Participant 15)

### **Conflict in confidence**

Having confidence in a management intern nursing student makes him/her stronger. However, it is difficult to implement in practice. The head of the ward tries to act cautiously. If the management intern nursing student himself/herself has no a desire to do more work, the head of the ward will not transfer the responsibilities to him/her and or he/she tries to keep a management intern nursing student busy by assigning the simple tasks to him/her so that he does not have more requests because the head of the ward cannot trust management intern nursing students and it is likely that it will cause the work to fall apart and he/she may lose control of the his/her ward.

### **Having no confidence in the management intern nursing students to assign the job tasks to them**

The management intern nursing students often have no motivation to learn more and try to pass the time and end their internship sooner. This behavior of the management intern nursing students causes the head of the ward to be cautious and also, he/she refrain from assigning more job tasks to them because either they are not performed well or they are delayed which can interfere with the plans of the head of the ward.

"...One day, the head of the ward told me to check the patient's medical records using a Kardex and give him/her the report by the time of the visit.... which I could not do it due to another thing that happened and in fact I was negligent.... now she doesn't assign the job tasks to me anymore" (Participant 4)

### **Having no regular work schedule to perform the jobs tasks by the head of the ward**

One of the reasons why the head of the ward cannot trust the management intern nursing students is that the head of the ward has no regular work schedule. Therefore, depending on the conditions, the head of the ward implement an irregular schedule daily, and this makes him/her unable to trust the management intern nursing students.

"...I have not seen the head of the ward has a checklist or a specific work plan for managing the department, considering that he has good work experience, I feel that he performs most of the work and planning subjectively, that's why he gives me an irregular schedule..." (Participant 16)

### **The satisfaction of the head of the ward instead of other personnel for grading**

When the job tasks are not carried out according to a regular work schedule, it can lead to the dissatisfaction of the management intern nursing students because they also try to get the satisfaction of the head of the ward. The management intern nursing students try to do better in situations that they know will lead to grading.

"The head of the ward is responsible for part of grading. In order to get this part of grading, I try to gain the satisfaction of the head of the ward, so I do things that he likes the most" (Participant 12)

### **The meaninglessness of the assurance for the students' future career**

There is no guarantee to become a manager at a hospital because meritocracy has no role in as healthcare system. A person's science and art in management has no role in his/her selection as a manager because some factors like being of the same mind with top-level managers are more decisive.

### **A management internship does not guarantee a future career**

Management internship does not provide suitable conditions for the management intern nursing students in order to prepare their future career or can help them become a manager in the future. However, the head of the ward does not implement the principles of the management and also, he/she mange the department depending on the condition. Because there are the limitations of financial and human resources, too much insistence may jeopardize the position of head of the ward. Accordingly, the head of the ward does not engage in challenges to maintain his/her position.

"...The management internship was weak and there was no place where you could actually learn the basic principle of management, so there is no guarantee that a person will select as a manager..." (Participant 8)

### Lack of sufficient study resources to increase the student's specialized knowledge

The scientific and artistic limitations of management cannot be observed in the heads of the wards and most of their work is experimental, which they have achieved over the years. The heads of the wards are considered to be the only learning resource for the management intern nursing students. If the professor is not present, there is no other scientific resource in the department to learn the basic principle of management.

"...the heads of the wards have gained knowledge through experience and if you have a scientific question, they cannot answer because they do not study and the heads of the wards work based on the healthcare system..." (Participant 9)

## 4. DISCUSSION

The goal of study was to explain the lived experiences of management intern nursing students in the clinical settings of the QES using the SERVQUAL model. The Five main themes and 16 sub-themes were obtained from the data analysis, which were interpreted in this section. One of the main themes investigated in this study was the conflict over physical resources. Physical resources and equipment are essential to implement an effective management program. When a manager deals with the inconsistency in the ward's equipment and facilities, he/she faces challenges in implementing disciplinary issues in the workplace. Due to the inconsistency in the workplace and the facilities and equipment of the ward, it becomes difficult for the manager.

In agreement with our study, previous studies conducted in Iran demonstrated that it was a gap between the management intern nursing students' expectations of physical resources, the facilities and equipment of the ward and ideal conditions and also the students believed that creativity of the head of the ward was effective for managing the department due to the lack of both the personnel and the facilities, but they did not consider these conditions to be effective for the management intern nursing students' learning (Tehranineshat et al., 2022; Hoseini-Rostami et al., 2018).

Moreover, a study of Sihuin-Tapia et al., (2015) showed poor quality of services and equipment, which according to the conditions of the study in South America, the economic, social and political issues of the society could be effective in the quality of healthcare services and therefore their performance in the field of patient care was poor. Also, a study conducted by Yarmohammadian et al., (2015) demonstrated that healthcare management students reported poor quality of services, which could affect their performance and learning. Aboubakr and Bayoumy, (2022) conducted a study on dental and nursing students in Egypt and the results showed that in the tangibility dimension, expectations do not match the current status. Furthermore, Rizvi et al., (2020) also reported the poor results in the tangibility dimension. The reason for the weakness in the tangible dimension was the lack of facilities, the shortage of the staff and the high demand for healthcare services that the system is unable to respond.

Another result of this research was the challenges of responsiveness in the ward. The communication between the management intern nursing students and the head of the ward faced problems due to unavailability of a guide/leader for the students when the trainer was not present. Also, there are no additional scientific resources to solve the management intern nursing students' work problems to help them perform their tasks better. The management intern nursing students, who can be the cause of good change during management internship, their opinions and suggestions, were not welcomed by the head of the ward and other personnel. In consistent with this study, Hoseini-Rostami et al., (2018) and Pekkaya et al., (2017) reported that the greatest gap was responsiveness. They also showed low satisfaction of managers and personnel with the system (Hoseini-Rostami et al., 2018; Pekkaya et al., 2019).

Also, another study revealed that manager should prioritize the improvement of college services in terms of the dimensions of quality, indicating that there were significant gaps between collegians' expectations and perceptions. There was a gap in the responsiveness dimension that managers should increase their willingness to help their collegians provide extra assistance. Also, a negative gap observed in the timely and quick response to the complaints and concerns of the collegians would be resolved by the managers (Sibai et al., 2021). Also, in another research, the researchers showed that responsiveness was directly related to the customer satisfaction, that responsiveness to customers should be accurate and strong (Lagat and Oyoga, 2019). In addition, the researchers found that responsiveness was one of the essential factors for service quality that could contribute to general employees' satisfaction with the system (Mohamed and Ali, 2019).

Another result of this research was the double empathy, indicating that the head of the ward had different behaviors towards the management intern nursing students under different conditions and also did not have a respectful behavior, including lack of cooperation with the students' commuting program and curriculum and welfare programs, lack of inflexibility in facing the problems caused by the student and assigning a lot of related and unrelated work to the management intern nursing students. Our results were consistent with those of Kilaru and his team are suggesting that the patients were dissatisfied with care and treatment



services provided by manager and personnel for them and they did not inform them when the above services were performed and thus their empathy was poor (Ranney and Peimer, 2016).

In line with the results of the current study, Misaii et al., (2019) and Rafati et al., (2021) demonstrated that the greatest gap of educational services has seen in the empathy domain. Misaii et al., (2019) evaluated the QES of a military medical university and a negative gap observed in empathy indicated that the QES of military medical university was poor, including the professors' respect for the students and the appropriate behavior of the teaching staff towards the students. In Rafati et al., (2021), the empathy dimension showed the tendency of the university to provide fast services to collegians, indicating the university's sensitivity and awareness towards the demands, questions and complaints raised by students. In addition, the empathy dimension refers to being warm and friendly to students by understanding their special conditions and respecting their opinions by both the personnel and the trainers (Misaii et al., 2019; Rafati et al., 2021). Two researchers in their research demonstrated that there was a gap in the empathy dimension. Empathy had a significant effect on the satisfaction of students and patients, but it did not affect the quality. Therefore, it should be taken into consideration because a student who has empathy for the personnel and the head of the ward will perform the tasks better (Perera and Dabney, 2020).

Conflict in confidence was another result of this study. From the point of view of the head of the wars, having management intern nursing students' student creates a double emotion that their presence in the department would be helpful and, in another case, the students can perform the job tasks of the personnel who were absent and on the other hand, the personnel cannot independently assign their job tasks to the students because they feel that the student has not the necessary skill to be able to perform the tasks independently. Also, the personnel do not have a regular schedule to fill the students' working time. In addition, the students try to perform a series of things to get the grade by obtaining the satisfaction of the head of the ward. The findings of a study demonstrated that a gap saw in the assurance dimension and also the educational services provided by nursing school did not provide the collegians' expectations. The student's effort is not proportional to the grade he/she gets and also his/her expectation from the class session is due to the lack of systematic and relevant contents provided per session (Tehranineshat et al., 2021). Misaii et al., (2019) found a negative gap in the reliability dimension too, which might be due to the problems existing in some fields, such as not performing the tasks by professors and the personnel at the appointed time. In addition, there is an uncertainty in assigning tasks to students by professors.

Mohebifar et al., (2015) evaluated the service quality at teaching hospitals in Qazvin province, Iran and found that the greatest gap has seen in the reliability dimension because there was no regular schedule for working provided by the head of the ward. Contrary to the above-mentioned studies, a study at a hospital in Spain was carried out and reported no gap in reliability dimension and patients' satisfaction level with managers was high and managers had good planning. Patients were satisfied with the procedures that were performed for them (Regaira-Martínez et al., 2010).

Another result obtained from the present study was the meaninglessness of assurance for the students' future career. Preforming a management internship did not guarantee the students' future career and this internship program did not guarantee a management position for the students. Also, to solve the problems, they needed the study resources to solve their problems and also these human resources and books were not available to management intern nursing students.

In line with the results of the current study, a study conducted by Nazem et al., (2020) showed that most of the expectations and quality gaps were related to the assurance dimension. The patients' expectations from assurance dimension related to doing the right things at the hospital, the correct work of the personnel and their up-to-date knowledge were very important from the patients' point of view. Also, the greatest gap in this dimension showed that according to the patients' opinion, the doctors and medical staff did not have adequate knowledge to help patients and did not treat them with respect and also, they failed to make the patients feel safe and secure (Nazem et al., 2020).

In a study carried out in Malaysia, the results demonstrated that the greatest gap has seen in the assurance dimension, indicating that the service quality in private and public educational sectors was not the same and private sectors did not guarantee proper services to students (Chui et al., 2016). Contrary to our study, Fan et al., (2017) reported no gap in the assurance dimension. Most patients or their families were aware of their condition and treatment and were satisfied with the medical treatment. These results demonstrated that patients tend to trust medical services and identify their experience in the hospital to be relatively satisfactory compared to their initial expectations (Fan et al., 2017).

The contradicting results obtained from various studies conducted in this domain can be influenced by the conditions and facilities of the hospital, the number of personnel, physical space, the age of the hospital and training centers, the educational and welfare facilities of the university and the teaching hospital. Accordingly, there are always differences in the domains of the QES of different teaching hospitals and from this point of view, teaching hospitals may have superiority or weakness in one or more

dimensions compared to other hospitals. It is therefore recommended that research to be conducted in several teaching hospitals with different facilities at the same time in order to generalize the results.

### Limitations

One of the limitations of the present study is the lack of a written management plan among the ward's managers and the management intern nursing students could not perform management tasks trained by an instructor in a standard manner. In addition, the quality of students' managerial work was assessed using the self-report technique and also it may be influenced by the desirability bias or response bias. Therefore, the above factors may contribute to the generalization of the findings.

## 5. CONCLUSION

The findings of this research demonstrated that the students' experience levels of management internship were low in the 5 domains of the SERVQUAL model. The weak facilities of the hospital in terms of having a written management plan for ward managers, human resources, facilities and equipment, the difference between the students' training program and the management plan applicable in the hospital by ward managers could contribute to the implementation of the students' plan. Planners and managers of hospitals and universities should have a written management plan so that by implementing the different educational models, students can make proper use of internship in the field and new learning and experiences will shape their future performance and they can independently work as a manager in the future.

### Acknowledgement

The title of the live experiences of management intern nursing students in the clinical departments of the quality of educational services under the model at Zabol University of Medical Sciences was investigated and approved with the code of ethics IR.ZBMU.REC.1401.147. <https://ethics.research.ac.ir/IR.ZBMU.REC.1401.147>.

Thanks all the colleagues and students for collaboration and participation. The authors are thankful of Dr Mohammad Reza Firoozkahi PhD of Nursing and Najmeh Ghiami Kestegar (The Head of Operation Technology) for reading and editing the primary copy.

### Authors' Contribution

Arbabisarjou AA conceived of the presented idea and edited the primary manuscript. Abdollahi Mohammad performed and verified the analytical methods. Ghabimi M and Yousefian MN encouraged investigate of subject and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

### Ethical approval

The study was approved by the Medical Ethics Committee of at Zabol University of Medical Sciences and approved with the code of ethics IR.ZBMU.REC.1401.147. <https://ethics.research.ac.ir/IR.ZBMU.REC.1401.147>.

### Informed consent

Written & Oral informed consent was obtained from all individual participants included in the study. Additional informed consent was obtained from all individual participants for whom identifying information is included in this manuscript.

### Funding

This study has not received any external funding.

### Conflict of interest

The authors declare that there is no conflict of interests.

### Data and materials availability

All data sets collected during this study are available upon reasonable request from the corresponding author.

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