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BASIC MEDICAL SCIENCES / TEMEL TIP BİLİMLERİ

Healthcare Team in Ward Round: Roles and Responsibilities from the Perspective of Pediatric Surgical Residency Teachers

Klinik Vizitlerde Sağlık Ekibi: Çocuk Cerrahisi Eğiticilerinin Perspektifinden Roller ve Sorumluluklar

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Abstract

Objectives: The aim of this study is to determine the roles and responsibilities of healthcare team members in ward rounds from the view of pediatric surgery teachers.

Materials and Methods: A qualitative design was used with semi-structured interviews were conducted with six pediatric surgery teachers.

Results: The consultant physician on ward rounds has a critical role and responsibilities. Concerning the duties of residents/senior residents and other surgeons, the importance of complying with hierarchical communication, patient management, and preparation before and during ward rounds were stressed. The roles and responsibilities of the supervisor nurse were defined as specifying medical information and observations during ward rounds and ensuring the flow of information among team members. The teachers described the nurses' roles as passive-listening, completing the resident deficiencies and fulfilling the doctor's instructions. Effective communication, teamwork and continuing professional development are among the important roles of the healthcare team.

Conclusion: The roles and responsibilities of residents differed by their experiences and competencies. It was determined that nurses are not expected to actively participate in the decision-making process regarding patient care and have a passive role as an observer. It should be noted that it is expected of doctors in the ward round team to maintain "hierarchical communication".

Key Words: Ward Rounds, Improving Health Quality, Qualitative Research

Öz

Amaç: Bu çalışmanın amacı, çocuk cerrahisi eğiticilerin gözünden klinik vizitlerde sağlık ekibi üyelerinin rol ve sorumluklarını belirlemektir

Gereç ve Yöntem: Araştırma niteliksel desene sahip olup, altı çocuk cerrahisi eğitici ile yarı-yapılandırılmış görüşmeler yapılmıştır

Bulgular: Klinik vizitlerde vizit sorumlu doktorunun kritik rol ve sorumlukları vardır. Asistan/kıdemli asistan ve diğer cerrahi doktorlarının hasta hakimiyeti başta olmak üzere, vizit öncesinde hazırlık ve vizit sırasında hiyerarşik iletişime uymalarının önemi öne çıkmıştır. Sorumlu hemşirenin rol ve sorumlukları ise vizit sırasında tıbbi bilgi ve gözlemlerini belirtme, ekip üyeleri arasında bilgi aktarımını sağlama olarak tanımlanmıştır. Eğiticilerin hemşirenin vizit sürecine aktif kalımına ilişkin görüş farklıkları olduğu dinleme asistan eksiklerini tamamlama ve hekim direktiflerini yerine getirilmesi pasif rollerinin olduğu görülmüştür. Vizit sürecinde yapıcı iletişimde bulunma, ekip işbirliği içinde çalışma ve sürekli mesleki gelişim sağlık ekibinin önemli rolleri arasındadır.

Sonuç: Asistanların rol ve sorumlulukları deneyim ve düzeylerine göre farklılık gösterdiği görülmüştür. Hemşirenin hasta bakımı ile ilgili karar verme sürecine aktif olarak katılımının beklenmediği, pasif izleyici rolünün tanımlandığı belirlenmiştir. Değişik deneyimlere sahip olan vizit ekibi içindeki doktorların "hiyerarşik iletişimi" sürdürme beklentisinin öne çıktığı dikkat çekmektedir.

Anahtar Kelimeler: Klinik Vizit, Sağlık Kalitesinin İyileştirilmesi, Nitel Araştırma

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Introduction

Cooperation and coordination of different professionals play an important role in ensuring quality and patient safety in healthcare services (1-3). Ward rounds are an integral part of healthcare services due to their impact on collaboration, coordination and patient safety in clinics. In the United States, it is estimated that five rounds, on average, take place per day for an inpatient (4). In all professional groups providing healthcare services, it is key for team members to be aware of their duties and responsibilities in ensuring safe, high-quality, patient-oriented care during ward rounds (1,5-7). Studies conducted in this field emphasise the fact that team members are aware their roles and the expectations in these roles enable the ward round process to be carried out in a qualified manner with a collaborative approach, including patient treatment and care (2,5,8). In addition, determining trends in the patient's condition during ward rounds leads to situational awareness and standardisation of the process (5,9), as well as preventing negative interactions and bedside chaos among team members, thus, improving the quality of the process (10). However, despite the importance of collaboration, it is pointed out that uncertainties in the definition and perception of the roles and responsibilities of healthcare professionals may pose a great risk for patient safety (8,11).

Ward rounds is the process of information flow between healthcare professionals regarding patient care, management and workflow. More generally, it is "the temporary or permanent transfer of some or all aspects of care for a patient or patient group to another person or professional group with professional responsibility and accountability" (3,8,9). Ward rounds are seen as an integral part of medical education in providing patient-centered care, clinical learning and competencies as well as contributing to patient care and management (12). Since William Osler, it has been the basic strategy for clinical education and is still considered essential for the training of physicians and their acquisition of clinical competence (12,13).

Many different theories underpin learning from ward round, but Kolb's experiential learning theory offers the most theoretical support. Kolb's learning cycle, is a constructivist theory concerning how learners take experiences from the external world into their private worlds of thought and emotions. They interpret experiences, give them personal meaning, and plan new actions in response to their interpretation (14).

To meet the needs of the ever-changing healthcare system, different ward rounds are carried out, such as training, consultation and multidisciplinary, with varied processes and purposes (8). In other studies, the nurse's roles were identified as patient advocacy, providing patient care, and leadership during the rounds. The roles and responsibilities of team members may change to carry out different visits effectively (5,11,15). Research shows that the current definitions of the roles and responsibilities of the consultant physician (1,5,16,17), resident (1,5,16,17), senior resident (1,18,19), supervisor nurse (5,7,20), and nurses (1,5,7,8,11,15,21), during rounds are unclear, and different definitions can be made. One study found (8), that doctors used nurses to supplement information and provide extra detail on patient assessment during ward rounds. In other studies, the nurse's roles were identified as patient advocacy, providing patient care, and leadership during the rounds (15). The socio-cultural conditions in which research has been conducted have a significant effect on the emergence of such different definitions. Apart from variability in the definition of roles and responsibilities during ward rounds, other agreed-upon issues are listed as follows: i) the uncertainties in the roles negatively affect multidisciplinary rounds, ii) it is important to define open roles for each team member, and iii) a clear approach needs to be established for each team member (1,6,7).

Due to the prime role of rounds in the patient care/treatment process, conducting studies to examine ward rounds and the roles and responsibilities of the healthcare team in this process is indispensable for a service-based approach and patient safety. Addressing these studies in socio-cultural contexts such as institutional, department culture, specialties, team members and ward round atmosphere will contribute to a detailed explanation of the problem. This study aims to determine the roles and responsibilities of health professionals participating in pediatric surgery ward rounds through the experiences of pediatric surgery teachers. It is thought that the views of the teachers can contribute to structuring ward rounds and removing uncertainties. To this end, the study has sought an answer to the following research question:

- How do pediatric surgery teachers define the roles and responsibilities of health professionals participating in pediatric surgery ward rounds?

Materials and Methods

The phenomenological design, a qualitative research approach, was used in this study. Phenomenological studies are conducted with relatively few people and focus on individual experiences, leaving aside the researcher's own perspective and prejudices (22).

Participants

The study group was composed of six pediatric surgery teachers - two pediatric surgeons, two associate professors of pediatric surgery and two pediatric surgery professors - working in the Clinic of Pediatric Surgery of University of Health Sciences Turkey, Ankara Child Health and Diseases Hematology Oncology Training and Research Hospital. A purposeful sampling method

was used, which is designed to select situations that are rich in knowledge and experience to maximise the effectiveness of limited resources (22). The pediatric surgery teachers were selected according to the following criteria: i) their ability to share rich experiences, ii) the specific information they have about ward rounds, and iii) their routine participation in pediatric surgery ward rounds. Participation in the research was voluntary. Other healthcare team members (pediatric surgical residents and nurses) were not included in the study because they did not have sufficient knowledge and experience about the ward rounds process and management and did not routinely participate in the ward rounds.

Data Collection

The interviews took place between April and May 2019 in the teachers' offices. Only the researcher and teachers were present during the interviews, which lasted 29-60 minutes. The interviews were done "face to face" by the female researcher (NC), and voice recordings were taken. A semi-structured interview form was used. The form included questions that examine the roles and responsibilities of team members during ward rounds generated by considering previous studies in line with the purpose of the research. To evaluate the appropriateness and understandability of the interview questions, two experienced general surgery specialists were consulted. The consent of the teachers was obtained by giving more detailed information about the purpose and scope of the study on the day of the interviews. Before starting the study, no relationship was established between the participants and the researcher. Field notes were taken by the researcher during the interview.

Statistical Analysis

The thematic analysis method was used. Verbatim transcriptions were made from the recorded interviews. A qualitative data set was composed by combining transcripts of all interview texts. This data set was read several times and an in-depth perspective on the interviews was formed. After repeated readings, similar and different data segments were marked, and codes were determined. General codes were determined by researchers within the framework of the first established codes and an approved code list was generated. To ensure the reliability of the data, a researcher experienced in qualitative research and the researcher (NC) coded over two randomly selected interview texts. Both researchers have experienced in qualitative research and attended a qualitative research workshop. Inter-coder reliability was calculated as 80% by dividing the number of agreed codes by the total number of both agreed and disagreed codes (23). The codes, sub-themes and themes were reviewed by the researchers and thematic schemes were set up. Coding was done using the Microsoft® Excel program. The findings of the study are presented with direct quotations to reflect the experiences of the surgery teachers. The study complied with the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (See Supporting Information S1).

Results

The surgery teachers interviewed in the study were 36-54 years old and had been working 12-30 years as a doctor and 9-25 years as a pediatric surgeon. Two of the teachers had participated in the "Trainer-Training" programme, which includes bedside training, adult education, asking questions, peer teaching and development of educational programmes. The teachers defined the roles and responsibilities of healthcare professionals in ward rounds differently according to their position in the team (Figure 1). Findings on roles and responsibilities are summarised below.

Consultant Physician*

The teachers defined the duties and responsibilities of the consultant physician on ward rounds within a broad framework including clinical management, patient management, teaching, role modeling, monitoring and supporting the resident, compentency in non-technical skills and continuous professional development. The teachers stated that they and other team members obtained up-to-date information about the patient treatment/care process through ward rounds and that they should organise patient-centred clinical management by evaluating this information. It seems important to give feedback to team members in the clinical management process:

"What is the function of service? The thing to be applied to patients is service management, and routine. Which patient will be treated? what is planned? So to say, whether he needs to be hospitalized or in intensive care? these are all things to be evaluated during the ward rounds (Teacher 3, Female)".

"It cannot be a regular operation. Because in the morning ward round, after the patients have been toured together, a decision is made on what to do for patients, that is, "let's demand these patient examinations -patient-based assessments-", "let's demand X-ray", "let's do this...". You know, a supervisor nurse also exists during the visits.." (Teacher 1, Male)".

The teachers emphasised that they conducted ward rounds to obtain information about the general condition of patients, to evaluate patients and to manage their treatment/care plan. The consultant physician on ward rounds has an important role in patient management:

"To have information about the clinical course of the patient, to discharge if the patient needs to be discharged, to adjust his treatment, to give or reduce drugs if it is needed to his treatment... we do it to follow the process in that way (Teacher 4, Male)".

The teachers stated that ward rounds are valuable learning environments, and the consultant physician on the round contributes to the education and training of residents. Education and training activities are carried out through discussions, question-answer and demonstrating or observing clinical practices:

"For sure! we would like to contribute to the self-development of the resident and make them qualified on the patients/disease treatments by monitoring them during the patient evaluation process, by discussing with them on the patient, asking questions about the disease when necessary, or discussing things about the distinctive diagnosis of the disease, examinations, or other physical examination findings, etc. (Teacher 1, Male)".

It was emphasised that the consultant physician performs as a role model that shapes the management, evaluation and formation of professionalism among the residents:

"They see our management or our capacity to assess. I mean, how is the teaching done? How does a medical specialist stand? Or what should be the position of an residentt, and so on? Everyone observes their own positions. A discipline is being formed. We are role models. Our colleagues apply another variation of what they see in us or what they see in their fellows. They watch us all and draw a conclusion (Teacher 2, Male)".

The teachers defined the monitoring of residents' professional development and their individual support among the roles and responsibilities of the consultant physician on rounds. As part of these roles and responsibilities, they noted that residents consider patient dominance, patient treatment/care process management and identification of personal problems:

"Residens' control... The term "control" refers to: how did they evaluate the patient? How to say, how did they make the progress of the day? Have they done the necessary examinations? Have they already started the necessary treatments for patients' diseases after checking them? One of the shortest ways we use the most to understand whether they manage the patient's treatment processes is to carry out ward rounds. It is the thing that is most quickly and easily understood whether they have control over the patient or not (Teacher 1, Male)".

The teachers stated that the consultant physician of the ward round should have non-technical skills such as teamwork and the capacity for decision-making. In this context, it was mentioned that a moderate ward round atmosphere should be provided for team members to express their opinions freely, and decisions should be made after receiving the opinions of the team members:

"The person conducting the round should be open to every opinion. As I said, everyone should express their opinion after all. Right or wrong! Ultimately a decision should be made about the patient. There is also the following point. There is mainly a primary doctor following the patient, a staff specialist. Otherwise, he must make the final decision. The person conducting the rounds must approve or disapprove of it, and a decision must be made after all parties have expressed their opinions (Teacher 6, Male)".

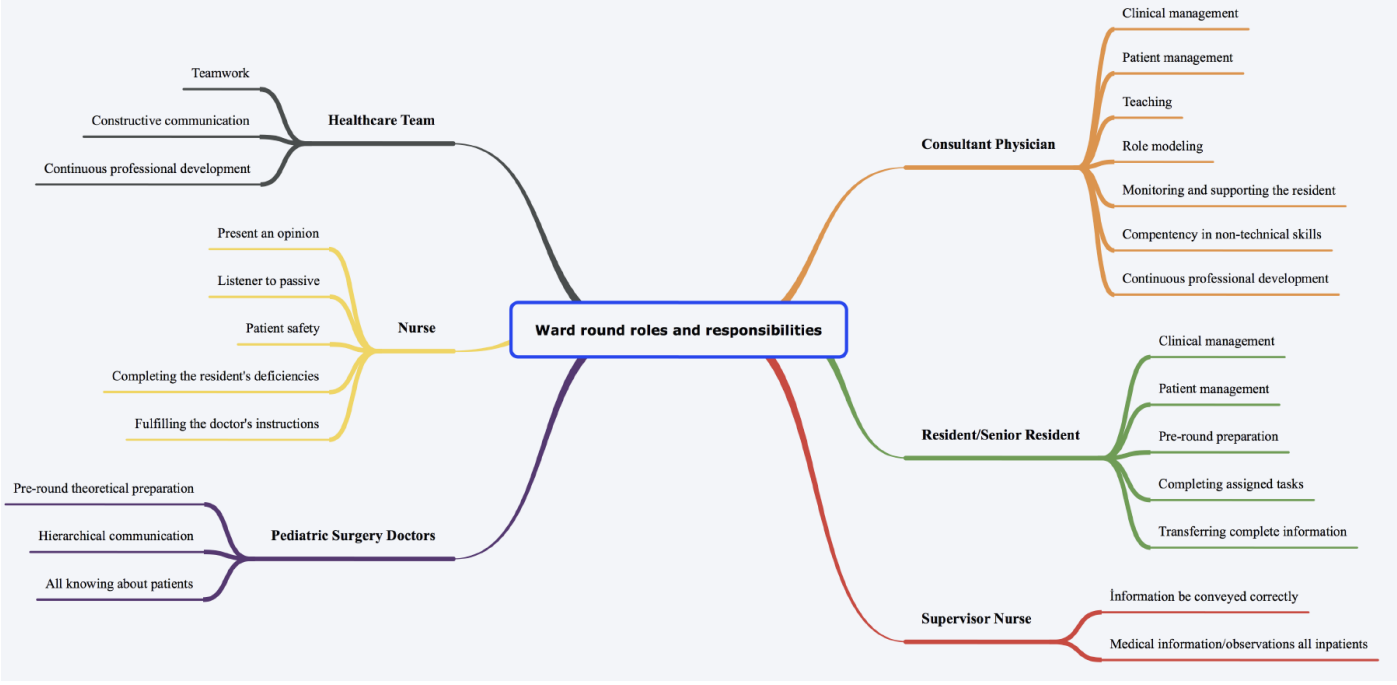

Figure 1: Roles and responsibilities of the healthcare team in the ward round

In addition to the training of healthcare team members, it has been stressed that ward rounds are also a training process for the consultant physician, and the consultant physician should also develop themselves professionally in this process:

"Now, for example, when the subject of the round is determined, I try to read it myself. So I'm looking at the latest literature. You need to be able to add something. You have to be superior to them. In this way, you encourage them to say something on the matter. They should say: "Well, this is the case, and I should take a look at it or something". You know, I think you need to be able to renew yourself (Teacher 5, Female)".

Resident/Senior Resident

The teachers consider patient management, clinical management, pre-visit preparation, completing assigned tasks and transferring complete information as the roles and responsibilities of the resident/senior resident during ward rounds. The teachers stated that pediatric surgery residents should have the treatment/care process from the day of hospitalisation, not just daily updates, of all patients in the clinic:

"Now, first of all, I would like a pediatric surgery resident to know absolutely everything about the patient. He must know the story of the patient, the results of the treatment methods applied to the child from the beginning of the monitoring, and everything else. After that, if he is on duty, he should be in control of the vital signs of the patient, and everything that happens to the patient so long as he stands by patients during the night (Teacher 3, Female)".

In addition to patient domination, the treachers stressed that the senior resident especially should control patient management, functioning of the clinic, complete the deficiencies and ensure clinical management:

"The surgical hierarchy starts right here. Before the professor's round, the most senior resident should supervise the round among the residents. Because it is thought that he is close to expertise and his level of education is better. Actually, he is expected to manage everything. He is required to ask: "What did you do to this now? What did you do to that? Tell me about all...". He should complete the deficiencies in this way (Teacher 4, Male)".

During rounds, the teachers stated that all residents should have a background related to the treatment/care process of the patients. In this context, they stated that it is important to be prepared for rounds and that residents should organise rounds among themselves. They emphasized that the senior resident is responsible for this preparation:

"New juniors! There is such a hierarchy. You know, their seniors are responsible for completing the resident round before, right? Everyone should get an idea about the night shift, even those who have not been participated in the night shift (Teacher 5, Male)".

"The residents need to know how the overnight progresses of the inpatients before the round was. We want them to know everything about the new inpatient during the rounds, such as where did the anamnesis come from? how was the patient? why was the patient hospitalized? (Trainer 2, Male)".

Some teachers stressed that residents should update information connected to patients on rounds, then search and read the points highlighted within the scope of the training activities:

"We expect the residents to run immediately to do the work spoken there and the duties that fall into their fields. Or he has to say: "let me read this". Because we say there: "read these criteria, look! we did such a thing there ..." those criteria... Because his seniority must be sufficient, and he needs to know every relevant thing. You say: "Tell it to him, and then we'll talk about it once you have read it". He needs to take his time and study what we gave him, as well as his duties (Teacher 2, Male)".

It is important to provide complete information about the patient to make the right decisions during rounds. One of the teachers defined the complete realisation of the information transfer process among the roles and responsibilities of the residents:

"The main duties and responsibilities of the residents are, here, to fully convey the patient's daily watch-out processes (Teacher 1, Male)".

Nurse

The teachers defined the roles and responsibilities of nurses during the round process as providing opinions, ensuring patient safety, listening to the patient, completing the resident's deficiencies and fulfilling the doctor's instructions. Some teachers stated that there may be information the healthcare team has overlooked or is incomplete, and it is important for the nurses participating in rounds to convey their medical information/observations to the patient during the ward round:

"That is why everyone needs to participate in the ward round. The attention of the team might be elsewhere. For example, the doctor may not notice some things. But, here, the nurse who monitors the process should remind, for example, "He has tachypnea. Are you going to do anything?" It's good to make such reminders (Teacher 6, Male)".

Contrary to the above view, another view stated by the teachers is that the nurse does not need to actively participate in ward rounds but should be a passive listener. According to this view, it is sufficient for nurses to attend and listen only to the patient's visit under his/her responsibility instead of attending

all ward rounds. One of the teachers further expanded this view and stated that fulfilling the doctor's directives is among the roles and responsibilities of the nurse during the ward round process:

"Everything we warned during the roundt, and everyone should listen to what is being said about their patient, including the nurses, we think of her as an auxiliary health staff (Teacher 2, Male)".

"Only at the round? I think there are also other things that are under the nurse's duties and responsibilities, such as to care for patients properly, or to follow orders (Teacher 4, Male)".

For nurses, extra roles and responsibilities might be added during the round, such as supporting residents in terms of completing their observations and eliminating their deficiencies, defining the obstacles related to patient care and conveying these obstacles:

"At the beginning, the nurse will supplement his (resident's) checks, observations, and his deficiencies. She will convey the defects that she noticed, and provide medication where required (Teacher 3, Male)".

"For example, we check the patient and we say: "mobilize him". The nurse in the team that will mobilize him, who is looking after him ... If the patient cannot be mobilized, this needs to be communicated, and shared, for example, "his mobilization is not possible, or Why can't he be mobilized?..." To look for the reasons lied under non-mobilization, such as, is it because of the pain? Is there a contracture? Or is there something else? What is it? We need to think about all possibilities (Teacher 1, Male)".

Patient safety requires teamwork. In this context, the nurse should work in cooperation with the residents and give warnings when necessary:

"There is a double check of the work done from all sides. Namely, there are aspects of the work done by the residents and the specialty students that concern the doctor. They are controlled by the seniors. There are also things they share with the nurses in the treatment process. Like orders, and things to do about the patient. Indeed, they should be monitored by senior nurses (Teacher 1, Male)".

Supervisor Nurse

Concerning nursing care, it is important that information be conveyed correctly during the ward round. It is emphasised that the person who will exchange information should be the right person:

"Accordingly, this is important. I mean, as I said, some things are not always possible. Our wish is for the supervisor nurses to do the morning visit with all their fellow nurses there, in that thing, and monitor the patients. Has the patient eaten? drank? whether moved or not? lung massage done? cough? all these need to be conveyed to us... this is relatively easy to do, but there must be the right people... (Teacher 1, Male)".

The teachers stated they can consult the supervisor nurse about his/her medical information/observations of all inpatients in the clinic when necessary during ward rounds. According to the teachers' opinions, the supervisor nurse should be capable of implementing the treatment/care process of all patients in the clinic, be professionally equipped and participate in primary patient care:

"The supervisor nurse should also listen to everyone, listen to all patients. There will also be questions that we can ask her during the ward round. That is, the assistant tells something but she is the one who observes something. We can get her opinion. How was this patient compared to yesterday? "I think it was unpleasant, or he has diarrhea..." the doctor might not have seen it, but it was green, watery, and so on... so we need her medical knowledge and observations (Teacher 2, Male)".

Pediatric Surgery Doctors

In the views of the teachers, specialist and resident pediatric surgeons should participate in the visit by making theoretical preparations for patients and diseases to carry out the visit efficiently:

"He must definitely read the patient, read from the previous night, do not come to the ward round by saying that he knows everything anyway, and he should review something that he can add to them according to each seniority levels, he must be prepared, and each team must be prepared for themselves. If the resident studies for himself, if the specialist doctor looked for himself, if the trainer had scanned the literature according to himself, if it was known what was in the hospital, its efficiency would be higher (Teacher 2, Male)".

The teachers stated that pediatric surgery specialists and residents should be able to master the patient treatment/care process during the round, although there are differences in institutional and clinical operations. It has been observed that patient dominance has positive contributions to the round:

"One who will attend the round, as I said before, can be residents, maybe a specialist, or a doctor, the institution is different, the functioning is different... Whoever might be... he must have control over the patient in every sense (Teacher 6, Male)".

It was emphasised that the round should be conducted within a certain hierarchical communication framework and that both residents and experts should act in accordance with this hierarchical communication chain during the ward round:

"Everyone acts according to their seniority level during rounds, only responsible one talks, anyone who talks about the patient, he might also be the junior, no one will interfere

until he finishes his word... if he is asked something, he should answer... after the junior, the service supervisor talks, and after that, if anything, the service specialist talks... everything works in that hierarchy and discipline (Teacher 2, Male)".

Healthcare Team

In this theme, the characteristics that the whole team should have - except for the responsibilities of individual team members - are defined. The teachers stated that the patient treatment/care process requires teamwork, and in some cases, it is important for the team members to support each other. In the teacher's comments, it was stressed that it is essential for team members to work in harmony and show support for each other:

"It is significant in terms of teamwork of course... so you rounds the wards together, and you want the nurses, at least the supervisor nurse, to be there. All in all, if you have someone else in your ward, for example, if you have a physiotherapist specialized in burns, you need to have a physical therapist... (Teacher 1, Male)".

"Therefore, teamwork is also like the organs of a body in this sense. It is necessary for everyone to work in harmony, to understand each other's situation, they must not hide something (Teacher 2, Male)".

The views of all team members during rounds are valuable, and it is critical for team members to express their opinions using constructive communication techniques during rounds:

"I mean, the education continues for all of us, from the most senior to the junior, from the expert to the professor. There are new things you can learn from every patient. Everyone's opinion is also very important. What comes to your mind may not come to my mind. If it is said in an appropriate condition, in an appropriate way, if everyone can be involved in scientific discussion, this shows the wealth of the team (Teacher 5, Female)".

Emphasising the educational aspect of rounds, visits contribute to the continuous professional development of healthcare team members. In this process, it has been observed that healthcare team members must make inferences to ensure their continuous professional development:

"Every round is an education of course. Namely, in the end, the purpose of the ward roundt is to discuss the patient. In this sense, at the bedside, I think it is useful that everyone participating in the visit should do some inferences, whether it is auxiliary health personnel or from other health branches (Teacher 6, Male)".

Discussion

A clear definition of roles is vital for patient-centred, effective, efficient and structured ward rounds. Understanding this process is a priority in terms of structuring specialty training and clinical training. Using a qualitative data set, this study attempted to define the roles and responsibilities of healthcare professionals who participate in visits, and it was carried out with a relatively small sample, considering the socio-cultural differences.

The teachers brought a multidimensional perspective to the roles and responsibilities of the consultant physician; the importance of patient and clinical management, education, role modeling, monitoring and supporting residents, compentency in non-technical skills and individual continuation of professional development were emphasised. Earlier studies also examined the roles and responsibilities of the consultant physician and described the different aspects of the ward round, such as clinical review, agreeing on a clinical plan, including clinical criteria for discharge and an expected date of discharge (1,8,16-18). Reece and Klaber (18), list the consultant physician's roles and responsibilities on rounds as helping residents, interpreting information by using their expertise in decision-making and ensuring inter-team communication. Manias and Street (17), stress the discussions on planning patient care, and management of these discussions are within the responsibilities of the ward round's consultant physician. Parallel to these study findings, earlier studies reported that patient and clinical management are predominant within the framework of roles and responsibilities. However, the teachers interviewed in this study highlighted the educational role of the consultant physician on rounds. Role modeling, providing observations and support and continuing professional development are defined among the roles and responsibilities of the consultant physician.

According to the teachers, there were differences in the roles and responsibilities of the senior residents and residents during ward rounds. These differences can guide the levelling of competencies, especially in residency education. Teachers have stated that pre-round preparation, patient control, completing assigned tasks, full information and clinical management are among the roles and responsibilities of the residents/senior residents. The responsibilities of the senior pediatric surgery resident were separated and new responsibilities were added, such as the control of patient management and clinical operation, completing deficiencies and ensuring clinical management. In the study, the roles and responsibilities defined for the specialist doctors in the team are the same as those specified for the senior residents. The roles and responsibilities defined for these two groups are similar because the senior resident is at the last stage of training before transitioning to specialist. In other studies, giving an overview of patient treatment and care, summarising the patient to the ward round team, keeping written records, making the clinical decisions for patients and leading the ward round are among the basic roles and responsibilities of the student resident (8,18,19). Falco and

Balmer (19), state that the roles and responsibilities of senior residents during rounds are to efficiently organise patient assignments for interns and medical students, review their studies, answer questions and manage the treatment and care process. As stated above, studies predominantly define some of the roles and responsibilities of the consultant physician on rounds, such as leading the round process, making decisions and being a teacher. Unlike Falco and Balmer's (19) study, this study does not address the educational and leadership role of residents, whether senior or not. It is thought that these roles and responsibilities are seen as competencies at the level of expertise rather than the resident level. However, it is known that peer learning is widely used in clinical education in practice (24). If these roles and responsibilities are ignored in the trainers' definitions, the residents' contributions to education may not be fully seen. Besides, if the responsibility of peer learning do not describe clearly, solidarity within professional groups may decrease and induce missed opportunities to become a qualified clinical teacher in the future. It is essential to study these perceptions extensively when reviewing residency training programmes and processes.

In this study, the emphasis on the importance of "hierarchical communication" by teachers, specialists and resident doctors during ward rounds was highlighted in the interviews. Here, two situations in hierarchical communication exist: first, communication between those at different stages in the same occupational group, such as between junior residents, senior residents and trainers; second, communication between different health professionals. There is a clear expectation from the teachers regarding the need to observe "hierarchical communication" among those in the same profession during rounds for doctors. This expectation is also seen in the descriptions of other healthcare team members, such as nurses. Defining nurses as "auxiliary health staff" and their duties and responsibilities as applying ordered treatment and obeying orders indicates hierarchical perceptions among professionals. It is thought that the traditional ward round culture and the perception of the health team are effective on the hierarchical views of the teachers. It is difficult to communicate with healthcare professionals who are generally perceived in a higher hierarchical rank during the ward round. This may affect the participation and roles in the round (15,16,25). Rice et al. (25) studied in the internal medicine clinic and found that the inter-professional hierarchy has negative effects on communication and cooperation. Similarly, Bould et al. (26), reported that negative hierarchical culture has negative effects on patient safety, residency teaching and team functionality. Improving and teaching professional teamwork and communication are increasingly recognised as a higher priority for patient safety (27). In this line, it has been observed that the development of training programmes is important in providing safe care to the patient, increasing the perception of inter-professional learning and improving communication and cooperation between team members (28).

In ward rounds, which are among the central activities of the patient treatment/care process, a collaborative approach between doctors and nurses affects patient care positively (16,29). However, studies have shown that doctors and nurses have little interaction with each other and are not inclined to cooperate during ward rounds. They have also shown that nurses take part in ward rounds as a supplementary object to remove incomplete information and to answer raised questions during rounds, apart from the decision-making process regarding the patient (6,11,17,30-32). Manias and Street (17), found that supporting doctors' knowledge about the patient and providing extra details during ward rounds seem to be among the roles and responsibilities of nurses. Similar research has shown the following: i) nurses' contributions to rounds are not appreciated and tolerated, ii) (32) ward rounds are not conducted in a democratic way, iii) doctors dominate the process, iv) (21) nurses have little participation, and v) it is among the roles and responsibilities of nurses to answer questions asked during rounds (11). From the teachers' standpoints, although doctors and nurses have the same aim, it is obvious there are different opinions about the participation of nurses in the patient care process. Although some of the teachers touched upon the importance of participation and cooperation, here, they gave nurses the role of "transferring and completing information". Other teachers said that they (nurses) should be listeners with passive participation during rounds rather than being professional members of the healthcare team.

During the ward round, the roles and responsibilities of all healthcare team members are specified as having a discharge plan, medication management, making acute decisions regarding patient care, teamwork and ensuring constructive communication security (1,8). Besides, it is essential that all healthcare professionals establish a learning culture individually or as a team during the ward round (1). The teachers stated that ward rounds are valuable learning areas for all healthcare team members as this process contributes to the continuous professional development of the team. Constructive communication and working in collaboration are among the roles and responsibilities of the healthcare team. The results of this study show that the roles defined by the teachers regarding hierarchical communication and nurses' participation in rounds conflict with other roles and responsibilities including communication and cooperation, which the healthcare team should undertake during the ward round. Collaborative practice environments have a positive impact on patient safety and quality of care by enabling the sharing of knowledge, different expertise and perspectives, and establishing equal status among team members (32). In addition, the collaborative approach

is recognised as an integral part of workplace learning for healthcare professionals. The perception of hierarchy can lay negative ground in workplace learning by affecting question asking, feedback and critical thinking (33). It is thought that the reasons such as lack of inter-professional training, experience and being unfamiliar with each other's roles may affect cooperation and communication during rounds. One of the most important findings of this study is that, although the importance of inter-professional collaboration has been stated by many studies at the pre- and post-graduate education level in recent years, it is necessary to work more to reflect this awareness in the field and to improve the understanding and competencies of it.

Study Limitations

The study is limited in generalisability because of its qualitative nature. The data were obtained from pediatric surgery teachers working in the same institution. However, it is expected that the results will contribute to similar studies carried out in different centres.

Conclusion

In this study, the expertise of healthcare team members participating in ward rounds as well as their roles and responsibilities at the individual and team level were defined from their teachers' perspectives. The consultant physician on rounds has a critical role in terms of learner, healthcare team, patient and clinical functioning. The roles and responsibilities of the residents are defined differently according to their level of experience. Although the importance of teamwork and communication was emphasised during the ward round, it was determined that the active participation of nurses in the decision-making process of patient care was limited, and the view that he/she has a passive audience role in the team continues. Despite its limitations on communication, it has been determined that hierarchical communication is among the roles and responsibilities that the team should pursue during rounds. To provide qualified and reliable patient care, it is important to conduct studies in different areas of expertise and with team members that reflect the perceptions of the roles and barriers to these roles during rounds. Although it is not possible to quickly change the established culture and perceptions that support it, action research examining the reflections of teamwork and inter-professional collaboration on patients must be carried out.

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Ethics

Ethics Committee Approval: Ethical approval was obtained from Ankara University Clinical Research Ethic Committee (approval no: 2019/024, date: 18.02.2019).

Informed Consent: The participants were verbally informed about the anonymisation of the data and voluntary participation, and their written consent was taken. To ensure the confidentiality of participants' identities, the interview data were presented in coding.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: N.C., S.T., Design: N.C., S.T., Data Collection or Processing: N.C., S.T., Analysis or Interpretation: N.C., S.T., Literature Search: N.C., S.T., Writing: N.C., S.T.

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