

## Quality of Obstetric Services: Perspectives of Patients, Obstetricians, and Midwives

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**Key words:** quality of obstetric services; technical quality; functional quality; external efficiency.

**Summary.** *Objective.* The aim of this study was to compare the perspectives of patients and health care staff on the quality of obstetric services in an obstetric department.

**Material and Methods.** This study was carried out at the Department of Obstetrics, Hospital of Lithuanian University of Health Sciences, where 68 obstetricians and midwives and 334 female patients completed anonymous questionnaires. Two different versions of the questionnaire for patients and health care staff were prepared with the aim to compare the results of both groups.

**Results.** Patients evaluated technical quality of services significantly better than health care staff. Other items were showed to have no significant differences with the exception of sterility of equipment and premises and appearance of physicians. Patients and health care staff had similar opinions about professional relationship between patients and physicians: patients can expect representation of their interests and evaluation of treatment progress. Evaluation of external efficiency revealed that respondents were satisfied with health care and would recommend the current health care institution to their friends and relatives or would use it again when needed.

**Conclusions.** Patients evaluated technical quality of services significantly better than health care staff. The different perceptions of patients and health care staff about functional quality and external effectiveness of services in most aspects were insignificant.

### Introduction

The quality of health care together with its assessment and improvement plays an important role in the current health care system. In the quality assurance process, much consideration is given to the components of health care service: accessibility, continuity, effectiveness, efficiency, and patients' safety (1). In Lithuania, as in many other European countries, the quality of health care remains a priority of health care policy and strategy. In past decades, access to health care and quality of health care became the focus of studies for international (1–4) and Lithuanian researchers (3, 5–8). The findings of such studies are useful for the objective evaluation of changes in health care delivery and understanding the limitations of reform. Patients' perceptions of health care activities and satisfaction with health care reveal subjective information about the quality of services. According to several studies, investigation of patients' perspectives and their expectations is a more accurate way to assess quality of services rather than analysis of patients' satisfaction (9–12).

Mother and child health is emphasized in the Lithuanian health program for 2008–2010 (13). Low mother and infant mortality rates, an indica-

tor of quality of national health care, are directly dependent on the appropriate obstetric services (2). The infant mortality rate in Lithuania (6.8 per 1000 infants in 2006) decreased to that of countries known for low infant mortality rates compared to the European average (14). Despite favorable statistics, the quality of obstetric services has not been studied, especially from the health care providers' perspectives. High-quality health care has to comply with the needs and expectations of its consumers and also meet standards of effective clinical practice (13, 15). Service suppliers, the health care staff, are important in improving organizational structure and processes by reporting personal perceptions of professional activity (16, 17).

The aim of this study was to compare the perspectives of patients and health care staff on the quality of obstetric services at the Department of Obstetrics, Hospital of Lithuanian University of Health Sciences (former Kaunas University of Medicine).

### Material and Methods

The study was carried out at the Department of Obstetrics, Hospital of Lithuanian University of Health Sciences. A total of 68 obstetricians and mid-

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wives and 334 female patients completed an anonymous questionnaire. The response rates were 94.9% and 81.8% for medical staff and patients, respectively.

**Study Design.** A questionnaire was designed according to the instrument for the assessment of quality of health care service suggested by Ferguson et al. in 1999 (18). The researchers adapted the questionnaire for the particular research purpose. Technical and functional aspects of services were assessed and external efficiency was evaluated. Technical quality was described as visually or physically perceptible aspects of quality experienced by patients through service delivery. This included statements about signboards for orientation; cleanliness and modernity of equipment and facilities; competency, clothing, and appearance of medical staff; patients' physical safety; and schedule and convenience of treatment regimen.

Functional quality of services described the relations between patients and health care staff experienced through service delivery. Many technical and functional aspects were present during care provision that influenced patients' opinions about the services. Patients will use this information whether to choose the current health care institution again or recommend particular services and professionals to family, friends, and others. Functional quality measured personal interactions between patients and health care staff during care delivery: information given to the patient about the necessity of particular treatment; sincerity, regard, and respect demonstrated by health care staff; treatment results and explanation about positive or negative findings; technical quality of treatment procedures; and effective problem solving.

External efficiency was described as an individual's intention to recommend services to anyone else (friends, relatives, and others) or to use the services repeatedly. Intention to reuse services is an indicator of satisfaction and overall positive evaluation of service quality.

Two different versions of the questionnaire for patients and health care staff were prepared with the aim to compare the results of both the groups. A 5-point Likert scale was used (1, "strongly agree"; 5, "strongly disagree"). In the data analysis, answers were classified into three groups: group 1, disagree ("strongly disagree" and "disagree"); group 2, have no opinion, and group 3, agree ("agree" and "strongly agree"). The approval of institutional review board was obtained before data collection.

**Ethical Issues.** The study protocol was approved by the Regional Bioethics Committee of the university hospital. Patients and medical staff were informed about the purpose of the study and principles of voluntary and anonymous participation. The patients and medical staff gave their informed consent before completing questionnaires.

Table 1. Background Characteristics of Respondents

Characteristic	N (%)
Educational level	
University/college	130 (38.9)
Professional school	104 (31.1)
Secondary school	98 (31.0)
Total	334 (100.0)
Place of residence	
Urban	253 (75.7)
Rural	81 (24.3)
Total	334 (100.0)
Income	
<200 Lt	14 (4.2)
201–300 Lt	35 (10.5)
301–500 Lt	74 (22.2)
>500 Lt	189 (56.6)
Not responded	22 (6.6)
Total	334 (100.0)

**Description of the Sample.** A total of 334 female patients participated in the study. The participants were recruited in the ambulatory Department of Obstetrics at the University Hospital. The patients ranged in the age from 18 to 50 years, with a mean age of 35 years. Sociodemographic data are presented in Table 1.

The second sample of respondents (n=68) was health care staff: 30 obstetricians and 38 midwives. In this group, there were 56 women and 12 men with a mean of 14 years in practice.

**Data Analysis.** Data analysis was conducted with the statistical package "SPSS 13.0" for Windows. The mean of sample characteristics and standard deviations were calculated. The Student *t* was used to compare the deviation of the sample mean to the population mean. The chi-square ( $\chi^2$ ) test was used to compare the proportions in independent groups. The level of significance was set at  $P < 0.05$ .

## Results

The health care delivered was evaluated from two different perspectives: patients and health care staff. Analysis of the results revealed that patients rated the technical quality of services significantly better than health care staff. Other items showed no significant differences with the exception of sterility of equipment and premises and appearance of physicians (Table 2).

The different perceptions of patients and health care staff on the functional quality of services in most aspects were insignificant. Patients and health care staff had similar attitudes toward professional relations between patients and physicians: patients can expect representation of their interests and evaluation of treatment progress (Table 3).

External effectiveness was assessed by asking respondents about their intention to choose the health care institution once again or recommend it to others. Overall satisfaction with received health care

Table 2. Evaluation of Technical Quality of Health Care Services From the Perspectives of Patients and Health Care Staff

Item	Score, Mean±SE		P
	Patients	Health Care Staff	
Clear signs, charts and directions in hospital aid orientation	4.19±0.04	4.01±0.12	0.11
Equipment and premises are sterile	4.11±0.04	3.39±0.16	<0.001*
Physicians are dressed appropriately and look tidy	4.44±0.04	4.21±0.08	<0.001*
Midwives are dressed appropriately and look tidy	4.33±0.04	4.24±0.11	0.35
Clear and comprehensive health care information is provided to patients	4.02±0.05	4.09±0.08	0.47
Treatment interventions and rules ensure patients' physical safety	3.99±0.04	4.18±0.08	0.06
Treatment and diagnostic equipment is modern and advanced	3.68±0.05	3.76±0.11	0.48
Physicians are competent and highly qualified for practice	4.23±0.04	4.19±0.07	0.61
Overall technical quality	4.05±0.03	3.91±0.06	0.04*

\*P&lt;0.05.

Table 3. Evaluation of Functional Quality of Health Care Services From the Perspectives of Patients and Health Care Staff

Item	Score, Mean±SE		P
	Patients	Health Care Staff	
All necessary and comprehensive information about the treatment plan is provided to the patient	4.19±0.05	4.06±0.08	0.16
Physicians sincerely communicate with patients	4.15±0.05	3.97±0.09	0.09
Midwives sincerely communicate with patients	4.05±0.05	4.15±0.07	0.26
Physicians are gentle, sensitive, and attentive providing treatment procedures	4.21±0.05	4.16±0.08	0.54
Midwives are gentle, sensitive, and attentive providing treatment procedures	4.06±0.05	4.38±0.07	<0.001*
All patients' complaints and remarks are taken into account by physicians	4.21±0.05	4.09±0.08	0.17
All patients' complaints and remarks are taken into account by midwives	4.04±0.05	4.31±0.07	0.00*
When problems arise, physicians demonstrate efforts to solve them quickly	4.03±0.05	4.09±0.09	0.62
When problem arise, midwives demonstrates efforts to solve the them quickly	3.89±0.05	4.31±0.08	<0.001*
The patient is observed during treatment and results are regularly assessed	4.05±0.06	4.10±0.07	0.49
Information about changes in the treatment plan is provided immediately to the patient	3.91±0.05	4.21±0.07	<0.001*
Prescribed procedures are performed qualitatively	4.11±0.04	4.24±0.06	0.09
Quality of treatment is reliable	3.96±0.05	4.00±0.09	0.74
Health care staff is respectful to the patients	3.99±0.05	4.22±0.08	0.01*
Overall functional quality	4.05±0.04	4.16±0.05	0.10

\*P&lt;0.05.

Table 4. Evaluation of External Effectiveness From the Perspectives of Patients and Health Care Staff

Item	Score, Mean±SE		P
	Patients	Health Care Staff	
I will recommend the current health care institution to others	4.31±0.04	4.29±0.08	0.85
I will use current services again if needed	4.44±0.04	4.31±0.07	0.13
I am satisfied with my treatment and overall services	4.30±0.04	4.25±0.08	0.61
Overall quality of treatment and health care is high	4.16±0.04	4.12±0.10	0.75
Overall external effectiveness	4.30±0.04	4.26±0.07	0.57

services was also evaluated. Points of view regarding the external effectiveness of health care quality in both the group were compared. There were no significant differences between the two perspectives. External effectiveness of health care was rated by 4 points or more. Respondents were satisfied with health care and would recommend the current health care institution to their friends and relatives or use it again when needed (Table 4).

## Discussion

To achieve excellence, another look at the management of our health care system in meeting the needs of our nation is needed. Leaders need to shift obsolete paradigms and set a course to sustain excellence. Today's health care consumers are more sophisticated than in the past and demand increasingly more accurate and valid evidence of health care quality (19).

The results of this study revealed rather similar perceptions of health care quality by health care staff and patients. Significant differences were found in the technical quality assessment of obstetric services in which health care personnel were more critical about care delivered than patients. These varying points of view confirmed, once again, the necessity of different perspectives – of consumers and suppliers – for full-scale quality assessment in health care. Patients with limited competency in health service organization were unable to adequately assess the equipment or professional level of prescribed treatment (1, 20). Usually they felt fear and inconvenience rating their “life savers.”

Other Lithuanian studies on quality of health service reported rather low levels of consumers’ satisfaction with care delivery that directly depended on financial resources of the institution (3, 5, 6). In a study carried out in one Vilnius hospital, about 50% of patients were satisfied with the level of technology. The buildings and facilities in the same hospital were rated as sufficient or poor by one-third of the patients (21). The findings of other studies did not differ substantially (12, 20, 22, 23). The efforts of stakeholders and local administration should be directed to the physical environment and improvement of technical quality: comfortable and esthetically pleasing patient care units and reduced number of beds to 20 in each unit. Clean clothes and bedding and tasty food were considered indicators of good quality care (12, 20, 21, 23). Overall satisfaction with health care may be increased by improving the functional quality of health services. In this study, female patients were stricter and more critical about the functional quality of health care in comparison with health care staff. Patients reported a lack of effective, clear, and comprehensive communication (24). Communication was a prerequisite for the patient’s perception of satisfaction with the care quality in similar studies (25–27). The patients emphasized the importance of receiving adequate information and that an improvement in communication would improve satisfaction (25). It was important that the explanations of health care staff were clear and straightforward, so that the patients could understand their diagnosis and treatment. The

timing of communication also had an influence on patients’ satisfaction. Patients who received information about routine procedures early during their hospitalization rated the quality of care better (17).

There are many challenges facing our health care, but one point is evident – quality is the most important item on the agenda. Quality, as perceived by consumers, must be the number one priority for any health care system that strives to excel. Such a system also realizes that consumers perceive quality in terms of health status achieved, accessibility to health services, and efficiency with which services are provided. Quality in health care therefore means more than just being competent. It also requires adequate knowledge and the right attitude to make proper judgments and the right choice or decision. The decisions must be appropriate and directed not only to the health problem but also to ethical norms and social circumstances.

Patients’ expectations regarding health care are a key factor in satisfaction with health care quality. Several factors influence patients’ expectations both before and during care. More studies in service quality assessment and evaluation from the perspectives of patients and health care staff are needed. Annual surveys with similar methodology would provide findings for the development and improvement of health care services.

### Conclusions

Perceptions of health care quality by health care staff and patients were rather similar. Significant differences were found in the assessment of technical quality of obstetric services in which health care personnel were more critical than patients about care delivered: patients evaluated technical quality of services significantly better than health care staff. The different perceptions of patients and health care staff on functional quality and external effectiveness of services in most aspects were insignificant. Respondents were satisfied with health care and would recommend the current health care institution to their friends and relatives or would use it again when needed.

### Statement of Conflict of Interest

The authors state no conflict of interest.

## Akušerijos paslaugų kokybės vertinimas pacienčių, akušerių ginekologų ir akušerių požiūriu

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**Raktažodžiai:** ambulatorinės akušerinės pagalbos paslaugų kokybė, techninė paslaugų kokybė, funkcinė paslaugų kokybė.

**Santrauka.** *Tyrimo tikslas.* Palyginti ambulatorinės akušerinės pagalbos kokybę pacienčių, gydytojų akušerių ginekologų ir akušerių požiūriu Lietuvos sveikatos mokslų universiteto ligoninės VŠĮ Kauno klinikų (buvusiose KMUK) Moterų konsultacijoje.

*Tyrimo medžiaga ir metodai.* Tyrimas atliktas Lietuvos sveikatos mokslų universiteto ligoninės VŠĮ Kauno klinikų Moterų konsultacijoje. Anoniminėje apklausoje dalyvavo dirbantys gydytojai akušeriai ginekologai ir akušeriai (N=68, atsako dažnis – 94,4 proc.) gydytojai akušeriai ginekologai ir akušeriai (N=68, atsako dažnis 94,4 proc.). Taip pat apklaustos 334 pacientės (atsako dažnis – 81,1 proc.).

*Rezultatai.* Palyginę pacienčių ir personalo paslaugų kokybės vertinimą ligoninėje, nustatėme, kad statistškai patikimai geriau techninę paslaugų kokybę vertino pacientės. Funkcinę paslaugų kokybę panašiai vertino tiek personalas, tiek medikai. Tiek pacientės, tiek medikai išorinį paslaugų efektyvumą įvertino daugiau nei 4 balais ir statistškai reikšmingų skirtumų tarp jų atsakymų į teiginius nebuvo.

*Išvados.* Mūsų tyrimas parodė, kad geriau techninę paslaugų kokybę vertino pacientės, o funkcinę paslaugų kokybę panašiai vertino tiek personalas, tiek medikai.

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