

QUALITY OF SERVICES IN HOSPITAL HEALTH CARE

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Purpose: The quality of services in public hospitals is of key importance for patients' satisfaction. The aim of the paper was to indicate the most important features of the quality of services related to the patient's hospitalization, and then to diagnose the expected and received level of quality of medical services in the opinion of patients of public hospitals.

Design/methodology/approach: The study used SERVQUAL service quality assessment method. The study was conducted in public hospitals in the Silesian Voivodeship. 287 patients were examined. The survey consisted of two questionnaires, a part concerning determining the weights of individual criteria, and particulars. Both questionnaires contained 22 statements each, the particulars included 5 questions. The assessment was made by awarding points on a Likert scale of 1-7. The study was carried out from January to July 2023.

Findings: The conducted study allowed to identify key areas that require corrective action. The biggest gaps between the assessment and expectations of patients in public hospitals regard such dimensions as: empathy, professionalism, and trust, as well as the material elements.

Research limitations/implications: The study proposed a model of quality of services in public hospitals presenting assessment criteria aimed at diagnosing the dimensions that, in the opinion of patients, are well perceived and those that, in their opinion, need improvement.

Practical implications: Knowing the opinions of patients allows public hospitals to obtain information on the extent to which their healthcare meets the expectations and needs of patients. The results of the study provide the basis for taking corrective actions to improve the services provided, and public hospitals gain knowledge about the needs of patients and areas requiring solutions improving the quality of services offered.

Social implications: The use of the results of the study allows to adjust services to the expectations of patients in public hospitals and suggests the direction of further actions to ensure quality in health care.

Originality/value: The paper is an introduction to the complex topic of improving the quality of medical services and achieving an appropriate level of hospital services.

Keywords: medical services, quality of medical services, hospital management.

Category of the paper: empirical research paper.

1. Introduction

The health care system is one of the most important aspects of social life and the quality of medical services provided is of key importance for providing adequate care to patients. Medical services are an area that greatly affects the health and lives of patients, so it is important to ensure their high quality. A medical service is considered to be "a series of intangible activities - from the patient's first contact with the health care facility until leaving it - undertaken on commission to ensure health or enrich personal values" (Krot, 2008) and their high quality depends on a qualified medical personnel, effective treatment processes, availability of equipment and technology, as well as ensuring patient safety. Medical services are a wide spectrum of activities related to healthcare, including diagnosis, treatment, rehabilitation, and disease prevention, which means that they are part of the group of the most specific services that cannot be equally detailed due to their characteristic quantitative, qualitative, cost, and income value. These services are also characterized by high labor intensity and uncertainty of the positive result of their performance.

By improving the quality of the services offered, medical facilities strive to acquire the optimal number of patients, which increases the chances of their efficient functioning and the full use of the contract with the National Health Fund (NFZ). Correlation between the level of health services, patient satisfaction, and the degree of meeting the health needs of the society, indicate the need to set criteria enabling the evaluation for of the quality of health services. Assessment of the quality of services is one of the bases for their improvement. This paper is an introduction to the issues related to the continuous need to improve the quality of medical services by public hospitals, and to achieve a high level of satisfaction among their recipients, i.e. patients.

For the purposes of this paper, author focused on examining the level of quality of medical services in public health care, on the example of hospital services.

2. Quality in medical services

The concept of "quality" is a term difficult to define. This results from:

- its multidimensional and interdisciplinary nature,
- quality assessment depending on experience and knowledge,
- the concept of quality changing as a result of the development of the economy, as well as the level of awareness of entrepreneurs, managers and employees, and
- dependence on the applied quality concepts in a given organization.

The concept of "quality" originally appeared in Greek in the form of the word *poiotes*, introduced for the use of philosophical disputes, meaning the possession of certain qualities allowing to evaluate specific things, and then was translated by Cicero into Latin as the word *qualitas*, defining the properties of an object. In turn, Plato concerned quality as "a certain degree of perfection" (Bielawa, 2011, pp. 143-152). Another definition of quality was developed by his student Aristotle, who wrote that "everything that is done deserves to be done well" (Werpachowski, 2011, p. 382). This statement was the beginning for the formation of the concept of quality, which is an important element in the development of society. Currently in literature you can find a large number of proposed definitions of this concept. For example, the quality according to P.B. Crossy is "compliance with requirements" (Sobkowski, Staszewski, 2003, pp. 88-89). E.W. Deming defines quality as "the expected degree of uniformity and reliability at the lowest possible cost to match market requirements" (Deming, 1986). J.M. Juran's defines quality as "usefulness" (Juran, 1988).

Based on the above definitions, the quality of the service can be defined as the ability to meet the specific needs of the buyer by combining such features of the service that distinguish it from others (Biesok, 2013, p. 13).

The concept of "quality in medical services" in European countries gained the interest of politicians and state authorities only in the mid-1980s. The World Health Organization (WHO) defined this concept as a combination of the features of a service product, assuming at the same time that quality consists of all those features of a service product that, when combined, make the product meet the expressed and unconscious needs of the buyer (Wiśniewska, 2016). According to the Ministry of Health, the quality of medical services depends on such factors as: availability of services, effectiveness of treatment, patient safety, communication with the patient, respect for the patient, responsibility for his/ her health, and cost-effectiveness (Ministry of Health, 2020). In turn, according to the report of the European Agency for Safety and Health at Work (EU-OSHA), the key factors that affect the quality of medical services include: skills of medical personnel, availability and effectiveness of medicines and medical equipment, hygiene standards, and safety procedures (EU-OSHA, 2019).

The main recipient of the offered medical services is society, which is why it is so important to provide them with high-quality services provided by health care facilities. Their quality can be analyzed in the following spheres:

- the sphere of medical services - applies to the service provided, the procedure, examination, surgeries performed in accordance with modern medical knowledge,
- information sphere - concerns direct communication between the medical personnel and the patient (the method of providing the patient with information about his condition, disease, prognosis, etc.),
- technical sphere - applies to equipment, quality of medical and diagnostic equipment used during treatment, and

- the sphere of management, and the economic and administrative sphere - applies to the method of managing financial and material resources, and the effective use of human potential in the services provided by the institution (Krok, 2011, p. 98).

According to research conducted in Poland, the quality of medical services is perceived by patients as one of the most important criteria for choosing a medical facility and the decision to continue treatment (Wojtyna et al., 2019, pp. 99-107), therefore, patients' opinions are important for assessing the quality of healthcare. Therefore, its research is justified in many studies.

3. Significance of the quality of medical services in hospital management

Both in the Polish and world literature there are many works referring to the concepts and methods of management in medical facilities. This results from the dynamic development of medical entities, competitive struggle, and technological progress. These factors mean that medical facilities that are unable to meet the quality expectations of patients are eliminated from the market. Recently, we may also observe an increase in the awareness of patients and their needs regarding medical services, which means that the development of medical facilities depends on the quality they offer. Many authors indicate, that the patient's satisfaction with the treatment is, apart from the knowledge and experience of the personnel, as well as access to modern diagnostic methods, a prerequisite for obtaining good treatment results. Therefore, the implementation of high-quality medical services requires effective coordination of activities and the ability to adapt to constantly changing conditions.

Ensuring a high level of quality of medical services is expensive and therefore cannot be treated as an investment only. When investing in quality, marketing aspects should be taken into account, such as the prestige or image of the facility on the market, but also the possibility of building loyalty relationships between the patient and the facility.

A new approach to issues related to the quality of medical services results from changes in global markets, such as: strengthening the requirements in terms of safety and manufacturer's liability for a product or service, increasing requirements of recipients as to reliability, durability, ease of use, availability. The economic factor also influences the interest of medical facilities in the issue of quality. It was found that there is a direct correlation between the quality of services provided and the financial results of the organization that offers them (Cronin and Taylor, 1992; Hallowell, 1996; Chang, Chen, 1998; Lasser et al., 2000; Newmana, 2001; Rashid, Rokade, 2019 etc.). Increasing the level of quality should usually lead to strengthening the position of the medical facility and attracting additional patients, and thus to improving financial results.

For each healthcare service, patients are the main users, therefore, from the healthcare point of view the patient's opinion on the level of his expectations and satisfaction is an important parameter for assessing the quality of care and an indicator of the assessment of the standard of medical services. Therefore, the patient's experience is currently recognized as one of the three pillars (next to clinical effectiveness and patient safety) of good quality healthcare (Czartowski et al., 2020, p. 10).

At the end of 2020, there were 575 public hospitals in Poland. Most of them are run by counties (44%) and voivodships' self-governments (31%). Only 8 percent of the hospitals were run by cities, and only 2 percent were municipal hospitals. Other facilities are run by medical universities and the ministry ([https://www.portalsamorzadowy.pl/...](https://www.portalsamorzadowy.pl/)).

Hospital management, taking into account the quality of medical services provided by this entity, is to some extent determined by the recipient the service is addressed to and, what is also very important, which entity acts as the payer. Quality in itself is not a goal to be achieved. The primary goal is to provide services that bring maximum profits. We are talking here not only and not primarily about measurable profits that can be translated into the financial success of the hospital, but also about specific profits for the individual beneficiary and for the local community in which the given health care facility operates. Hospital management in terms of the quality of services provided cannot be conducted in isolation from the reality and applicable legal regulations. According to law, there are three entities significant for the health care system on the health services market:

- beneficiary – an entity using health services,
- service provider – an entity providing health services,
- payer – entity financing health services.

We should also remember that the quality management of health services in a hospital is multi-dimensional. The hospital can provide services financed by the National Health Fund (NFZ) and commercial services. Public hospitals are not entitled to collect fees from private payers, which has significant consequences in the provision of medical services. Financing being unsatisfactory for beneficiaries combined with the inability to finance services from other sources causes dissatisfaction of patients and medical personnel, and consequently long queues for services, certainly affecting the health condition of persons entitled to these services.

"Assumptions of the reform of healthcare entities performing medical activities such as hospital services" published in 2021 by the Polish Ministry of Health, drew attention to the "general tendency of deterioration of the financial situation of public hospitals with each passing year". Quoted data show that the total liabilities of public hospitals in 2017-2020 systematically increased from PLN 14,148 million to PLN 18,889 million. Due liabilities increased from PLN 1,617 million to PLN 2,148 million. Voivodeship hospitals had the highest level of total liabilities, followed by county hospitals, hospital run by medical schools and run by cities. The authors of the document also observed unjustified competition between hospitals for patients, medical personnel and material resources, unfavorable for the functioning of

hospitals. According to experts, this negatively affects hospitals that compete instead of complementing each other, which would provide the patient with comprehensive healthcare ([https://www.portalsamorzadowy.pl/...](https://www.portalsamorzadowy.pl/)).

Apart from the aforementioned financial problems affecting the quality of services in public hospitals, literature on the subject also indicates other factors, such as cases of misdiagnosis of patients, lack of interest in the patient during his stay, or problems with communication between healthcare professionals and patients (Laroche et al., 2004; Poon et al., 2004; Verboomoon et al., 2016).

The increase in the number of surveys of service quality - patient satisfaction over the last few years indicates that the concept of quality improvement is becoming more and more important in the service industry year by year, and emphasizes the importance of patient feedback as an important tool in the processes of monitoring and improving the quality of healthcare services (Kasprzyk, 2012, pp. 187-188; Grol et al., 2000, pp. 882-887; Blenkiron, Hammill, 2003; Kropornicka et al., 2003).

Therefore, the main purpose of this paper was to indicate the most important features of the quality of hospital services and to diagnose their expected and received level in the opinion of patients of public hospitals in the Silesian Voivodship.

The results of the conducted study are the basis for taking corrective actions in the field of improving the services provided. They also allow the managing personnel of public hospitals to gain knowledge about the needs of patients and areas requiring the use of solutions to improve the quality of services offered.

4. Methodology

Patient satisfaction with the services of a given hospital is one of the basic determinants of the success of the facility. However, we should remember that meeting customer expectations is not easy and conditioned by many factors. The quality of the service provided depends on the quality of the entire unit. Therefore, the management of public hospitals should take all measures to obtain information about the expectations and requirements of patients in order to better adjust services.

Various methods are used in research on the quality of medical services, e.g. patient surveys, clinical audits, risk analyses, healthcare process assessments and patient safety studies. Commonly used quality testing methods in health care include the Servqual method and its simplified version, the Servperf method (Cronin, Taylor, 1992).

For the purposes of this paper, the author decided to use the first of the mentioned methods developed by a team of American scientists led by Professor A. Parasuraman. SERVQUAL was the first concept developed to measure the quality of services by applying the method of

statistical inference based on empirical research (Parasuraman, Berry, Zeithaml, 1991, pp. 420-450). According to the aforementioned researchers, it is an instrument for assessing the quality of services made by the client (patient), taking into account the occurrence of five gaps in the sphere of service quality:

- gap 1 – is defined as the difference between the patient's expectations and the medical facility management's perception of these expectations,
- gap 2 – is the difference between the medical facility management's perception of these expectations and the specification of the quality of services,
- gap 3 – the difference between the quality of service specification and the quality of service provision,
- gap 4 – determines the difference between the quality of service provision and the information that the patient obtains about it,
- gap 5 – a measure of the difference between the level of meeting expectations and the patient's perception of the service (Parasuraman, Zeithaml, Berry, 1985, pp. 41-50).

The SERVQUAL method distinguishes five dimensions of services (Bonsalla et al., 2005):

1. material elements - understood as the external and internal appearance of the premises, facility, as well as the behavior and presentation of the personnel and its equipment,
2. reliability - ability to perform the service at the promised level and in the indicated time,
3. response time - quick action and response to patient expectations,
4. certainty - professionalism, appropriate behavior of personnel, and
5. empathy - individual approach to the patient.

Despite controversy over the validity and reliability of this model, it is widely used in healthcare (Newman et al., 2001; Teas, 1993, pp. 18-34).

The study is empirical and is based on primary data collected from patients hospitalized in six public hospitals located in the Silesian Voivodeship. 350 questionnaires were distributed to randomly selected patients who were hospitalized at that time at the hospitals selected for the study. The number of returned, correctly completed questionnaires amounted to 287, which gives a response rate of almost 82%. The survey, in accordance with the rules developed by A. Parasuraman's team, consisted of two questionnaires, a part concerning determining the weights of individual criteria, and particulars. The purpose of the first survey was to diagnose the expected level of services, while the second survey was to diagnose the received level of service quality (Wolniak, Skotnicka-Zasadzień, 2009, pp. 38-58). Each questionnaire contained 22 statements. The particulars included 5 questions. The assessment was made by awarding points on a Likert scale of 1-7, where 1 means "I strongly disagree" and 7 "I strongly agree". The use of an odd scale allows the respondent to maintain a neutral position. Due to the number of people surveyed, the study was conducted in the period: January-June 2023.

Referring to the most important issues discussed in the theoretical part, this paper attempts to identify the most important features of the quality of services related to the patient's hospitalization, and then, using the SERVQUAL method, to diagnose the expected and received level of quality of medical services in the opinion of patients of public hospitals in the Silesian Voivodship.

5. Study results

Characteristics of the study group

In the study group (Table 1), men constituted the majority - 73% (210). Most of the respondents are city inhabitants - 65%. The study group was dominated by people married - 71% (203), who obtained vocational or secondary education - 42% (122) and primary education - 34% (96). Respondents with higher education accounted for 24% (69). Among the respondents, the largest group were people aged 56-65 - 29% (83). The second group consisted of people aged over 66 - 22% (64). The third group of respondents were patients aged 46-55 - 16% (46). Patients aged 25-35 accounted for 12% (35), while patients aged 36-45 accounted for 11% (32). The least numerous group in the study were patients - respondents under the age of 25 10% (27).

Table 1.
Socio-demographic criteria of public hospitals patient

Variables	Socio-demographic criteria (n=287)		
		n	%
Sex	Women	77	27
	Men	210	73
Place of residence	city	186	65
	rural areas	101	35
Marital status	single	84	29
	married	203	71
Education	higher	69	24
	vocational/secondary	122	42
	primary	96	34
Age	< 25	27	10
	25-35	35	12
	36-45	32	11
	46-55	46	16
	56-65	83	29
	>= 66	64	22

Source: own study.

Assessment of the quality of medical services in public hospitals

For the purpose of the study, author proposed a model of the quality of services in public hospitals, in which evaluation criteria were presented to diagnose the dimensions that, in the opinion of patients, are well perceived and those that, in their opinion, need improvement. In this model, the first dimension of material elements included: tidiness and order in hospital rooms, appropriate hospital equipment, modern equipment and neat, aesthetic appearance of the personnel. The second dimension - reliability - included the following statements: the attitude of medical personnel to the patient, the level of patient care, the reliability of the service at the promised level and at the indicated time, as well as the quality and aesthetics of served meals. The third dimension - response time - concerned such statements as: quick actions and responding to the expectations set by patients; informing the patient on an ongoing basis about the service provided (the course of the treatment process); efficient implementation of the service by the hospital's medical personnel. The fourth dimension - professionalism and trust - included: competence and qualifications of the personnel, information about the treatment process, information about the medicines administered and recommended use, personnel's dedication to best possible meeting the needs of the patient, and providing information about the purposefulness of performing tests and treatments. And final dimension – empathy – included the following statements: friendliness of the personnel, individual approach to the patient, willingness to help, sense of security and respecting patient's rights.

Table 2.

Dimensions of assessing the quality of services in the field of patient care in registration

Assessment dimensions	Detailed description
Material elements	Tidiness and order in hospital rooms; appropriate hospital equipment; modern equipment; neat, aesthetic appearance of the personnel.
Reliability	Attitude of medical personnel towards the patient; level of patient care; reliability of the service at the promised level and in the time indicated; quality and aesthetics of serving meals;
Response time	Quick actions and responding to the expectations set by patients; informing the patient on an ongoing basis about the service provided (the course of the treatment process); efficient implementation of the service by the hospital's medical personnel.
Professionalism and trust	competence and qualifications of the personnel, information about the treatment process, information about the medicines administered and recommended use, personnel's dedication to best possible meeting the needs of the patient, and providing information about the purposefulness of performing tests and treatments.
Empathy	Friendliness of the personnel, individual approach to the patient, willingness to help, sense of security and respecting patient's rights.

Source: own study based on Parasuraman, Zeithaml, Berry, 1985.

After familiarizing themselves with the model presented above, the surveyed patients assessed the weight of five criteria (from Table 2) dividing 100 points between individual dimensions at their discretion (Table 3)

Table 3.*Determination of the weight of dimensions by the surveyed patients*

Service quality assessment dimensions	Average SERVQUAL dimension weights
Material elements	19
Reliability	20
Response time	21
Professionalism and trust	20
Empathy	20
Total:	100

Source: own study.

In the further part of the study, a seven-point Likert scale was used to measure individual service quality criteria. Respondents rated each of the 22 survey items twice to identify "quality gaps" to measure the difference between their expectations and their perception of various aspects of the service. The analysis of individual questions (Table 4) allowed to obtain the arithmetic averages of service quality assessments in the field of patient care in registration in the surveyed public hospitals and arithmetic averages of the surveyed patients' preferences for the said service. Respondents gave the highest scores to information about the medicines administered and recommended use, observance of patient's rights, keeping the patient informed about the service provided (the course of the treatment process), information about the purposefulness of performing examinations and treatments. The equipment of hospital rooms, quick actions and responses to the expectations of patients, as well as the quality and aesthetics of meals were rated the worst. In addition, the survey using the SERVQUAL method also allowed to calculate relative and absolute quality gaps. The relative qualitative gap is the difference between the respondents' assessment of the quality of services provided by the surveyed health care facilities and their preferences (the respondent's assessment minus the assessment of their preferences). The absolute qualitative gap is the difference between the respondents' assessment and their maximum preferences (the respondents' assessment minus the maximum assessment).

Table 4.*Patients' preferences and assessments regarding the quality of services in public hospitals*

Item	Feature	Respondent's preference	Assessment of the respondents	Relative qualitative gap	Absolute qualitative gap
	Material elements				
1.	Tidiness and order	4.7	3.4	-1.3	-3.6
2.	Equipment of hospital rooms	5.2	3.1	-2.1	- 3.9
3.	Neat, aesthetic appearance of the personnel	4.7	3.4	-1.3	-3.6
4.	Modern medical equipment	5.3	3.4	-1.9	-3.6
	Reliability				
5.	Medical personnel attitude towards the patient	5.0	3.6	- 1.4	-3.4
6.	The level of patient care	4.9	3.5	- 1.4	-3.5

Cont. table 4.

7.	Reliability of the service performance at the promised level and in the indicated time	4.8	3.5	-1.3	-3.5
8.	Food quality and aesthetics	5.2	3.1	-2.1	-4.9
	Response time				
9.	Quick action and response to patient expectations	4.6	3.1	-1.5	-3.9
10.	Keeping the patient informed about the service provided (treatment process)	5.1	3.8	-1.3	-3.2
11.	The hospital's medical personnel performs the service as efficiently as possible	4.9	3.2	-1.7	-3.8
	Professionalism and trust				
12.	Personnel's competence and qualifications	5.2	3.4	-1.8	-3.6
13.	Providing information about treatment	5.1	3.5	-1.6	-3.5
14.	The personnel is dedicated to best possible meeting the needs of the patient	5.3	3.4	-1.9	-3.6
15.	Information about the medicines administered and recommended use	5.1	4.2	-0.9	-2.8
16.	information on the purpose of performing tests and treatments.	5.1	3.8	-1.3	-3.2
	Empathy				
17.	Sense of security	5.0	3.6	-1.4	-3.4
18.	The friendliness of the personnel	5.2	3.4	-1.8	-3.6
19.	The understanding and patience of the personnel	5.3	3.4	-1.9	-3.6
20.	Willingness to help the patient	4.8	3.5	-1.3	-3.5
21.	Individual approach to the patient	5.1	3.5	-1.6	-3.5
22.	Respecting patient's rights.	5.0	3.9	-1.1	-3.1

Source: own study.

The largest relative quality gaps indicated by the respondents concern such criteria as: the quality and aesthetics of meals and the equipment of hospital rooms (-2.1 each), modern medical equipment, dedicated to best possible meeting the needs of the patient, and the personnel's understanding and patience (-1.9 each), or the competence and qualifications of the medical personnel and the friendliness of the personnel towards the patient (-1.8 each). The lowest relative qualitative gap was obtained by such criteria as: providing information about the medicines administered and recommended use (0.9), respecting patient's rights (-1.1), tidiness and order, neat, aesthetic appearance of the personnel, reliability of the service provided on the promised level and at the indicated time, informing the patient on an ongoing basis about the course of the treatment process, information about the purpose of performing tests and treatments, as well as the willingness to help the patient (-1.3 each) and the attitude of medical personnel to the patient, the level of patient care and the patient's sense of security -1.4 each). The largest absolute quality gap concerns the quality and aesthetics of hospital meals (-4.9), the equipment of hospital rooms and the speed of action and response to patients' expectations (-3.9 each) and the efficient implementation of the service by the hospital's medical personnel (-3.8). The lowest absolute quality gap was obtained by such criteria as: providing information about the medicines administered and recommended use (-2.8), respecting patient's rights

(-3.1), informing the patient on an ongoing basis about the course of the treatment process, information about the purpose of performing tests and treatments (-3.2) and the attitude of medical personnel to the patient, the level of patient care and the patient's sense of security (-3.4 each).

Subsequently, the individual SERVQUAL dimensions for the surveyed public hospitals were assessed. For this purpose, an analysis of non-weighted results was carried out by comparing the arithmetic average in an attempt to actually perceive the quality of hospital services with the result of the expected results for each respondent and for each of the assessment dimensions (figure 1). The best rated dimension is "response time" (-0.9) and the worst is "empathy" (-1.83). This result is a confirmation of the ratings given by the examined patients. The total non-weighted SERVQUAL score for the quality of services in the area of patient care in the registration was -1.35 and, according to the adopted criteria, this score can be considered as average.

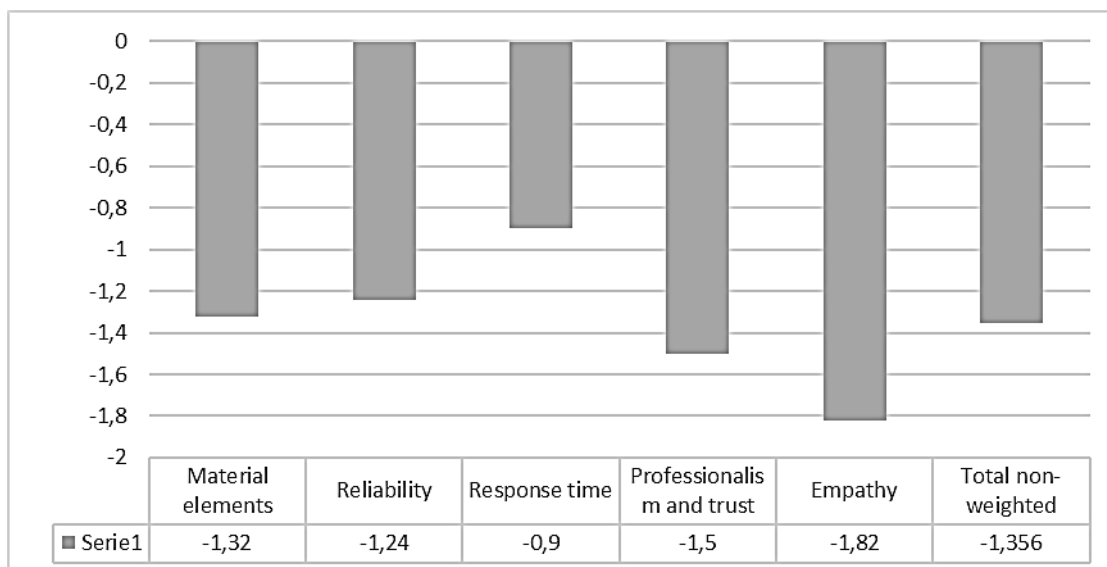


Figure 1. Assessment of SERVQUAL dimensions calculated using the non-weighted method for the surveyed health care facilities.

Source: own study.

A weighted SERVQUAL score was then calculated. For this purpose, the data defining the average weights of dimensions assigned by the surveyed patients were multiplied by the assessment of dimensions calculated using the non-weighted method. The lower the value of the weighted average for a given dimension, the greater the improvement efforts it requires (figure 2).

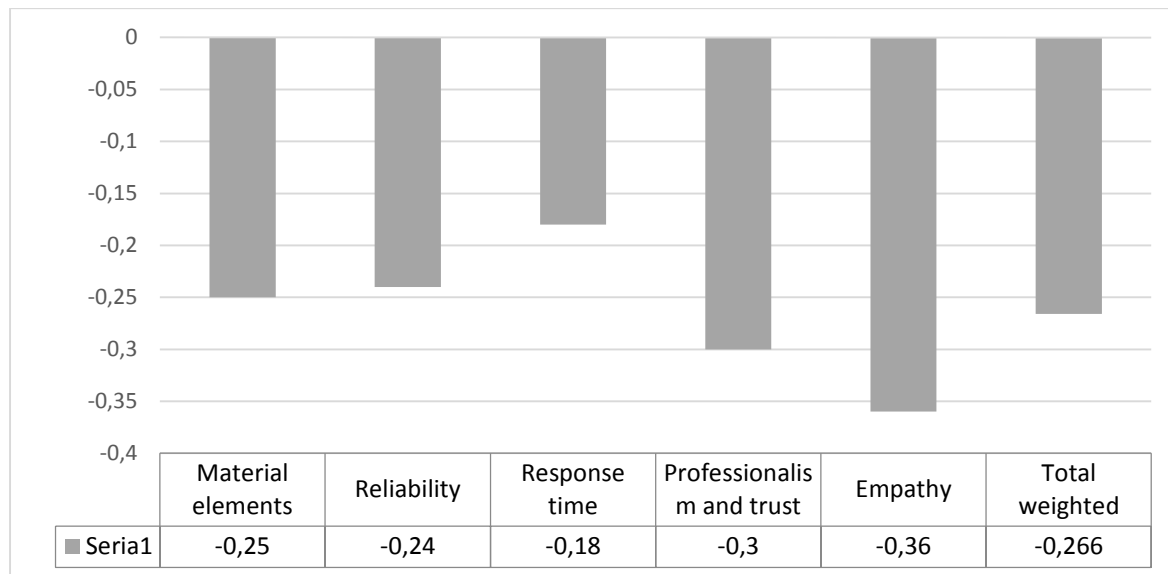


Figure 2. SERVQUAL weighted average for individual quality dimensions of the surveyed health care facilities.

Source: own study.

For all results of the non-weighted and weighted average, the Servqual values were negative, which means that the quality of medical services expected by patients differs from that offered by the surveyed public hospitals and is unsatisfactory.

6. Discussion

This study aimed to assess the current quality of hospital services using the Servqual scale in relation to the opinions of public hospital patients. Regarding the results of the conducted study, it can be concluded that for patients using services in public hospitals, the biggest problem is the "empathy" dimension (-0.36). This may be the result of the personnel's lack of understanding and patience towards patients (-1.9), lack of kindness (-1.8) or lack of individual approach to the patient (-1.6). It can also be linked to the burnout syndrome, which is a natural phenomenon. Working in a hospital is very demanding and exhausting. Hospital employees encounter illness, suffering, and death on a daily basis, which can lead to the fact that at some point they become indifferent, start to perform their work mechanically, treating patients as objects. On the other hand, the cause of poor work can be fatigue and heavy workload. This is certainly an issue requiring further research. We should remember, that the medical personnel plays a key role in building a lasting relationship between the hospital and the patient. Therefore, shaping proper relationships with patients affects the entire service process, including the final satisfaction of the patient (Kunecka, 2010, pp. 451-457).

Personnel behavior affects the quality of work and the social image of the hospital (Krot, 2008, pp. 59-61). A characteristic feature of medical services is their low degree of complexity. In this case, apart from an accurate diagnosis, patients expect from the doctor understanding of their needs, support and reassurance, listening skills, acceptance of their suggestions, and thus developed interpersonal skills (Kapała, 2001, p. 17).

The second dimension requiring corrective action is "professionalism and trust" (-0.3). The biggest gaps between the assessment of patients and their preferences concern issues related to the personnel's efforts to meet the patient's needs (-1.9), personnel competence and qualifications (-1.8) and providing patients with information about the treatment process. Patients are interested in the effectiveness, urgency and safety of the treatment and care process. In this sense, the quality of medical services depends on the qualifications of medical personnel and the conditions in which medical services are provided, as well as on the course of procedures used and the atmosphere in which these procedures take place, and finally on recovery or improvement after leaving the health care facility. Therefore, when considering the quality of medical services from the patient's perspective, certain elements should be taken into account, which undoubtedly include the professionalism of the medical personnel, patient safety, but also: quick access to the right advice, effective treatment provided by trusted specialists, availability of clear, understandable information, participation in making decisions related to treatment and care, respect and maintaining intimacy in the process of diagnosis and treatment.

The third worst rated area requiring changes is the "material" dimension (-0.25). The largest gap (-2.1) between patients' expectations and their assessment concerns the social conditions and equipment of hospital rooms. Patients pointed out primarily the issues related to the availability of the press, television, the Internet, the number of patients in the room and its spaciousness. Another gap concerned the lack of use of modern medical equipment - (-1.9). According to the report of the Supreme Audit Office (NIK) from 2021, hospitals do not use modern medical equipment. The reason for this may be poorly planned purchase of medical equipment, lack of properly trained personnel, lack of contracts with the National Health Fund, or costs exceeding the amounts reimbursed by the National Health Fund ([https://www.prawo.pl/...](https://www.prawo.pl/)). When undertaking corrective actions in the indicated areas, it should be remembered that the patient does not base the assessment of the quality of medical services on the effect of treatment, but above all, he focuses on material elements, previous experiences and behavior of medical personnel. Therefore, we should remember that these factors will become more important only when the technical quality reaches a minimum.

These results are confirmed by earlier nationwide surveys, according to which 66% of adult Poles negatively assessed the functioning of the health service. Including 27% - definitely negative. 30% were of the opposite opinion (Public Opinion Research Center, 2018). Polish patients are more willing to choose private medical care. In 2022, their number increased by 17% compared to 2021 ([https://biuoprasowe.medicover.pl/..](https://biuoprasowe.medicover.pl/)). Also, international studies show

the weakness of the quality of health care in Poland compared to other European countries. In the Euro Health Consumer Index (EHCI) for 2018, Poland was ranked 32nd out of 35 countries assessed, scoring 585 points out of 1000 (Health Consumer Powerhouse; Euro Health Consumer Index 2023; [https://worldpopulationreview.com/...](https://worldpopulationreview.com/)). The lack of a long-term health policy strategy makes it difficult to find a model tailored to the needs and expectations of citizens (Feliksiak, 2016).

The patient's experience is shaped both by all the elements and situations with which he comes into contact while using hospital services, as well as by contact with its employees. This contact builds the patient's ideas and opinions about the quality of work of the entire entity. Therefore, the aim of the activities of medical facilities should be to achieve patients' satisfaction and gain their trust. The quality of medical services becomes one of the most important elements of the effectiveness of health care facilities in a competitive market (Horbaczewski, 2006, p. 10).

The use of the Servqual test method will allow to improve the services provided by public hospitals, identify areas that should be improved as soon as possible to be able to satisfy the patient as much as possible. Modern management concepts assume continuous improvement, which is why hospitals should not limit themselves to the proposed changes, but should systematically conduct patient satisfaction surveys and implement further changes. The conducted analysis allows us to conclude that in all five examined areas the results were negative, which means that public hospitals do not meet the expectations of their patients.

When reviewing the literature on the management of the quality of medical services, we can find examples of empirical studies that confirm the correlation between the management of the quality of medical services and the improvement of medical results and satisfaction of patients and medical personnel, along with their sources: For example, research conducted by Linda Aiken and her team in the United States showed that medical facilities that used advanced quality service management methods had better patient safety records than those that did not (Aiken et al., 2002, pp. 1987-1993). Study conducted in Switzerland showed that medical facilities using service quality management obtained higher patient satisfaction ratings than facilities that did not use them (Bühler et al., 2019, pp. 647-656). Also, study carried out in Poland confirmed that the introduction of quality management programs for medical services in hospitals led to reduction in the number of medical errors and to improvement in patient satisfaction (Grochowski et al., 2015, pp. 1-11).

These studies support the thesis that effective quality management of healthcare services is essential to ensure the best quality of healthcare for patients and for the satisfaction of healthcare professionals, and that SERVQUAL can help hospitals identify the characteristics of healthcare services considered important by patients (Alrubaiee et al., 2011; Pekkaya et al., 2019, pp. 340-347).

7. Summary

In conclusion, managing the quality of health services in public hospitals is a key element in providing patients with the best possible medical care. There are many tools and methods that allow for continuous improvement of medical processes and services. It is important that hospitals focus on providing the highest quality services to attract and retain patients and provide them with the highest level of medical care.

Therefore the quality of medical services is one of the main elements of the effectiveness of the functioning of hospitals on a competitive market, and patient satisfaction with the services they offer is a prerequisite for obtaining good treatment results. The results of the assessment of the quality of health services are one of the grounds for their improvement, and at the same time they determine the implementation of the principle of customer-patient orientation.

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