

## DIRECTIONS OF CHANGES IN HEALTHCARE UNIT MANAGEMENT FROM THE PATIENT'S PERSPECTIVE

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**Abstract:** The aim of the article is to determine the direction in which changes should be introduced in the management of healthcare units to increase patient satisfaction with the organization of services in the examined unit. It is emphasized that hospital management is a comprehensive process that includes planning, organization, coordination, and control of activities. These subprocesses are aimed at the efficient provision of medical services and the management of material and human resources. Based on the literature, the authors have identified factors influencing effective hospital management. Special attention is paid to the quality of medical care and accreditation as tools for raising quality standards. In the empirical part, the results of research conducted in a group of hospitals are presented, in which respondents assessed the level of satisfaction in selected areas. The Kano methodology was then used to understand patient expectations and classify attributes of hospital services. The results of the analysis indicated that some attributes have a neutral classification, while others are attractive to patients and generate a high level of satisfaction. The final part of the study includes recommendations for directions of changes in the management of healthcare units identified based on the conducted research.

**Key words:** healthcare, hospital management, quality, patients satisfaction, Kano method

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### Introduction

The main goal of healthcare (HC), although it varies between countries and regions, is to provide medical care, promote health, and improve the quality of life for patients and society as a whole. Defining the concept of HC, it can be stated that HC is a comprehensive system of services and activities aimed at maintaining, restoring, and improving the health of individuals or populations. There are numerous definitions of HC in the literature (Marcinów and Olejniczak, 2011; Stefko et al., 2016), but the emphasis is often placed on those mentioned above.

Healthcare consists of elements such as medical, psychological, and psychiatric services, preventive and long-term care, chronic disease management, information

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systems, medical documentation, financing, health insurance, scientific research, medical development, and care coordination (Soffel, 1993; Pol, 1992). The implementation of all these tasks within the HC system rests on healthcare units. These units include hospitals, medical clinics, long-term care facilities, specialized clinics, public health centers, emergency medical services, mental health centers, pharmacies, and medical laboratories (Sanders, 2005; Nithman, 2015). Managing these units is a complex process that requires knowledge of various regulations, procedures, and guidelines. The more complex a healthcare unit (HU) is, the more challenging its management becomes (Dantas, 2001). Additionally, demographic changes, shifts in the prevalence of diseases, and technological advancements necessitate changes in HU management.

In light of the above, it seems rational to seek problematic areas that imply the need for changes in healthcare. Therefore, it becomes necessary to identify attributes of hospital service organizations. Achieving efficiency in this regard is possible through designing changes in response to real issues in healthcare unit (HU). The research problem is defined as understanding public opinion regarding the significance of selected attributes of hospital service organizations. The objective of this study is to identify the attributes most crucial for achieving patient satisfaction during hospitalization. Thus, the following research hypothesis has been formulated: „*The organization of the hospitalization process determines the level of patient satisfaction.*” Verifying the hypothesis and achieving the research objective will enable us to identify directions for organizational changes in managing the given healthcare unit (HU).

Achieving the set goal required conducting survey research. The study consisted of two parts. In the first part, with the consent of the selected unit, data from surveys collected during an audit conducted by the Center for Quality Monitoring (CMJ) were used, and in the second part, the results of surveys collected using the Computer-Assisted Web Interview (CAWI) method were utilized. Based on the analysis of respondents' answers, directions for changes in the management of the selected HU were identified. Furthermore, the methodology used can be applied to other HUs and for research expansion purposes.

### **Literature Review**

Hospital management (HM) is a complex subject due to the intricacies of the field. Perhaps that's why this topic is frequently explored by numerous researchers. In the scientific publication database ScienceDirect, there are over 1 million studies registered in this domain. If we narrow the search down to the last five years, we get over 389,000 publications. As of the preparation of this paper, there are already 64,939 publications from the year 2023 alone (as of September 11, 2023), and there is a noticeable annual increase in the number of publications from 2018 to 2023 (ScienceDirect database).

Hospital management (HM) is a complex process that encompasses planning, organization, coordination, and control of activities aimed at efficiently providing

medical services and managing hospital resources and personnel. Various authors identify many contributing factors affecting effective HM. These include the involvement of experienced physicians in the top-level management team and the implementation of public health policies (Tushar et al., 2023). Dantas (2001) discusses the role of managers in primary healthcare facilities, emphasizing the significance of the administrative, technical, and political dimensions of their work. Fein (1993) focuses on intensive care units, emphasizing the need to maintain quality while simultaneously increasing hospital efficiency and profitability. Luzi (1997) explores the integration of clinical and managerial activities in healthcare organizations, particularly through the use of communication and information system guidelines. Another factor influencing HM is physicians employed in public healthcare organizations engaging in private practice (DePietro, 2006). According to this author, hospitals utilize very little information from private practice to improve knowledge management, career development, or training planning. Hospital management aims to provide high-quality care to patients, efficiently utilize resources, and meet regulatory requirements. Bloom et al. (2015) presented interesting results when investigating the quality of hospital management. Their research confirmed that increased competition among hospitals (a greater number of healthcare organizations) leads to higher management quality (an increase of 0.4 standard deviations) and better hospital performance (a 9.7% increase in survival rates for acute heart attacks). On the other hand, Fiorillo et al. (2021), in one of their studies, point out the benefits of using Lean tools to improve hospital management. HM encompasses areas such as strategic planning, financial management, personnel management, operations management, quality management, information technology management, risk and compliance management (Rustiarini, 2023; Ivascu and Cioca, 2019), communication and patient relationships, development and innovation (Duong et al., 2023), and crisis management. Considering the purpose of this study, HM will specifically refer to the management of the quality of hospitalization-related services.

Quality management in hospitals (QMH) aims to ensure that medical care is safe, effective, and in line with best medical practices. QMH involves monitoring quality indicators, managing medical risks, responding to incidents, and improving care processes. Maintaining good relationships with patients and their families, proper patient communication, handling complaints and suggestions, and ensuring patient satisfaction are crucial complements to hospital management efforts. Patient satisfaction is influenced by the perceived quality of services provided by the hospital (Wang et al., 2022; McConnell et al., 2016; Zhao et al., 2023). Various quality indicators are used for assessment, including:

- Healthcare-Associated Infections (Smith et al., 2022; Al-Tawfiq, 2014; Rani, 2020).
- Readmission Rate (Aliyev et al., 2023; Shea, 2021; Witcraft et al., 2021; Gavurova et al., 2020).
- Patient satisfaction index (Wang et al., 2021; Meesala and Paul, 2018; Alibrandi et al., 2023; Akthar et al., 2023).

- Service availability index (Rourke, 1991; Boomija, 2019).
- Treatment effectiveness indicator (Cheng, 2005; Ivanková et al., 2020).
- Medical technology utilization index (Chluski and Ziora, 2015; Cohen, 2002).
- Compliance with regulations and standards index (Marzban, 2017; Hoseinpoufard et al., 2012).

The literature indicates the significant importance of the availability and quality of medical services in hospitals. For example, Rourke (1991) presents a review of medical services in small hospitals in Ontario, providing the number of beds and various medical procedures performed. Boomija (2019) discusses a system that allows users to browse hospital details, including physician and medication availability, while Cheng (2005) focuses on the assessment and analysis of the quality of medical services in inpatient wards of public and non-profit hospitals. As researchers point out, hospital management is closely related to their evaluation (Gavurova et al., 2020).

One of the essential documents confirming the quality of hospital services is the accreditation certificate (regulated by Article 3 of the Act of November 6, 2008, on accreditation in healthcare in Poland). Hospital medical accreditation is a system of requirements and standards concerning the hospital's equipment and organization of work. Various institutions worldwide offer accreditation. For instance, The Joint Commission operates in the United States, while in Poland, the Ministry of Health's Center for Quality Monitoring is the sole institution authorized to conduct accreditation processes among hospitals. Accreditation, upon the recommendation of the Accreditation Council, is granted by the Minister of Health for a period of three years after an audit is conducted. Hospitals seek accreditation because it brings several benefits, including raising quality standards, increasing patient trust, recognition by regulatory authorities, enhancing competitiveness, and improving internal processes. However, it's worth noting that the accreditation process can be demanding and time-consuming, and hospitals must systematically maintain compliance with the standards to retain their accreditation.

An interesting research area is the analysis of the impact of accreditation on quality management processes in hospitals. Some researchers maintain that maintaining and monitoring hospital support service quality is the most influential factor driving quality management in hospital services (Tushar et al., 2023). In this sense, hospitals with accreditation are believed to significantly enhance their ability to provide patients with a sense of security (Wiśniewska and Muraczewska, 2015). However, others (Marzban, 2017), when examining quality indicators in hospitals, do not find significant differences in the indicators of hospital care processes with varying levels of accreditation. Nevertheless, patients are a vital aspect of this process (QMH), and their satisfaction is a key factor for assessing healthcare services (Gavurova et al., 2020).

Many scientific studies highlight various significant factors influencing patient satisfaction (Oltedal et. al. 2007). For instance, Alibrandi et al. (2023) indicate that patient satisfaction depends on both the outpatient clinic where care is provided and

the assessment of care quality. Their research shows that factors contributing to higher satisfaction include parking availability, facility cleanliness, and the assessment of doctors, provided their competencies and professionalism align with patient expectations. In other studies, authors emphasize hygiene and sanitary conditions (Asiamah et al. 2022), comfort and privacy (González et al. 2005), as well as the manner of medical information transmission (Salomon et al. 1999). Conversely, authors Meesala and Paul (2018) argue that reliability and response time (rather than empathy, tangibility, and assurance) impact patient satisfaction. Patient satisfaction is directly related to their loyalty to the hospital. According to these authors, marital status and age do not influence the regression weight of the analyzed variables, although gender has some significance.

In the field of hospital management, the search for areas and directions of potential improvements in healthcare delivery is another interesting research area. Contemporary researchers focus on patient satisfaction, management's approach to change, and staff perception (Shuv-Ami and Shalom 2020). Stelmach et al. (2014) demonstrated that changes in hospital ownership in Poland improved patient opinions about its functioning. Gabutti (2017) identified three main pillars of change in hospitals: a progressive patient care model, patient-centered care approach, and lean thinking. However, there are knowledge gaps concerning the effective implementation of these changes. McKee (1998) emphasized the need for active management of organizational changes in healthcare and the importance of considering their impact on care quality. Nevertheless, other scholars observe that hospital management has a greater impact on the quality of processes than on clinical quality (Marley, 2004). Walston (2003) underscored the significance of employee perceptions in sustaining serious changes in hospitals. Additionally, there are studies confirming the importance of providing hospital staff with information about patient satisfaction survey results. For example, Rezenblum et al. (2012) found that physicians who received feedback from hospital management about patient satisfaction on their ward over the past year had a more favorable view of a structured patient satisfaction improvement plan.

The literature review conducted indicates broad recognition of the topic of patient satisfaction and management of healthcare unit (HU). However, it still appears insufficient to determine which elements of the hospitalization process are absolutely essential to patients and which only marginally enhance the level of satisfaction with hospitalization services. This represents a research gap. Identifying these elements can be considered crucial when designing changes in healthcare unit (HU) management.

### **Research Methodology**

The research subject was a so-called complex hospital located in the Silesian Voivodeship, consisting of two main hospital units, with a total of 32 departments and an equal number of outpatient clinics, capable of hospitalizing over 800 patients

(with 834 beds, and the hospital also performs day surgeries or procedures lasting less than one day).

The conducted empirical research was aimed at finding answers to what extent hospital management processes should be improved to enhance the quality of healthcare. Research on management processes was carried out from the patient's perspective. The research procedure consisted of two stages:

-the first stage involved a detailed analysis of the audit results of the studied hospital conducted by an external entity.

-in the second stage, the Kano methodology was used to identify attributes of hospital service organization.

The methods used during the empirical research allowed for a scientific exploration of the topic. In the first stage of the research, data from questionnaires constructed for the hospital audit purposes were analyzed. These questionnaires were provided by the studied hospital and collected during one month in May 2023. The number of responses to individual questions ranged around two hundred. In some questions, a lower response rate was noted due to the non-obligatory nature of providing an answer. In others, respondents had the option to select multiple choices, leading to an increased number of votes. Given the theme of this study, only a few questions were selected from the entire set, based on which several areas requiring improvement were presented.

The second stage of the research was conducted using a questionnaire developed based on the Kano methodology (named after its creator, Professor Noriaki Kano). The Kano methodology is a tool used in quality management and helps understand and classify customer expectations regarding products or services, in this case, patient expectations regarding the hospitalization process. Surveys were collected using the CAWI method (Computer-Assisted Web Interview). Responses were obtained from 212 participants to whom a link to the form was provided via social media. In this case, respondents did not have to be patients of the hospital selected for the study. Their evaluations regarding selected attributes affecting the perception of the quality of hospital services were important.

**Table 1. Attributes of hospital service organization**

No.	Attribute
SO1	doctor's visits in the hospital room
SO2	medical consultations
SO3	patient visiting hours
SO4	admission to the hospital ward
SO5	time to receive hospital discharge (Hospital Treatment Card)
SO6	bureaucratization of documentation during hospitalization
SO7	dedicated rest areas
SO8	clear information in the Hospital Treatment Card
SO9	courtesy and friendliness of doctors towards patients

**Source:** Own study based on empirical research.

The questionnaire consisted of 41 attributes, and each attribute had two simple questions – one regarding the occurrence of a given feature and the other regarding its absence. Respondents were asked to provide one of the following answers: "like it," "expect it," "don't care," "live with it," "dislike it" (Matzler and Hinterhuber, 1998; Santhoshkumar et al., 2022).

**Table 2. Example question concerning attribute SO1**

SO1. Doctor's visits in the hospital room take place according to the previously communicated schedule to patients.				
a. What if it is the case? (functional form of the question)				
like it	expect it	don't care	live with it	dislike it
b. What if it is not the case? (dysfunctional form of the question)				
like it	expect it	don't care	live with it	dislike it

**Source:** Own study based on Kano's Methods.

The attributes related to hospital service organization are listed in Table 1. In Table 2, for example, questions (of a functional nature: *What if it is like that?* and dysfunctional nature: *What if it is not like that?*) are presented for a selected attribute: doctor visits in the hospital room taking place according to the previously announced schedule made known to patients (denoted in the questionnaire with the symbol SO1).

Then, following the Kano methodology guidelines, responses regarding each attribute were examined, and they were assigned to a specific type, i.e., QE - Questionable, AE - Attractive, RE - Reverse, IT - Indifferent, OD - One-dimensional, and ME - Must-be (table 3).

**Table 3. Kano evaluation table**

Requirements		Disfunctional				
		Like it	Expect it	Don't care	Live with it	Dislike it
Functional	Like it	QE	AE	AE	AE	OD
	Expect it	RE	IT	IT	IT	ME
	Don't care	RE	IT	IT	IT	ME
	Live with it	RE	IT	IT	IT	ME
	Dislike it	RE	RE	RE	RE	QE

**Source:** Own study based on Kano's Methods.

In the search for correlations between a given attribute of hospital service organization and patient satisfaction, satisfaction coefficients - CC and patient dissatisfaction - were used according to the following formulas (Berger et al. 1993):

$$CC = (AE+OD)/(AE+OD+ME+IT) \quad (1)$$

$$DC = (OD+ME)/(AE+OD+ME+IT) \quad (2)$$

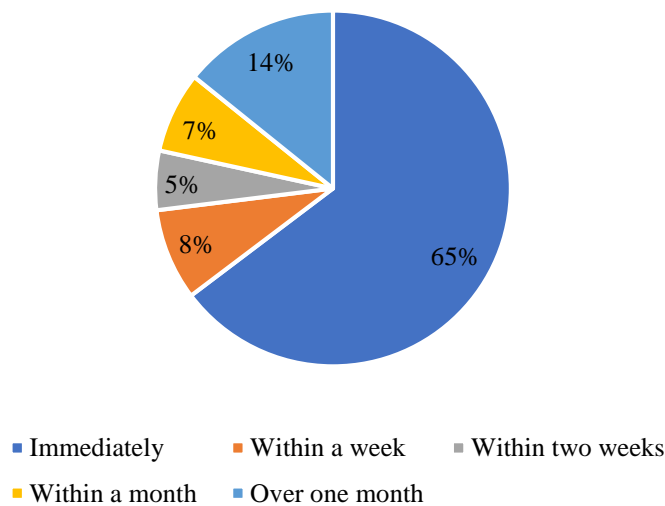
The satisfaction coefficient (CC) value ranges from zero to one. The closer the value is to 1, the greater its impact on patient satisfaction. Conversely, if the dissatisfaction



coefficient (DC) value is close to one, patient dissatisfaction affects the respective quality attribute (Matzler and Hinterhuber, 1998).

### Research Results

The first stage of the research involved analyzing the results of an external audit. The data provided by the hospital from questionnaires collected during the audit conducted by CMJ included responses to an incomplete set of questions, allowing only a general understanding of the hospitalization topic. It is worth noting that in accreditation studies, no information was obtained regarding the gender and age of patients or other sensitive data. The presented results of the analysis only include percentage breakdowns of responses provided by surveyed patients. Areas requiring empirical investigation were identified as follows: admission time to the hospital, services provided by staff (medical, nursing, midwifery, physiotherapists and rehabilitators, medical caregivers), living conditions during hospitalization, and post-hospitalization health recommendations.



**Figure 1: Time from referral to hospital admission**

Source: Own elaboration

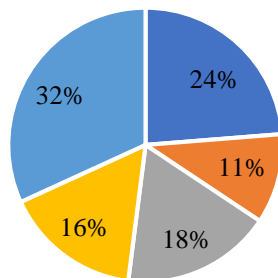
One of the questions in the questionnaire pertained to the time that elapsed between receiving a referral and the patient's admission to the hospital. In this case, 204 respondents provided answers, with 65% of the surveyed population being hospitalized immediately (Figure 1). From the perspective of improving hospital management processes, particularly the organization of hospital services, the high percentage of patients waiting for admission for over a month (up to 14%) appears concerning. There are undoubtedly many diverse reasons for this, likely not solely on the hospital's side. However, this fact does not change the reality that such a



statistic can negatively impact the assessment of the quality of services provided by the hospital.

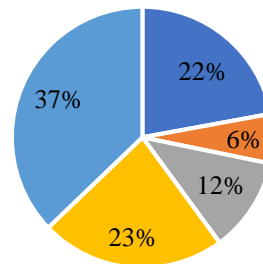
The context of the level of quality of hospital services, specifically medical care, is reflected in the percentage of satisfied patients (Figure 2). More than half (66%) of the 198 respondents are individuals who have experienced medical staff care and feel fully, rather well, or moderately cared for (32%, 16%, and 18% respectively). On the other hand, a significant 24% declare that they did not experience the expected medical care, which may somewhat correspond to the dissatisfaction of patients with the prolonged admission time to the hospital ward (see Figure 1).

A slightly different pattern of responses compared to medical care was obtained concerning services provided by nurses and midwives, as well as physiotherapists and rehabilitators. In the first case, the percentage of patients fully cared for, rather well, or at a moderate level is 72% among the 198 respondents, namely 37%, 23%, and 12%, respectively (Figure 3). Regarding the services of physiotherapists and rehabilitators, 57% of patients feel cared for (Figure 4). It's worth noting that not every hospital ward provides physiotherapy and rehabilitation services, which is why the number of responses obtained was only 97. On the other hand, more than 20% declare that they did not experience the expected nursing and midwifery care as well as physiotherapy and rehabilitation (22% out of 198 - Figure 3 and 27% out of 97 - Figure 4). Meanwhile, 27% out of 120 respondents expressed a negative opinion about the care provided directly by medical attendants, with 37% being fully satisfied (Figure 5).



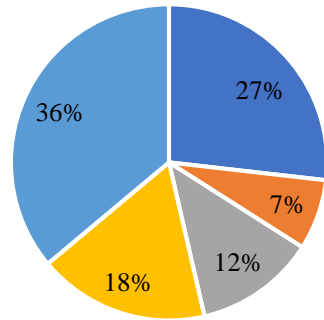
- Definitely not
- I don't think so
- On average
- I guess so
- Definitely yes

**Figure 2: Doctors' care**  
Source: Own elaboration



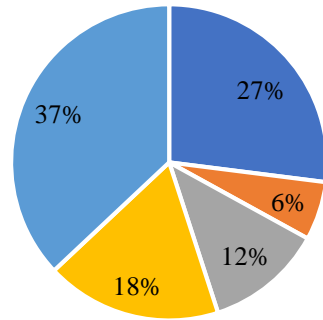
- Definitely not
- I don't think so
- On average
- I guess so
- Definitely yes

**Figure 3: Nurses/midwives' care**  
Source: Own elaboration



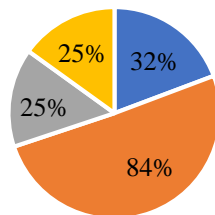
- Definitely not
- I don't think so
- On average
- I guess so
- Definitely yes

**Figure 4: Physiotherapists' care**  
 Source: Own elaboration



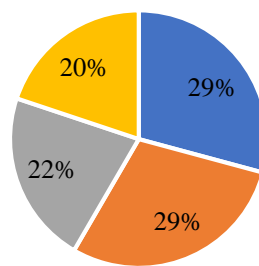
- Definitely not
- I don't think so
- On average
- I guess so
- Definitely yes

**Figure 5: Medical caregivers' care**  
 Source: Own elaboration



- I have no objections
- I have reservations about the hospital room
- I have reservations about the bathroom
- I have reservations about the rest conditions

**Figure 6: Conditions of stay in the hospital**  
 Source: Own elaboration



- Definitely yes
- Within a certain
- Not really
- Definitely not

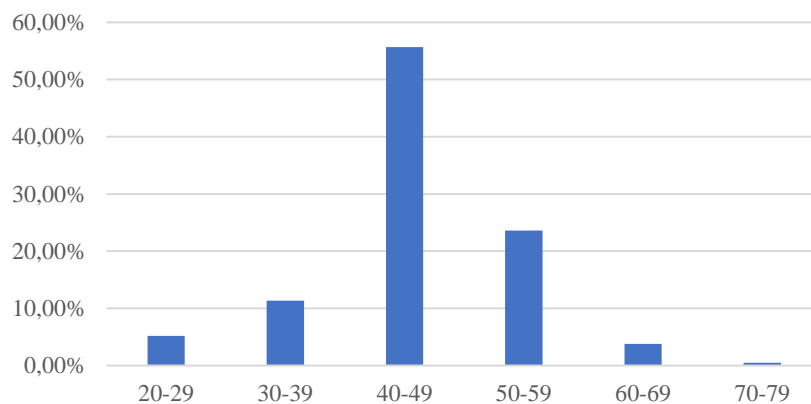
**Figure 7: Health-promoting guidelines in the Hospital Treatment Card**  
 Source: Own elaboration

When assessing the conditions of their stay in the hospital, only 32% of respondents (out of all responses obtained) did not express any reservations (the question allowed for multiple choices, hence the percentages in Figure 6 do not add up; the number of selected options was 268, and the number of respondents was 120). The most inconveniences were related to the conditions in hospital rooms (over 84% of responses). The hospital's investments in improving sanitary infrastructure were reflected in a significantly lower percentage of responses expressing reservations about the bathrooms (Figure 6).

In the area of assessing patients' opinions on the health recommendations provided in the Hospital Treatment Card (commonly referred to as the discharge summary), only 29% out of 161 responses confirmed receiving satisfactory post-hospitalization guidelines (Figure 7). In this context, a substantial 20% of respondents declared a lack of knowledge in this regard.

In summary, the results of the research indicate the need for a more detailed examination of the causes and issues related to hospitalization processes. However, it is hard to disagree with the opinion that these processes should and can be improved, taking into account infrastructure (i.e., buildings, medical equipment, etc.), social capital, accessibility and quality of services, and safety. The organization of hospital services also remains of significant importance.

Following the adopted research procedure, the second stage involved a detailed analysis of selected attributes of hospital service organization. The preparation of a custom questionnaire based on the Kano methodology guidelines allowed for conducting the survey electronically, where the link to the form was distributed through social media.

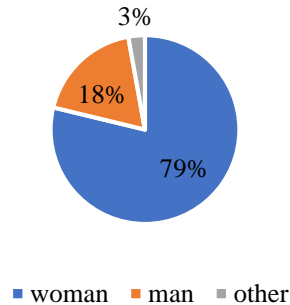


**Figure 8: Characteristics of the research sample - age**

Source: Own elaboration

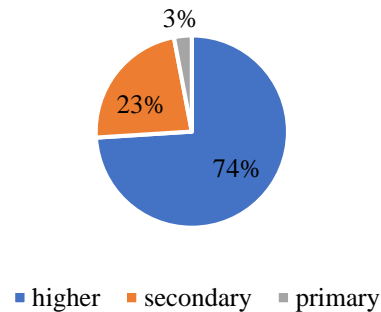
The detailed characteristics of the study sample are presented sequentially in figures: 8, 9, and 10. The age distribution of the respondents indicates that the majority of

participants in the study were between 40 and 50 years old (Figure 8). Women predominated in the surveyed population - 79% (Figure 9). In terms of education, only 3% of respondents declared a primary level of education, while over 70% had a higher education (Figure 9).



**Figure 9: Characteristics of the research sample – gender**

Source: Own elaboration



**Figure 10: Characteristics of the research sample - education**

Source: Own elaboration

The description of hospital services was based on a set of proposed 9 attributes, presented in Table 1.

According to the Kano methodology, an analysis of response statistics given by respondents was conducted for each of the above 9 attributes (from SO1 to SO9). They were categorized into two question types: functional (what if it is?) and dysfunctional (what if it is not?).

**Table 4. Response statistics from respondents according to the Kano methodology**

	ME	OD	AE	IT	Class	CC	DC
SO1	15%	17%	33%	34%	IT	0.51	0.33
SO2	19%	17%	30%	34%	IT	0.47	0.36
SO3	11%	4%	28%	57%	IT	0.32	0.15
SO4	23%	25%	32%	21%	AE	0.56	0.47
SO5	19%	22%	32%	27%	AE	0.54	0.41
SO6	15%	13%	27%	45%	IT	0.40	0.28
SO7	8%	6%	36%	50%	IT	0.42	0.14
SO8	13%	29%	26%	32%	IT	0.55	0.42
SO9	18%	25%	31%	25%	AE	0.56	0.43

Source: Own elaboration

The analysis conducted shows that a set of 6 attributes, namely SO1, SO2, SO3, SO6, SO7, and SO8, identifies the IT class, which means a neutral state (Table 4). This implies that respondents do not perceive significant benefits from these factors.

Therefore, these attributes will not significantly impact the satisfaction or dissatisfaction of patients. This is confirmed by the satisfaction index (CC) values, which, for this set of attributes, mostly do not exceed the level of 0.5.

Regarding the mentioned 6 attributes, only minor differences in the index values and assigned classes can be observed. For example, attribute SO8, belonging to the IT class, has a higher CC level than SO5, which has been classified as AE (attractive). It is worth noting that the AE class is identified by three attributes: SO4, SO5, and SO9. These attributes are clearly recognized by respondents and meet their requirements, implying a state of satisfaction.

The above analysis confirms that when improving hospital services, it is essential not only to search for a set of attributes but, above all, to identify those with the greatest impact on the satisfaction level of patients. From a hospital management perspective, especially in organizing services, it may be desirable to continually invest in improving all functional areas. However, to ensure high-quality services, it may be worthwhile to focus primarily on attributes that have the most significant importance and impact from the perspective of the recipients of these services, namely hospital patients.

### **Conclusion**

Hospital management is a complex and demanding process aimed at ensuring effective medical care, patient safety, and the sustainable operation of medical facilities. Effective hospital management requires collaboration between medical staff, administrative personnel, and management (Tushar et al., 2023), as well as adaptation to changing patient needs and regulatory environments (Dantas 2001). Therefore, continuous monitoring of changing patient expectations and their classification to identify attributes that will contribute most to their satisfaction is crucial, what is confirmed by many authors (Gavurova et.al., 2020; Fiorillo et al. 2021; McConnell et al. 2016). Furthermore, patient satisfaction surveys should be conducted regularly, ideally every six months, to identify areas where patient satisfaction is low. The analysis of data collected in this regard can and should be a key factor in shaping future directions of healthcare management.

Analyzing the results presented in this article, changes can be recommended to enhance the overall competitiveness of hospitals. Regarding the survey of patient satisfaction with the workforce, it is worth noting that patients rated the care provided by nurses and midwives the highest (72% of satisfied patients). Rehabilitation therapists and physiotherapists ranked second (57% of satisfied patients), followed by medical attendants (56% of satisfied patients), and doctors were rated the lowest (48% of satisfied patients). In fact, more than half of the patients expressed dissatisfaction or rated the work of doctors in creating a sense of care at an average level. This dissatisfaction, the low patient satisfaction stemming from the feeling of not being treated properly by doctors, is significant, as Kano method research has shown that the attribute "O9: The way doctors treat patients" significantly affects patient satisfaction.

Taking all of this into consideration, the question arises: why were doctors rated the lowest? Is it because they are overworked, which is a consequence of healthcare staff shortages, or is it because they are naturally arrogant and have a sense of superiority over patients, which is exacerbated by staff shortages? It is certain that staff shortages force hospital management to be more tolerant of deficiencies or shortcomings in their work. Observed discrepancies include rushed medical visits and consultations, a lack of time to build a relationship of trust between doctors and patients and their families, and even arrogant behavior by doctors. Therefore, changes in healthcare management should focus on training and sensitizing current doctors to the need for an individual approach to patients (Rezenblum et al. 2012). This could include various training programs aimed at teaching doctors the principles of effective communication, both among themselves, with the rest of the hospital staff, and with patients and their families. Additionally, training programs should emphasize the importance of teamwork and shared responsibility for processes (Shuv-Ami and Shalom 2020) and their impact on the hospital's reputation, essentially transforming the hospital into a well-performing enterprise (Bloom et al. 2015) with defined processes and individuals responsible for their execution.

Training existing staff alone may not suffice, as there is a significant shortage of medical personnel. Considering the hospital's position in the immediate environment, it is advisable to continue close collaboration with the Regional Labor Office, local government entities, and the university community to establish a medical school or department within existing universities in the vicinity. This would allow healthcare facilities to influence the curriculum of medical programs, determine the desired number of students based on their needs, organize internships and medical specialties, and eventually create positions for fully qualified doctors after specialization. Another incentive for retaining outstanding students in the hospital after completing their education is a scholarship program funded jointly by the hospital and the local government. Lastly, according to the Kano method, factors that most significantly influence patient satisfaction with services, in addition to the aforementioned attribute related to doctor behavior, include "O4: Smooth and delay-free admission to the ward" and "O5: Minimization of bureaucratic paperwork during hospitalization." To improve these areas, the implementation of an information system focused on integrating the entire patient treatment process is recommended (Chluski and Ziora 2015; Cohen 2002). Such a system would lead to a higher level of service standardization and include requirements for electronic document completion by patients at control points. While introducing such a system would require staff training and increased involvement, especially when dealing with elderly patients, it would also allow for the creation of interactive patient profiles accessible to all hospital units, from clinics to wards.

The conducted empirical research has certain limitations, arising, for instance, from evolving societal needs and changes in regulatory environments. Against this backdrop, the design of changes becomes a process that requires continuous monitoring and real-time responsiveness. Therefore, the recognition of attributes of

hospitalization processes should be an ongoing effort. Another limitation may be the scale of the conducted research. For designing systemic organizational changes in hospitals in Poland, it seems justified to expand the research sample. Furthermore, supplementing the research with a sample from other countries could reveal differences and similarities between hospital care systems. Moreover, examples of best practices could enrich recommendations for improving the management of hospital service organizations in response to patient needs. The empirical research carried out is characterized by certain limitations arising, for example, from changing social needs and changes in the regulatory environment. Against this background, the design of change becomes a process that requires constant monitoring and ongoing response.

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## KIERUNKI ZMIAN W ZARZĄDZANIU JEDNOSTKAMI OPIEKI ZDROWOTNEJ W OPINII PACJENTÓW

**Streszczenie:** Celem artykułu jest określenie w jakim kierunku powinny być wprowadzane zmiany w zarządzaniu jednostkami opieki zdrowotnej, aby podnieść satysfakcję pacjentów z organizacji usług w badanej jednostki. Podkreśla się, iż zarządzanie szpitalami jest kompleksowym procesem, obejmującym: planowanie, organizację, koordynację i kontrolę działań, niniejsze subprocesy mają na celu efektywne świadczenie usług medycznych, zarządzanie zasobami materialnymi oraz zasobami ludzkimi. W oparciu o literaturę przedmiotu autorki zidentyfikowały czynniki wpływające na efektywne zarządzanie szpitalami. W sposób szczególny odniesiono się do jakości w opiece medycznej oraz akredytacji jako narzędzia podnoszenia standardów jakości. W części empirycznej zawarto wyniki badań zrealizowanych w zespole szpitali, w których respondenci określili poziom satysfakcji w wybranych obszarach następnie wykorzystano metodologię Kano do

zrozumienia oczekiwań pacjentów i klasyfikacji atrybutów usług szpitalnych. Wyniki analizy wskazały, iż niektóre atrybuty mają klasyfikację obojętną, podczas gdy inne są atrakcyjne dla pacjentów i generują wysoki stopień zadowolenia. Kończącym elementem opracowania są rekomendacje kierunków zmian w zarządzaniu jednostkami opieki zdrowotnej zidentyfikowane w oparciu o przeprowadzone badania.

**Słowa kluczowe:** opieka zdrowotna, zarządzanie szpitalem, jakość, satysfakcja pacjentów, metoda Kano