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## Ocena jakości usług medycznych w opinii klientów wewnętrznych (personelu) i klientów zewnętrznych (pacjentów)

### Streszczenie

**Wstęp.** Określenie standardów działań i zapewnienie wysokiej jakości usług stanowi wymóg jednostek działających na rynku usług zdrowotnych. Do tych jednostek należą zakłady opieki zdrowotnej, dla których zapewnienie wysokiej jakości świadczonych usług powinno być wartością priorytetową, gdyż jakość przekłada się na zdrowie, zaufanie, bezpieczeństwo, a także życie pacjenta.

**Cel.** Celem pracy jest częściowa ocena jakości usług medycznych dokonana w trzech oddziałach, dwóch szpitali klinicznych Uniwersytetu Medycznego w Łodzi.

**Materiał i metody.** Badaniem objęto klienta wewnętrznego (personel) i zewnętrznego (pacjent), do których skierowano kwestionariusz ankiety. Badaniem zostało objętych 101 osób.

**Wyniki.** Wyniki odnoszące się do pierwszego kontaktu pacjenta z personelem w zakładzie opieki zdrowotnej wykazują wysoki poziom zadowolenia z obsługi. Uprzejmość personelu medycznego, empatia, umiejętność zrozumienia potrzeb i oczekiwań satysfakcjonuje pacjentów. Aspekty jakości: uzyskanie przez pacjentów zrozumiałej, kompletnej informacji o stanie zdrowia, o ryzyku związanym z podejmowanym leczeniem, możliwość wyboru formy leczenia, zostały ocenione znacznie gorzej. Połowa personelu jest zdania, iż pacjent otrzymuje zrozumiałą i kompletną informację o stanie zdrowia, większość jest przekonana, że pacjent nie bierze udziału w procesie decyzyjnym dotyczącym wyboru jednostki diagnostycznej i terapeutycznej. Wyniki wskazują, iż personel nie narusza prawa do uzyskania opieki w atmosferze szacunku i poszanowania godności pacjentów. Ponad połowa pacjentów nie została poinformowana o prawach im przysługujących.

**Wnioski.** Najgorzej ocenione aspekty jakości odnoszące się do możliwości uzyskania kompletnej informacji o stanie zdrowia, o ryzyku związanym z podejmowanym leczeniem, a także możliwości wyboru jednostki diagnostycznej i terapeutycznej mają wpływ na poziom akceptacji ryzyka w sektorze ochrony zdrowia, który w polskim sektorze ochrony zdrowia jest stanowczo zbyt wysoki.

**Słowa kluczowe:** jakość opieki zdrowotnej, badania satysfakcji.

## Quality assessment of health care services in patients' and medical staff's opinion

### Abstract

**Introduction.** The determination of standards and assuring high quality services constitute main requirements for the units functioning in the health care services market. These entities comprise health care units which prioritize the delivery of high quality services. Such services mean health, reliance, safety as well as patient's life.

**Aim.** The aim of this work is a partial assessment of the quality of medical services which was effectuated in three wards of the two clinical hospitals of Medical University of Lodz.

**Material and methods.** The research was directed towards medical staff and patients who were surveyed. The research included 101 respondents.

**Results.** The results regarding the patient's first contact with the personnel in the health care unit show a high level of satisfaction from the services. The patients are satisfied with the kindness, empathy and the ability to understand the needs and expectations of the patients. The aspects of quality: providing the comprehensible and complete information about patient's health, the information regarding the risk connected with the undertaken treatment, the possibility to choose the form of treatment, were assessed much less favorably. Half of the medical staff is convinced that patients receive comprehensible and complete information about their health, the majority of them is assured that a patient does not decide which diagnostic and therapeutic unit to choose. The results show that the personnel do not violate patient's rights to receive good care and to be treated with respect and dignity. More than half of the interrogated patients were not informed about their rights.

**Conclusions.** The lowest assessed aspects of quality such as the possibility to receive complete information regarding patient's health, risk connected with undertaken treatment and the possibility to choose the diagnostic and therapeutic unit, have a great impact on the level of risk acceptance in the health care area, which is much too high in the Polish health care system.

**Key words:** health care quality, satisfaction research.

The reassurance of high quality services is perceived as the most essential problem of the present health care system. The determination of standards of activities has become the main requirement for entities functioning on health services market which influences appropriate level of services [1]. These entities comprise health care units which prioritize the provision of high quality services. Such services mean health, reliance, safety as well as patient's life [2]. A health care unit is obliged to provide high quality services in each and every step of patient's hospitalization, i.e. during the period of diagnosing, treatment, nursing or rehabilitation [3]. Moreover, the organizational changes of the health care system, advancement of medical knowledge and new technologies are gradually making the notion of health care quality increasingly important. Increasing patients' requirements, the knowledge of their rights and the awareness of the dangers resulting from medical procedures, are crucial as far as quality is concerned [4]. In order to ensure the high quality of services, it is inevitable to manage quality effectively through the efficient implementation of the quality system which is defined as a collection of mutually connected and mutually influencing elements, such as: organizational structure, procedures, processes, resources of the organization [4]. The system ensuring accurate quality of the medical services cannot be created instantly. Its particular elements are formed gradually and systematically. Carefully planned activities and controls can become a preventive and effective method reducing the risk of adverse events [3]. Adverse and unexpected events may occur in all hospitals and health care organizations in the world, even the best ones, as even the latest technologies do not eliminate the possibility of error occurrence [5]. However, it is essential to find their source, systematize them and minimize them to such an extent that they become acceptable by an organization or environment in which the unit functions. Furthermore, they ought to be monitored [6,7]. In the area of health care services in Poland the following system activities of confirmation and supervision of quality can be enumerated: quality management system according to ISO 9001:2000, Accreditation according to the Program of Accreditation Committee at National Centre for Quality Assessment in Health Care in Krakow and Total Quality Management (TQM).

The implementation of quality management systems into the organization does not eliminate the necessity of executing research and analysis of the factors influencing the quality of medical services, which simultaneously show the level of patients' satisfaction. The satisfaction is defined as the reaction which supervenes between the subjective assessment of the level of service and the patient's expectations. The sufficient level of satisfaction is achieved when the subjective assessment of the level of service is equal to the patient's expectations [8]. It is important to determine the differences between the perception of the same aspects by patients and medical staff which in consequence help to create an effective quality system ensuring that medical services reflect the expectations. The form of the research survey is based on the factors determining medical services quality which result in assessment criteria of medical services such as: structure criteria, process criteria, result criteria. However, before the creation of a research tool it is inevitable to state that the quality is a multidimensional notion which is difficult

to quantify and, in order to create objective quality assessment criteria, it is vital to define it. For the needs of this research the definition of quality according to ISO (PN-ISO 8402:1996) "*Quality – the entirety of the object's properties, connected with its ability to fulfill the confirmed and anticipated needs*" was adopted [9].

## AIM

The aim of this study is partial assessment of the quality of medical services which was effectuated in three wards of the two clinical hospitals of Medical University of Lodz.

## MATERIAL AND METHODS

The research was directed towards medical staff and patients. The research lasted from January to June 2009.

The research was effectuated with the use of two types of research surveys. The first type, containing 31 queries, was distributed among 71 patients. The other type, containing 26 queries, was distributed among 30 members of medical staff. The research covered 101 individuals.

The assessing queries in the research survey were determined with the use of a five-score scale. However, the pattern E/P (*excellent/poor*) was not used. The scale used in the survey presented as follows: very good, good, poor, very poor, average. The fact queries used the pattern: yes, no, do not remember/know, have no opinion. The tool also contained the queries regarding: interpersonal relationships (staff politeness, comprehensible information flow), material aspect (medical equipment and computers), service availability (admission time), professionalism (the competence of the staff regarding examining the patients and applying medical procedures), empathy (understanding the patient's needs and expectations), patient's rights (the opportunity to acquaint with patient's rights code, the awareness of the rights). The risk – one of the components of quality – was granted a particular attention in order to assess its impact on the level of risk acceptance in the health care area.

The differences in opinions between the medical staff and the patients were examined with the help of a *t*-Student test. In order to determine the mean value, dominant, standard deviation and the variation coefficient, the Microsoft Office 2007 was used. A part of the results was presented in percentage value.

## RESULTS

The research surveying the level of medical staff satisfaction regarding medical services quality covered 30 members of medical staff. Mostly nurses responded to the survey (28 nurses, 1 physician, 1 person from non-medical personnel). Two of the respondents were supervisors. The average age of the respondents was 41 (standard deviation equal to 9.1), the majority of the staff at the age of 45. Detailed data concerning the medical staff are presented in Table 1.

<sup>1</sup> Object means product and/or service.

**TABLE 1. The description of medical staff employed in particular wards.**

	Internal client employed in ward X	Internal client employed in ward Y	Internal client employed in ward Z
Number of people in the research	9	11	10
Average age	40	35	47
Dominating age	45	42	51
Number of people on a sick leave in 2008	1	6	2
Average time in days of sick leaves	14.5 (standard deviation 10.9)	62.6 (standard deviation 91.4)	27.8 (standard deviation 21.8)

Source: *own's work*

The other survey was directed towards 71 individuals who were the patients in wards X, Y, Z. The research covered 25 patients from ward X, 30 patients from ward Y and 16 patients from ward Z. The average age of the respondents was 58 (standard deviation equal to 15.5), majority of patients at the age of 49. Forty one women and 30 men agreed to participate in the survey. The majority of the people were secondary school graduates, whose monthly income was equal to 1000-2000 PLN. Detailed data are presented in Table 2.

Frequently, the patient's first contact with the health care takes place at a registry desk/admission room. It can be suggested that the way the patient is treated there will influence his/her opinions about the quality of services in a particular unit. For that reason the main subject of the research was to survey medical staff as well as patients on the functioning of the admission room and the politeness of the employees working there. Significant number of patients assessed these aspects of quality as positive, granting good and very good assessment. Medical staff stated that the functioning of the admission room is average and the personnel's politeness is on a good level. The results of the research by Ż. Kisiel, A. Samborsk-Sablik and W. Gaszyński in The Emergency Ward of the Barlicki Clinical Hospital of the University of Lodz [10] and the research by I. Bajor in the ambulatories of general practitioners in Świdnik, Kraśnik and Jarosław [11] are similar to researches presented in this dissertation. The results regarding patients' first contact with the staff of the health care unit (registry desk/admission room) reveal their high level of satisfaction concerning the services.

From the patient's point of view the most important factor is the staff attitude towards him/her: kindness, empathy, ability to understand his/her needs and expectations. All the patients agreed that physicians were kind and their empathy was assessed positively (very good and good responses only), the understanding of patients' needs and expectations by the physicians was also assessed positively, only 6 persons thought that this aspect of quality is average. Nurses were granted similar but not identical assessments. The only difference is that 2 respondents found the nurses impolite. However, on the basis of the results, it can be assumed that these aspects of quality are perceived as satisfying by the patients.

Another significantly important aspect of medical services quality is - providing the patients with the comprehensible and complete information regarding their health, risk connected with the undertaken treatment and the possibility to choose the form of treatment. These aspects of quality were assessed lower in comparison with the above mentioned aspects, however the majority of assessments were positive. Fifty eight respondents assessed that the comprehensibility of the doctor's diagnosis was very good and good and 52 of them admitted that the received information was exhaustive and complete, 19 patients received incomplete information or none. Almost half of the respondents were not informed about the risk connected with undertaken treatment and only 8 patients were proposed an alternative form of treatment.

The opinions of the members of the medical staff were divided as far as the above mentioned aspects of quality

**TABLE 2. The description of individuals who were patients in particular wards.**

	External client as a patient in ward X	External client as a patient in ward Y	External client as a patient in ward Z
Average age	64	56	52
Sex	Women	10	20
	Men	15	10
Education	Basic	6	1
	Vocational	6	5
	Secondary	10	19
Average monthly income per family member	Higher	3	5
	Up to 1000 PLN	5	5
	1000-2000 PLN	14	22
	2000-3000 PLN	6	3
	Over 3000 PLN	0	0
Average time in days of the stay in a ward	3	13	4

Source: *own's work*

TABLE 3. Responses of the medical staff

	Internal client employed in ward X,Y,Z	Internal client employed in ward X	Internal client employed in ward Y	Internal client employed in ward Z
Average score of admission room	2.97	2.67	2.91	3.7
Average score of politeness of the personnel employed in admission room	3.8	3.33	3.82	4.20
Average score of admission time to the respondent's ward	3.17	3.00	2.82	3.7
Average score of functioning of the respondent's ward	3.97	3.00	4.27	4.5
Average score of hygiene and sanitation in the respondent's ward	4.10	3.44	4.18	4.60
Average score of computer equipment in the respondent's ward	4.43	3.89	4.45	4.60
Average score of medical equipment in the respondent's ward	3.43	3.67	2.91	3.80
Is medical documentation comprehensible, complete and authorized/dominant	Yes	Yes	Yes	Difficult to say
Determination if the patient receives comprehensible and complete information regarding his/her health/dominant	Difficult to say	Yes	Difficult to say	Yes
Does a patient participate in decision-making process regarding his/her treatment/dominant	Yes	Yes	Difficult to say	Yes
Is the respondent given too many responsibilities/dominant	Yes	Yes	Yes	Yes
Frequency of having the sense of being given too many responsibilities/dominant	Every day	Every day	Every day	Every day
Is the work given adequate to earnings/dominant	No	No	No	No
Is the personnel performing the same duties better paid in other units/dominant	Yes	Yes	Yes	Yes
Does the work give development opportunities/dominant	Yes	Yes	Yes	Difficult to say
Does the supervisor assess the respondent's work in a just and constructive way/dominant	Yes	Yes	Yes	Yes
Is the atmosphere at work friendly/dominant	Yes	Yes	Yes	Yes
Does the respondent frequently work in a stressful atmosphere/dominant	Yes	Yes	Yes	Yes
Can the respondent rely on his/her co-workers in case of any problems	Yes	Yes	Yes	Yes
Average score of relationships with co-workers	4.07	4.33	3.45	4.50
Does the respondent have a sense of job security	Yes	Yes	No	Difficult to say

Source: *own's work*

are concerned. Only half of the personnel thought that the patient received comprehensible and complete information regarding his/her health. The remaining half stated that the patient did not receive such information (7 persons) or it was difficult to determine if the patient received exhaustive and complete information. More than a half of the personnel (17 persons) agreed that the patient participated in the decision-making process regarding his/her treatment, others were not sure or stated that the patient's opinion about the form of treatment was not important. It must be added that the medical staff and the patients' assessment did not depend on the ward they worked/stayed.

A very important aspect of medical services quality is observing patient's rights and providing them with all the necessary information regarding their rights. One of the most important principles is patients' right to be treated with respect and dignity. Despite the fact that the respondents' answers were not 100% positive, it can be assumed that in the surveyed wards physicians and nurses did not violate patients' rights regarding the quality of care. What bothers most is the fact that more than a half of patients were not informed about their rights.

## DISCUSSION

In the light of the positive opinions of the patients, it is not surprising that most of the surveyed wards will be/were recommended to the family and friends. The predominant number of positive opinions regarding the quality of services should not be surprising as the majority of research on satisfaction present similar results.

However, this research is enriched by the information from the medical staff whose knowledge of services quality in hospitals is more valuable as it is gained through long-term observation. The patients do not possess this knowledge and their opinions are subjective and individual and therefore differentiated. They are impacted by the patient's condition and his/her priorities and preferences which alter patient's sensitivity to particular aspects of quality. Simultaneously, it is highly probable that some of the patients, who had been ascertained that the survey was anonymous, think that the personnel may have the access to the responses which may then influence their performance during the patient's stay in hospital.

Frequently, when the patient was asked if he was likely to participate in a survey regarding the medical services he/she used to reply: "everything is very good", "please, put a tick next to very good only", "I have no objections", etc.

TABLE 4. Patient's responses.

	External client as a patient in ward X,Y,Z	External client as a patient in ward X	External client as a patient in ward Y	External client as a patient in ward Z
The method of admission to hospital/dominant	Specialist's referral to hospital	Specialist's referral to hospital	Specialist's referral to hospital	GP's referral to hospital
Average time in days spent waiting for admission to hospital	13.63	0.70	17.07	27.31
Average score of waiting time	4.11	4.40	4.00	4.00
Average score of admission room	4.03	4.26	4.03	4.03
Average score of politeness of the personnel employed in admission room	4.18	4.43	4.17	4.17
Average score of hospital sanitation	4.55	4.36	4.67	4.67
Are the meals served at acceptable hours/dominant	Yes	Yes	Yes	Yes
Average score of the taste of the meals	3.70	3.56	3.67	3.67
Average score of the understanding of the external clients' needs and expectations by physicians	4.35	4.44	4.23	4.23
Average score of the understanding of the external clients' needs and expectations by nurses	4.39	4.40	4.33	4.33
Were the physicians sufficiently polite/dominant	Yes	Yes	Yes	Yes
Were the nurses sufficiently polite/dominant	Yes	Yes	Yes	Yes
Average score of understanding of the diagnosis pro- vided by the physician	4.08	3.96	4.07	4.07
Was the information regarding patient's health full and complete/dominant	Yes	Yes	Yes	Yes
Determination if the information about the risk con- nected with the treatment provided/dominant	No	No	No	No
Was the information regarding the possibility to choose the treatment provided/dominant	No	No	No	No
How much time did the physician devoted to patient/ dominant	Average	Average	Average	Average
Average score of physicians' politeness	4.59	4.68	4.47	4.69
Average score of nurses' politeness	4.63	4.80	4.47	4.69
Were the patients respected by physicians/dominant	Yes	Yes	Yes	Yes
Were the patients respected by nurses/dominant	Yes	Yes	Yes	Yes
Was the respondent informed about the patient's rights code/dominant	No	Yes	No	Yes
Would the respondent recommend the hospital to his/ her family, friends/dominant	Yes	Yes	Yes	Yes
Time in days spent in hospital	7.35	2.84	12.73	4.31
Had the respondent already stayed in a described ward/ dominant	No	No	No	No

Source: own's work

The results also show that not all aspects were assessed in the same way. Additionally, during an interview, patients gave the examples of health care units which rendered services on a very low level. Two conclusions can be drawn: (1) the quality of services in surveyed wards is very high in comparison with other wards; (2) patients are afraid to present their negative opinions as they fear that the quality of care may worsen. It may be assumed that far better occasion for carrying out surveys is interviewing patients whose treatment in hospital was terminated or who are about to be released from hospital. Nevertheless, the attempt to interview ex-patients in most cases was unsuccessful. The patients explained that they desired to return immediately to their home and family.

## CONCLUSIONS

1. The research regarding the level of patients' satisfaction is significantly important in the process of quality improvement. The results of this researches become a measuring instrument of the services quality rendered in health care units.
2. The research on satisfaction shall be aimed at not only patients but also medical staff.
3. The patients find the quality of medical services in three wards of the two clinical hospitals in Lodz satisfying. Nevertheless, the opinions of the medical staff do not reflect the situation described by patients. Medical personnel is far more critical in their opinions.
4. The aspects of quality regarding the opportunity to receive complete information concerning the patient's health, risk connected with undertaken treatment and the possi-

bility to choose diagnostic and therapeutic unit were assessed lowest. These aspects influence the level of risk acceptance in health care area, which admittedly in Polish health care area is by far too high.

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