

The hospitalized patient as a partner in the survey on safe care in the Czech Republic

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Abstract

OBJECTIVES: The study examined the extent to which patients in the Czech Republic are involved in decisions regarding their treatment and whether they are interested in ensuring safety during hospitalization.

METHODS: Patients were interviewed to determine their perspectives regarding the previously stated objectives. The sample consisted of 514 patients who had been admitted to hospital for a minimum of three days.

RESULTS: It is clear that patients in the Czech Republic are unaware of safety issues associated with provided care, but 52.2% of respondents expressed a desire to be more involved in decisions pertaining to their treatment. Widowed patients, as well as those hospitalized for more than six days, expressed less of a desire for such involvement. Half of the patients enrolled in the study stated that health care professionals had encouraged them to ask questions about their treatment. With regard to errors associated with surgical reversals, 58.3% of respondents stated that nursing staff had performed checkups to avoid confusion in surgery. Another patient safety issue is nosocomial infection acquired through improper hand-washing techniques of medical personnel. 73.5% of patients said they would not have the courage to ask medical staff (doctors or nurses) whether they had washed their hands prior to examination.

CONCLUSION: Patients in the Czech Republic are unaware of the safety issues associated with provided care, but more than half expressed a desire to be more involved in decisions that pertain their treatment.

INTRODUCTION

Increasing patient safety is a global phenomenon and was codified in April 2005 in the Luxembourg Declaration on Patient Safety. A frequently discussed and highly problematic issue is patient participation in the assurance of their own safety in healthcare facilities. The seemingly simple question of what role patients can play in this pursuit conceals some very complex problems.

Patients contribute to their own care by providing diagnostic information; participating in decisions pertaining to their treatment; choosing a care provider and treatment method; monitoring adverse events and more. Knowledge, ability to act and a willingness to participate in assuring their own safety may vary from patient to patient and vary under different circumstances. Older individuals who were raised to seldom question a physician's authority are unlikely to ask questions

about errors and safety during their stay in hospital. In some countries, active patient involvement can also be greatly complicated by cultural and social attitudes toward authority. A willingness and desire to participate in assuring a safe hospital stay also depends on what is required, i.e. is it something simple like a medical staff checkup? Knowledge of procedures and protocols will also vary among patients. Coulter and Ellins indicated the following ways in which patients can contribute to the safety of their own health care: making informed choices regarding care providers; assisting in diagnosis specification, participating in decisions pertaining to treatment; contributing to the safe use of medications; participating in infection control initiatives; checking the accuracy of medical and nursing documentation; observing and monitoring care procedures and protocols; identifying and reporting treatment complications and adverse events; conducting effective self-treatment (including treatment monitoring) and formulating a plan to improve services (Coulter and Ellins 2007).

This study examined the extent to which patients in the Czech Republic are involved in decisions pertaining to the care provided and whether they are interested in participating safety issues during hospitalization.

MATERIAL AND METHODS

Patient opinion surveys were conducted using the structured interview technique. A field survey was performed through controlled patient interviews conducted by an interviewer. The data were collected using a Survey Network INRES. The survey involved 216 interviewers from the Czech Republic who were provided with detailed instructions prior to the start of the study. Statistical data was processed with the application for statistical analysis of social data SASD, version 1.4.10. The 1st sorting degree and 2nd degree classification tables were processed. The degree of dependence of the selected characteristics was based on χ^2 and other testing criteria (according to the nature of the characteristics).

Tab. 1. Patient sample according to gender and age.

	Men			Women		
	A	%	Deviation	A	%	Deviation
18–29 years	23	4.5	0.0	30	5.8	0.0
30–39 years	31	6.0	+0.2	34	7.0	-0.4
40–49 years	29	5.6	-0.4	38	6.8	+0.6
50–59 years	34	6.6	-0.8	38	6.6	+0.8
60 years and over	125	24.3	+0.9	132	26.7	-1.0

Source: Patients hospitalized in the Czech Republic in 2011 (as of 31.12.2011). Institute of Health Information and Statistics, Prague, 2013.

The sample of patients admitted to hospital was designed to correspond to the proportion of all patients in the Czech Republic in terms of region (county), gender, and age. These characteristics were considered representative. They comprised a sample of 514 patients admitted to hospital for a stay of three days or more. Respondents were informed of the study objectives in advance and were made familiar with the interviewer sheet. Patient participation was voluntary and based on informed consent. The survey did not address any controversial ethical issues. Respondent refusal to answer individual questions did not exceed the level of statistical significance.

In terms of gender, the sample consisted of 242 (47.1%) male patients and 272 (52.9%) female patients, which corresponded to the analogue composition of patients admitted to hospitals in the Czech Republic. In terms of relative frequency, there were no observable deviations between the sample and the overall population; the research is representative of patient gender in the Czech Republic (Table 1).

Relative to the basic sample's age classification, the deviation from the general population did not surpass 1.0%. It can be concluded that the results are representative of various patient age groups for individuals hospitalized in the Czech Republic (Table 1).

The Czech Republic regional division established in 2001 was used for the regional classification of respondents. Compared with the composition of the basic sample, the maximum deviation was 0.4%. The results are representative of patients hospitalized throughout the Czech Republic in terms of gender, age, and region.

A preliminary data analysis showed the best differentiating aspects for the given sample description and characterization was gender, age and regional affiliation.

Other characteristics of the hospitalized patient sample were not representative. They did, however, enable a description through other characteristics such as education, marital status, occupation, hospital type and traits that characterized the hospitalization.

Concerning education, the sample was primarily represented by patients with a lower level of education, and patients with a secondary school education. In terms of marital status, most patients were married (51.6%). In terms of occupation, most were either retired (36.8%) or employed (35.4%).

Other features also characterized the patient sample in terms of hospitalization. The first was the type of hospital to which patients were admitted. The majority of the sample had been hospitalized in county, regional and university hospitals.

Another characterization in terms of hospital stays was the manner in which patients were admitted. Respondents could be divided into two roughly equal-sized groups relative to (1) emergent and (2) planned admissions.

An additionally observed characteristic was the number of hospitalizations individual patients had

experienced. This affected their knowledge of the hospital environment and level of experience. Just less than half of patients (48.2%) stated that they had undergone three or more previous hospitalizations; just over one-fifth of the patients (21.4%) indicated that their current hospital stay was their first.

The study also investigated the duration of patient hospitalization on the day of their interview. The survey only included patients whose stay had lasted at least three days. Respondents reported the actual number of hospitalization days at the time of the interview. The average length of hospitalization was 7.8 days. The results were subsequently organized into three basic groups. The largest patient group in terms of hospitalization duration (52.1%) comprised those who had been hospitalized for 3–5 days at the time of their interview.

RESULTS

Regarding the extent to which patients in the Czech Republic are involved in decisions about nursing care, respondents were asked questions concerning the option to discuss the safety of care; efforts to engage the patient in treatment decisions; patient support from health professionals relative to decision-making and patient limitations (reticence, diffidence, deference) which inhibited their involvement in decisions pertaining to their care. Other questions (not mentioned because of the limitations of the article) focused on mistaken patient identity issues and medical staff adherence to cleanliness and hygiene regulations. (Additional questions were asked, but were not included in this paper due to length restrictions.)

More than half (54.0%) of respondents viewed the opportunity for patients or their families to discuss the safety of the provided care as positive. It was viewed as negative by 22.0% and the remaining patients were neutral (e.g. hard to decide, “no answer” – Table 2).

Many patients were unaware of what the safety of the provided care involves, and they did not feel qualified to discuss it.

An analysis of statistically significant relationships between the observed socio-demographic characteristics and this issue did not show any statistically significant differences in this sample subset. This indicates that patients' responses did not differ significantly according to gender, age, education, hospital type, hospitalization duration, etc. The response distribution in these subsets was, therefore, similar to the entire group.

Another question regarding active patient involvement in decision-making evaluated patients who were more involved in decisions pertaining to their treatment (Table 3). More than half (52.1%) expressed a willingness and desire to participate more in decisions about their treatment. On the other hand, 27.5% of patients were not interested in greater involvement and the remaining patients were neutral.

Significance tests showed that widowed patients were less willing to participate in treatment making decisions. The Chi-square Test of Independence characteristic (χ^2) for distribution according to marital status has a value of 23.493 at 12 degrees of freedom, $p < 0.05$. Patients hospitalized for long periods (more than 6 days) were also less willing to participate in decisions pertaining to treatment. The Chi-square Test of Independence characteristic (χ^2) in the case of the distribution according to hospitalization duration has a value of 18.909 at 8 degrees of freedom, $p < 0.05$.

The third item examined, with regard to patient involvement their own treatment, was whether the patient was encouraged to ask questions of healthcare professionals. Half of the patients (50.9%) responded to the question, “Were you encouraged to ask the staff questions?” by stating that they had been encouraged to do so. Of the sample patients, 29.4% felt that they had not been supported in this way. The remaining respondents were neutral.

Tab. 2. Did you or your family have the opportunity to discuss safety issues?

Response	Absolute frequency	Relative frequency (%)	Relative valid frequency (%)	Cumulative relative count (%)
Definitely	109	21.2	23.3	21.2
Yes	168	32.8	35.7	53.9
Hard to decide	80	15.6	17.0	69.5
Rather not	89	17.3	18.9	86.8
Absolutely not	24	4.7	5.1	91.4
No answer	44	8.4	0.0	100.0
Total	514	100.0	100.0	

Tab. 3. Would you like to be more involved in decisions about your treatment?

Response	Absolute frequency	Relative frequency (%)	Relative valid frequency (%)	Cumulative relative counts (%)
Definitely	109	21.2	22.0	21.2
Yes	159	30.9	32.1	52.1
Hard to decide	87	16.9	17.5	69.1
Rather not	100	19.5	20.2	88.5
Absolutely not	41	8.0	8.2	96.5
No answer	18	3.5	0.0	100.0
Total	514	100.0	100.0	

Significance tests showed no statistically significant association with any of the observed socio-demographic characteristics. This indicates that the response distribution in each group divided by socio-demographic characteristics was similar within the entire sample.

The final indicator of active patient involvement in such decisions attempted to determine the degree of personal embarrassment that prevents them from being more active.

When asked, "Is there anything you are ashamed (afraid) to ask the nursing staff?" 73.5% of patients stated that neither shyness nor fear precluded them from asking nursing staff any questions. Just under one-fifth (18.7%) of respondents admitted to feelings of deference and apprehension when it came to questioning or challenging a medical decision or behavior. The remaining respondents were neutral.

Even in this case, significance tests did not show a statistically significant relationship between socio-demographic characteristics and patient responses. Therefore, it cannot be concluded that gender, age, education, or other social/demographic characteristics have an impact on whether patients experience deference and apprehension when asking questions of the nursing staff.

To compare these items, which dominated the area of patient involvement in decision-making, it was necessary to filter out the extreme values on the scale (see above) and focus the items on the scale with regard to patient deference and apprehension, since the scale had the opposite focus. This was followed by data transformation that allowed answers to be distributed according to the arithmetic mean.

Table 4 shows the items dominating the area of active involvement in decision-making in a reduced form, including the number of observed cases and medium values.

The above table shows that, in terms of active involvement in decision-making, deference and apprehension of asking questions of nursing staff is the least concern. These patients do not have such inhibitions, and neither shyness nor reticence obstructs their participation in decision-making. Compared with other

items in this group, there was somewhat reduced support for patients when questioning physicians. However, the differences were not significant.

Safety risks also arise in cases of patient misidentification. Thus, the next question was whether the nursing staff verifies patient name and date of birth prior to surgery or other procedures.

When asked, "Does the nursing staff check your name and date of birth prior to surgery or other procedures?" nearly 8 in 10 (78.6%) patients stated that nursing staff always or usually did so. Approximately 1 in 10 (10.5%) stated that nursing staff generally or never do so; the remaining respondents did not have a clear opinion on this issue and therefore did not express one.

The verification of name and date of birth prior to surgery or other procedures was primarily seen in university and private hospitals. The Chi-square characteristic of Independence Test (χ^2) according to division by hospital type shows a value of 30.882 with 16 degrees of freedom, $p < 0.05$. However, the strength of the test was weakened by an insufficient number of observations in five contingency table cells.

The final item in this area examined whether nursing staff carried out checks to avoid misidentifying patients prior to surgical procedures. This item was represented by a large proportion of "not applicable" responses (20.4%), as many patients had not undergone surgery during hospitalization. More than half of the patients (58.3%) reported that a nurse had conducted a check to avoid confusion prior to surgery, and only 3.5% said they were not aware if such a check had occurred. For the remaining patients, the question was either not applicable, or they did not have a clear opinion. A second-degree classification analysis did not identify any statistically significant differences in the responses of individual patient groups; their attitudes regarding this matter were similar. One area of questioning concerned patients in the 'safe care' program (partnership in practice) pertained to medical staff adherence to cleanliness and hygiene regulations, and patient behavior in relation to this issue.

When asked, "Did the nursing staff wash and disinfect their hands before each intervention performed on you?" more than half of the patients (55.8%) confirmed that the nursing staff had done so. Less than one-tenth (8.9%) stated that the nursing staff had not done so. A considerable percentage (35.3%) did not know, or could not answer the question. No statistically significant differences were found in individual group responses when classified according to socio-demographic characteristics.

Another question examined whether patients had the courage to ask a health care professional if they had washed their hands prior to examination. An analysis of the results clearly shows that patients cannot be expected to assume a greater degree of control of hygiene regulation compliance in hospitals. Only 12.1% of respondents reported having the courage to ask med-

Tab. 4. 'Active' patient involvement in decision-making.

Item	N	Mo	Me	\bar{x}	s^2	s
Possibility to discuss safety	470	2	2	2.470	1.398	1.182
Effort to get involved in decision making	496	2	2	2.607	1.577	1.256
Support for asking questions	495	2	2	2.665	1.601	1.265
Shame, fear of asking questions	504	1	2	2.028	1.420	1.192

N = number of observations; Mo = modus; Me = middle value; \bar{x} = arithmetic mean; s^2 = dispersion; s = determinative deviation

ical staff (doctors and nurses) whether they had washed their hands prior to an examination. Conversely, 73.5% of patients reported that they would not dare ask, and the remaining respondents were neutral or could not decide. In this respect, patients were unanimous and their answers did not reveal statistically significant differences.

A comparison of mean values clearly shows that patients do not want to get involved in monitoring medical staff compliance with health care regulations. They do not have sufficient courage to do so; they also fear negative reactions from the staff if they raise questions on the issue. From this point of view, adherence to hygiene regulations may be a major risk factor in terms of safe care.

DISCUSSION

Patient involvement in hospitalization safety issues, as well as issues related to inadequate hygiene and infection control, the mistaken identity of patients, etc., can be valuable for healthcare professionals. There is a growing effort in many countries to encourage patients to express themselves to ensure safety in health care (Schwappach and Wernli 2010; Vincent 2010; Davis *et al.* 2011). These initiatives are important because they appear to be cheaper and more direct. However, these interventions are not as simple as they seem. There is the question of whether patients are willing to become involved in safety issues. In our study, a portion of the patients was unaware of what safety issues were associated with their medical care, and did not feel informed enough to discuss it. More than half of the respondents (54.0%) positively rated the option to discuss safety issues associated with the care they received, whereas 22.0% of respondents expressed a negative opinion. The next question examined patient willingness to become more involved in decisions pertaining to their treatment. More than half of the patients (52.1%) expressed a willingness and desire to do so.

It is unclear how such involvement would be received or perceived by medical staff. Would such a shift in responsibility be acceptable and ethically justifiable? We were unable to fully answer these questions, but some studies have already shed light on these issues.

Marella *et al.* (2009) conducted a telephone survey regarding 10 hospital security practices with 856 people in the Northeastern USA. The respondents were not in hospital at the time, and therefore stated what they would do in such a situation. The probability of activity varied considerably. For example, 85% of respondents said they would ask why a procedure was indicated, while 45% would consider the refusal of procedures (e.g. x-rays or blood sampling), that had been 'ordered' (prescribed) by a doctor. Blood collection is a minor procedure, but demonstrates what many patients must defend themselves against when in hospital. A similar telephone survey was conducted by Waterman *et*

al. (2006), who interviewed 2,078 recently discharged patients in the Midwestern USA. More than 90% were prepared to ask nurses about the purpose of a medication, even though only 75% actually asked when given the chance. Fewer patients (75%) would be prepared to help staff mark the site of surgery and even fewer (45%) would consider asking nurses and doctors whether they washed their hands. When patients had the opportunity to assist in marking the surgical site, only 17% did so, and even fewer (4.6%) asked the staff about hand washing. Although these patients were likely not asked to assist in the designation of a surgical site, or to join the campaign on hand washing, one can see how big the gap between the intention to control the procedure and the actual implementation might be.

How are patients in hospital actually able to ask questions about care safety and quality issues? Rachel Davis explored this question in a surgical department (Davis 2009). The study confirmed that many patients in hospital would not even consider accusing staff, particularly doctors, of not having washed their hands. Men tended to be less willing to ask questions than women were, perhaps because the sample included men who were unemployed and had a lower education. It is possible that the willingness to ask questions might be substantially higher if patients were personally invited to ask the staff questions. Authors Davis *et al.* (2008) report that the safety initiatives, in which patients are involved, will have to be carefully tailored for different needs and contexts, and will have to involve staff in order to be successful. If patients feel burdened by the responsibility and challenging questions, it is very unlikely that they would engage and they may become annoyed. On the other hand, when staff and patients seek to cooperate on hand hygiene, the reaction may be quite different.

These studies show that people in hospital, and those who were recently discharged, were willing to ask doctors and nurses factual questions rather than inviting them to do specific procedures. Therefore, patients cannot be relied upon to ask staff challenging or important questions, even if the process is designed to protect them against risks related to hospitalization. The practical implications were completely summarized by Marella *et al.* (2009), who argued that, when patients are potentially willing partners in 'safe care' problems, medical staff must educate them in practices that support their own safety. According to Schwappach *et al.* (2013), patients became actively involved in safety procedures after watching educational videos and reading brochures. These videos and pamphlets were positively evaluated by both staff and patients. Patients were instructed, as well as encouraged, to be vigilant and alert medical staff to all possible potential errors that patients feel have occurred, or may occur.

Regarding the question, "Were you encouraged to ask questions of medical workers?" half of the patients (50.9%) in our study (Czech Republic) stated

that they were encouraged by medical workers to ask questions concerning their treatment. About a third of respondents (29.4%) felt that they had not received such encouragement. The remaining respondents were neutral.

As reported by Marella *et al.*, patients need recognize the skills, competence and good intentions of health care professionals. Once patients become engaged in these practices, they should receive positive support in the form of replies such as “Thank you for reminding me” or “I’m glad you asked me” (Marella *et al.* 2009).

Even though errors associated with mistaken patient identity occur every day and are often highly publicized, patients still do not understand how important it is to use some form of identification. Most patients (58.3%) in our study indicated that checks to avoid confusion in surgery had been performed by nursing staff. Only 3.5% said that they were unaware if such a check had occurred. For the remaining patients, the question was either not applicable or they did not have a clear opinion. According to our study, the least risky behavior in nursing staff involves tasks related to, confirming side and site for surgical procedures, the accuracy of doctor performance and the verification of patient name and date of birth prior to a medical procedure. Reducing the likelihood of infection transmission is associated with proper and frequent hand washing, the use of gloves and sterile medical devices, as well as safe handling of sterile instruments, etc. In our study, 73.5% of patients said they would not have the courage to ask a health care professional (doctor or nurse) whether they had washed their hands prior to an examination. Davis *et al.* (2011) demonstrated that the question of hand hygiene is a very sensitive topic. According to their research, the vast majority of patients were ready to inform medical staff of a suspected surgical wound infection, but only half were willing to ask health care professionals if they had properly washed their hands. Patients do not have the courage to ask health care professionals any question on this topic and they fear negative reactions from the staff. From this point of view, hygiene regulation compliance can be viewed as a major risk of safe care.

CONCLUSION

Patients in the Czech Republic are unaware of what safety issues are associated with the care they receive. However, more than half expressed a willingness and desire to become more involved in decisions pertaining to their treatment. Widowed patients were less willing to participate in such decisions, as are who have been hospitalized for more than six days. Half of the respon-

dents enrolled in this study of Czech Republic patients were encouraged (by health care professionals) to ask questions about their treatment. Regarding errors associated with surgical reversals, 58.3% of the respondents stated that nursing staff had confirmed the surgical site prior to surgery. In terms of patient safety, the transmission of nosocomial infections is an important issue and is associated with proper and frequent hand washing by medical personnel. Almost three-fourths of patients (73.5%) reported that they would not have the courage to ask medical staff (doctors and nurses) whether they had washed their hands prior to an examination.

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