Implications for limiting visits to patients residing in hospital wards during the COVID-19 pandemic

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ABSTRACT: The impact of COVID-19 on the healthcare system has been devastating, as the system has had to undergo major changes, including the postponement of scheduled surgeries, the admission of patients in a state of emergency, and the use of teleportation. At the same time, the COVID-19 pandemic caused restrictions on visits to hospitalized patients by relatives, despite recommendations for family visits to patients in hospitals, as an important component of quality care provided. Material and methods: The study included 198 relatives of hospitalized patients in the period from March 2020 to March 2022 in the Silesian province. To achieve the research objective, a questionnaire developed entirely by the Authors, consisting of 9 questions, was used. The questionnaire concerned the assessment of restrictions on visits to hospitalized patients by relatives during the pandemic. The survey was conducted between November 2021 and March 2022. Results: The majority of relatives (91%) indicated that they were able to contact (including by phone) the patient every day during their hospital stay. At the same time, the largest number of respondents marked the answer that visiting patients during their stay in the hospital ward was prohibited (97%). In addition, 39% of respondents answered that it was "rather bad" to restrict visits to a loved one staying in the hospital during the pandemic. Conclusions: Undoubtedly, when considering the implementation of rules restricting patient visitation during the COVID-19 pandemic, relevant authorities should carefully look at and compare the potential harm of the issued decision to restrict visitation by relatives along with the risk of virus transmission. Currently, there are insufficient studies formally assessing the effects of restrictions on patient visits by relatives. However, it is clear from the authors' survey that the majority of relatives are rather negative about the implemented restrictions on patient visits.
KEYWORDS: hospitalized patients; hospital visitation restriction; patients' relatives; pandemic.

1. INTRODUCTION

There have been many dangerous pandemics throughout history. One of the most dramatic pandemics was the plague (Black Death) caused by the bacterium Yersinia pestis. According to estimates, this pandemic killed an estimated 75-200 million people in Africa, Asia, and Europe in the 14th century. Another, also devastating, pandemic that killed millions of people was the Spanish flu, which occurred in 1918, and the 2009 influenza pandemic, caused by the A/H1N1v virus (the so-called swine flu). Mandatory isolation was the first measure to curb the spread of the disease. Today, this form of social distancing is referred to as home isolation or quarantine. The lack of vaccinations and pharmaceuticals targeting the influenza virus prompted medical personnel and authorities in the 20th century to adopt measures to potentially limit the spread of the virus on a global scale. Such measures included attempts to isolate people, quarantine them, keep social distance by refraining from public gatherings, and maintain personal hygiene [1].

The pandemic of the COVID-19 infectious disease, caused by the SARS-CoV-2 coronavirus, immediately affected the health service. The impact of COVID-19 on the health care system was devastating, as the system had to undergo major changes, including postponing scheduled surgeries, admitting patients in a state of emergency, and using teleportation. Patients found it difficult to reach the hospital by ambulance, and those with chronic diseases preferred to postpone follow-up visits for fear of infection. Outpatient health care activities were limited to urgent cases, and scheduled activities were put on hold. As a result, telephone consultations were used, which, despite all their benefits during the pandemic, do not appear to be able to fully replace in-person consultations [2].

Lockdown and patients' fear of referral to health care facilities, prevented medical personnel from identifying diseases in patients in advance and thus implementing appropriate treatment. After the waves of the pandemic ended, there was an increasing number of elective procedures that were halted by the pandemic. Currently, it is not yet clear how sick people were affected by the loss of personal interaction with a doctor, interruption of treatment, or lack of previously scheduled follow-up visits [2].

At the same time, the COVID-19 pandemic has resulted in restrictions on visits to hospitalized patients by relatives, despite recommendations for family visitation of patients in hospitals as an important component of quality care provided. Visiting patients primarily increases satisfaction among both patients and family members and reduces the stress of not having contact with loved ones [3].

2. MATERIAL AND METHODS

To achieve the research objective, a questionnaire developed entirely by the Authors, consisting of 9 questions, was used. The study was carried out in a medical entity in the Silesian province using the anonymous survey method. The study included 198 relatives of patients hospitalized between March 2020 and March 2022 in the Silesian province. The study included 102 women (52%) and 96 men (48%). Relatives were divided into 5 groups based on place of residence: rural, a small city (up to 20 thousand residents), medium city (20-100 thousand residents), large city (more than 100 thousand residents), very large city (more than 200 thousand residents), and into 4 groups based on education: professional, primary, secondary, higher education. Also taken into account was the degree of relationship the relative has with the patient. Participation in the study was voluntary and
anonymous. The authors of the study conducted the surveys in person and each time, before distributing the questionnaires, they appealed to patients to make honest statements, assuring them of the anonymous and scientific purpose of the study. It took about 10 minutes to complete the questionnaire. Patients presented a correct attitude when filling out the forms. The survey used single-choice questions in the closed-ended question category. The survey concerned the evaluation of restrictions on visiting hospitalized patients by relatives during the pandemic. The survey was conducted between November 2021 and March 2022 on a group of 198 respondents.

At the beginning of the questionnaire, a metric was presented that included questions on age, gender, education, place of residence of the patient's relatives, relationship to the hospitalized person, hospital wards where the patients stayed, the province where the patients stayed and the period during which the patients stayed in the hospital ward (Table 1, Figure 1,2).

The largest group in terms of age is in the 45-59 age range. This group of respondents includes 45% of women and 37% of men. The most frequently indicated educational level in the sample of respondents was secondary education (51%). A total of 60% of respondents had a residence in a medium-sized city. The largest number of patients were in the orthopedics department (69 people), cardiology (29 people), and gynecology (27 people), and the most common period of patient hospitalization indicated by respondents was from October 2020 to May 2021. (63 people). The survey included relatives of patients who are independent, i.e. who do not need care or assistance from others, such as nutrition, mobility, or grooming.

In addition, the questionnaire was divided into 2 parts. In the first part of the questionnaire, respondents were asked about the possibility of contact with patients, i.e. whether the respondent had any opportunity to contact the patient during his stay in the hospital, whether medical staff assisted in contacting the patient, whether relatives had the opportunity to give personal items necessary during hospitalization to the patient, whether relatives could visit patients staying in the ward, and how respondents assessed the limitation of visiting patients staying in hospitals during the pandemic. The second part of the survey included questions about contact between relatives and medical staff, i.e. how relatives rated the way medical staff communicated information about the patient, how often the relative was able to obtain information about the patient from medical staff, whether the relative received information about the patient over the phone from medical staff.

<table>
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<th>Variable</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
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<td>3%</td>
<td>4%</td>
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<td>23%</td>
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<tr>
<td>small town</td>
<td>13%</td>
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Table 1: Characteristics of age, education, place of residence of relatives of hospitalized patients, own study
<table>
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<th>2020-06-20 to 2020-09-20</th>
<th>2020-10-20 to 2021-05-21</th>
<th>2021-06-21 to 2022-09-21</th>
<th>2021-10-21 to 2022-03-22</th>
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<td>18%</td>
<td>20%</td>
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<tr>
<td>very big city</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Table 1**: Distribution of patients by city type.

![Hospital ward](image)

Figure 1: The number of patients in each hospital ward in the period from March 2020 to March 2022, own study.

![Period of hospitalization](image)

Figure 2: Number of hospitalized patients by pandemic period, own study.

![Relationship](image)

Figure 3: Degree of the relationship linking relatives to hospitalized patients.
3. RESULTS

The first part of the survey dealt with questions relating to communication between loved ones and the patient. As the reason for admitting a patient to the hospital, respondents most often indicated a planned procedure and/or treatment (55%). 40% indicated a sudden deterioration in the patient's condition. In contrast, only 4% of respondents indicated rehabilitation after an illness or injury. In contrast, none of the people surveyed marked complications after an illness. In the "other" response, 1% of people marked gynecology.

The majority of people (91%) indicated that they had daily opportunities to contact (including by phone) the patient during their hospital stay. Significantly fewer people (6%) responded that they only had the opportunity to contact the patient once a week during their hospital stay. In contrast, 3% of respondents answered that they had no contact with a loved one staying in the hospital. No one (0%) marked the answer that they had the opportunity to contact the patient less than once a week. On the other hand, when asked "did the medical staff help you contact (including by phone) your loved one?", the majority of respondents answered that they did not need help contacting the patient (88%). Significantly fewer marked the answer that medical staff definitely helped (4%) and rather helped (4%) in contacting the patient. Only 2% of respondents marked the answer that they did not contact the patient, while 1% marked the answer "difficult to say." In contrast, "definitely not" (0.5%) and "rather not" (0.5%) were indicated by a total of 1% of respondents. To the question "did you have the opportunity to give a loved one personal items necessary during hospitalization?" most respondents answered, "rather yes" (67%). 27% of respondents marked the answer "definitely yes." In contrast, only 3% of people answered: "rather not" and a total of 3% answered "definitely not" (1.5%) and "hard to say" (1.5%). At the same time, the largest number of respondents marked the answer that visiting patients during their stay in the hospital ward was prohibited (97%). 2% of respondents marked the answer that they did not visit patients during this time. In contrast, a total of 1% of respondents answered that visits were allowed (0.5%), as well as indicating the answer "other" (0.5%). None of the people marked the answer that visiting patients was possible, but only in special situations (0%). For the last question from the first part of the survey, i.e. "How do you rate the restriction of visiting a loved one staying in the hospital during a pandemic?", 39% of respondents answered, "rather badly." 23% of people marked the answer "rather good," while 19% of people answered "definitely good" and 18% answered "definitely bad." 1% of respondents marked the answer "difficult to say." None of the respondents answered, "there were no restrictions on visiting a loved one".

The second part of the survey dealt with questions related to the contact of the patient's relatives with medical staff. When asked how the loved one rated the way the medical staff communicated information about a patient in the hospital, the vast majority of people (58%) indicated that they did not contact the medical staff. 28% of respondents answered that they rather well rate the way medical staff communicates information about a patient, while 11% of respondents answered that they will rate this way of communicating information. Only 2% of people marked the answer "rather bad" and "definitely bad" was marked by 1% of respondents. No one of the respondents indicated the answer "difficult to say." The next question was "How often were you able to get information about a loved one from medical personnel?". Most respondents (58%) indicated the answer that loved ones did not contact medical personnel. Slightly fewer (24%) marked the answer that they could get information about the patient from medical personnel once a day. 14% of respondents marked the answer "several times a day" and only 4% of respondents answered "less often than daily." To the last question, i.e. whether the loved one received information about the patient over
the phone from medical staff, the vast majority of respondents also answered that they did not contact medical staff (58%). 40% of respondents marked the answer that they received information about the patient over the phone from medical personnel after verifying the identity of the person calling the medical facility. In contrast, only 2% of respondents indicated that medical staff did not provide patient information over the phone. None of the people marked the answers "Yes, always" and "other".

4. DISCUSSION

Flexible patient visitation policies in hospitals are an important part of care to reduce stress and increase satisfaction for patients and family members. In the wake of the COVID-19 pandemic, restrictions have been put in place on visiting hospitalized patients to inhibit the spread of the SARS-CoV-2 virus [3].

The Chief Sanitary Inspector on March 11, 2020, issued recommendations regarding visits by relatives and visits by sales and medical representatives to hospitals in connection with cases of coronavirus infection in Poland, in which he recommended halting or significantly restricting visits to patients in hospitals [4]. According to Article 5 of the Law on Patients' Rights and Patients' Ombudsman, "the head of a health care provider or a physician authorized by him or her may restrict the exercise of the exercise of patient rights in the event of an epidemic emergency or for reasons of patient health safety, and in the case of the rights referred to in Article 33(1), also for reasons of the organizational capacity of the entity." In turn, Article 33(1) of that law stipulates the right of a hospitalized patient to contact others in person, by telephone, or by correspondence [5]. During the pandemic, treatment entities introduced total bans on visits, thereby implementing orders and guidelines issued by authorities, relevant institutions, or national and provincial consultants and provincial consultants [6]. However, the Patient Ombudsman has indicated that there should not be a total ban on patient visits [7]. On September 6, 2021, recommendations were issued by the Ministry of Health and the Chief Sanitary Inspectorate on the organization of visits to patients residing in hospital wards during the COVID-19 epidemic, in connection with the progress of the National Vaccination Program against COVID-19 [8]. According to these recommendations, if a patient was vaccinated against COVID-19, or underwent infection with SARS-CoV-2 virus, visitation was possible by persons vaccinated against COVID-19 or by unvaccinated persons who have a negative test result for SARS-CoV2 virus or underwent infection with this virus. On the other hand, visiting a patient in such circumstances by unvaccinated persons who do not have a negative test result for SARS-CoV-2 virus and have not undergone infection with this virus was recommended with an intensified sanitary regime. On the other hand, in a situation where the patient has not been vaccinated against COVID-19, has not undergone infection with the SARS-CoV-2 virus, and does not have a negative test result for this virus, it was recommended that vaccinated patients be allowed to visit, by unvaccinated patients (who have a negative test result or have undergone infection with SARS-CoV-2 virus) also with an intensified sanitary regime. It has not been recommended to visit a patient who has not been vaccinated against COVID-19, has not undergone infection with SARS-CoV-2, or has a negative test result for this virus by unvaccinated persons who have also not received a negative test result for this virus and have not undergone infection with the virus, except in special situations determined by the head of the treatment entity. On April 28, 2022, and then on May 24, 2022, the recommendations of the Ministry of Health and the Chief Sanitary Inspectorate on visiting patients residing in hospital wards during the COVID-19 epidemic were updated [9,10]. According to the recommendations, among other things, it should be possible for a patient to be visited by 1 person at a time and by 2 people in special situations.
There should also be time slots for daytime visits and limits on the duration of visits to reduce the risk of people congregating in one room.

Patient-centered care provides care that meets the patient's needs and ensures that clinical decisions are guided primarily by the patient's preferences and values [11]. The goal of the health care system is to meet the most basic needs of society, i.e., health and well-being. The effective operation of the healthcare system, however, requires the involvement of patients and their families as partners in the proper functioning of the healthcare system. Patients and their families are not simply passive recipients of health services. They should be active partners in joint decision-making regarding care [11]. Denying visits or care to a family member can entail adverse and potentially long-term psychological consequences for isolated patients, their families, or the health care professionals involved in their care. In addition, prohibiting visits may discourage patients from seeking treatment.

During the pandemic, other forms of contact between patients and loved ones. However, virtual contact (including video calls) was not implemented in all hospitals due to resource or connectivity limitations, or to protect the privacy of other patients. Instead of video calls, telephone communication may also be used, but this form of contact is not always satisfactory. In addition, the use of electronic communication by patients can increase the burden on already overburdened health care workers who assist patients using communication devices, especially those of the elderly. In addition, for some patients and their families, virtual contact is not enough to meet their needs and well-being, so health care professionals may feel obliged to act as a surrogate family, taking on roles usually performed by the patient's loved ones, such as keeping a vigil at the patient's bedside and relaying information, including non-medical information, to interested parties [12].

It is clear from the survey conducted by the authors that the majority of relatives are rather negative about the implemented restrictions on patient visits (39%). Insufficient investigation of the impact of patient visitation restrictions that have been implemented to reduce the spread of the virus has resulted in a lack of knowledge of the negative consequences of these restrictions for hospitalized patients and their families. Further evaluation of the impact of visit restrictions and the efforts being made to mitigate the negative effects of these restrictions is important for planning for pandemics and other events that may affect the burden on health care systems in the future [13].

According to a report compiled from signals to the Patient Ombudsman for the period from January to September 2020, in the case of hospital treatment, out of 104 reports, 25 reports involved deprivation of the right of a loved one to participate in the provision of health services to patients [14]. As the report indicates, there was a significant restriction, and sometimes a ban on relatives visiting patients, regardless of the assessment of the degree of epidemiological risk. The ban was imposed automatically, with no effort to seek opportunities to make contact between relatives a reality, despite their health-related nature [14].

The Authors' surveys were conducted among relatives of independent patients, so relatives were able to have daily contact (including by phone) with the patient (91%). As many as 58% of relatives did not contact medical personnel and medical personnel did not have to help contact the patient (88%).

5. CONCLUSIONS

Relatives of hospitalized patients are increasingly recognized as key individuals during the delivery of patient- and family-centered health care. The family primarily provides emotional support to patients. Their presence at the patient's side can improve communication and foster trust between patients, families, and healthcare professionals. Family members can also advocate for the patient, or help patients overcome language
barriers when interacting with the doctor[12]. As health systems tailor limited visitation policies to the ongoing COVID-19 pandemic, they may unintentionally impact patient and family involvement in the provision of care, including shared decision-making with medical staff [12]. Undoubtedly, when considering rules to restrict patient visitation during the COVID-19 pandemic, relevant authorities should carefully look at and compare the potential harm of the issued decision to restrict visitation by relatives along with the risk of virus transmission. As studies (on emergency cases) indicate, there is no evidence that visitors to hospitalized patients, are a source of transmission or are at higher risk of infection [12].

The rapidly evolving evidence base for COVID-19 means that research findings may change over time. In different countries, pandemic policy-making processes may vary depending on the health systems and jurisdiction in place. There is also a lack of sufficient research formally assessing the effects of restrictions on patient visits by relatives. Such studies are also needed for future pandemics. However, it is clear from the Authors' survey that the majority of relatives are rather negative about the introduced restrictions on patient visits (39%). A limitation of the Authors' work is the focus only on independent patients and their relatives, but studies on dependent patients and their relatives are in the pipeline.

BIBLIOGRAPHY
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