

ORIGINAL RESEARCH

Medicine Science 2019;8(2):375-80

Communication difficulties in perioperative anesthesia management for immigrant and refugee patients

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Received 22 November 2018; Accepted 03 December 2018
Available online 18.02.2019 with doi:10.5455/medscience.2018.07.8992

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Abstract

Healthcare providers who encounter different ethnic groups have been faced with serious communication problems with immigrant and refugee (I/R) patients. The perioperative period is very important for both anesthesiologists and patients. In this study, it was aimed to reveal anesthesiologists' problems related to I/R patients and to propose solutions for determined problems. An online survey questionnaire about the quantity and quality of communication problems that anesthesiologists come across in the perioperative period was developed. 120 of the anesthesiologists (49.0%) were trying to communicate by using body language or dictionary. 65 (26.5%) of the anesthesiologists could not communicate with these patients at all. During the process of taking "Informed Consent Form" before the anesthesia practice, 125 of the anesthesiologists (51.2%) stated that used a form written in physician's own language which was not understood by I/R patients. 76 anesthesiologists (31%) stated that they preferred general anesthesia instead of regional anesthesia because of language barriers. As a conclusion, the present study reveals that there are serious problems in the providing health care services regarding anesthesia to I/R patients especially due to the language barriers.

Keywords: Anesthesia, immigrant and refugee, communication

Introduction

In recent years, migrations have begun from many Middle Eastern countries to neighboring countries due to the conflict and war in the Middle East. Since March 2011, more than 10 million Syrian people had to leave their homes and settle in neighboring countries [1]. In Turkey, about one million immigrant were hospitalized, over 797 operations and about 184 thousand deliveries were performed between 2011-2016 [2]. The communication aspects are one of the most common problems during immigrants' and refugees' (I/R) perioperative period.

The perioperative process, which starts with preoperative patient evaluation and continues until the detection of postoperative problems is very important for both anesthesiologists and patients. In the preoperative evaluation of patients, the history of patients is quite important for determining the type of anesthesia. On the other

hand, the understanding of the physician's instructions during the examination is necessary for the maximum benefit expected from the operation. Obtaining and evaluating the information or taking necessary measures is a serious problem in these patients experiencing the communication problem which may affect the perioperative vital functions.

Another important element in the preoperative period is to obtain informed consent regarding the anesthesia procedure. Article 18 of the patient rights regulation in Turkey states that "information is given to the patient as simply as possible in such a way that it can be understood in accordance with the social and cultural level of the patient" [3]. Confronting patients who face with "informed consent form" without detailed information may lead to serious legal problems. Informing the patients about the procedures to be performed before operation and premedication applications are quite important in terms of prevention of surgical and psychological stress. Nervousness in the patients who do not have well communication may lead to some problems even when the patient is brought to the operation room and surgical stress can postpone the discharge. Anesthesiologists may face the inability to make a position them or to control the anesthetic effects and

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patients cannot follow the anesthesiologists' instructions during awakening and post-operative period.

In this study, it was aimed to reveal anesthesiologists' problems in I/R patients and to propose solutions for determined problems.

Material and Methods

The study was approved by the Necmettin Erbakan University Ethical Board. A cross-sectional nationwide survey was sent to 3070 anesthesiologists across Turkey. The mailing list was obtained from the Turkish Society of Anesthesiology and Reanimation directory available to members. The questionnaire prepared according to the studies in the literature evaluating communication problems between healthcare providers and I/R patients due to differences in language and culture in developed countries. The questionnaire consisted of 23 questions about the frequency of anesthesiologists' the encountering with I/R patients, the quantity, and quality of communication problems, the other problems they come across in the perioperative period and suggestions for solutions to these problems.

Surgical procedures are classified into four categories (class I: not exceeding 30 min minor surgical procedures or interventions such as endoscopy, imaging under MRI, circumcision, abscess drainage or lipoma excision; class II: surgical procedures that

last between 30 min and 1 hour such as inguinal herniation, cystoscopy or tonsillectomy; class III: moderate surgeries that last between 1-4 hours such as cesarean section, knee prosthesis, hysterectomy, middle ear surgery or limb fracture surgery; class IV: major surgeries that last longer than 4 hours such as radical prostatectomy, vertebra or brain surgery).

Statistical Analysis

In the study, it was calculated how many percents of the sample represented the population with the sample size. Accordingly, the margin of error for the sample sizes at the 95% confidence interval (Z-table value 1,962) was found as $e=0.056$. This means that sample size would deviate by at most 5.6% from the main mass. Data obtained from the survey were calculated using the Statistical Package for the Social Sciences (SPSS) for Windows version 13.0 (SPSS Inc, Chicago, Illinois) package program. Descriptive statistics of participants such as number, percentage and mean were used in the evaluation.

Results

Total of 257 anesthesiologists responded to the survey. The anesthesiologists who participated in the study were divided into 4 groups regarding ages. The highest participation was in the age group of 36-45 ($n=137$, %53.3). Other characteristics of the participants are shown in Table 1.

Table 1. Characteristics of Anesthesiologists

	n	%		n	%
Age			Institution		
25-35	64	24.9	Public Hospital	101	39.3
36-45	137	53.3	UHSTRH ^b	90	35.0
46-55	47	18.3	University Hospital	37	14.4
>55	9	3.5	Private Hospital	26	10.1
Sex			Foundation Hospital	3	1.2
Male	92	35.9	Professional Experience (year)		
Female	164	64.1	1-5	40	15.6
Citya			6-10	92	35.8
Istanbul	62	24.4	11-15	62	24.1
Konya	26	10.2	>15	63	24.5
Ankara	24	9.4	Title		
Bursa	16	6.3	Assistant	19	7.4
Sanliurfa	13	5.1	Specialist	191	74.3
Icel	11	4.3	Academician	47	18.3
Kayseri	8	3.1			
Others	97	37.7			

a. Seven cities where the most answered to the survey were indicated, b. University of Health Science, Training and Research Hospital

Results of the frequency of anesthesia for I/R patients are shown in the Figure 1A and Figure 1B indicate the frequency of the categories of surgical procedures that applied to I/R patients.

The frequency of anesthesiologists' communication levels with I/R patients was scaled from 1 to 5. The first value was "No problem at all" while the 5th value was "I encounter very often".

Only 10 (4.1%) of the anesthesiologists stated that they did not have any communication problems, while 100 of them (40.7%) stated that they had frequent communication problems and 189 of them (77.1%) stated that sufficient or effective communication was necessary during the perioperative period. The frequency of communication problems with I/R patients and the necessity of the effective communication are shown in Figure 2.

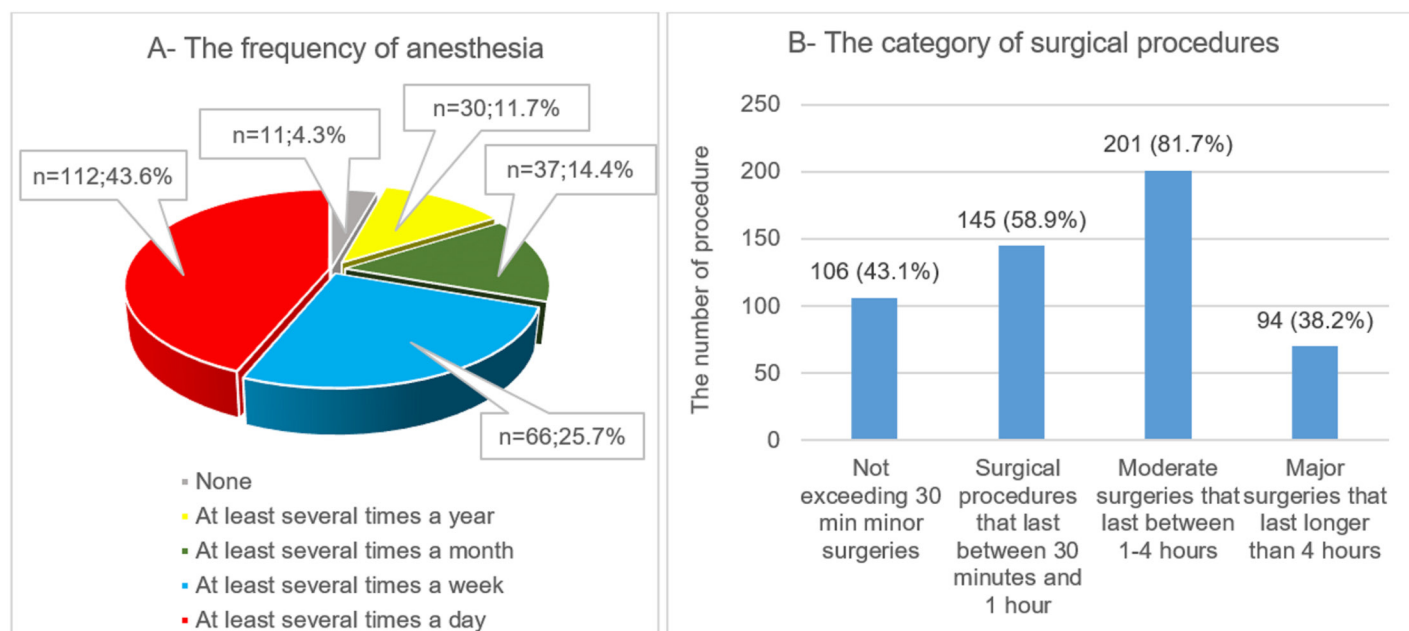


Figure 1. The frequency of anesthesia (A) and the category of surgical procedures (B) for immigrant and refugee patients

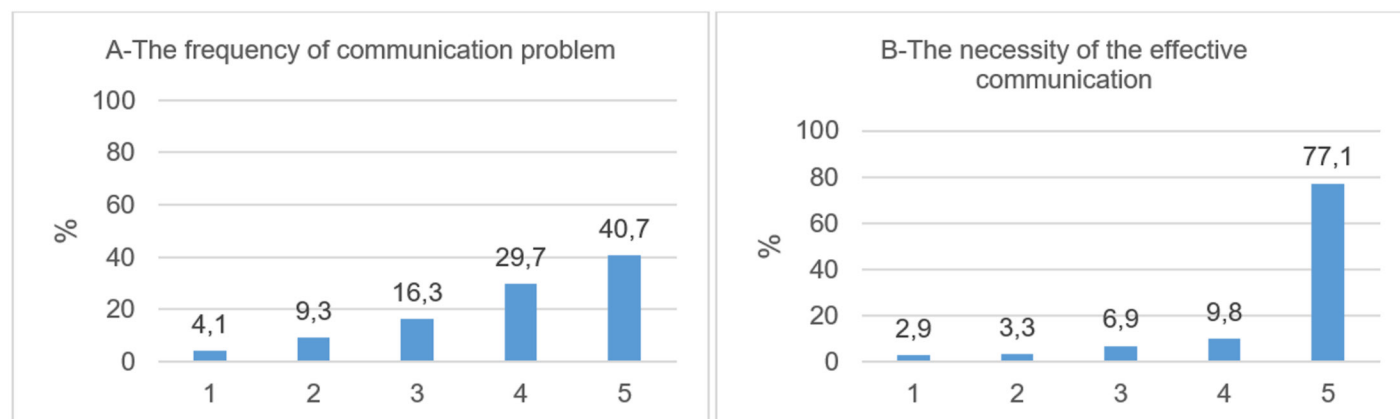


Figure 2. A-The frequency of communication problem B-The necessity of the effective communication with immigrant and refugee patient. (The Likert scale was used to evaluate the anesthesiologists' thoughts. For figure 2A, 1: Not ever, 2: Rarely, 3: Sometimes, 4: Often, 5: Always; for figure 2B, 1:Strongly disapprove, 2:Disapprove, 3:Undecided, 4:Approve, 5:Strongly approve)

64.1% of the anesthesiologists stated that the I/R patients or their relatives understood the Turkish language (n=157, 64.1%). During the preoperative evaluation most anesthesiologists stated that they use the telephone interpreter or interpretership services of their hospital (n = 124, 50.6%). One hundred twenty (49.0%) of the anesthesiologists were trying to communicate by using body language or dictionary. However, 65 (26.5%) of the anesthesiologists could not communicate with I/R patients at all. Ninety (36.6%) of the anesthesiologists stated that the given information about the anesthesia was not enough during the preoperative examination and 65 of them (26.5%) stated that they could not ask the other features such as the medical history of the patient, fasting time or allergy.

During the process of taking "Informed Consent Form" before the anesthesia practice, 125 of the anesthesiologists (51.2%) stated that used a form written in physician's own language which was not understood by I/R patients. Approximately half of the anesthesiologists thought that there was no legal validity of this consent text (n=122, 50%). Very few anesthesiologists were

using a text written in the I/R patients language (n=15, 6.1%). Eleven anesthesiologists did not answer the questions about the informed consent. The way of receiving informed consent form and anesthesiologists' views on the legal validity of this consent form is shown in Figure 3.

Seventy-six anesthesiologists (31%) stated that they preferred general anesthesia instead of regional anesthesia, while 156 anesthesiologists (63.7%) preferred a type of anesthesia practice according to appropriate indications. The most common problem was about inability to provide the necessary and proper position during performing regional anesthesia (n=195, 82.3%). The most common problem encountered by anesthesiologists was "problems that could be overcome" (n = 180, 73.5%). Thirty-one of the anesthesiologists (12.7%) did not face with any problems, 112 of them (45.7%) could not fulfill the planned anesthesia method, 20 of them (8.2%) encountered serious morbidity and 2 of them (0.8%) resulted in mortality. One hundred ninety-nine anesthesiologists, (80.9%) were not exposed to any violence by I/R patients, but they were exposed to psychological, verbal and

physical violence, respectively 34 (13.8%), 33 (13.4%) and 1 (0.4%). Seventy-five (30.6%) of them stated that these problems were more frequent than non-I/R patient. Ninety-five of the subjects stated that I/R patients had more problems in the postoperative period, especially in conditions requiring follow-up such as pain.

Most of the anesthesiologists stated that it is necessary to provide interpreting services in hospitals to overcome language barriers (n=208, 84.9%). The proposed solutions to the problems that are met due to the communication difficulties are shown in Table 2.

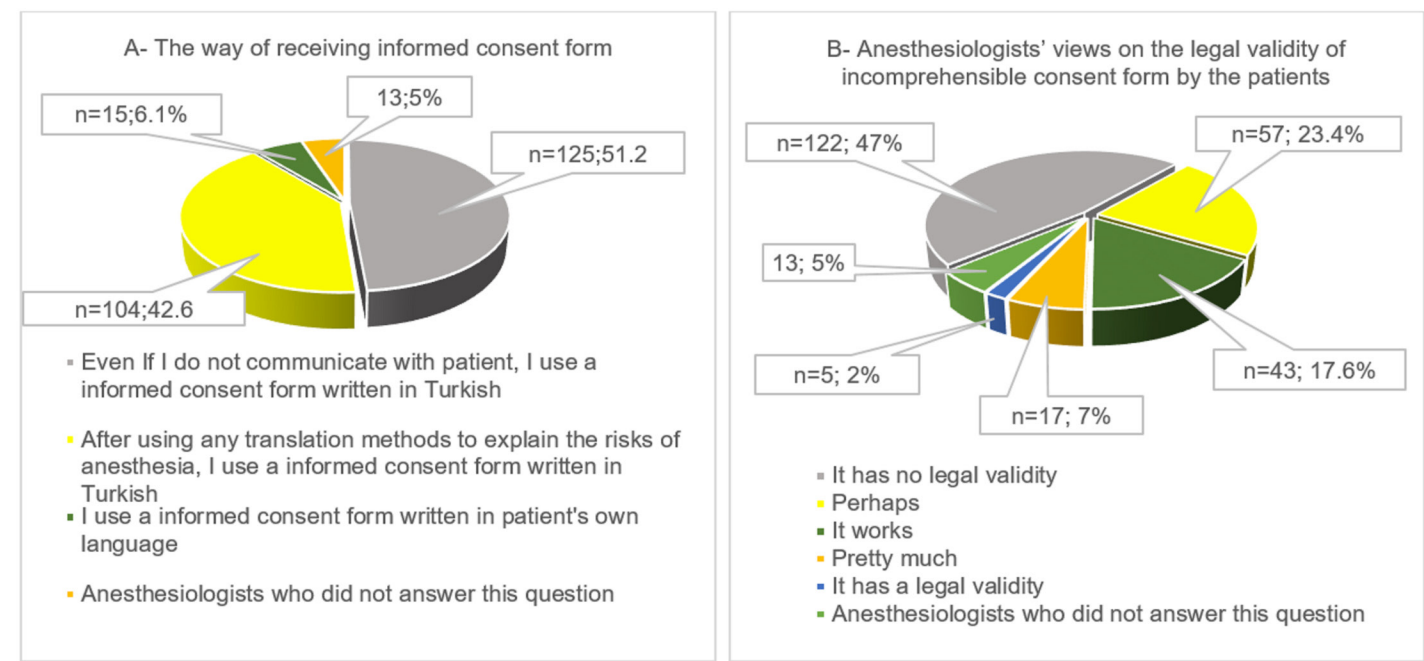


Figure 3. The way of receiving informed consent form (A) and anesthesiologists' views on the legal validity of incomprehensible consent form by the patients (B)

Table 2. The proposed solutions to the problems that are met due to the communication difficulties

Suggestions	n	%
This is a language problem and the Turkish language education should be extended for them	118	48.2
Interpreting services must be provided in the hospitals	208	84.9
Patient information texts and informed consent forms should be prepared in a way that patients can understand in their own language	165	67.3
This is an acculturation and quality communication will be provided in progress of time	50	20.4
A patient safety system must be standardized for these patients	1	0.4

Discussion

People who migrate from their original country to another country or region in order to improve their financial or social status or increase their future expectations for themselves or their families are defined as “immigrants”; while people who are outside of their country where they are a citizen because they are worried about being persecuted, and who can not benefit from the protection of their country [4,5]. According to the data of 2017, only the number of Syrian I/R in Turkey are more than 3 million and a majority of these people admitted to the hospital to receive any medical services [6]. In this study, we evaluated the anesthesiologists' dilemma with I/R patients due to communication problems during the perioperative period and the suggestions for determined issues.

In developed countries where I/R people live intensively, communication issues between physicians and patients have continued to be a serious problem. In a study of better practices for immigrants in health care in European countries, it was stated that the most frequent problem with 95% was language barriers [7]. In a study comparing total knee arthroplasty (TKA) outcomes in English-versus non-English-speaking patients in

Australia, Dowsey et al. found that 34.6% of patients had serious communication problems and reported that speaking in English was a less positive functional outcome predictor after TKA [8]. Akkoç et al. stated that 61% of I/R patients in Turkey have experienced several troubles due to the language problems in health care institutions [9]. In our study, we found that more than half of the anesthesiologists could not communicate with more than half of the I/R patients and that they needed an interpreter. We also found that a quarter of them could not communicate because there was not an interpreter in their institution.

During the preoperative evaluation, patients' chronic diseases, medications, history of operations are some vital importance in determining the type of anesthesia. Taking the necessary precautions in the preoperative process is a serious problem in this group of patients, which may affect the perioperative vital functions. Stefan et al. reported that healthcare providers could not reach medical history in 17% of immigrant patients. They also were concerned that lack of contact details and nationality made decisions regarding consent [7]. Ruppen et al. stated that it was very difficult to explain their diseases and the treatment modalities

to them [10]. In our study, a quarter of the anesthesiologists stated that they could not exactly obtain medical history, fasting and allergy status of these patients during preoperative evaluation.

The misunderstanding between patient and physician may cause faults that can not be compensated later. It has been reported some examples of wrong medicine use because of misunderstandings in refugee patients in California residents [11]. Even more Ring et al. pointed out that a 65-year-old female patient had mistakenly an operation in her left-hand instead of a right-hand because of the misconception of the physician [12]. Stefan et al. stated that one of the biggest obstacles to have a good practice for refugees in 16 European countries is the misunderstanding of diseases or treatments [7]. On the other hand, improper planning during preoperative preparation is one of the most important reasons for complications [13]. In the literature, we could not reach any information about complications related to the change in planned anesthesia procedure due to communication problems. In our study, one-fourth of the anesthesiologists stated that they carried out an anesthetic technique according to the appropriate indications while one-third of them could not carry out their planned anesthetic technique due to communication difficulties. This problem was caused by the fact of the inability to provide the necessary and proper position for patients during regional anesthesia. Worse still, 20 anesthesiologists (8.2%) encountered severe morbid events and 2 anesthesiologists (0.8%) faced one event resulted in mortality.

Previous studies have reported that some immigrant patients lack confidence in healthcare providers [8]. In this context, it has been reported that patients from countries where political or religious conflict has previously experienced feelings of disbelief against health care providers. Negative attitudes towards healthcare providers or sometimes hostile behavior are largely attributed to cultural differences, misunderstandings, or the feeling of being underestimated. This can often be a result of patients' previous social experiences or discrimination anxiety. However, the negative behavior of staff towards immigrant patients may also continue this fear of discrimination. Due to inability to understand the language of the host country immigrant patients may also experience discrimination and refusal in the health care system and may be treated unkindly [7]. Sometimes all these factors may turn the physician-patient relationship into situations that result in violence. In a study examining the issues encountered by healthcare providers in Turkey, health workers were exposed to psychological, verbal and physical violence, respectively 22%, 3%, and %1. [9]. In our study, 80.9% of the anesthesiologists were not exposed to any violence by I/R patients, but they were exposed to psychological, verbal and physical violence, respectively 13.8%, 13.4%, and 0.4%.

It is necessary to inform patients about the anesthetic procedure and to obtain their informed consent at the end of the preoperative evaluation. Effective preoperative informed consent can lay the groundwork for a less anxious, more knowledgeable, cooperative and satisfied patient profile [14]. Obtaining informed consent for diagnosis and treatment procedures including emergency or elective surgery can be a complex and challenging process in I/R patient. However, this is a necessity for patient safety and critical medical and legal responsibility. In the Guidelines for "Improving Patient Safety Systems with Limited-English Patients Proficiency", which

prepared by American Department of Health and Human Services, the poor and inadequate consent form has been assessed in risk management [15]. The American Anesthesiology Ethics Committee states that there are three important elements of a valid informed consent: disclosure/explanation, capacity, and voluntariness [16]. The statement of disclosure/explanation describes the accuracy of information regarding surgical intervention or anesthesia to the patient. Capacity, which encompasses both competence and comprehension is based on the foreign-language consent problem. Voluntariness requires that the patient is making an autonomous decision and is free of coercion. Extra effort may be required during obtaining informed consent in I/R patients due to language and cultural barriers [15]. With similar reasons physicians may also expose to ethical problems due to the patient's inadequate understanding of the information that transmitted during the appointment [16]. Meghan D Morris et al. stated that patients could not even write their own names on the informed consent form [11]. In our study, we found that 54% of the anesthetists use a consent form that is prepared on a physician's native language.

There are lots of research on the issue of solution regarding the I/R patients' communication difficulties. Priebe et al.'s study about immigrants has referred to seven components of good practice. These include organizational flexibility, good interpreting services, working with families and social services support, cultural awareness of staff, training programs and information materials for immigrants, positive and stable relationships with staff, and clear guidelines on care entitlements of different group migrants [7]. A good interpreter service may solve communication difficulties in a short term. "International Patient Support Line" in six languages has been created by the Republic of Turkey Ministry of Health in order to overcome these difficulties. Within this scope, a Foreigners Communication Center, which provides service in four languages has been established by AFAD (Disaster and Emergency Management Authority) [18]. However, in our study about half of the anesthesiologists stated that they could not make use of possibilities of telephone interpretation service. For this reason, 84.9% of the anesthesiologists stated that interpreting services must be provided in the hospitals.

In many countries where immigrants and refugees live, the communication problems have been solved through professional medical interpretation services. In the United States, the practice guideline for patients with language problems has emphasized that it is necessary to be experienced interpreters [15]. Providing educated medical interpreters for patients who can not speak the language of the healthcare provider has seen as a fundamental component of medical care. All Australian hospitals have telephone translation services provided by experienced medical interpreters [19]. Organizations and programs will be needed to overcome their language barriers [20]. The opening and dissemination of Turkish language training courses in provinces or counties for I/R patients can help solve this problem [9]. On the other hand, holding hospital training programs and information materials for I/R patients can help contribute to solving communication issues. About half of the participants in our study stated that "this is a language problem and the Turkish language education should be extended for them". Approximately 67.3% of them recommended the arrangement of the hospital training programs and the use of informational materials for these patients.

It has been shown that training of staff on acculturation improves patient-healthcare provider interaction [21]. Especially the promoting staff participation in social and economic assistance programs would likely be necessary to lessen acculturation barriers [11]. In the present study, 20.4% of the participants stated that these problems were cultural-based and that these problems would be resolved with a positive cultural interaction in time. It will also be more appropriate to inform the health care providers about I/R patients and workers' rights, to give legal and psychosocial support for the problems they have experienced.

To create a 'national patient safety guideline' in order to solve the limited communication and language problems may be one of the most effective practices. Patient safety guidelines for immigrants in the United States and Canada are among the best examples of solving existing problems [15,22]. In our study, there was very few proposals on standardizing a safety system and establishing a guide for I/R patients, which is attributed to the fact that the lack of understanding of such an implementation in our country.

There were a few limitations to our study that should be mentioned. Firstly, we sent the questionnaire only to the member of Turkish Society of Anesthesiology and Reanimation. However, we know that the number of anesthesiologists is more than member of Turkish Society of Anesthesiology and Reanimation. If we had reached all of the anesthesiologists, we could achieve better results. Secondly, statements may have been influenced by response tendencies, e.g. in line with the social desirability of answers, and reflect only personal statements.

Conclusion

The current study reveals that there are serious problems in providing health care services regarding anesthesia to I/R patients especially due to the language barriers. Present study may increase the awareness about this issue and provide a resource for the scientific-based solution suggestions.

This article does not contain any studies with human participants or animals performed by any of the authors.

Since this study was a survey, informed consent was not obtained from the participants.

Competing interests

The authors declare that they have no competing interest.

Financial Disclosure

All authors declare no financial support.

Ethical approval

The study was approved by the Necmettin Erbakan University Ethical Board.

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