DESIGN AND EVALUATION OF PSYCHOMETRIC ATTRIBUTES OF THE "PHYSICIANS' ATTITUDES TOWARD ESTABLISHING PERSONAL AND FRIENDLY COMMUNICATION WITH PATIENTS" SCALE

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Abstract

The physician-patient communication is one of the most important forms of communication in the health system. If this communication loses its moral aspects for different reasons, it will lead to mistrust. Therefore, this research was conducted to design and evaluate the psychometric attributes of the "Physicians' attitudes toward establishing personal and friendly communication with patients" scale. The present methodological research was conducted in three phases. In the first phase, conventional content analysis was used. In the second phase, the terms of the questionnaire were developed using the results of the qualitative part. In the third phase, the psychometric attributes of the questionnaire were determined using face validity, content, and reliability of internal consistency and stability. The score of all items of the questionnaire using the effective item selection method was more than 1.5. The CVR of 15 items was more than 0.62 and the CVI of all items was higher than 0.79. Cronbach's alpha of 0.749 was obtained to measure the internal consistency of the questionnaire using SPSS-v24 software. The used questionnaire has appropriate internal validity and reliability. Based on the results, there was no comprehensive and unified attitude towards establishing personal and friendly relations between a physician and a patient among experts.

Keywords: Psychometrics, Physicians' attitudes, Physician-patient communication, Iran

INTRODUCTION

One component of professionalism in medicine is the physician-patient communication. The physician's ability to communicate effectively with the patient is the most important part of the medical art and it is essential for physicians to acquire this skill [1]. When a patient sees a physician, no one is as aware of his physical, mental, and emotional health as the patient himself; therefore, if the physician does not have sufficient skills to communicate properly with the patient, he cannot obtain the necessary information about the patient's physical and mental condition; thus, he cannot adopt the most appropriate treatment [2]. Basically, the physician-patient communication is formed when the patient wants the physician's services and the physician consciously accepts him as his patient. This communication is referred to as a contractual and bilateral communication based on consent. When this professional communication is formed, the parties have a series of legal, moral, and professional duties and requirements towards each other; therefore, understanding the time of beginning and end of this communication is very important [3].

The key to effective communication between physician and patient is trust. Proper communication between physician and patient builds considerable trust, intimacy, or emotional attachment, resulting in increased patient satisfaction with the treatment process. Duration of the previous communication, the amount of confidential personal or private information transferred to the physician, the modality of the patient's medical problem and the grade of the patient's emotional interdependence on the physician all play a role in the intimacy of this communication [4]. Damage to this trust leads to an inefficient communication, which is only based on the need of the patient [5].

The establishment of a dysfunctional communication between physician and patient results in patient dissatisfaction, increased errors, misdiagnosis, increasing the cost of health services, prescribing unessential drugs, wasting patients' time and money, an incorrect treatment process, and ultimately reduced quality of health care [6].

The quality of the physician-patient communication is never constant but is constantly changing. In the last two decades, the physician-patient communication has widely changed so that medical decisions have been focused on the patient and his values [5]. Maintaining boundaries in the physician-patient communication is crucial to good medical care and proper services.

Sometimes there is a individual and friendly communication between physician and patient.

An individual and friendly physician-patient communication causes mental and intellectual conflict between the parties and diverts them from the ultimate goal of the communication, which is to help improve the patient's health; whether it is only based on friendship and personal communication or for sexual abuse. In most studies, this communication is obsolete and cannot be accepted [1]. The friendship and love between physician and patient in most countries are reprehensible and condemned and is clearly stated in the codes of their professional ethics; because in the physician-patient communication, the physician is in a position of strength and the patient is in a position of weakness due to the nature of this communication. The patient is ready to do whatever the physician tells him when he sees the physician. In this case, if a communication is formed, it is to the detriment of the patient because the two sides are not in the same position. It cannot be said that this communication is problematic if the patient consents because the patient owes himself to his physician and may not express his dissatisfaction due to embarrassment or shame [7, 8].

Several ethical issues have been considered in the medical profession, especially in the physician-patient communication. Physicians need to know and adhere to their ethical responsibilities in order to communicate properly with patients [9]. Although physicians are aware of these principles, sometimes different other issues affect this communication. Many of these complaints are not related to the physician's scientific skills and performance, but to how to communication with the patient. In other words, the cause of most medical complaints and violations is communication errors [10]. When the patient sees a physician, he is vulnerable and sick and is ready to do whatever the physician says. When a person is vulnerable in terms of physical and mental abilities, he or she is usually placed in a position of weakness and vulnerability instead of being in a position of strength and equality. Therefore, the physician should avoid any sexual, personal, or emotional contact with patients [11-13]. In some countries, the emotional and personal communication between physician and patient is always immoral. Any romantic communication that establishes between physician and patient will weaken the communication between them and if the right and wrong boundaries are forgotten in this regard, physicians may think of their own interests rather than the patient [14, 15]. Bolland et al. consider the physician-patient communication to be immoral and reprehensible only if it leads to a sexual
communication; however, others consider a patient's sexual abuse immoral instead [16-18].

Since the physician-patient communication is one of the most important communication in each society, if this communication deviates from its real and moral aspect for any reason, it will lead to mistrust and affect the society. On the other hand, knowing the attitudes of physicians towards personal and friendly communication with the patient helps to take the necessary interventions and appropriate culture-making. Although all aspects of a friendly and personal communication with patients in European and American countries have been thoroughly studied and examined over the years and the harms of such communication have been identified and there is a single opinion in this regard, but its dimensions in Iran are still unclear and have not been properly addressed. Also, the necessary education and culture-making regarding this issue, the limitations of the physician-patient communication, the reasons for the condemnation of such a communication, and the related ethical principles have not been addressed. Studying physicians’ personal and friendly relations with patients requires the use of valid tools based on the local culture of the target group. So far, several tools have been designed with different purposes for assessing the physician-patient communication. For example, in 2020, Rasekhi et al. designed a physician-patient communication skills tool and assessed its psychometric attributes [19]. This scale is not appropriate for assessing the friendly communication between physician-patient. To design or use a tool, considering its psychometric quality is of great importance. The two main features of psychometric attributes are validity and reliability, which are addressed in our study [20]. Therefore, this research was conducted to design and assess the face and content validity and reliability of physicians’ attitudes toward establishing individual and friendly communication with patients.

MATERIALS AND METHODS

Study Design

The present methodological study was conducted in 2019-2020 using a combined exploratory plan in two qualitative and quantitative stages.

Qualitative phase

Conventional content analysis was used to explain the concept of "a friendly and personal physician-patient communication". The study population consisted of three groups of physicians who were elected using purposive sampling. Inclusion criteria for physicians contained being Iranian and having at least five years of experience in a private office or clinic. Inclusion criteria for patients included having a bachelor's degree or above in psychology, philosophy, social sciences, or the law. Semi-structured interviews were used to gather data, which were finally saturated after interviewing 32 people. The most important questions of the interview include "What do you think if the physician-patient communication for any reason moves towards becoming emotional and forming a friendly communication?" and "Usually, communication start with love and expression of interest; what do you think about the situation where a physician develops feelings for a patient?" These questions were extracted from the literature review and experts' ideas. The interviews were recorded and transcribed literature next analyzed. The times of interviews were between 14-48 minutes. The interviews were analyzed using the contract content analysis method and the proposed Graneheim & Lundman method through the MaxQDA software. Accordingly, data analysis began with the repeated and narrative reading of all text data from interviews and recorded nonverbal interactions until the researcher closeness to data through immersion and obtaining an overview. Then, the data were read word for word to extract codes, which were exact words from the texts and contained key concepts and ideas. Then, the researcher examined the text and wrote down his first impression, argument, and analysis in the margins. As this process continued, tags appeared for the code that reflected more than one key concept and was often derived directly from the text and later converted into the initial coding map. Then, the codes were classified based on their similarity and degree of relevance within the subcategories. These emerging classes were used to organize and group the codes within meaningful clusters. Subclasses, in turn, were placed within the main classes based on their similarity and homogeneity [21].

To ensure the accuracy of the findings, the results of the analysis were given separately to two participants in both groups of physician and patients, who approved them. Data credibility was ensured through reviewing the interview transcripts by the participants, prolonged engagement, continuous observation, and interaction among researchers, peer review, and a combination of several methods (interview and observation). To ensure transferability were tried to mention all the details of the study, contained the field of research and characteristics and experiences of the participants, and maximum diversity was used for sampling. Also, data reliability was ensured through accountability. In other words, all research processes, data collection, analysis, coding and formation of classes were reviewed by one of the referees who were familiar with qualitative research.
the end, all the research processes were recorded and widely published to ensure their accuracy.

After explaining the concept and defining its dimensions, the databases of PubMed, ProQuest, Scopus, and Google Scholar were reviewed using keywords, including physician-patient communication, individual communication, friendly communication, communication errors. Finally, the items of the questionnaire were designed after combining the searched items in the review and qualitative stages, and the draft of the personal and friendly physician-patient communication was prepared with 100 items. In the next stage, the validity and reliability of the instrument were inquired.

**Quantitative stage**

**Face and content validity**

Content validity was analyzed through content validity ratio (CVR) to determine necessity and content validity index (CVI) to determine the relevance of items. For this purpose, the draft of the tool was provided to experts in 12 medical ethics and tool designers and they were asked to assess if the tool was suitable in terms of exigency and congruence. Then, the numerical value of CVR was specified based on the Lawshe table, and items with CVR less than 0.62 were removed [22, 23].

Then, the CVI of the whole tool, the degree of setlement and average was computed. Kappa statistics were calculated to evaluate the agreement between voters for every item. Items with (kappa statistic score ≥ 0.75) remained in the tool [24]. In order to validate the face validity, 10 individuals (5 physicians and 5 patients) were randomly interviewed to assess the difficulty, ambiguity, and relevance of the items. Then, the effect of each item on face validity was examined to reduce the items and assess the significance of every item. Finally, these patients and physicians were asked to determine the significance of every item based on their experiences. Finally, vague and supernumerary items were removed with an impact factor <1.5 [25].

**Reliability**

Reliability was assessed using two methods. Internal consistency was assessed after the face and content validity phase through calculating Cronbach's alpha. In order to appraise the stability of the scale, a questionnaire was given to 35 physicians and patients within 2 weeks and the ICC of the tool was computed using the test-retest method. Data analysis was done using SPSS-V24 software.

**RESULTS**

**Qualitative phase**

Participants in this study were 33 cases, including 11 physicians with a mean age of 35.23 ± 9.12 years, 10 patients with a mean age of 41.35 ± 13.11 years, and 12 experts in medical ethics with a mean age of 48.53 ± 10.25 years. Based on the qualitative stage data, a personal and friendly communication between physician and patient was defined and extracted, and converted into six themes (Assimilating physician-patient emotional communication with other emotional communication, Considering the emotional communication between physician and patient as ethical, Considering the emotional communication between physician and patient as unethical, Degradation of unethical physician-patient relations to sexual relations, Degradation of unethical physician-patient relations to self-interested relations and Legalizing the emotional communication between physician and patient) (Table 1). In the next step and after analyzing the literature, 19 items were added to the set of items and at this point, no new dimension was added. Accordingly, the draft scale consisted of 100 items, each representing an aspect of the concept of an individual and friendly communication between physician and patient. The interview statements were divided into eight categories after analysis and integration. From each theme, one or more items were selected to represent that theme. Three items were selected from the first class, one item from the second theme, one item from the third themes, two items from the fourth themes, one item from the fifth themes, two items from the sixth themes, four items from the seventh themes and two items from the eighth themes. Finally, 16 items were used for the initial design of the questionnaire.

**Face and content validity**

The results of CVR proved that out of 16 items, one item was less than the cutoff point of 0.62 and deleted and 15 items with a CVR score> 0.62 remained pursuant to the study team. CVI was too computed by calculating the mean and considering the cutoff point of 0.79. The CVI of all questions except the item that was removed was higher than 0.79. Then, the cases that overlapped in terms of specifications and conceptual dimension were inquired and in case of overlap, they were merged with each other. Finally, 15 items entered the face validity stage, and items with an impact factor of less than 1.5 (impact factor <1.5) were removed. Finally, the draft of the tool was approved with 15 items.

**Reliability**

The reliability of the tool was assessed via measuring internal compatibility and stability. To determine the
reliability, in addition to assessing the internal consistency, Cronbach’s alpha coefficient of 0.749 was obtained and the stratified internal correlation coefficient method was also used, which was 0.81 indicating good reliability of the tool. The overall degree of agreement on relevance and transparency with the conservative approach of items were both 80%. The overall relevance and overall transparency of the tool were calculated with the general agreement approach, which was reported to be more than 80%. The overall comprehensiveness of the tool was 90%. About the scoring method of the tool, whereas this tool has positive and negative dimensions, scoring is done using positive and negative dimensions. At this phase, the positive dimensions are scored directly (totally agree = 5, agree = 4, no idea = 3, disagree = 2 and totally disagree = 1) and negative dimensions are scored reversely (totally agree = 1, agree = 2, no idea = 3, disagree = 4 and totally disagree = 5). The range of feasible scores for the positive and negative dimensions is 15-75 and 16-80 and the total score is between 31 and 155.

**DISCUSSION**

Findings obtained from the qualitative stage indicated a fundamental difference of opinion among the participants in the study. In some cases, there was even a discrepancy between the opinions of the participants, and some of them believed that the affection between the physician and the patient was immoral. The results of the study by Dobash et al. showed that in some countries, the emotional communication between physician and patient is always immoral. When an internal medicine specialist in Texas started an emotional communication with his patient, the State Medical Board fined him $ 10,000 and 10 hours of ethics training in compensation for professional misconduct [26]. However, other participants had different beliefs and did not consider it immoral. Some also referred to jurisprudence and others to the law for the emotional communication between physician and patient. Some believed that the emotional communication between physician and patient should be reported, and others believed that this communication should not be reported and are only related to the physician and patient. Some physicians do not consider loving a patient immoral because the concept of empathy and friendly relations with patients has no definite boundaries in their minds and they are not aware of the differences between them. In this case, it is even possible that the physician’s behaviour for the empathy with the patient due to lack of awareness and familiarity with the necessary boundaries in the physician-patient communication leads to misunderstanding and confusion in the patient’s mind. Some participants ruled out the need for moral judgment due to the lack of legal barriers to emotional communication between physician and patient. However, in order to be sure, this issue should be discussed in detail and in-depth with the great scholars and authorities, which has not been achieved yet. Some of the interviewees believed that the problem should be addressed by the law, and because of no law on this issue and due to the lack of specific legal instructions, the emotional communication between the physician and the patient is not immoral. It should be noted that legal propositions are always smaller than moral propositions, and legal propositions are formed after moral propositions and based on them. That is, before addressing the law, it is necessary to achieve a precise moral view of the society and experts, and then create the law based on them. However, currently, there is no single view on this issue in Iranian society. Therefore, physicians need to be trained to explain the principles of the physician-patient communication and the skills needed to communicate effectively with patients.

Another finding of this study was that most of the participants considered it immoral to establish any friendly and romantic communication between the physician and the patient and stated that this prohibition should not be limited to romantic or sexual relations with patients. Other studies have shown that the physician-patient communication is only immoral and reprehensible if it leads to a sexual communication, whereas some others did not even consider sex to be immoral and considered the sexual abuse of the patient immoral and reprehensible. The results of this study were in line with the results of the study by Darkan et al. [17]. The American Medical Association and the American Academy of Orthopedic Surgeons condemned the sexual communication between physicians and patients. Cases of sexual harassment by physicians that have become public have led various states in the United States to develop and enforce their own laws on physicians’ sexual behavior [27]. In Canada, if a physician has sex with a current patient before ending the therapeutic process, it is considered sexual abuse by Medical Supervision Centers, and there is no problem if it is agreed. However, an imbalance in these communication makes it impossible for the patient to have real agreement to establish a communication [28]. In a study conducted in 1996 on sexual assault in various fields of medicine, it was reported that sexual assault is more likely in the fields of psychiatry, family medicine, and gynecology. According to a proposed theory, the nature and duration of the communication in these disciplines increase the chances of crossing boundaries [29]. Fong et al. reported that immoral communication, including sexual abuse, begin with the expression of
feelings and emotions, and no one knows that this expression of emotion and feelings is going to lead to abuse [1]. The results of a study conducted in 2014 in Canada and the United States showed that respondents feel that having an intimate communication with patients, whether current or former, is undoubtedly immoral and wrong. This rate has decreased compared with a survey in 2010, in which 80% of the participants had this opinion [30].

In this study, some participants considered the issue correctly, and using accurate analysis and considering the existing possibilities and the sequence of possible events, made important points about the friendly and personal communication between physician and patient. The ultimate goal of the physician-patient communication is the health of the patient and the community, and the physician should not pursue any other goal in parallel with this goal. The physician also should not allow anything to distract him from the health of the patient and the community. In other words, any emotional communication between the physician and the patient may cause mental engagement of the patient or physician and the ultimate goal of the communication may not be achieved; thus, it cannot be accepted. Stewart et al. showed that the ultimate goal of the physician-patient communication is the patient's health, which is consistent with the results of this study [31].

It is a misconception that the physician-patient communication is not related to anyone other than themselves because the physician-patient communication is effective in shaping the view of people in the community towards the health system and its organizations. Any violation of the principles of ethics and law will damage the physician-patient communication and the community's trust in physicians. Therefore, physicians should be sensitive to establishing such communication with patients and in addition to avoid establishing such communication with patients, report such communication among their colleagues in order to protect patients' rights and public trust in physicians. This difference and contradiction between the opinions of the participants indicate that this issue has not been institutionalized in Iran yet; thus, everyone analyzes and concludes in his own opinion. Some state that the emotional communication between physician and patient is a patient-physician right and should not be prevented, whereas others believe that an emotional communication violates the patient's rights and will lead to its destruction.

In the present study, after designing the instrument, qualitative face validity methods and quantitative and qualitative content validity were used for determining the validity of the instrument. In this study, the CVR value of 15 out of 16 items with an average of 0.86 (at least 0.80) was higher than the Lawshe table (0.62); therefore, the presence of the items (P <0.05) was essential in this tool. In this study, the validity of the whole questionnaire was obtained 0.86 using the Lawshe formula. The results of the content analysis of the questionnaire showed the significance of the factors at the level of P <0.01. Also, the average final CVI for the tool was 0.97. Its reliability was obtained 0.81 by examining the internal consistency, considering the Cronbach's alpha coefficient of 0.749, and using the intra-class correlation coefficient, which indicated the proper reliability of the tool. The overall degree of agreement on relevance and transparency with the conservative approach of the items was 80%. The overall relevance and overall transparency of the instrument were calculated with the general agreement approach, which was reported to be more than 80%. The overall comprehensiveness of the tool was 90%. In 2020, Rasekhi et al. developed a communication skills tool between the patient and the patient [19].

Among the first 30 items, the item effect was higher than 1.5, the content validity ratio was more than 0.51, content validity was above 0.79, thus, 18 items were considered for exploratory factor analysis. Then, these variables were loaded according to the given value of greater than 1 on four factors. The reliability of the instrument was confirmed by the Cronbach's alpha coefficient of 0.92. The objectives of this tool are completely different from the tools of the present study and all its psychometric attributes have been confirmed [19]. In 2011, Matthew J. Ridd et al. designed the physician-patient communication scale and assessed its psychometric attributes. The difference between this tool and the tool assessed in our study is that it examines the quality and depth of the communication between physician and patient. This tool has 8 items, and the results of its psychometric attributes showed that it has a good reliability with Cronbach's alpha of 0.93. In addition, its internal correlation coefficient was calculated to be 0.87 [32]. Van der Feltz-Cornelis developed a tool for measuring the communication between physicians and patients that consisted of two subscales: The first
subscale had 9 items with the Cronbach's alpha of 0.94, indicating its internal consistency and the second subscale, consisted of four items with the Cronbach's alpha of 0.68. Also, the test-retest score was calculated to be 3.63 after two months, which was almost constant, and the Pearson correlation was calculated to be 0.61 [33]. The difference between the questionnaire used in the present study and that of the Christina study is the type of communication pattern and the focus on a friendly and personal communication, which no similar questionnaire was not found.

CONCLUSION
The "Physicians' attitude towards establishing personal and friendly relations with patients" questionnaire has proper content and face validity and appropriate reliability. The opinions obtained from the interview indicated the lack of a comprehensive and unified attitude towards the friendly and personal communication between physician and patient among the experts. The different views of physicians and patients participating in this study indicated that so far this issue has not been accurately considered and it has not been ethically analyzed; thus, everyone analyzes and concludes according to his own opinion. Therefore, it is suggested that this issue be researched and discussed by a group of experts, and its results are provided to all to provide a basis for the moral sensitivity and logical conclusion of others and the achieving close views and opinions. The authors suggest that this questionnaire be used to assess the attitudes of physicians towards establishing personal and friendly communication with patients and based on the results, the necessary measures should be taken for education and institutionalization of the principles of establishing a proper physician-patient communication.

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DECLARATION OF INTEREST STATEMENT
The authors declare no potential conflicts of interest.

CONSENT FOR PUBLICATION
Free and informed consent was obtained from all study participants.

AVAILABILITY OF DATA AND MATERIALS
All data resulting from this study has been published and will be provided in the form of a supplementary file if needed.

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AUTHOR'S CONTRIBUTIONS
F.H, A.AK, AH.SH, SH.R involved in the study conception/design. F.H, A.AK, AH.SH, SH.R, MS.Y and H.A contributed to the data collection/analysis. H.A and F.H drafted the manuscript. F.H, H.A, AH.SH in critical revisions for important intellectual content and administrative/technical support and supervised the work.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE
This article is taken from the medical doctoral thesis approved by Tehran University of Medical Sciences. All ethical standards for clinical research, such as obtaining informed consent, confidentiality of information, possibility of withdrawal at any time, privacy, fairness and non-harm to study participants, were observed.

References
11. Maintaining a professional boundary between you and your patient. [Updated 2013].
12. SANA JQ. The struggle in a physician-patient communication to not get personal. [Updated 2017].
29. Paul Cerrato M. Exclusive ethics survey: is it ever okay to date a patient? [Updated 2014].
Table 1. Classes extracted from the qualitative stage of the study

<table>
<thead>
<tr>
<th>Classes extracted from the contract content analysis stage</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assimilating physician-patient emotional communication with other emotional communication</td>
<td>18</td>
</tr>
<tr>
<td>2 Considering the emotional communication between physician and patient as ethical</td>
<td>19</td>
</tr>
<tr>
<td>3 Considering the emotional communication between physician and patient as unethical</td>
<td>22</td>
</tr>
<tr>
<td>4 Degradation of unethical physician-patient relations to sexual relations</td>
<td>5</td>
</tr>
<tr>
<td>5 Degradation of unethical physician-patient relations to self-interested relations</td>
<td>14</td>
</tr>
<tr>
<td>6 Legalizing the emotional communication between physician and patient</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 2. Face and content validity and the final tool assessing physicians' attitudes toward establishing personal and friendly communication with patients

<table>
<thead>
<tr>
<th>Item</th>
<th>CVR</th>
<th>CVI (Transparency)</th>
<th>CVI (relevance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Friendship and love between the physician and the patient, like the other human relations, are subject to religious rules.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2 Friendship and love between the physician and the patient, like other human relations, are subject to the legal rules that govern society.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3 Friendship and love between physician and patient, like the rest of human relations, are subject to the rules based on the custom of society.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4 Friendship and affection between a physician and a patient are not generally immoral.</td>
<td>0. 6</td>
<td>0. 8</td>
<td>0. 7</td>
</tr>
<tr>
<td>5 Friendship and love between a physician and a patient are immoral for any reason.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6 Friendship and love between a physician and a patient are immoral only if it is done for sexual communication.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7 Friendship and love between a physician and a patient are only immoral if it is to establish a romantic communication.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8 The friendship between a physician and a patient is immoral only if it is motivated by the expectation of using the other party.</td>
<td>0. 8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9 The love between physician and patient has nothing to do with anyone but physician and patient.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10 The physician-patient communication is related solely to them, and others should not make ethical judgments about it.</td>
<td>1</td>
<td>0. 8</td>
<td>1</td>
</tr>
</tbody>
</table>
Continuation of Table 2.

<table>
<thead>
<tr>
<th>Item</th>
<th>CVR</th>
<th>CVI (Transparency)</th>
<th>CVI (relevance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 The romantic communication between physician and patient undermines public trust in the medical community.</td>
<td>0.8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>12 The romantic communication between physician and patient needs to be reported by colleagues to the relevant authorities.</td>
<td>0.8</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>13 If a colleague notices a romantic communication between a physician and his patient, it is necessary to give the physician an ethical warning.</td>
<td>0.8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14 Patients should be aware that a physician's romantic communication with them is forbidden and should be reported.</td>
<td>0.8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>15 To control the communication between physician and patient, whether friendly or romantic, it is necessary to establish strict disciplinary and organizational rules.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16 To control the communication between physician and patient, it is necessary for any organization, such as a hospital, clinic, etc., to establish precise organizational rules.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
«ДАРГЕРЕДІН ЕМДЕЛУШІЛІРМЕН ЖЕКЕ ЖӘНЕ ДОСТЫҚ БАЙЛАҢЫСЫ ОРНАТУҒА КӨЗҚАРАСЫ» ШКАЛАҢЫҢ ПСИХОМЕТРИЯЛЫҚ ҚОРСЕТКІШТЕРІН ЭЗІРЛЕУ ЖӘНЕ БАҒАЛАНУ

Түріндеме
Дәрігер мен емделуші арасындағы қатысым денсаулық сақтау жүйесінде мағынды қарым-қатынас процестерінің бірі болып табылады, егер оған қатысушылар қандай да бір себептермен моралдық нүссауларды ұстануды тәкіттәс, олда сенім бұзылды. Бұл зерттеу «Дәрігерлердің емделушілермен жеңе достық қарым-қатынас орнатуға қатынасы» шқаланың психометриялық белгілерін зертте және багалау мақсатында жүрісіз. Бұл зерттеу жүрісі және бірнеше қызметкерлерге көзқарас. Бірнеше методологиялық баяндардың құрылымы ағылшынды, түрлі қызметкерлермен байланысты. Екінші кезеңде қандай тәсілді жасоңыздар. Екинші кезеңде сапалық бөлімінің нәтижелері әрқылы сауалнаманың шарттары жасалынған, үшінші кезеңде қызметкерлер мен қызметкерлермен қараш сақталып, үшінші кезеңде сәртінде валідділігін әдіс жасау. 1-5-тен қарастыра отырып, CVR 0,62-ден қаттығуға, ал барлық тармақтары CV10,79-дан қаттығуға болады. 0,749 тең Кронбах альфасы SPSS-v24 багдарламалық құрылындағы, сауалнаманың ішінде сәйкестігін анықтау үшін алынған. Пайдаланылған сауалнаманың со қысқырлық ішінде валідділігі мен сәйкестігі мен бар. Алынған нәтижелерге сүйеніп, қазіргі қағазына мамандар ортасында дәрігер мен емделушінің қарашына және достық қарым-қатынасының орнатуға қатысты кешендері және біртұтас көзқарас қалыптысқанға ден айтуға болады.

Түрін сөздет: психометрия, дәрігерлердің қарым-қатынасы, дәрігер мен емделуші арасындағы қатысым, Иран.

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Резюме
Общение между врачом и пациентом является одним из важнейших коммуникативных процессов в системе здравоохранения, если его участники перестанут по каким-либо причинам придерживаться моральных ориентиров, будет нарушено доверие. Данное исследование было проведено с целью разработки и оценки психометрических признаков шкалы «Отношение врачей к установлению личного и дружественного общения с пациентами». Настоящее методологическое исследование проводилось в три этапа. На первом этапе был выполнен контент-анализ. На втором этапе были разработаны условия анкеты с использованием результатов качественной части, а на третьем этапе были определены психометрические признаки анкеты с использованием внешней валидности, содержания и надежности внутренней согласованности и стабильности. Оценка всех пунктов анкеты с использованием эффективного метода выбора пунктов составила более 1,5. CVR по 15 пунктам был выше 0,62, a CVI по всем пунктам выше 0,79. Альфа Кронбаха, равная 0,749, была получена для измерения внутренней согласованности вопросника с использованием программного обеспечения SPSS-v24. Используемый опросник имеет соответствующую внутреннюю валидность и надежность. На основании полученных результатов можно говорить о том, что среди специалистов на данный момент не сформировано комплексное и единое отношение к установлению личных и дружеских отношений между врачом и пациентом.

Ключевые слова: психометрия, отношение врача, общение между врачом и пациентом, Иран
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