User perception of the interpersonal relationship with the nurse about the assistance received in the HiperDia program

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Abstract—The objective was to identify the user's perception of the interpersonal relationship with the nurse regarding the assistance received in the consultation of the Hiperdia program, based on the different roles that the nurse can assume, in the light of Peplau's theory of interpersonal relationships. Descriptive research, with a qualitative approach, carried out with 20 users registered in the Hiperdia Program of a Basic Health Unit, in the city of Belém, Pará, Brazil. The theory based on data from Strauss and Corbin and the IRaMuTeQ software were used. Resolution 510/2016, approved in CAAE: 14945819.8.0000.0018, was respected. Most participants were female 16 (80%), incomplete elementary school 14 (70%) and over 60 years old 11 (55%). Four categories were identified: 1) The user-nurse bond in the health service; 2) User-nurse interaction in the identification of risk factors and care regarding Chronic Noncommunicable Diseases; 3) Health education activities to improve the quality of life of users with Chronic Non-Communicable Diseases; 4) How the user deals with the disease and the nurse's help in understanding the problem. All were correlated with the roles played by the nurse, according to Peplau's theory. Realize that the nurse's roles are intertwined, as they are sequential steps. In research, the role of the stranger was the only negative point, as it still remains a reality in primary care.

Keywords—Communication; Nursing theory; Nursing; Interpersonal relationships.

I. INTRODUCTION

According to the World Health Organization, Chronic Noncommunicable Diseases (NCDs) are the biggest cause of death worldwide. In Brazil, in 2016, 74% of deaths in people aged between 30 and 69 years were due to NCDs⁴. Among these pathologies are Diabetes Mellitus (DM) and Systemic Arterial Hypertension (SAH). The Risk Factors Surveillance System for chronic non-communicable diseases showed that Brazil has seen an increase in the prevalence of DM and SAH in recent years. The prevalence of DM went from 5.5% in 2006 to 7.4% in 2019, an increase of 34.5% in the period, while SAH in 2006 had a prevalence of 22.6%, changing to 24.5% in 2019⁵.

In this scenario, the Hiperdia program has been an important instrument in Primary Health Care in assisting users with these pathologies⁶. However, in order to promote more effective assistance, it is necessary to have an interpersonal relationship with the user. In this context, the nurse becomes an important professional in monitoring users with DM and SAH, since the profession needs a development of skills that allows an interpersonal relationship in the search for systematic and comprehensive care⁷. Thus, Hildegard Elizabeth Peplau's Theory of Interpersonal Relationship is adequate as a theoretical contribution to nurses who work with users with DM and SAH.

Peplau's theory qualifies good practices, since, through the phases it proposes, care is directed and the nursing professional recognizes, through interpersonal relationships with the patient, their difficulties, and develops care in response to these identified needs. The patient, on the other hand, when recognizing his clinical condition provided by interpersonal relationships, participates in his own care⁸.

According to Peplau, there are four sequential phases in interpersonal relationships that are interrelated and overlap, namely: Orientation, Identification, Exploration and Resolution⁹. The interpersonal process, on the other hand,
consists of 6 roles that nurses must play, namely: strange role, resource provider, teacher, leader, substitute, advisor. The theory was chosen because Peplau is concerned with the experiences that the individual may have in relation to his chronic non-communicable pathologies, which are irreversible and the individual needs to adapt to his real situation, therefore, non-adherence to treatment is often related to lack of interpersonal relationship between the nurse and the user.

In view of the above, this study aims to identify the user's perception of the interpersonal relationship with the nurse about the assistance received in the consultation of the Hiperdia program, based on the different roles that the nurse can assume, in the light of the theory of interpersonal relationships of Peplau.

II. MATERIALS AND METHODS

This is a descriptive, cross-sectional study with a qualitative approach. Twenty users registered in the Hiperdia Program of a Basic Health Unit, located in the city of Belém, Pará, Brazil, participated in the research. To delimit the sample, the saturation technique was performed, considered a sampling process by theoretical saturation in which the collected data are interrupted when there are no new elements.

The inclusion criterion was the participation of users diagnosed with DM and / or SAH, registered in the Hiperdia Program, aged 18 years or over and as an exclusion criterion users with less than 1 year of follow-up by nurses in the Program Hiperdia, who has communication difficulties or cognitive deficits. The research was carried out through a semi-structured interview, divided into two parts: I) User identification regarding age, gender and level of education for social characterization and; II) Guiding questions about the user's perception regarding the interpersonal relationship with the nurse, in the light of Hildegard Elizabeth Peplau's theory. In this second stage, the guiding questions are related to the roles that must be developed by nurses in caring for the user, based on the interpersonal relationship of Peplau's theory. Data collection took place from October to November 2019.

Data analysis was performed using the theory based on data by Strauss and Corbin (2008), which allows the classification of the conceptual ordering and the IRaMuTeQ software (R interface for the Multidimensional Analyzes of Textes et Questionnaires) that makes possible different types of analysis of textual data, the vocabulary distribution can be organized in an easily understandable and visually clear way with graphic representations based on lexicographic analyzes.

The analysis by Strauss and Corbin (2008) is used in qualitative research. The technique was only for carrying out the conceptual ordering of ideas, based on open and axial coding. In the open step, the IRaMuTeQ software was used, the analysis of statistical choice being the Descending Hierarchical Classification (DHC) through the Dendogram that allows to regroup the corpus according to its similarity to each other. After this survey, axial coding was performed to make the relationship between the classes formed by IRaMuTeQ and the construction of the categories. After identifying the categories, a thorough reading of the categories and the speeches of each one was carried out to make a correlation with the roles played by nurses, according to Peplau's theory, namely: role of stranger, provider of resources, substitute, teacher, leader, substitute, advisor.

The research followed Resolution No. 510, of April 7, 2016 and Resolution No. 466, of December 12, 2012. Data collection started after approval by the Research Ethics Committee (CEP) of the Health Sciences Institute UFPA, opinion 3,579,897: CAAE: 14945819.8.0000.0018. All participants signed the Free and Informed Consent Form (ICF). Participants had their anonymity preserved, codenamed E1, E2 and E20.

III. RESULTS

The total number of study participants was 20, of whom 16 (80%) were female and 4 (20%) were male. As for education, most had incomplete primary education 14 (70%), secondary education 3 (15%), higher education 2 (10%) and illiterate 1 (5%). Regarding age, most were over 60 years old 11 (55%), followed by 6 (30%), between 50-59 years old and 3 (15%) between 30-49 years old.

The Descending Hierarchical Classification (DHC) through the Dendogram, allowed the identification of the statistical analysis, as shown in Figure 1.
In category 1, represented by the color red, it obtained 21.9% of the responses of the interviews. The most repeated words in this category were: consultation (24), schedule (5), time (6), treatment (3), month (3), schedule (3), get (9), consult (8). This category addresses the difficulty of obtaining a nursing consultation. In category 2, identified by the color green, it is represented by 28.1% of the responses of the interviews. The most repeated words were: question (39), diabetes (21), pressure (15), nurse (15) family (10), problem (10), disease (9). The category groups information about family and personal findings as risk factors and the nurse's interpersonal relationship with the user and their role in guiding doubts.

In category 3, identified by the color blue, it presents 27.6% of the responses of the interviews. The words that appeared the most were: taking (41), time (14), physical (11), exercise (9), right (24), time (10), walking (7), food (7), medication (13), walking (10). This category addresses the guidelines provided by nurses regarding physical exercise, medication and food; and category 4, identified by the color purple, represents 22.4% of the responses to the interviews. The most repeated words were: thanks (7), god (9), front (4) diabetes (4), explain (11), disease (19), accept (9), live together (3). It refers to the answer about the acceptance of the disease, help from the nurse to the user and guidance on the disease.

In the axial coding of Strauss and Corbin (2008) and the classes identified in IraMuTeQ, the textual domains and interpretation of meanings were identified, thus, the following categories emerged: 1) The bond between the user-nurse in the health service; 2) User-nurse interaction in the identification of risk factors and care regarding Chronic Noncommunicable Diseases; 3) Health education activities to improve the quality of life of users with Chronic Non-Communicable Diseases; 4) How the user deals with the disease and the nurse's help in understanding the problem.

When correlating the categories found, the roles played by nurses were identified from the user's perception, according to Hildegard Elizabeth Peplau's theory, namely: role of stranger, resource provider, teacher, leader, substitute, advisor.

THE STRANGE'S ROLE

IraMuTeQ relates the speeches only in two categories: category 1 and 2, however, the two categories are not directly related to each other, but are interconnected in general. Both show factors that influence the interpersonal relationship and that the reception of the professional influences the acceptance of the treatment. It was found that the role of stranger was identified by several statements by the participants. The following are some extracts from the corpus on the factors that hinder the development of an interpersonal relationship with the nurse:

"I'm ashamed to ask a question, you know, I seem to stop when I ask" (E3).

"sometimes we schedule a day, but when I arrive there is no one, then I go back and there is no one, so we reschedule" (E8).

"[...] in six months I am already dead [...] first, consultations were scheduled every month and not now" (E10).

"Not at the moment, because I haven't been back with her in a while" (E20).

ROLE OF THE PROVIDER

IraMuTeQ lists the statements in 2 categories: 1 and 4. The two categories are not directly related, but they are interconnected because they point out that for users the nurse welcomes and talks about their health conditions, helps in the understanding of Chronic Noncommunicable Diseases and in the best way of coping with the disease. The user perceives the nurse as the professional who can offer resources to them to understand their current situation, identifying the role of resource provider, as shown in the extracts below:

"I have all this freedom to ask or answer, because the nurse gives me the opportunity, and we are in a place that not everyone wants to do that" (E1).

"Take the right medicine, ne, when I'm feeling something, I tell her" (E4).

"She is great. The first time I met her, she served me very well and so far she's being a caring person with me, she explains everything correctly" (E5).

"I feel comfortable, yes, to express myself to her and say what I am feeling" (E10).

“So, what I feel, I pass on to her and she advises me” (E17).

“This is happening to me, how can you help me” (E18).

ROLE OF TEACHER

IraMuTeQ lists the statements in 2 categories: 3 and 2. These categories are directly related and show that the user highlights the nurse's concern and guidance regarding the health-disease process, a situation that can be observed in the following strata:
"She says like this, look, this is not a seven-headed bug, that everything has a way that we can live life as it was before, without having the problem" (E5).

"She explains what can happen if we don't take care, not lowering glucose can make us blind, lose part of our foot" (E14).

"Well, I know, because I know that we don't want to accept, we don't want to accept the disease, but what can we do. She talks to me, says I have to raise my head" (E18).

LEADER’S ROLE

IRaMuTeQ lists the statements in 3 categories: 1, 3 and 2. Categories 1 and 3 are directly related and point out the role of the nurse as a leader in the health education process and active participation of users in whom the presence of bond, according to the strata below:

"Look at the physical exercise, she speaks well, but we just have to put it on our heads because if we don't do it, we are the ones who are harmed because she clarifies, but sometimes it is the patient" (E3).

"She says how it is for me to take the medicine, how it is for me to relax, you know [...] she tells me not to take the medicine all together, it is to take it as prescribed" (E10).

"Vindo para consultas ne, porque se eu não vir eu não vou aprender e saber se eu to fazendo alguma coisa de errada, né" (E12).

“Ela me dá o conselho e eu faço tudo direitinho, eu não sou dessas pessoas que são relaxadas, eu tenho que fazer sempre certinho” (E20).

Despite identifying the role of leader, it appears that health education is more focused on basic questions about lifestyle. Category 2 is separate from the previous ones, but the nurse also appears as a leader when he values the user's need, according to the extract, below:

"Well, she asks what we are feeling and I think this is very important" (E3).

SUBSTITUTE ROLE

The IRaMuTeQ lists the statements in 2 categories: 4 and 2. The two categories are directly related and are interconnected and address the representativeness that the nurse has in conducting the monitoring of users. Thus, the extracts show the presence of the interpersonal relationship between the user and the nurse and the affectionate feeling, as shown below:

"Look at my relationship with her and very good, yes, she asks everything I have" (E6).

"I like her, she is a very caring person, she explains what we have, that we have to take medicine, because otherwise we will cause more inconvenience" (E12).

"I certainly feel very comfortable with this nurse, she gives me the opportunity to feel comfortable with her, she certainly asks everything" (E13).

"Good, every time I come she always welcomes me [...] I have a good relationship" (E14).

ROLE OF ADVISOR

IRaMuTeQ lists the main statements of 2 categories: 3 and 1. These categories are directly related and generally address the same thematic axis and talk about the health education activities carried out by nurses and the presence of the creation of a bond between users and professional for the treatment and better quality of life of the patient. In the extracts below, the role of advisor to allow nursing care is verified, by identifying the guidelines received by the user regarding food, physical activity, use of appropriate medication, blood pressure and capillary blood glucose checks:

"Look, the food has to be adequate, you know, she guides me" (E1).

"Checks blood pressure and blood glucose" (E2).

"Look, she said it was for me to go for a walk, not to eat too much greasy food and salt, which is the main thing, these things" (E3).

"She told me to take the right medicine, not to stop when it’s running out (E16).

IV. DISCUSSION

In the present study, the majority of participants were female 16 (80%), had incomplete elementary education 14 (70%) and 11 (55%) over 60 years old. It is an aspect that the search for health services occurs mainly by women, about 2.43 times in relation to men. The presence of users with low education confirms what has already been announced by the Brazilian Society of Arterial Hypertension, being individuals with a higher prevalence of Chronic Non-Communicable Diseases. As for age, most users who follow the Hiperdia program are elderly, as there is a higher prevalence of NCDs in individuals over 50 years of age.

Regarding the Descending Hierarchical Classification (DHC) through the Dendrogram, category 2 presented greater representativeness and the most related one in the discussions regarding the roles of nurses, showing the importance of the interaction between the user and the professional in the care provided to users with NCDs.

Communication is directly associated with the quality of the results found in terms of maintaining adequate health for the user. The lack of an interpersonal relationship means that there is a greater possibility of limitations regarding communication with professionals, making the
user concerned with reporting only the clinical manifestations presented without realizing that psychosocial conditions directly influence health and the way can lead to chronic diseases\cite{15}. Peplau's theory highlights the importance of psychological aspects in the face of nursing interventions\cite{16}.

Quanto à identificação dos papéis do enfermeiro com base na teoria de Hildegard Elizabeth Peplau, sabe-se que estes são fundamentais para manter um relacionamento interpessoal. A teoria de Hildegard Peplau aborda seis papéis fundamentais que a enfermagem desempenha: o papel de estrangeiro, provedor de recursos, professor, líder, orientador e substituto\cite{8}.

Regarding the role of stranger, the research showed negative points for its effectiveness, the lack of therapeutic communication was one of them. Therapeutic communication strengthens the bond, mutual respect, trust, receptive listening and interpersonal relationship. Therefore, the lack of recognition by health professionals, of the importance of using this tool in interpersonal interaction, makes it difficult to establish the bond\cite{17}. The possibility of influencing a person is directly related to the type of bond developed and the possibility of reducing the suffering of the other regarding the diagnosed pathology and its possible complications\cite{4}.

Another point identified in the role of stranger was the difficulty of making an appointment and the temporal distance between them, which was reported to be 3 to 6 months, which makes interpersonal relationships difficult, such a situation is a reality, as the appointments scheduled in primary care have a waiting time between the day of the appointment and the day of the consultation, which can often last for a year of waiting time\cite{10}.

In the study, the research participants perceive the nurse as a professional provider of resources, being considered a positive result, since the users identified him as someone who has the answers to their doubts and trust him to help them. As a resource provider, the nurse must offer specific responses to assist the user in understanding their needs. When the professional meets the user's requests, a feeling of trust in the health service develops. strengthening the bond, in addition to becoming socially participant in the socio-political process\cite{8}. In this case, it is necessary for nurses to be aware of the users' demands, promoting qualified listening and guaranteeing comprehensive and quality care, seeking to reduce the cases of complications of the disease\cite{19}.

In the role of the teacher, it was demonstrated that nurses are concerned with the acceptance of the users' health-disease process. The nurse, in addition to developing nursing care, has in her work process teaching through health education activities that promote injury prevention, in addition to being a fundamental instrument to motivate people to have positive attitudes towards health, their health and to be protagonists of their care\cite{20}.

It is known that, the diagnosis of chronic diseases generates strong physical and emotional wear, reaching mainly the emotional one\cite{21}, therefore, it is the health professional's responsibility to help the user to understand his disease to learn to live with the pathology and have a good quality of life.

In the role of leader, it was noticed that the nurse seeks the active participation of users in order to change their lifestyle, however, one should not only work on basic changes such as diet, physical activity and medications, but also making the user understand that these changes are continuous and gradual. Changing attitudes and developing self-care should be promoted\cite{22}.

The guidance on changes in life habits must come from a two-way process, characterized by the exchange of knowledge and experiences, in which the user has an active role in dialogue and decision-making, thus, the conditions must be appropriate. of life, beliefs and preferences of the user, making him the protagonist of his self-care\cite{23}. In this context, communication is essential so that nurses can survey relevant problems and set goals for the development of their consultation\cite{24}.

In the role of substitute, it is noticed that the nurse manages to develop a good relationship with the user and makes him feel welcomed by him. Thus, the creation of a bond of trust, the use of available resources, mobilization of internal resources, resilient resolution are the results of this good interpersonal relationship, since understanding the user's feelings and having empathic attitudes during the interpersonal process are strategies that provide the active participation of users in the therapeutic process, making the patient resilient in coping with the disease\cite{16}.

Regarding the role of advisor, it is clear that the nurse is able to perform his assistance in practice. For Silva et al. (2015) nursing interventions involve both the research area and guidelines such as food, physical activity, medication use, among others\cite{8}.

V. CONCLUSION

This study made it possible to achieve the intended objective regarding the roles developed by nursing, from the perception of the assisted user in the Hiperdia Program. There is a reflection on the importance of using Peplau's theory to patients with chronic diseases, as nurses acquire a broader view of the care process, when they understand their roles in conducting the monitoring, not only regarding
the physical aspect, but also related to the psychological aspect.

Considering the roles developed by the nurse, in the light of Peplau’s theory, it appears that they are intertwined because they are sequential steps. In research, the role of the stranger still remains a reality in primary care, hindering a better interpersonal relationship and the search for better treatment. The roles of resource provider, teacher, leader, substitute and advisor were identified through the extracts. It is noteworthy that there is little national and international research on the use of the theory for patients with chronic diseases, and it is necessary for nursing to invest in the application of the theory, as it allows the professional to know himself about his assistance, understand the importance of the experience of the patient, together and perceive the health situation and improvement in quality of life.

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