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Beliefs related to diet adherence of patients treated with oral anticoagulants

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Crenças relacionadas à adesão à dieta de pacientes tratados com anticoagulantes orais

Creencias relacionadas con la adhesión a la dieta de los pacientes tratados con anticoagulantes orales

Simone Helena dos Santos Oliveira[a]
Mailson Marques de Sousa[a]
Simone Maria Muniz da Silva Bezerra[b]
Tamara Silva[b]
Karina Karla de Sá Gomes[a]
Gessica Christine de Carvalho e Silva[c]

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ABSTRACT

Objective: Identify the beliefs related to adherence to diet of patients treated with oral anticoagulant.

Method: Descriptive study, guided by the Theory of Reasoned Action, conducted with 57 patients in continuous use of oral anticoagulants, attended at a general cardiology outpatient clinic in João Pessoa and specialized in anticoagulation in Recife. Data were collected from February to May 2017, with an application form with open questions, through an interview, and submitted to a descriptive analysis.

Results: The most mentioned positive behavioral beliefs were to improve health/treatment in the general outpatient clinic and to control coagulation, in the specialized service. Children, spouses, doctors, and parents stood out proportionally in both scenarios as positive normative beliefs.

Conclusion: In the outpatient clinic specializing in oral anticoagulation, patients add more specific beliefs about the interference of vitamin K-rich diet on coagulation, when compared to those in the general cardiology outpatient clinic.

Keywords: Anticoagulants. Diet. Patient compliance. Social theory.

RESUMO

Objetivo: Identificar as crenças relacionadas à adesão a dieta de pacientes tratados com anticoagulante oral.

Método: Estudo descritivo, norteado pela Theory of Reasoned Action, realizado com 57 pacientes em uso contínuo de anticoagulantes orais, atendidos em ambulatório cardiológico geral em João Pessoa/PB e especializado em anticoagulação no Recife/PE. Os dados foram coletados no período de fevereiro a maio de 2017, com aplicação de formulário com perguntas abertas, por meio de entrevista, e submetidos a análise descritiva.

Resultados: As crenças comportamentais positivas mais referidas foram melhorar a saúde/tratamento no ambulatório geral e controlar a coagulação, no serviço especializado. Filhos, esposo(a), médicos(as) e pais se destacaram, proporcionalmente, em ambos os cenários, como crenças normativas positivas.

Conclusão: No ambulatório especializado em anticoagulação oral os pacientes agregam mais crenças específicas acerca da interferência da dieta rica em vitamina K sobre a coagulação, quando comparados com os do ambulatório cardiológico geral.

Palavras-chave: Anticoagulantes. Dieta. Cooperação do paciente. Teoria social.

RESUMEN

Objetivo: Identificar las creencias relacionadas con la adhesión a la dieta de pacientes tratados con anticoagulante oral.

Método: Estudio descriptivo, orientado por la Theory of Reasoned Action, realizado con 57 pacientes en uso continuo de anticoagulantes orales, atendidos en ambulatorio cardiológico general en João Pessoa y especializado en anticoagulación en Recife. Se recolectaron los datos en el período de febrero a mayo de 2017, aplicándose un formulario con preguntas abiertas, por medio de entrevista, y sometido al análisis descriptivo.

Resultados: Las creencias con conductas positivas más referidas fueron mejorar la salud/el tratamiento en el ambulatorio general y controlar la coagulación en el servicio especializado. Hijos, esposos, médicos y padres se destacaron, proporcionalmente, en ambos escenarios, como creencias normativas positivas.

Conclusión: En el ambulatorio especializado en anticoagulación oral los pacientes agregan más creencias específicas acerca de la interferencia de la dieta rica en vitamina K sobre la coagulación, cuando comparados con los del ambulatorio cardiológico general.

Palabras clave: Anticoagulantes. Dieta. Cooperación del paciente. Teoría social.

[a] Universidade Federal da Paraíba (UFPB), Programa de Pós-Graduação em Enfermagem. João Pessoa, Paraíba, Brasil.

[b] Universidade de Pernambuco (UPE), Programa de Pós-Graduação em Enfermagem. Recife, Pernambuco, Brasil.

[c] Universidade Federal da Paraíba (UFPB), Hospital Universitário Lauro Wanderley (HULW). João Pessoa, Paraíba, Brasil.

INTRODUCTION

Oral anticoagulants (OACs) are vitamin K antagonist medications, which act to increase blood clotting time. Its use is indicated for conditions that predispose the formation of intravascular thrombi, such as the presence of atrial fibrillation, deep vein thrombosis or brain stroke, and require a strict follow-up of the drug treatment, combined with adherence to the recommended diet[1-2].

Adherence to therapy is understood as the extent to which the behavior of an individual agrees with the guidance of a health professional regarding the use of medication, to dietary follow up, change in lifestyle or the adoption of health protectors behaviors[3]. Therefore, adherence to therapy by patients who use oral OACs represents a great challenge not only for these, but also for health professionals working in specialized or general services, since it involves not only the judicious use of prescribed drugs, but also important changes in eating habits, with adequate control of foods consumed.

In this sense, patients taking OACs need to change eating habits in order to avoid that inadequate food for their vitamin K intake can interact with the drug therapy in use, minimizing the protective therapeutic effects and favoring the emergence of vascular complications, such as bleeding or thromboembolic events[4].

The general clinical stability of patients and especially of oral anticoagulation are goals sought by health professionals and represent success in the developed practices. For patients, been with the *International Normalized Ratio* (INR) within the parameters of therapeutic stability reveals the engagement in prescribed therapy and may represent different positive meanings in their lives. Regarding this, clinical trial showed that patients with stable oral anticoagulation levels presented better perception of quality of life compared to patients outside the therapeutic target of INR[5].

In order to favor adherence to therapy, it is relevant to select specific and clearly defined behaviors and know the favorable and unfavorable beliefs to its realization. Studies of this nature allow to elucidate beliefs that support the proposition of strategies aimed at adherence to health-promoting behavior. In this sense, the *Theory of Reasoned Action* – TRA is presented as a theoretical-methodological model to analyze beliefs, attitudes and normative factors in specific groups and contexts, in order to identify the intentions and predict behaviors[6]. This reference was chosen because of its wide use in the study of volitional health behaviors, since the proposition of intervention strategies that seek to favor the adoption of health promoting and protective behaviors should be subsidized by consistent theoretical models that can indicate which factors influence a specific behavior.

Thus, it was defined as behavior of interest for the study in point the use of diet in patients treated with OACs, with the purpose of clarifying factors that may interfere positively or negatively in the achievement of behavior and, in addition, provide information that supports the development of care technologies aimed at health promotion, reduction of complications and improvement of the quality of life of these patients.

From the searches in the databases, no studies were found in the international and national literature about the phenomenon, considering the theoretical and methodological reference, the object and the behavior of interest – TRA, beliefs of patients using OACs and adherence to the recommended diet.

In view of the above, the present study has raised the following questions: What are the beliefs of patients treated with oral anticoagulants related to diet adherence? Is the set of diet-related beliefs among patients treated with oral anticoagulants different according to the type of service where they are attended? In order to answer the proposed questions, the objective was to identify the beliefs related to adherence to the diet of patients treated with oral anticoagulants attended at a general cardiology outpatient clinic and specialized in anticoagulation.

METHOD

An exploratory, cross-sectional study with a quantitative approach, guided by the *Theory of Reasoned Action* – TRA, theoretical-methodological framework that aims to predict and understand human behavior. The theory is based on the assumption that the human being, being a rational species, uses, in a systematic, implicit or explicit way, the information that is available, whether complete or not, true or not, to form the behavioral intention, best behavior predictor. The theory considers that human social behavior possesses, essentially, volitional character[6].

According to the TRA, to understand a particular behavior, it is necessary to identify and measure it. The behavioral intention is a function of two basic constructs: 1) personal nature – attitude: formed by the behavioral beliefs, which refer to the positive or negative evaluation that the individual makes about some behavior and evaluation of the consequences of the behavior in question; and 2) social influence – subjective norms: built by normative beliefs, which reflect the influence of social pressures to perform a given behavior and the motivation to agree with referents[6].

In order to predict behavioral intention, from the concepts of attitude and subjective norm, it becomes essential to elucidate modal salient beliefs in relation to the phenomenon investigated. Modal salient beliefs are the most frequent, that is, more often mentioned and originated from a universe and in subject, when the individual is approached through open questions about the studied behavior[6].

Primarily, delimiting the behavior of interest, adhere to the recommended diet, targeting the diet, defined the context where the study would be performed. Thus, its achievement occurred in two public hospitals of high complexity in the Brazilian Northeast, linked to the Unified Health System. Scenario A, located in the Municipality of João Pessoa/PB, offers general assistance in cardiology; scenario B is located in the city of Recife/PE and has a specialized outpatient clinic for oral anticoagulation. The scenarios were intentionally selected to verify whether the set of beliefs of the patients served in the general or specialized service differed or not, considering the type of service. It is noteworthy that in these scenarios activities are developed from the research groups of the institutions involved (Federal University of Paraíba/ Research Group on Chronic Diseases and University of Pernambuco/Research Group on Fundamentals and Practices of Nursing in Cardiovascular Nursing).

The data collection took place from February to May 2017, through a structured individual interview, in a reserved environment, in a single moment, before the scheduled medical care, being the data collection instrument filled in by the researcher himself.

The study population consisted of patients attended outpatient, with cardiovascular diseases and in continuous use of OACs. Following the precepts of the adopted theoretical framework, there is no requirement as to the number of subjects to elicit the modal salient beliefs about a behavior of interest. Thus, a non-probabilistic sample was used, for convenience, from the demand of the scheduled queries, until the data saturation criterion was reached, that is, that new information was not issued in up to five consecutive interviews.

The sample consisted of 57 patients, of which 27 were attended in scenario A (General) and 30, in B (Specialized). The inclusion criteria adopted were: age ≥ 18 years, continuous use of OACs, receiving information on the consumption of food source of vitamin K and being in outpatient follow-up during the period of data collection. Patients at first consultation and those with verbal communication difficulties were excluded. It is noteworthy that all the invited patients accepted to participate in the study.

A form with four open questions in the format of free answers was applied in order to elicit the beliefs about the behavior of interest, constructed according to the recommendations of the theoretical model. Although TRA recommends that the instrument be a questionnaire, the type was adopted, with the purpose of including people with no schooling. Thus, to investigate the behavioral beliefs about the advantages and disadvantages of adhering to the prescribed diet, the questions were: a) In your opinion, what are the advantages of adhering to the prescribed diet? b) In your opinion, what are the disadvantages of adhering to the prescribed diet? The normative beliefs, positive and negative, have been identified with the following questions: a) Which people important to you consider that you should adhere to the prescribed diet?; b) Which people important to you consider that you should not adhere to the prescribed diet?

A second instrument with sociodemographic and clinical questions was used to characterize the participants. Regarding the analysis of data, data from the second instrument were transported for a spreadsheet of the program Excel for Windows and then processed and analyzed using the IBM program Statistical Package for Social Science (SPSS), 21.0 version. Descriptive statistics were used by means of absolute and percentage frequencies. To compare the patients of the different scenarios in relation to sociodemographic and clinical variables, the Chi-Square or Fisher's exact test was applied. The comparison of the averages for the continuous variables was performed through the test *t*-Student.

In order to analyze the behavioral and normative beliefs, the criterion proposed by the TRA was used, in which these must be organized and grouped by similarity, according to the pre-established categories (behavioral beliefs and normative beliefs positive and negative). The beliefs emitted by the participants were categorized from the evaluation of two researchers with clinical experience in the follow-up of patients treated with OACs and with the use of the theory. They were classified as modal salient beliefs those that represents at least three emissions and 75% of the total responses emitted.

The study was approved by the Research Ethics Committee of the Lauro Wanderley University Hospital, of the Federal University of Paraíba (Opinion nº 1.932.572/2017, CAAE: 61841316.6.0000.5183), with the consent of the selected sites for the study. All participants received verbal and written information from the research and signed the Informed Consent Form. The study respected the recommendations of research involving human beings, according to Resolution nº 466/12 of the National Health Council.

RESULTS

A total of 57 patients in continuous use of OACs participated in the study, 47.4% of scenario A (General/João Pessoa) and 52.6% of scenario B (Specialized/Recife). Regarding the sociodemographic profile, it was possible to verify that 56.1% of the sample resided in the capitals and 43.9% in other municipalities. There was a predominance of females (71.9%) and the average age of the studied was 55.79 ± 13.93 years.

With respect to the clinical characteristics, all the interviewees used Warfarin. The average of the International Normalized Ratio (INR) was 1.96 for scenario A (General) and 2.64 for B (Specialized). Regarding the presence of comorbidities, it was observed that 33% of the patients had systemic arterial hypertension; 14.8%, heart failure; and 12.2%, diabetes mellitus. Table 1 presents the main sociodemographic and clinical characteristics of the study participants.

Table 1 – Sociodemographic and clinical characteristics of patients using oral anticoagulants. João Pessoa/PB and Recife/PE, Brazil, 2017

Variables	Scenario A General (n=27)	Scenario B Specialized (n=30)	P-value
Age (mean±sd*)	57.96±13.66	53.83±13.06	0.249§
Gender			
Male	9 (33.3)	7 (23.3)	0.402‖
Female	18 (66.7)	23 (76.7)	
Schooling			0.340¶
≤ 9 years of study	23 (85.1)	22 (73.3)	
> 9 years of study	4 (14.9)	8 (26.7)	
Professional situation			0.100¶
Active	3 (11.2)	0.0	
Inactive	24 (88.8)	30 (100)	
Family income†			0.023¶
< 1 Wage	2 (7.5)	10 (33.3)	
1 to 2 Wages	21 (77.7)	19 (63.4)	
Above 3 Wages	4 (14.8)	1 (3.3)	
Indication of OAC use ‡			0.062¶
Use of prostheses (biological or mechanical)	11 (40.7)	12 (40)	
Atrial fibrillation	9 (33.3)	14 (46.7)	
Cardiac insufficiency	5 (18.5)	0.0	
Venous thrombosis	2 (7.5)	1 (3.3)	
Myocardial Infarction	0.0	2 (6.7)	
Brain stroke	0.0	1 (3.3)	
OACs use time‡ in months (mean±sd*)	15.88±18.55	24.62±16.38	0.074§

Source: Research data, 2017.
*sd: standard deviation; †minimum wage in force in 2017, R$ 937,00 reais; ‡OACs: oral anticoagulants; §test *t*-Student; ‖chi-square test; ¶Fisher exact test

Regarding the analysis of beliefs, the frequency of positive behavioral beliefs (advantages) of adhering to the recommended diet is shown in Table 2 and, of these, 83% were salient modalities, that is, they were mentioned at least three times by the respondents of each site surveyed and composed, together with the others, index greater than 75% of the emissions, according to the criteria established in the present study. After categorization, the modal salient beliefs were thus distributed: improving health/treatment (47.2%) and controlling coagulation (35.8%). It is shown that the participants in scenario A presented a higher percentage of positive modal salient behavioral beliefs in relation to adhering to the recommended diet when compared to those in scenario B. It is important to note that two participants in scenarios A and seven of B did not mention advantages in adherence to the recommended diet.

Table 2 - Distribution of positive behavioral beliefs in adhering to diet recommended. João Pessoa/PB and Recife/PE, Brazil, 2017

In your opinion, what are the advantages of adhering to the recommended diet?	Scenario A		Scenario B		Total	
	N	%	N	%	N	%
Improves health/treatment	20	69.0	5	20.8	25	47.2
Control coagulation	5	17.2	14	58.3	19	35.8
Lose weight	2	6.9	0	0.0	2	3.8
Idiosyncratic	2	6.9	5	20.8	7	13.2
Total	29	100.0	24	100.0	53	100.0
PMSBBs*	25	86.2	19	79.2	44	83.0

Source: Research data, 2017.
*PMSBBs: Positive Modal Salient Behavioral Beliefs

The frequency of negative normative beliefs is demonstrated in Table 3, i.e., disadvantages of adhering to the diet. It is observed that not being able to eat the things that one likes (51.9%) and not eating green leaves (29.6%) were the modal salient beliefs identified in both scenarios and that in B there was a higher proportion of negative behavioral beliefs referred (Table 3). It is also worth mentioning that 17 and 13 patients, from the A (General) and B (Specialized) scenarios, respectively, reported that there was no disadvantage in adhering to the recommended diet.

Table 3 - Distribution of negative behavioral beliefs in adhering to the diet recommended. João Pessoa/PB and Recife/PE, Brazil, 2017

In your opinion, what are the disadvantages of adhering to the recommended diet?	Scenario A		Scenario B		Total	
	N	%	N	%	N	%
Not being able to eat the things you like	5	45.5	9	56.2	14	51.9
Do not eat green leaves	4	36.4	4	25	8	29.6
Idiosyncratic	2	18.2	3	18.8	5	18.5
Total	11	100.0	16	100.0	27	100.0
PMSBBs*	9	81.8	13	92.9	22	81.5

Source: Research data, 2017.
*PMSBBs: Positive Modal Salient Behavioral Beliefs

Regarding normative beliefs, i.e., important people who consider that patients should adhere to the recommended diet, 82 positive referents were reported, of which 80.5% were outgoing modalities. Among the main positive referents were children (31.7%) and spouses (24.4%), the latter being the most mentioned in the two areas surveyed (Table 4). In scenario B, six people stated that there was no one important to them who felt they should stick to the diet.

Table 4 - Distribution of positive normative beliefs (positive referents) in adhering to the recommended diet. João Pessoa/PB and Recife/PE, Brazil, 2017

Which people important to you consider that you should adhere to the recommended diet?	Scenario A		Scenario B		Total	
	N	%	N	%	N	%
Children	13	30.2	13	33.3	26	31.7
Spouse	10	23.3	10	25.6	20	24.4
Doctors	6	14.0	3	7.7	9	11.0
Nurse	0	0.0	2	5.1	2	2.4
Parents	4	9.3	4	10.3	8	9.8
Sister	3	7.0	0	0.0	3	3.7
Family	2	4.7	2	5.1	4	4.9
Niece	2	4.7	0	0.0	2	2.4
Idiosyncratic	3	7.0	5	12.8	8	9.8
Total	43	100.0	39	100.0	82	100.0
PMSBBs*	36	83.7	30	76.9	66	80.5

Source: Research data, 2017.
*PMSBBs: Positive Modal Salient Behavioral Beliefs

Concerning the negative referents, of the 57 participants in the research, 51 (89.5%) reported that there was no one important to them that considered that they should not adhere to the recommended diet. Two occurrences for friend in scenario A (General), one for spouse in B (Specialized) and one for sister and child in the two scenarios were observed.

DISCUSSION

This is the first study to identify beliefs related to diet adherence behavior in patients who use OACs developed in the Brazilian scenario under the TRA. The findings allowed to identify both the behavioral beliefs (of attitudinal nature) and normative beliefs (of social influence), positive and negative, that can exert influence in the behavior researched.

With regard to the sociodemographic variables, it can be verified that in the two scenarios surveyed, there were female participants, with low level of education, no professional activity and income of one to two minimum wages. For these variables, income alone was significantly different between the areas surveyed, which can be attributed to the higher proportion of people who reported income below a minimum wage in scenario B, when compared to A. These characteristics corroborate with other studies developed in the national context[7-10], revealing characteristics inherent to lower socioeconomic strata in patients from services funded by the Unified Health System.

Regarding positive behavioral beliefs, similarity is observed in both scenarios investigated. When comparing the categories, it is verified that the belief that adhering to the diet "improves health/treatment" was mostly cited by patients in scenario A (General) and the belief "control coagulation" prevailed in scenario B (Specialized). Particularly, attention is drawn to scenario B, where avoiding bleeding or thrombi was referred to as an advantage of adhering to the diet, revealing greater clarity as to the specificity of the treatment performed.

Therefore, the results show that the patients in scenario A (General) believed that the use of the recommended diet promoted a global effect on health, which could result from the broad approach in terms of dietary guidance provided by the doctors of the service, who attend to patients with cardiopathies of diverse etiologies, whose food control does not emphasize foods rich in vitamin K, but all those that can affect the base disease(s).

On the other hand, the belief that the use of the recommended diet has the advantage of controlling the coagulation among the patients in scenario B can be due to the fact that this is an outpatient clinic specializing in oral anticoagulation, which favors more directive orientations

for the importance of the control food interactions in relation to foods rich in vitamin K and on the drug-nutrient interaction in the onset of adverse events and in the maintenance of INR levels within the indicated parameters for those who use OACs, resulting in the formation of specific beliefs by these patients, since they aggregate knowledge relevant to disorders of coagulation due to the therapy they perform.

In agreement with these findings, a study carried out in India with 240 brain stroke patients using OACs, identified that 67.9% of the searched individuals had knowledge about the action of the anticoagulant drugs in the prevention of blood coagulation. The authors further found that 44% of participants were aware that if the INR value was higher than the target therapeutic range, the risk for bleeding would increase[11].

As to the disadvantages of adhering to the diet, these were slightly higher in group B and were restricted especially to "not being able to eat the things you like" and "do not eat green leaves". Considering that the patient with a chronic disease needs to make changes in eating habits in order to maintain clinical stability, coherence is observed in the beliefs given about the disadvantages of adhering to the diet, since patients taking OACs are advised to control, with the highest possible severity, the consumption of food of animal and plant origin sources of vitamin K, which shows its highest concentration in dark leafy vegetables.

Therefore, knowing the disadvantages perceived by patients using OACs to adopt the recommended diet is the first step in the planning of strategies to weaken them so that they do not constitute a barrier to adherence to the proposed short, medium and long term therapy. In this sense, the guidelines should focus on controlling the consumption of foods rich in vitamin K and not on their suppression.

As for normative beliefs, the positive social referents who presented the highest frequencies of answers for both scenarios were children, spouses, doctors and parents. In isolation, scenario A evidenced sister, who, by the frequency of emissions, was considered a modal salient reference for this scenario. It is noteworthy that the nurse was mentioned only by the participants in scenario B, a specialized service in which this professional is present in the patient care team that makes use of OACs. However, due to the low frequency in which it was mentioned, it did not compose the modal belief set for the investigated group.

From the results, it can be observed that people of daily living are the most important positive referents that can influence the adherence behavior to the diet. Thus, people belonging to the family context are responsible for playing a relevant role in the self-care behavior of the individual, through support and motivation. This finding corroborates with the assertion that the family organization and their interactions influence and collaborate positively to the successful to the adherence to a lifestyle that permeates clinical stability[12].

It is important to emphasize that lifestyle changes require engagement on the part of all those involved, of people with chronic illness or condition, family members, people from their closest living and health professionals[13]. In this sense, not only the components of the family nucleus, but also the doctor appears as a figure that exerts positive influence on the patient in both scenarios.

It is also evidenced the absence of other health professionals as social referents in scenario A (General) and only two references to the nurse in scenario B (Specialized), a fact that reveals the need to strengthen the educational actions developed and the establishment of bond of the nurses with the patients in scenario B, in order to be more recognized as positive referents, improve the quality of care and favor the adherence of patients to the proposed therapy.

In scenario A, care is given in a general ambulatory unit in cardiology, where only the doctor acts. Therefore, it is consistent that the nurse or other health professional has not been cited as positive referents. On the other hand, this finding also reveals an important gap in the service, which has nurses, nutritionists, psychologists and other professionals, who can add the specificity of their knowledge in strategies developed by a multiprofessional team to promote the integrality of health care together to patients who use OACs.

In turn, the specialized service (B) counts on the participation of doctors and nurses, but, nevertheless, the nurse was little mentioned. Therefore, it awakens to the possible need to re-signify the actions developed by nurses, especially those of an educational nature. Therefore, rethinking the strategies developed by the team and, in particular, by the nurse becomes of substantial importance to reaffirm their role as a health promoting agent.

It is known that health professionals configure themselves as educators of patients in health services. Through educational activities, they favor the understanding of the health/illness process, encouraging the adoption of new lifestyles, better management of self-care and, consequently, adherence to established therapeutics[14].

Considering the premise that services that act in a multidisciplinary way provide holistic assistance, the implantation of specialized multidisciplinary assistance in scenario A directed to patients who undergo oral anticoagulation

can compete for favorable clinical outcomes, as INR control with values within the target therapeutic range, decrease in hospital readmission rates due to complications and greater adherence to treatment, reflecting a reduction in health costs[15-16]. In part, the support of this argument can be proved by the unsatisfactory and satisfactory means of INR presented by the patients of scenarios A and B, respectively.

Still in the body of belief analysis, according to the criteria adopted in the present study, to include as salient modalities those mentioned at least three times, it was possible to verify that among the normative negative beliefs did not emerge social modal salient references that considered that the patients should not adhering to the diet, from which it can be deduced that the important referents for the respondents supported the necessary measures for the follow-up of the prescribed treatment and for the control of the disease. This finding reaffirms the importance of involving the family in possible actions developed in the two services researched for the engagement of patients in therapy and for the success in preventing complications resulting from INR results outside the therapeutic range due to the potentiation of the effects of OACs by the lack of control in the consumption of foods rich in vitamin K.

Although the on-screen study meets TRA recommendations in the design of the beliefs, given the sample size is determined by their saturation, it is important to consider that the composition of larger samples could favor the identification of greater number and/or other advantages/disadvantages and positive/negative referents.

As regards the theoretical methodological body, the TRA has been shown to be an appropriate benchmark, which can be used to identify beliefs and predict human behavior. Thus, it is suggested that further studies be conducted in the different regions of the country, in view of cultural plurality and eating habits, in order to identify new beliefs or to corroborate those raised in this study. It should be noted that according to TRA[6], by means of beliefs a person ponders the consequences of a future action in a dimension of favorability or unfavourability, allowing them to be evaluated *a posteriori* the determinants of behavior under investigation and the intention to perform it. Therefore, based on the results produced in the present research, we have the beliefs that will guide the elaboration of instruments (psychometric scales) that identify the predictors of the use of the recommended diet for patients who use OACs in the different scenarios searched.

For nursing practice, it is believed that the results found will subsidize care technologies that strengthen positive beliefs (advantages and positive social referents) and revert negative beliefs (disadvantages) into positive ones to favor the adherence of patients to the diet, with the scope of educating and favoring empowerment for self-care.

CONCLUSION

Although the services are distinguished by the characteristic of care provided (general - in cardiology, specialized - patients using OACs), the modal salient beliefs do not stand out among the scenarios. However, it should be noted that the average level of INR within the therapeutic range among the patients of the specialized service in OACs.

By choosing the comparative study as a research method, it was possible to analyze similarities and distinctions in the set of beliefs that permeate the advantages and disadvantages of adhering to the recommended diet and to identify the referents that can positively influence adherence to the behavior investigated in the different scenarios. Thus, the findings emphasized that in the specialized service in oral anticoagulation the patients added more specific beliefs about the interference of the diet rich in vitamin K on the coagulation, when compared with the service for general cardiology.

Therefore, it is salutary to implement an outpatient clinic specializing in OACs in the service that provides general care in cardiology, as well as the multidisciplinary approach, in order to optimize and improve the quality of care, contributing to the survival and minimizing unfavorable clinical outcomes to patients taking OACs. This investment would become the embodiment of good use and application of resources and the potential that the service offers.

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Corresponding author:
Simone Helena dos Santos Oliveira
E-mail: simonehsoliveira@gmail.com

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