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RESEARCH

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CONSENSUS ON THE DELPHI METHOD OF PRIORITY NURSING DIAGNOSIS FOR HEART FAILURE IN PRIMARY CARE^{*}

Consenso pelo método Delphi de diagnósticos de enfermagem prioritários para insuficiência cardíaca na atenção primária*

Consenso sobre el método Delphi de diagnóstico de enfermería prioritario para insuficiencia cardíaca en atención primaria^{*}

*Article extracted from the Doctoral Thesis entitled "Heart failure approach in primary care: the use of priority nursing diagnoses as a strategy for care" by Dayse Mary da Silva Correia, under the guidance of Prof. Dr. Maria Luiza Garcia Rosa.

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ABSTRACT

Objective: to describe and analyze the process of selecting priority nursing diagnoses for nursing care for individuals in different stages of heart failure in primary care. **Method:** this is a research clipping, consisting of a methodological phase, with the application of the Delphi technique with specialists referring to 176 nursing diagnoses according to the NANDA-I Taxonomy from December 2012 to July 2013. **Results:** 144 diagnoses were identified as non-priority and 32 were selected as priority nursing diagnoses, aggregated in this study as: "sign of severity"; "Knowledge / attitude / practice"; "symptom"; and "risk". **Conclusion:** the map generated by this effort became useful to guide the search for the prevalence of each diagnosis and, above all, to propose health interventions in primary care aimed at the needs of healthy individuals, with a clinical diagnosis of heart failure or at risk for their development.

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DESCRIPTORS: Heart failure; Health Promotion; Nursing diagnosis.

RESUMO

Objetivo: descrever e analisar o processo da seleção dos diagnósticos de enfermagem prioritários para o cuidado enfermagem aos indivíduos nos diferentes estágios de insuficiência cardíaca, na atenção primária. **Método:** trata-se de um recorte de pesquisa, constituído por fase metodológica, com a aplicação da técnica Delphi junto a especialistas referente a 176 diagnósticos de enfermagem segundo a Taxonomia NANDA-I no período de dezembro de 2012 a julho de 2013. **Resultados:** 144 diagnósticos foram identificados como não prioritários e 32 foram selecionados como diagnósticos de enfermagem prioritários, agregados neste estudo como: "sinal de gravidade"; "conhecimento/atitude/prática"; "sintoma"; e "risco". **Conclusão:** o mapa gerado por esse esforço fez-se útil para orientar a busca da prevalência de cada diagnóstico e sobretudo para propor intervenções em saúde na atenção primária direcionadas às necessidades dos indivíduos saudáveis, com diagnóstico clínico de insuficiência cardíaca ou com risco para o seu desenvolvimento.

DESCRITORES: Insuficiência cardíaca; Promoção da saúde; Diagnóstico de enfermagem.

RESUMEN

Objetivo: describir y analizar el proceso de selección de diagnósticos de enfermería prioritarios para el cuidado de enfermería para individuos en diferentes etapas de insuficiencia cardíaca en atención primaria. **Método:** este es un recorte de investigación, que consiste en una fase metodológica, con la aplicación de la técnica Delphi con especialistas que se refieren a 176 diagnósticos de enfermería de acuerdo con la taxonomía NANDA-I desde diciembre de 2012 hasta julio de 2013. **Resultados:** se identificaron 144 diagnósticos como no prioritarios y 32 se seleccionaron como diagnósticos de enfermería prioritarios, agregados en este estudio como: "signo de gravedad"; "Conocimiento / actitud / práctica"; "Síntoma"; y "riesgo". **Conclusión:** el mapa generado por este esfuerzo se volvió útil para guiar la búsqueda de la prevalencia de cada diagnóstico y, sobre todo, para proponer intervenciones de salud en atención primaria dirigidas a las necesidades de individuos sanos, con un diagnóstico clínico de insuficiencia cardíaca o en riesgo de padecerlos desarrollo.

DESCRIPTORES: Insuficiencia cardíaca; Promoción de la salud; Diagnóstico de enfermería.

INTRODUCTION

Heart failure (HF) is a complex clinical syndrome, often difficult to diagnose, based on a cardiovascular continuum, beginning with the presence of risk factors, therefore with changes in cardiac structure and function, from asymptomatic to symptomatic, evolving to a poor prognosis.¹ It is associated with high morbidity and mortality, being responsible for high cost in the health system. And it has a hospital mortality, which varies between 6.0%² to 9.5%³, with an average hospitalization period of 5.8 days, and an estimated 2 million Brazilians affected. Thus, there is an estimate that the annual cost in the country is above 200 million reais.²

The estimated prevalence of individuals with HF in the world is 23 million, with 2 million cases diagnosed per year⁴, among them, approximately 240 thousand new cases in Brazil.³ In most countries, the prevalence has been increasing due to the binomial population aging, and greater effectiveness

in the treatment of chronic conditions that lead to HF, as well as HF itself.⁵ However, there is little evidence about its prevalence in primary care.

Highlighted in Latin America, there is the Digitalis Study, an epidemiological survey, in the city of Niterói (RJ), in which among the 633 participants aged \geq 45 years, an alarming prevalence of 79% of individuals at risk for development was identified of heart failure in the Family Medical Program.6 In the sociodemographic profile, predominantly female (47%), black or brown (46.2%), age between 45 and 69 years (62%), education level of up to the 5th year (32%). And for the major risk factors for the development of heart failure, 62% were hypertensive, 53% diabetic, 26% obese and 7% with coronary artery disease.⁶

HF in primary care has a recommended classification for individuals in its different stages⁷, called stage 0 (healthy); stage A (presence of risk factors for developing HF); stage B (with structural heart disease, but without signs or symptoms of HF); stage C (with current or previous HF symptoms associated with underlying structural heart disease).

Therefore, the nurse as a member of the multidisciplinary team and with various roles within this team, should focus on the development of care models that prioritize the logic of care based on the needs of patients.⁸

In the Nursing Process, the use of the nursing diagnosis makes it possible to plan nursing interventions to achieve better results,⁹ as one does not aim at the diagnosis of the disease, but at the responses of the individual, family and community to real and potential health problems¹⁰, subsidizing actions that can reduce the risks, the individual's suffering, and improving the quality of life when facing illnesses.

However, for nurses in primary care who "take care" of the individual in the community, it is considered useful and appropriate to transpose the concept of priority nursing diagnosis, that is, the one that takes precedence over the others in order to achieve goals. In addition, he who proposes to minimize, interrupt or prevent the development and development of a disease.⁹

However, there was no evidence from studies that identified these nursing diagnoses in primary care, making it difficult to develop a care model to be proposed.

In this perspective, the objectives of the study presented here are to describe and analyze the process of selecting priority nursing diagnoses for nursing care for patients in different stages of heart failure, in primary care.

METHODS

This is a research cut, consisting of a methodological phase, with the application of the Delphi technique, for the selection of priority nursing diagnoses for HF. The referred technique can be defined as a systematic method of judging information, used to obtain consensus of specialists on a given theme, through validations articulated in phases or cycles.^{11,12}

It is characterized by anonymity, interaction with controlled feedback, responses with statistical information and the knowledge that the expert brings to the group. The original study of the application of the technique suggests four rounds and more recently it has been proposed to have two or three rounds, depending on the subject of interest.^{11,12}

The process involved 05 (five) experts, four nurses (3 doctors and 1 master) and an epidemiologist medical doctor, from December 2012 to July 2013. For this, the following inclusion criteria were considered: performance with insufficiency cardiac, approach to teaching, research and extension, geographical area, publication with nursing diagnoses, according to NANDA $-I^{10}$.

After the group was formed, a document was initially sent by e-mail to level the knowledge about HF in primary care; and definition of the concept of priority diagnosis to be adopted and to clarify the procedures for consensus, as well as all material for the rounds themselves.

After the group was formed, a document was initially sent by e-mail to level the knowledge about HF in primary care; and definition of the concept of priority diagnosis to be adopted and to clarify the procedures for consensus, as well as all material for the rounds themselves.

Therefore, in the first round, a spreadsheet with 176 nursing diagnoses was sent, out of a total of 214 diagnoses from the NANDA-I. taxonomy. 10 This exclusion was due to 38 (thirty-eight) diagnoses associated with hospitalized patients, infants and children, namely: in the Nutrition domain, 3 (three) regarding breastfeeding and jaundice were excluded; in the Roles and Relationships domain, 16 (sixteen) diagnoses about breastfeeding, maternity, paternity, family processes and relationships were excluded; in the Reproduction domain, 4 (four) diagnoses about child rearing were excluded; in the Coping / Tolerance domain, 6 (six) diagnoses addressing infants were excluded; in the Safety and Protection domain, 02 (two) were excluded, respectively aimed at critically ill and post-surgery patients. In addition, seven diagnoses that required more prolonged contact with the patient, exams or tests to define their presence in the following domains were excluded: Comfort (2), Activity and Rest (2), Perception / Cognition (2), and Roles and Relationships (1)

At each round, experts were asked to classify each diagnosis as priority (yes) or non-priority (no), justifying their decision and citing the bibliographic references consulted. From the second round, the main researcher presented the ND selected by consensus as priority or non-priority. DEs whose classification was not consensual were the subject of the next round, composing the next spreadsheet to be evaluated by the experts.

The priority diagnosis was defined as the one that takes precedence over the others, which aim to minimize, interrupt or prevent the development and evolution of a disease.⁹

The present study was approved by the Research Ethics Committee of the Faculdade de Medicina / Hospital Universitário Antônio Pedro of Universidade Federal Fluminense under opinion nº 010/2010.

The presentation of the results aims to redo the path of consensus, seeking to expose the logic of nursing care that went through the selection process that took place in the 08 (eight) rounds of the Dephi Method. Thus, domains are initially presented according to the percentage of diagnoses considered to be priority. And then, the priority diagnoses, regardless of the domain, which were aggregated in four groups by the authors due to their characteristic vis a vis the CI: 1) "Sign of severity"; 2) "Knowledge / attitude / practice (+) / (-)", indicating prevention or risk, respectively; 3) "Symptom"; 4) "Risk" that referred to specific risk situations.

RESULTS AND DISCUSSION

The classification of nursing diagnoses of NANDA-International10, in its 2009-2011 version, defined 13 domains, the domain being defined as "a sphere of knowledge, influences and questions" 10, of which 12 domains were selected as priority diagnoses. (Table 1).

Table 1 - Nursing diagnoses selected as priorities, according to the Domain, Class and Selection Round. Niterói, 2014.

Domain	Class	Diagnosis Ranked as Priority	Selection round
	Listlik store Par	Sedentary lifestyle	6
	Health perception	Ineffective self-control of health	1
1.Health promotion		Provision for improved self-control of health	5
	Health control	Ineffective health maintenance.	1
	Ingestion	Risk of unbalanced nutrition: more than bodily needs	8
2.Nutrition	Ū.	Willingness for improved nutrition	5
	Metabolism	Risk of unstable blood glucose	5
	Hydration	Excessive fluid volume	1
		Risk of liquid volume imbalance	5
3. Elimination and	Urinary function	Impaired urinary elimination	1
Exchange	Gastrointestinal function	Risk of constipation	6

Domain	Class	Diagnosis Ranked as Priority	Selection round
	Sleep / rest	Insomnia	5
	Energy balance	Fatigue	2
		Decreased cardiac output	1
		Activity intolerance	1
4 Astivity and Dest	Cardiovascular / pulmonary responses	Ineffective breathing pattern	8
4. Activity and Rest		Willingness to improve self-care	7
		Deficit in self-care for food	7
		Deficit in self-care for bathing	7
		Deficit in self-care for intimate hygiene	7
		Deficit in self-care to dress	7
5. Self perception	Self esteem	Situational low self esteem	8
6. Sexuality	Council franction	Sexual dysfunction	1
7.Coping/Stress	 Sexual function 	Anxiety	1
tolerance	Coping responses	Feeling of helplessness	3
8. Principles of life	Beliefs	Improved spiritual well-being inclination	8
9. Security/protection	Infection	Infection risk	4
10. Roles and relationships	Caregiver roles	Tension of the caregiver's role	8
11. D		Deficient knowledge	1
11. Perception/Cognition	Cognition	Willingness for improved knowledge	8
10. 0 (Willingness for improved comfort	8
12. Comfort	Physical comfort	Chronic pain	7

Source: Digitalis Study, 2014. Source: Digitalis Study, 2014.

Figure 1 shows the percentages of the total diagnoses analyzed, defined mainly as priorities in decreasing order.

The domains Activity and Rest (40%) and Health Promotion (40%) were the ones with the highest number of priority nursing diagnoses, followed by the Nutrition domain (38.5%). Safety / Protection, Coping / tolerance to stress and Roles and relationships were the domains with the lowest percentage of diagnoses selected (5,%, 6.5% and 7.1%, respectively).

Figure 1 -. Prevalence of priority and non-priority diagnoses according to the NANDA-I Taxonomy domains. Niterói, 2014.

	■ Priority	Non Priority
Security/protection	5	95
Coping / Stress Tolerance	[1]	93,5
Roles and relationships	r#1	92,9
Life principles		90,9
Self-perception		90,9
Elimination and exchange		88,2
Perception/Cognition	18,2	81,8
Sexuality	20	80
Comfort	745	75
Nutrition	€ <u>1</u> 3 4 5	61,5
Activity and rest	40	60
Health promotion	40	60

Table 2 presents the priority diagnoses per round of selection, disregarding the domains or classes. In the first round, nine diagnoses were selected that: a) indicated the presence of signs or symptoms of HF severity, referred to in this study as "Sign of severity" (5); or b) identified "knowledge, attitudes and practices (-)" (3), applicable to various diseases or chronic syndromes, with particular importance in HF, being only a diagnosis of this round as "Symptom". At that point, consensus was easily reached. It can be inferred that the following rounds were of indecision (rounds 2,3 and 4),

with great difficulty in reaching a consensus, with only one priority diagnosis being selected in each of them: fatigue10, feeling of impotence10, which were classified as "Symptom" and Risk of infection10, classified as "Risk". And in rounds 5, 6 and 7, 13 priority diagnoses were selected, pointing to "Risk" (9) or "Knowledge, attitude and practice (+)" (3) and only one referring to "Symptom". In the last round (eighth), seven priority diagnoses were selected: "Knowledge, attitude and practice (+)" (3), "Risk" (2), a "Symptom" and a "Sign of seriousness".

Table 2 - Nursing diagnoses selected as priority, by round and main characteristic of the diagnosis. Niterói, 2014

Nursing diagnosis (NANDA 2009-2011)	Selection round	Diagnostic characteristic *
Excessive fluid volume	1	"Sign of gravity"
Impaired urinary elimination	1	"Sign of gravity"
Decreased cardiac output	1	"Sign of gravity"
Activity intolerance	1	"Sign of gravity"
Sexual dysfunction	1	"Sign of gravity"
Deficient knowledge	1	"Knowledge / attitude / practice (-)"
neffective health self-control	1	"Knowledge / attitude / practice (-)"
Ineffective health maintenance	1	"Knowledge / attitude / practice (-)"
Anxiety	1	"Symptom"
Fatigue	2	"Symptom"
Feeling of helplessness	3	"Symptom"
Risk of infection	4	"Risk"
Provision for improved self-control of health	5	"Knowledge / attitude / practice (+)"
Provision for improved nutrition	5	"Knowledge / attitude / practice (+)"
Risk of unstable blood glucose	5	"Risk"
Risk of liquid volume imbalance	5	"Risk"
nsomnia	5	"Risk"
Sedentary lifestyle	6	"Risk
Risk of constipation	6	"Risk"
Willingness to improve self-care	7	"Knowledge / attitude / practice (+)"
Deficit in self-care for food	7	"Risk"
Deficit in self-care for bathing	7	"Risk"
Deficit in self-care for intimate hygiene	7	"Risk"
Deficit in self-care to dress	7	"Risk"
Chronic pain	7	"Symptom"
Risk of unbalanced nutrition: more than bodily needs	8	"Risk"
Ineffective breathing pattern	8	"Sign of gravity"
_ow situational self-esteem	8	"Symptom"
Provision for improved spiritual well-being	8	"Knowledge / attitude / practice (+)"
Tension of the caregiver's role	8	"Risk"
Willingness for improved knowledge	8	"Knowledge / attitude / practice (+)"
Provision for improved comfort	8	"Knowledge / attitude / practice (+)"
Characteristic attributed by the authors		

* Characteristic attributed by the authors

This study presented, for the first time, 32 (thirty-two) diagnoses selected as priority in primary care for individuals at risk for the development of heart failure or with clinical diagnosis of the disease in progress under health monitoring.

It is observed that initially the experts' eyes turned to the signs of seriousness and to some knowledge, attitudes and practices that denoted risk for HF decompensation, indicating that secondary prevention was the first and greatest concern. It is worth noting that of the six diagnoses pointing to a "Sign of gravity", five were defined in the first round and one in the last round (eighth). And then there was a period of doubt and lack of clarity that persisted for three rounds. In the following rounds, the greatest concern was once again secondary prevention and looking at positive attitudes, described by the diagnoses reporting deficits and improved disposition, respectively. Finally, being the last round, able to finish as a priority diagnosis with different characteristics. Therefore, it becomes evident that the selection did not obey the logic of the domains, not even that of the classes.

First Round

There was a tendency towards diagnoses already described in the literature, especially those for more advanced stages.

The ND *Ineffective Health Self-Control*¹⁰, in the *Health Promotion* domain, was related to ineffective choices in daily life to achieve health goals that are so important in primary care, either in primary or secondary prevention. The presence of this diagnosis is described in patients with chronic diseases, such as Diabetes Mellitus ¹³, and Hypertension¹³. However, there is no evidence in the literature on the application of this ND in the approach to Heart Failure (HF) in primary care. Therefore, as HF is caused by chronic diseases, not controlling and treating these diseases and their risk factors should be investigated in the population as a whole¹⁴, interventions in the field of knowledge deficit about pathology and care are suggested, favoring educational interventions, both for health promotion and for preventing HF decompensation and consequently improving quality of life through self-control of health.

When selected, the diagnosis Ineffective Health Maintenance¹⁰, was considered essential given the assessment of whether the patient would be able to maintain an effective standard of health, in order to achieve better adherence to the therapeutic regimen. From this first assessment, the nurse would be able to identify factors that influence the difficulty of correctly following the treatment. That is, the inability to identify, control and / or seek help to maintain health, is a priority because it compromises any intervention to improve the quality of life of the person with HF at any stage the individual is in. Many factors related to this diagnosis can compromise the objectives of health promotion. The diagnosis was supported by the defining characteristic about the lack of knowledge regarding basic health practices. Investigating the use of tobacco and alcohol is essential for assessing individuals with or at risk for HF. Because, it is essential that there are changes in daily life such as food restriction, smoking cessation or alcohol, regular physical activity in a significant and permanent way in lifestyle.15

When the ND *impaired urinary elimination*¹⁰ was selected, there was initially doubt as to whether the diagnosis *Decreased Cardiac Output*¹⁰ could include it. However, the diagnosis was identified as a priority given the association with HE.¹⁷

As for ND *Decreased Cardiac Output*¹⁰, it is a diagnosis with many defining characteristics, and with a strong association with heart failure. However, with difficulty in identifying in primary care.^{17,18}

And studies in the field of nursing diagnoses have confirmed the prevalence of the diagnosis *Activity intolerance*¹⁰ in patients with HF. 17,18,19

In the Class characterized as "Sexuality", the diagnosis *Sexual Dysfunction* ¹⁰, the rates of erectile dysfunction in HF are very high, reaching the level of 89% in some studies. The limited exercise capacity and coronary heart disease are considered the main mechanisms of erectile dysfunction in HF. Even though patients have difficulties in approaching this subject in a consultation, there is a concern about sexuality. ^{17.19}

Among the selected diagnoses, Anxiety¹⁰ has a high prevalence in individuals with HF, as its presence was identified in 62.5% among 50 patients undergoing outpatient treatment.²⁰

For the diagnosis *Deficient Knowledge*¹⁰, it is noteworthy that in some nursing research related to nursing diagnoses in patients with HF, deficient knowledge was one of the diagnoses that appeared with an important statistical percentage, as many patients are illiterate or have incomplete primary education.¹⁷ This brings difficulties to the patient, especially regarding knowledge and signs of decompensation of the disease for decision making.

Second, Third and Fourth Rounds

In the second round, in the "Activity and Rest" domain, only the diagnosis Fatigue¹⁰ was selected. In other words, a diagnosis focusing on a severe HF symptom. However, although patients with HF report the presence of Fatigue, this is a very subjective ND, and also works, according to taxonomy, as a related factor in other diagnoses. In a recent study, ¹⁷ the ND Fatigue was not statistically significant in hospitalized patients. It is an important diagnosis and requires nursing action. In terms of research in the NANDA-I10 taxonomy, it needs to be better worked in view of their subjectivity and because it appears as a defining characteristic in other nursing diagnoses, causing difficulties for nurses to identify them with better precision.¹⁷ Fatigue accompanies the person with HF, due to its pathophysiological manifestations compromising their quality of life, and still being able to increase the degree of dependence for activities of daily living.

While in the third round, the diagnosis "Feeling of Impotence" 10, may suggest the impact of the chronic disease, such as that "many patients think that life ended because of the disease".¹⁷ It is up to the nurse to support and guide him

in their daily lives, since this fact directly affects the value and capacity of self-care and the encouragement of social life, as well as the quality of life.

In the fourth round, when selecting the ND "*Risk of Infection*" ¹⁰ from the "*Security and Protection*" domain, there was concern about the development of the disease, since the experts corroborate that most of the financial cost of patients with HF should frequent hospitalizations. For the causal relationship between respiratory infection and clinical decompensation has been proven in several epidemiological studies. As noted²¹, vaccination against respiratory infections is cost-effective as a public health measure. There is a vulnerability in HF for respiratory infection triggers rapid decompensation, requiring hospitalization. It is up to the nurse, prevention and monitoring actions to intervene early in an attempt to avoid hospitalization, with clinical observation and judgment being essential.

Fifth, Sixth, Seventh and Eighth Rounds

In this round, the experts' discussion still remained with difficulty for some diagnoses considered non-priority due to the understanding that they are already being contemplated by others. However, after extensive discussion in the panel of experts, priority was given to "*Willingness to self-control on Health improved*"¹⁰ in the Health Promotion Domain, and in the Nutrition Domain, another willingness ND, that is, "Willingness for improved nutrition", ¹⁰ given the breadth and importance of diagnoses.

As for the ND "Risk of unstable blood glucose", 10 hitherto not a priority because it was considered that the defining characteristics would be evidence of other diagnoses, it was agreed that diabetes mellitus, as it is a risk factor for the development of HF, and because there is a high prevalence of type 2 diabetics in patients with HF.

In addition, the "Risk of imbalance in the volume of liquids", ¹⁰ which was initially indicated on the panel as a priority in the hospital context, was selected because in primary care it is possible to detect the risk with simple and available tests, preventing it from being installed the hydroelectrolytic imbalance, which can be severe enough depending on the stage of the person with HF. Therefore, the risk of electrolyte imbalance is a priority and must be monitored and valued by the nurse. In addition to this, "Insomnia",¹⁰ as it impairs the subject's quality of life, subsidizing the loss of energy, but which can be mistaken for fatigue.

Sedentary lifestyle,¹⁰ is a diagnosis that is characterized by a low level of physical activity, associated with the more advanced stages of HF, even though it is known that, when correctly prescribed, physical exercises help in the recovery of patients.^{20, 22}

As for the risk of constipation¹⁰, the selection was based mainly on pharmacological risk factors, where on the expectation of using various medications.

In the seventh round, the specialists basically included the individual's ability to perform or complete essential daily activities, that is, self-care, in their different types of deficit. Therefore, the diagnoses selected from the Activity and Rest Domain were: Willingness to improve self-care^{"10}, Deficit in self-care for food10, Deficit in self-care for bath¹⁰, Deficit in self-care for intimate hygiene10, Deficit in self-care for dressing.¹⁰ Thus, being an important focus of the nurse's performance through Health Education. It can be inferred that Self-Care for HF is relevant because it reflects how much the patient adheres to the treatment.²³ And yet in this domain, chronic pain¹⁰ was selected as a priority diagnosis, given the impact of pain on quality of life in the face of a chronic disease.

In the last round, that is, the eighth, some of the selected diagnoses add up to the 37% of taxonomy risk diagnoses in this study, namely: Willingness for improved spiritual well-being10, Willingness for improved knowledge¹⁰, and Willingness for improving the comfort. And to conclude the selection, the experts identified the impact of the family on care, hence the ND Tension of the caregiver's role,¹⁰ and the individual's self-esteem and context as a determining factor in care, hence the selection of the DE Low situational self-esteem.¹⁰ And finally, the ND Ineffective breathing pattern,¹⁰ due to possible sign of severity in stage C in primary care.

In this context, the selected diagnoses were relevant and priority for health promotion, risk prevention, therapeutic approach and monitoring of individuals with heart failure or at risk for the development of the disease at different stages in primary care.

CONCLUSION

The specialists selected 32 (thirty-two) nursing diagnoses from the NANDA-I10 Taxonomy. They were selected from 176 diagnosis applicable options to the adult population assisted in primary care, as priorities according to three main axes: those that aimed to diagnose patients with imminent risk of decompensation, those with less imminent risk, also characterized by risky behaviors, and those who identified knowledge, attitudes and practices to prevent risk / serious situations.

Considering the priority diagnosis as the one that takes precedence over the others, which aim to minimize, interrupt or prevent the development and evolution of a disease, it is concluded that the "map" generated by this effort became useful to guide the care of primary care nursing, both for those at risk of developing HF, and for those already diagnosed, increasing its effectiveness.

REFERENCES

- Ammar KA, Jacobsen SJ, Mahoney DW, Kors JA, Redfield MM, Burnett JC Jr, et al. Prevalence and prognostic significance of heart failure stages: application of the American College of Cardiology/ American Heart Association heart failure staging criteria in the community. Circulation. 2007;115(12):1563-70
- Andrade JP, Piva e Mattos LA, Carvalho AC, Machado CA, Oliveira GM. Programa Nacional de qualificação de médicos na prevenção e atenção integral às doenças cardiovasculares. Arq Bras Cardiol. [periódico na Internet].2013[acesso em 2020 jan 8];100(3):203-11. Disponível em: http://www.scielo.br/pdf/abc/v100n3/v100n3a01.pdf
- Ministério da Saúde. Datasus: mortalidade 1996 a 2012, pela CID-10 – Brasil [Internet]. Brasília (DF); 2008. [acesso em 2019 nov 20]. Disponível em: http://tabnet.datasus.gov.br/cgi/deftohtm.exe?sim/ cnv/obt10uf.def

- 4. Writing Group Members, Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, et al. Heart disease and stroke statistics-2016 update: a report from the American Heart Association. Circulation. [periódico na Internet] 2016[acesso em 2020 jan 8];133(4):e38-360. Disponível em: https://www.ahajournals.org/doi/ full/10.1161/CIR.00000000000350?url_ver=Z39.88-2003&rfr_ id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed
- Moscavitch SD, Garcia JL, Rosa LF, Pestana PR, Moraes LV, Silva COM, et al. Insuficiência cardíaca: estarão as diretrizes incorporadas na rede de cuidados primários? Rev Port Cardiol. 2009;28(6):683-96.
- Jorge AL et al. The Prevalence of Stages of Heart Failure in Primary Care: A Population – Based. Journal of Cardiac Failure.[periódico na Internet] 2016 [acesso em 2020 jan 8]; 22(2):153-7. Disponível em : https://www.onlinejcf.com/article/S1071-9164(15)01170-7/pdf
- Dzau V, Braunwald E. Resolved and unresolved issues in the prevention and treatment of coronary artery disease: a workshop consensus statement. Am Heart J. [periódico na Internet] 1991;[acesso em 2020 jan 8] 121(4 Pt 1):1244-63.Disponível em: https://www.sciencedirect. com/science/article/abs/pii/000287039190694D?via%3Dihub
- Lucena AF, Paskulin LMG, Souza MF, Gutiérrrez MGR. Construção do conhecimento e do fazer enfermagem e os modelos assistenciais. Rev Esc Enferm USP.[periódico na Internet] 2006[acesso em 2020 jan 8] ;40(2):292-8. Disponível em: http://www.scielo.br/pdf/reeusp/ v40n2/19.pdf
- Carpenito-Moyet LJ. Documentação do cuidado de enfermagem. In: Carpenito Moyet LJ. Planos de cuidados de enfermagem e documentação: diagnósticos de enfermagem e problemas colaborativos. 5a ed. Porto Alegre: Artmed; 2011.
- 10. NANDA International. Diagnósticos de Enfermagem da NANDA: definições e classificação. 2012-2014. Porto Alegre: Artmed; 2013.
- 11. Castro AV, Rezende M. A técnica Delphi e seu uso na pesquisa de enfermagem: revisão bibliográfica. REME Rev Min Enferm.[periódico na Internet] 2009 [acesso em 2020 jan 8]; 13(3):429-34. Disponível em: http://www.reme.org.br/artigo/detalhes/209
- 12. Scarparo AF, Laus AM, Azevedo ALCS, Freitas MRI, Gabriel CS, Chaves LDP. Reflexões sobre o uso da técnica Delphi em pesquisas na enfermagem. Rev Rene.[periódico na Internet] 2012 [acesso em 2020 jan 8];13(1):242-51. Disponível em: http://www.periodicos.ufc. br/rene/article/view/3803
- 13. Moura PC, Braga LM, Domingos CS, Rodrigues NV, Correia MDL, Oliveira LVA. Diagnósticos e intervenções de enfermagem em indivíduos hipertensos e diabéticos à luz de Orem. Rev Rene. [periódico na Internet]2014 [acesso em 2020 jan 8]; 15(6):1039-46. Disponível em : https://www.redalyc.org/pdf/3240/324041233018.pdf
- Brasil. Diretriz Brasileira de Insuficiência Cardíaca Crônica e Aguda. Sociedade Brasileira de Cardiologia.[Internet] 2018 [acesso em 2020 jan 8].104p. Disponível em: http://publicacoes.cardiol.br/portal/abc/ portugues/2018/v11103/pdf/11103021.pdf
- 15. França SAS, Neves ALF, Souza TAS, Martins NCN, Carneiro SR, Nascimento ES et al. Fatores associados à cessação do tabagismo. Rev Saúde Pública 2015;49:10. Disponível em: http://www.scielo.br/pdf/ rsp/v49/pt_0034-8910-rsp-S0034-89102015049004946.pdf
- 16. Linhares JCC, Orlandina L, Aliti GB, Rabelo-Silva ER. Aplicabilidade dos resultados de enfermagem em pacientes com insuficiência cardíaca e volume de líquidos excessivo. Rev Gaúcha Enferm. [periódico na Internet] 2016 [acesso em 2020 jan 8]; 37(2):e61554. Disponível em: http://www.scielo.br/pdf/rgenf/v37n2/0102-6933rgenf-1983-144720160261554.pdf
- 17. Pereira JMV, Flores PVP, Figueiredo LS, Arruda CS, Cassiano KM, Vieira GCA et al. Diagnósticos de enfermagem em pacientes com insuficiência cardíaca hospitalizados: estudo longitudinal. Rev Esc Enferm USP.[periódico na Internet] 2016 [acesso em 2020 jan 8];50(6):929-936. Disponível em: http://www.scielo.br/pdf/reeusp/ v50n6/pt_0080-6234-reeusp-50-06-00929.pdf
- 18. Aliti GB, Linhares JCC, Linch GFC, Ruscheld KB, Rabelo ER. Sinais e sintomas de pacientes com insuficiência cardíaca descompensada: inferência dos diagnósticos de enfermagem prioritários. Rev Gaúcha Enferm.[periódico na Internet]2011[acesso em 2020 jan 8];32(3):590-5.Disponível em : http://www.scielo.br/pdf/rgenf/v32n3/22.pdf
- Matos FGOA, Oliveira JLC, Alves DCI. Avaliação da acurácia dos diagnósticos de enfermagem em um hospital universitário. Enfermería Global.[periódico na Internet].2018 [acesso em 2020 jan 8]; 17(4): 166-201. Disponível em :https://revistas.um.es/eglobal/article/view/ eglobal.17.4.296021/249911

- 20. Muniz LC, Schneider BC, Silva ICM, Matijasevich A, Santos IS. Fatores de risco comportamentais acumulados para doenças cardiovasculares no sul do Brasil. Rev Saude Publica.[periódico na Internet] 2012 [acesso em 2020 jan 8];46(3): 534-542. Disponível em: http://www. scielo.br/pdf/rsp/v46n3/3690.pdf
- 21. Martins WA et al. Vacinação contra influenza e pneumococo na insuficiência cardíaca: uma recomendação pouco aplicada. Arq. Bras. Cardiol [periódico na Internet]. 2011 [acesso em 2020 jan 8];96(3): 240-245. Disponível em: http://www.scielo.br/pdf/abc/v96n3/ aop17210.pdf
- 22. Brasil. I Diretriz Brasileira de Prevenção Cardiovascular. Arq Bras Cardiol.[Internet].2013.[acesso em 2020 jan 8].78p.Disponível em: http://publicacoes.cardiol.br/consenso/2013/Diretriz_Prevencao_ Cardiovascular.pdf
- 23. Correia DMS, Mesquita ET, Singh M, et al. Desafios para o cuidado da insuficiência cardíaca: pesquisa exploratória com enfermeiras em Ontario. Rev Fund Care Online[periódico na Internet] 2016 [acesso em 2020 jan 8]; 8(4):5150-5155. Disponível em: http://www.seer. unirio.br/index.php/cuidadofundamental/article/view/5609/pdf_1

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