

Lifestyles: social representations construed by patients with myocardial infarction and family members



Estilos de vida: representações sociais construídas por doentes com infarto do miocárdio e familiares
Estilos de vida: representaciones sociales construidas por los pacientes con infarto de miocardio y familia

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ABSTRACT

Objective: The social representations of lifestyles construed by family members and patients diagnosed with myocardial infarction.
Method: Exploratory qualitative study supported by the theory of social representations, with 70 patients and 70 family members of two Portuguese hospitals, one on the coast and one inland from January to June 2015. Structural analysis was performed using two questionnaires relying on the technique called Free Association of Words.
Results: The evocations of patients and family members indicated weak convergence between the two groups in representing Lifestyle, yet showed the existence of knowledge that enhances a healthy lifestyle.
Conclusions: The categories Eat and Change were a consensus among the groups. For patients and family members, it was consensual that a poor diet is a harmful lifestyle for health. It was also clear that change is fundamental. Such an assumption makes room for the intervention of health professionals.
Keywords: Lifestyle. Myocardial infarction. Patients. Caregivers. Nursing.

RESUMO

Objetivo: Analisar as representações sociais de estilos de vida construídas por familiares e doentes com diagnóstico de infarto do miocárdio.
Método: Estudo exploratório e qualitativo sustentado na teoria das representações sociais, com 70 doentes e 70 familiares, de dois hospitais portugueses, um no litoral outro no interior do país, de janeiro a junho de 2015. Foi realizada análise estrutural, com o uso de dois questionários, recorrendo à técnica de Associação Livre de Palavras.
Resultados: As evocações dos doentes e dos familiares indicaram fraca convergência entre os dois grupos na representação de Estilo de Vida, contudo mostraram a existência de conhecimentos potenciadores de um estilo de vida saudável.
Conclusões: As categorias Comer e Mudança assumiram consensualidade nos grupos. Para doentes e familiares foi consensual que uma alimentação pouco cuidada representa um estilo de vida prejudicial para a saúde. Ficou também claro que a mudança é fundamental. Tal assunção abre espaço à intervenção dos profissionais de saúde.
Palavras-chave: Estilo de vida. Infarto do miocárdio. Pacientes. Cuidadores. Enfermagem.

RESUMEN

Objetivo: analizar las representaciones sociales de los estilos de vida construidos por la familia y los pacientes con diagnóstico de infarto agudo de miocardio.
Método: Estudio cualitativo exploratorio, apoyado en teoría de las representaciones sociales, con 70 pacientes y 70 familiares, de hospitales portugueses, uno en la costa y el otro en el interior del país, de enero a junio el año 2015. Se llevó a cabo el análisis estructural, para eso se utilizaron dos cuestionarios y la técnica de asociación libre de palabras.
Resultados: Evocaciones de los pacientes y familiares indican débil convergencia entre los dos grupos en representación de Estilos de vida, sin embargo, muestran la existencia de mejorar el conocimiento de un estilo de vida saludable.
Conclusión: Las categorías de la Alimentación y del Cambio tienen una clara consensualidad en ambos grupos. Para los pacientes y sus familiares existe un consenso de que una dieta poco cuidada es un estilo de vida perjudicial para la salud. También está claro que el cambio es fundamental. Esta premisa deja espacio para la intervención de profesionales de la salud.
Palabras clave: Estilo de vida. Infarto del miocardio. Pacientes. Cuidadores. Enfermería.

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■ INTRODUCTION

Lifestyle is defined as a configuration that articulates the ways of being, living and thinking that are inseparable from the social group of belonging. In this context, lifestyles refer to the way in which an individual or a group of individuals experiencing the world and, therefore, behaves and makes choices.

Lifestyles as modifiable conditions are inseparable from health⁽¹⁾. Individual choices related to nutrition, physical activity, leisure, or the adoption of measures to promote health or prevent disease, obesity, smoking, sleep or stress are factors that affect the individual's health (negatively or positively).

One model that supports this relationship is the Grossman's economic model that, from the analysis of the demand for health and health care, as a process of individual choice, attempts to predict the variables that affect the behavior and choices related to health. The author of this paper stresses that search for health is directly related to education, income level (socio-economic variables) and age (biological variable)⁽¹⁾.

The deep socio-economic and health changes that have occurred in post-war society translated into substantive changes in the living standards of Western societies, and therefore have impacts on health⁽²⁾. With the advent of mechanization, technological advances, computerization and the increasing presence of Labor Saving Devices (mechanisms that save efforts such as remote controls, power windows, etc.) on the daily lives of individuals, a progressive decrease took place in physical activity at work, in the home and leisure. The so-called technological and socio-economic progress has contributed to/promoted the population's increasingly sedentary lifestyle and so, instead of being an advantage for individuals, it is proving to be a potential threat to health⁽³⁾.

In various developed and developing countries, there is now a consensus on the importance of the early adoption of healthy lifestyles for the prevention of health problems through prevention and health promotion programs, with the aim of preventing either chronic diseases, their complications – by changing conditions associated with the social determinants of health – or changes in individual lifestyles.

In Portugal, the Commission on Social Determinants of Health, bearing in mind that the health determinants arise from individual factors and environmental factors, socio-economic and cultural concerns, refers to the need for the nationwide implementation of specific programs, mainly geared to empowering people to adopt healthy

lifestyles and to create environmental, organizational and more favorable conditions for social health⁽⁴⁾.

The publication of the *World Health Report* also states that non-communicable chronic diseases, examples of which are cardiovascular disease (leading causes of morbidity, loss of quality of life and mortality, high consumption of health care, economic and social costs) have strengthened the importance of healthy lifestyles. In the case of myocardial infarction (MI), lifestyles are one of the etiological factors, including diet and physical activity⁽⁵⁾.

Also in Portugal, signatories of the Declaration for a Better Life, drawn up during the Second National Congress for Public Health, in 2010, listed six urgent priorities in view of the prevention and control of non-transmissible chronic diseases: access to services (reducing health inequalities); literacy rates of citizens; reducing smoking; the reduction of alcohol consumption; encouraging a balanced diet and promoting physical exercise⁽⁶⁾. Similarly, apart from genetic inheritance, diets rich in saturated fats and carbohydrates, low in fruits and vegetables and with a substantial amount of salt and physical inactivity are risk factors that contribute to the development of cardiovascular diseases⁽⁷⁾. Cardiovascular risk is therefore associated with the presence of the unique characteristics of everyone, their living conditions and their lifestyles and scientific evidence demonstrates, more consistently, the benefits of early recognition of risk factors to prevent cardiovascular disease.

The analysis of Social Representations of coronary patients and their families about lifestyles allow to place into perspective how each group is positioned on the present actions and their impact on the future in terms of health. It will also allow the analysis of the importance attached to individual choices in terms of lifestyles and prescriptive guidance from health promotion and disease prevention.

This study aimed to analyze the social representations of lifestyles construed by family members and patients with the diagnosis of myocardial infarction and left the following guiding question: what are the social representations of lifestyles, designed for patients with myocardial infarction and their families?

■ METHOD

Choice was made for an exploratory qualitative study, using the framework of Social Representations.

The theory of Social Representations, allowed a reflection on common sense drafted by patients and their families about lifestyles. Social Representations are built by

individuals based on information available in society and aim to transform what is strange into something familiar⁽⁸⁾. They are organized as a core around which are grouped the peripheral elements⁽⁹⁾. For the author of this paper, the core has three functions: generating, organizing and stabilizing the social representations, linked respectively to the meaning, the internal organization and stability of the representation.

The sample was based on convenience and has included all patients with myocardial infarction and their families, who were hospitalized in two Portuguese hospitals (one along the coast and another inland), during the six months from January to June 2015. The sample consisted of 70 patients with the diagnosis of myocardial infarction and 70 family members. The following inclusion criteria were considered in the composition of each group of participants:

- Patient group: having a diagnosis of myocardial infarction. Hemodynamically unstable patients were excluded as were those disoriented in time and space;
- Family group: being a family member of a patient with myocardial infarction.

During data collection two questionnaires drawn up by the authors were used, one for the patient and the other for the family. They were composed of two parts. The first integrated socio-demographic questions, the second incorporated the inducing stimulus (lifestyle). To answer the second part, the Free Association of Words technique was used. The technique was to ask participants to fill out the questionnaire, freely and quickly, with the words or phrases that came to mind on "lifestyle". Whenever a patient was admitted in those services that met the criteria, the questionnaires were applied by the researchers. Data were processed by *software Evoc (Ensemble Programs Permettrant L'Analyse des evocations)* which provided the structure of social representations, statistical data and content. This structure arose from crossing the occurrence frequencies of the concepts associated with the representation of the object with its order of evocation provided the central core and the peripheral system and through the *Software SIMI (Similarity Analysis)* held a statistical and content analysis, based on the results on a prototypical Evoc base⁽¹⁰⁾.

All patients and families were informed about the study and its objectives and signed and the Free and Informed Consent Form before the implementation of the questionnaire. All ethical procedures contained in the Helsinki Declaration⁽¹¹⁾ regarding research and experimentation involving human subjects were followed and all approvals from Ethical Committees of both hospitals and the Ethics Committee for Health and Well-being of the University of Évora (No. 15004) 2015 were obtained.

■ RESULTS

70 patients from two hospital organizations, being 35 of each hospital participated in the study. The average age was 59.62 years old, with a standard deviation of 15.55 years, with a minimum age of 30 years and the maximum age of 84. It was found that 84.3% of patients were male and the age group most frequently among males is that of 61-70 years of age. The female gender corresponds 15.7% and there was a similar distribution in the second and fifth age group, respectively in the age group of 41-50 years old and in the group with more than 71 years old. It was also found that the first three age groups (<40 to 60 years of age), corresponded to the economically active age group of the population with 51.4%. It should be noted that regarding the qualifications of patients, 1.4% could not read or write, 20% studied until the 4th grade, 17.2% had until the 6th grade, 18.6% had until the 9th grade, 7.1% had until the 12th grade and 24.3% had higher education. These are people who worked, most has a low degree of education, who played various social roles and hence the importance of the social dimension takes in the lives of each and society in general.

For family members of IM patients, the mean age was 45.31 years, with a standard deviation of 9.89. It was found that 34.3% of family members were male and 65.7% were female. As for the relationship, the group son/daughter was the group that most responded with 50%, followed by the group spouse with 32.9%. Family members mostly (74.3%) had a professionally active status.

The evocations of patients over the inducing stimulus on "lifestyles" produced a total of 320 words, with 248 different words (77.5%) before the categorization process, which revealed an extensive homogeneity of the concept. After semantic categorization, 49 distinct categories were found. The result of the evocations in the group family before the categorization was 269 words, with 190 different words (70.6%), indicating the homogeneity of the concept. After semantic categorization, 42 various categories were identified. Table 1 are shown the houses relating to core center and the second periphery related to patients and relatives.

For patients, around *lifestyle* revolves the representation of having healthy **nutritional habits** (including the positive evocations concerning food) not **eating** (including negative evocations concerning food) things that harm, living with **calm** and tranquility, enjoying life in the best way through **leisure**. For this group, it is necessary to **change** and be **taught** to **prevent**. For the elements of the periphery, evoked words pointed to lifestyles that were harmful to health and its consequences, the **excesses**

Table 1 – Evocations prioritized by patients and family members to the stimulus – life styles (n = 70) – Portugal, 2015

		Central-core – Patients			Central-core – Family Members		
		AVERAGE ORDER OF EVOCATION – AOE <2.7			AVERAGE ORDER OF EVOCATION – AOE <2.7		
		Elements	f	AEO	Elements	f	AEO
f>=7	Nutrition		22	2.227	Eat	22	2.273
	Calm		11	1.818	Exercise	14	2.500
	EAT		10	2.600	Change	10	2.300
	Leisure		10	2.400	Work	10	2.100
	Change		9	2.556	Live	7	2.429
	Prevention		9	2.222			
	Education		8	2.250			
		2nd periphery-Patients			2nd periphery-Family members		
		AVERAGE ORDER OF EVOCATION – AOE >=2.7			AVERAGE ORDER OF EVOCATION – AOE >=2.7		
		Elements	f	AEO	Elements	f	AEO
F<7	Therapeutic		6	3.000	Inability	6	2.833
	Environment		5	3.000	Leisure	6	3.167
	Lack of control		4	2.750	Treatment	5	3.200
	Emotions		4	2.750	Anxiety	4	3.000
	Excesses		4	3.000	Trust	4	4.000
	Neglect		4	3.500	Depression	4	3.750
					Follow-up	3	3.667
					Family	3	3.667

Source: Research data, 2015.
f – frequency

and **negligence** that led to the **lack of control** with **emotions** to emerge, requiring appropriate **therapeutic treatment** and never forgetting the **environment** where it happened.

For the family, it is a consensus that **eating** is currently an unhealthy lifestyle, so that **changing** habits is emerging, particularly through **exercise** and performing lighter **work**, to be reborn to life and **live** better. In the most peripheral elements, **inability** and **treatment** could lead to **anxiety** and **depression**. **Leisure** and **trust**, on the other hand, are positive aspects to consider in lifestyles. When examining figure 1, it was found that centrality is in the **rule, nutrition, neglect** and **stress**. However, there are two opposite poles, that is, **eating** and **food**. The act of **eating**, as mentioned before, is a category that groups the most negative aspects of the act and which is co-related in a triangular way with a **sedentary, stressful and excessive lifestyle**. In **nutrition**, emphasis is made on the triangular connection with less positive categories such as **fear, frustration** and **tobacco** and the strong connection with the positive category **exercise**. This connection is indicative of the existence of enhancing knowledge of a healthy lifestyle.

In the analysis of evocations from the tobacco category assumes the representation of abandonment of it, but this abandonment can lead to frustration and fear. To point out the correlation between **rule, care** and **change**. This is a co-occurrence that is not very strong, but it should be stressed because the rule and care can lead to change and prevent future situations.

The central categories in Figure 2 are **stress, eating, inability** and **change**. **Stress** arises as the central category with a strong co-occurrence with **anxiety** and (at a lower level) to **depression**. The act of **eating** has a negative charge and arises in a strong correlation with the central three risk factors, **tobacco, stress** and a **sedentary lifestyle**. **Vice** and **fatigue** are also in a strong relationship. **Change** is the vertex of several moderate co-occurrences including **anxiety, trust** and **teaching** and the latter with **care**.

■ DISCUSSION

The data related to the group patients showed the categories **food, calm, eating, leisure, change, prevention** and **teaching** as the core constituents. The **food**

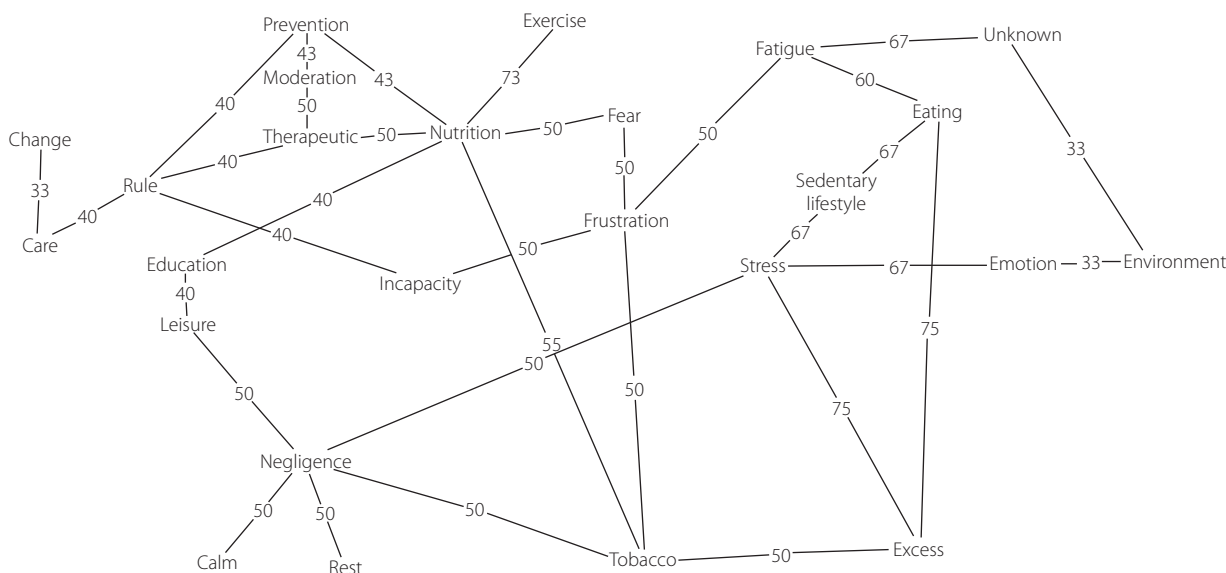


Figure 1 – Similarity analysis for the stimulus “lifestyles” in the patient group

Source: Research data, 2015.

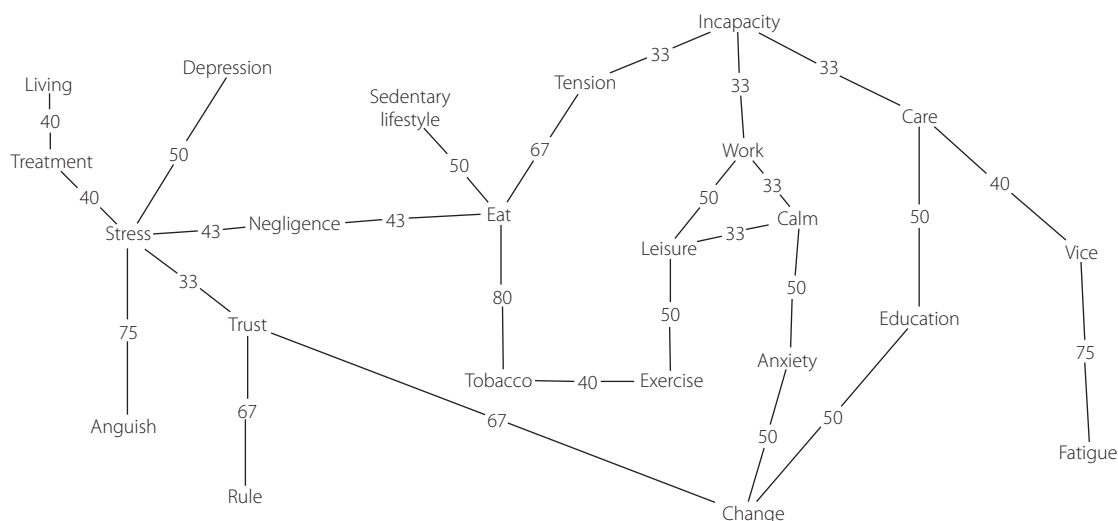


Figure 2 – Similarity analysis for the stimulus “lifestyles” in the group family members

Source: Research data, 2015.

category includes the terms careful diet, healthy, with rules, being cautious with nutrition and dieting. This category has its centrality confirmed by the similarity analysis as represented in Figure 1. There are numerous recommendations widely disseminated by various media about healthy and balanced diets, which makes it normal for this category to arise associated to lifestyles. In Portugal, the General Health Directorate (Direção de Saúde – DGS) emanates and systematically discloses these recommendations by various means, one of its priority targets is to

control obesity through healthy eating in the younger population, for health gains in future⁽¹²⁾. International recognition of the Mediterranean diet as intangible heritage for humanity is also a commitment of the Portuguese authorities to promote healthy eating among the population. Its use leads to healthy lifestyles that involve not only food but also the physical social and leisure components⁽¹³⁻¹⁴⁾. Leisure is one of the core categories that includes terms like vacation, walk, socialize and nature. The **calm** category includes words or phrases a calm, quiet and stress free life

and patients had the representation that this is critical to their health. Excessive stress, the level of personal or work life, was a major risk factor for myocardial infarction. Having a calm life and having a personality with positive reactions shows better results in terms of health⁽¹⁴⁾.

In the category **eat**, with centrality confirmed by similarity analysis represented in Figure 1 includes the expressions poor diet, beverages and food abuse. Scientific evidence proves that food is a protective factor regarding health and when there is an imbalance, the disease may emerge. This information is widely disseminated by political entities worldwide, including the Portuguese and is incorporated into the health programs of the different countries as a matter of priority intervention^(5-6,14). The notion that a careless diet is a risky lifestyle has been a motto for several studies. A systematic review on the effectiveness of training programs in primary health care has shown that there is improvement in eating habits and consequently in health outcomes, given the interventions regarding a balanced diet⁽¹⁵⁾.

Change as a category of the core contains terms such as alteration, modification, and reshaping and correcting the lifestyle. The category **teaching** incorporates the terms, educate, inform, learn, internalize and dialog. Analyzing the two categories, they are closely related, compared to lifestyles that patients adopt regarding food, physical activity, smoking and others. It is possible to successfully intervene through training programs at various levels of prevention for change⁽¹⁴⁻¹⁵⁾.

In the second periphery are the categories with a more individual character, and it is evident by the words evoked, that some patients associate lifestyles to their own **excesses** and **negligence**, leading to variations of **emotions** and consequent **lack of control**, always subject to interference from the **environment**. These are conditions that led, in their representations, to **therapeutic** use. It was found that a small group of patients assumed that excesses and neglect go hand in hand. The European Heart Charter (CEC) states that most risk factors leading to slightly moderate lifestyles, there is still a structural lack of knowledge of the population, since it is poorly prepared to take responsibility in the defense of its own health and health projects are more directed towards secondary and tertiary prevention than primary prevention⁽⁷⁾. In the same perspective, the most common thought is that "bad things" only happens to others. The overall Portuguese population eats five times more salt than is recommended, consumes copious amounts of fat, uses abusive amounts of sugar with clearly visible results in the population's weight profile and is usually not motivated to regularly practice exercise⁽⁷⁾.

The categories found in the second periphery are the most open to change given the more individual character of representation. Patients recognize what is wrong and assumed their excesses. They consider that neglecting health leads to emotional changes and the lack of control, not forgetting the environment where they live. Health depends not only on individual lifestyles, it is socially constructed in relations with the physical, economic and socio-cultural environment in which individuals are placed⁽¹⁶⁾. Given this recognition, patients undertook the need to receive treatment and be taught to change and give more importance to primary prevention.

In the group of family members, we found a core composed **eat, exercise, change, work** and **live**. The term includes **eating** the wrong food, poor diet, food abuse, alcoholism, excessive alcohol, i.e. the negative dimension of nutrition. It is a category with centrality confirmed by similarity analysis represented in Figure 2. Family members focused their attention on the nutrition of its members, in healthy lifestyles, defined largely by family transmission, the education received and the physical and social environment in which each person lives⁽¹⁷⁾. Eating, as a category, had a negative connotation for this group and assumed hegemony in the representations of lifestyles of these participants. A study carried out in Portugal refers to nutrition as one of the factors that most influence one's health, negatively or positively, also referring to stress and physical activity as factors that interfere with health⁽¹⁸⁾. These representations are also evoked by the family, through the category **exercise** that gathers expressions such as sports, walking, strolling and exercise. The **change** came into their minds, congregating expressions such as changing lifestyle, correction of errors and adjustments.

Individual choices related to nutrition, physical activity, leisure or the adoption of measures to promote health and prevention of disease affect individual health and are usually not well accepted by patients, like the changes imposed by the family⁽¹⁾.

Work, another category found, incorporates light work, incapacity of working and less work. **Living** includes expressions like life, healthy life, rebirth and conditioned life. Given these two categories, it is the family's role to monitor their member with all disabilities and treatments to combat anxiety and possible depression, associated with inactivity. For this phase to be more attenuated, the family should act as a promoter of healthy lifestyles. In fact, the practice of these lifestyles in and by the family, means living better personally and socially⁽¹⁹⁻²⁰⁾.

In more peripheral elements for family members arose representations with negative meaning such as **disability**

and **treatment** can lead to **anxiety** and **depression**. A study on family experiences after myocardial infarction reveals that feelings of anxiety and distress in the face of adversities imposed by the disease are common, highlighting the strengthening of family ties in helping the patient in their recovery⁽¹⁹⁾. On the other hand, the experience of families from the episode of the disease, when faced with the incapacity led to situations of intolerance and extreme anxiety which conditions relationships on many occasions, bringing conflict to these relationships, making interactions and social interactions difficult to maintain.

We live in the inevitability that the lifestyles adopted, are not the best for health. The most common determinants of this reality are due in part to unhealthy diet, lack of exercise, smoking, excessive alcohol consumption and high stress, as well as non-modifiable factors of a personal nature, such as genetics and cognitive ability to address and resolve the problem. This extensive list of conditioners often lead to anxiety and depression due to physical, mental, and social disability due to the disease and associated treatments⁽¹⁹⁻²⁰⁾.

Nevertheless, hope always seems to exist (and especially on the part of the family), reflected in the categories with positive semantic meaning that arise in the peripheral zone of the structure of representations. **Leisure, trust and family monitoring** are anchors that can find ways to promote healthy lifestyle habits, such as cooking for family, trying new dishes, getting out and walking outdoors, going bike riding together, among many other activities that promote emotional ties and reinforce the need for change⁽¹⁹⁻²⁰⁾.

The study helped identify the social representations of "lifestyles" from the perspective of patients with myocardial infarction and their families in the Portuguese population. This knowledge allows health professionals to justify intervention programs targeted to these subjects.

■ CONCLUSION

The categories Eating and Change are a clear consensus for both groups. For patients and relatives, it is a consensus that a careless diet (eating) is a harmful lifestyle for health. It is also clear that change is fundamental.

These findings allow us to know the most relevant social representations of lifestyles for both groups and leads us to another level which relates to knowing how to find consolidated intervention strategies in the knowledge that the study provided. The fact that patients evoke change, education and prevention, as well as recognize the power and calm (no stress) as lifestyles that promote health, can be seen as suitable space for the intervention of professionals in the promotion of healthy lifestyles.

The study concludes that the results of this study are a valuable tool with implications for health professionals, in particular for nurses. The latter have a strong potential for intervention in patients with myocardial infarction and their families, as there are temporary and/or permanent changes in health status, and help through the role of education and guide the patient and family to do the best with their capacity to pursue an active and healthy life.

As a limitation of the study was the fact that there is little research on the subject following the methodology of Social Representations. It is suggested that further research based on this methodology be developed because they are decisive to confirm and deepen the data, always in the perspective of patients and their families.

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