SOCIAL REPRESENTATIONS OF SELF-CARE IN THE PERCEPTION OF MEN WITH DIABETES

Laercio Deleon de Melo*
Cristina Arreguy-Sena**
Thais Vidal de Oliveira***
Paula Krempser****
Fernanda Ferreira Krepker*****
Paulo Ferreira Pinto******

ABSTRACT

Objective: to understand the social representations of men with diabetes concerning their self-care. Method: a procedural approach to social representations with sampling by typicity (N=50), composed of men treated in an outpatient service in Minas Gerais. The study collected characterization data and performed in-depth individual interviews for three months. The data were processed using the software SPPS version 26, NVivo Pro11®, and Iramuteq with content analysis (Pearson’s coefficient ≥0.70), and ethical-legal requirements were met. Results: predominant age of 50 years. Two categories emerged from speeches: 1) possibility of diabetes: attitudes adopted or neglected - focusing on adjustments in eating habits; 2) Diabetes and self-care: social practice of care focusing on the need for food control and practice of physical activity, aimed at preventing complications associated. Conclusion: the adherence/neglect to self-care evidenced refer to the need to strengthen the support systems to the group regarding the actions of disease prevention and health promotion, aiming at control of modifiable risk factors and glycaemic levels and early diagnosis for the postponement/management of possible complications.

Keywords: Men’s health. Diabetes mellitus. Social representation. Self-care. Public health nursing.

INTRODUCTION

Chronic noncommunicable diseases (NCDs) account for 90% of the causes of mortality worldwide among people aged 70 years, with diabetes and neoplasms considered their main causes of death. In Brazil, they represent 72% of the causes of death among people who are part of vulnerable groups; they are associated with: physical inactivity (15%); inadequate nutrition (34%), and obesity (overweight 48% and obese 14%)[1].

Projections for 2040 estimate the incidence of 23.3 million people with Diabetes Mellitus (DM) aged 20-79 years. The disease represented an increase of 61% of people affected, which, in 2015, placed Brazil in the fourth position among the ten countries with the highest number of DM patients[2]. This chronic metabolic disorder occurs with uncontrolled glycaemic levels, associated or not with: insulin deficiency, excess glucagon, osmolarity changes, protein glycation, lipid changes, and hypertension, resulting from genetic, environmental, or immunological factors[2].

The fact that man is culturally conceived as a strong, invulnerable, virile, and hegemonic being can influence his low search for health services. This vision and behaviours justify a possible deficit in self-care and disengagement in health promotion and disease prevention actions. From the perspective of gender, men represent a group more vulnerable and susceptible to illness, worsening of ongoing pathologies, and death[3]. The National Policy of Comprehensive care for men’s Health (PNAISH), allied to recommendation for surveillance on NCDs, sum forces for the creation of new goals/strategies aimed at men’s health in the public health system[4].
Self-care are actions conducted by social subjects for their wellness and health\(^5\). Men constitute a socially contextualized group from the perspective of gender and that DM and self-care can be considered representational objects capable of being captured by “common sense”\(^6\). The relevance of the theme is corroborated by the fact that men use fewer health services, have less engagement in prevention and health promotion actions\(^4\), although these are recommended for people with diabetes according to the guidelines of the DM, as well as for the care of people with chronic diseases in health care networks and priority care lines contemplated in the care model for chronic conditions (Macc)\(^2,3\). Justification for conducting this research is based on gender care according to cultural and social values that refer simultaneously to understanding how men with diabetes care for themselves. There was a gap on this topic in the literature regarding the gathering of social representations (SRs) about self-care. Considering the above, the objective of this study is to understand the SRs of men with diabetes regarding their self-care.

**METHOD**

It is a qualitative-descriptive research based on the General Theory of Social Representations (TSR) according to the procedural approach\(^6\) and structured according to the checklist Consolidated Criteria for Reporting Qualitative Research (Coreq). Outpatient service of a public Teaching hospital in Minas Gerais was the scene of the investigation, which is a reference for the care of two million users of the Basic Health System (SUS).

The study comprised a purposive sample of men with diabetes recruited by individual invitation while in the waiting room of an outpatient clinic. The eligibility criteria were: man aged 18 years old, with diabetes, having scheduled health care at the institution previously, and being in the waiting room for a visit. The study adopted the age criterion because this is the profile of the men assisted in the research setting. It excluded those who presented communication limitations (emission, decoding, and response), those whose had interview interrupted by the call to the doctor’s office, considering that the approach after the consultation could present information bias regarding the representational contents of the object of the investigation due to guidance received at the consultation. Of the potential participants who attended the institution during the data collection period, three did not meet the inclusion criteria because they did not complete the interview as they were called for assistance. Design composite sampling of fifty men met the recommendations of the approach used\(^7\). The data collection instrument contained: 1) Sociodemographic characterization (age, self-declared skin colour, marital status, number of children, years of study, and occupation); 2) In-depth individual interview triggered by guiding questions: How you do to take care of yourself, being a man with diabetes? How do you believe that a diabetic man should take care of himself? Report a case that has happened to you or a family member, friend, or acquaintance about how a diabetic man takes care of himself, and 3) Field journal records (contextual and communicational non-verbal content). Criteria for its structuring were: interactive, individualized approaches and collective content peculiar to the studies of design qualitative access profiles, behaviours, knowledge, values, and representations from experiences; be understandable to participants regardless of your level of education and favour documentation of discursive contents from of audio recording. The data collection process was conducted by a researcher previously trained to approach the subject with men, individually, aiming to reduce approach and information bias, preceded by ambiance (dynamics of the sector and its characteristics) and invitation for the interview to take place in a previously selected office to meet the privacy requirements of the approach, from May to July/2016, which interviews ranged in length from 10 to 30 minutes (average time: 20 minutes).

The Statistical Package for Social Science for Windows (SPSS) software, version 26, consolidated the quantitative variables for the characterization of the participants and analysed
through descriptive statistics. The speeches were transcribed in full and treated according to thematic-categorical content analysis, from the analytical route: pre-analysis; exploration of the material with the treatment of the results, and inference or interpretation\textsuperscript{8} to systematize the analysis of the corpus of the discourses in the procedural approach of TSR\textsuperscript{9} with the support of NVivo Pro-11 software.

The research adopted criteria to bring content analysis closer to the process approach of TSR and Orem’s concept of self-care: dimensions (behavioural/attitudinal $n=113$; informative/cognitive $n=96$; valutative/affective $n=14$ and objective/representational $n=39$ speech fragments respectively); representational origins (personal $n=200$; family $n=120$; friends, colleagues and acquaintances $n=52$, and professionals $n=37$ speech fragments, respectively)\textsuperscript{7}, and the structuring theoretical-philosophical axes of self-care according to Orem, grounded in the concepts of metaparadigm: 1) Human being: reflective agent about events and social environment, able to carry out self-care for his benefit; 2) Nurse: professional with competence to support individuals, clarifying what was not understood or helping him to adapt to changes; 3) Care scenario: wherever the individual is and needs professional assistance, and 4) Health: state of general well-being, even in the face of disease, impacting aspects physical, psychological, interpersonal and social\textsuperscript{5}.

The study sought to construct categories by approximating related representational contents up to theoretical densification (Pearson correlation $\geq 0.70$) using the NVivo Pro-11 software to understand the perception of people with diabetes for self-care practices. The connections between the emerging contents and the conceptions present in the participants’ discourse portrayed and agreed representational constructs obtained from the corpus and treated in the R Interface pour les Analyses Multidimensionnelles De texts et de Questions (Iramuteq) software for the formation of the graph in community, favouring the explanations of possible intercategory connections by the co-occurrence test\textsuperscript{9}. They received the names of self-care, activities, requirements, and self-care therapeutic requirements\textsuperscript{5}. The three researchers approved the evaluation of the last version. The study used the software NVivo Pro-11 and Iramuteq as the first subsidize thematic-categorical analysis, and the second enables lexicographic representation (cut-off point: $X^2 > 3.84$).

The research met all human research ethical and legal requirements and is part of the parent study entitled: “Social representations of men about health, disease, treatment, self-care, prevention and search for care” (Opinion no (1,416.132, of 02/19/2016). The study used alphanumeric codes to ensure anonymity (letter E, followed by numbers: 1 to 50).

**RESULTS**

Fifty men participated as follows: 37 (74%) with age $\geq 40$ years old (variability from 18 to 60 years); 19 (38%) self-declared white, and 14 (28%) black; 33 (66%) had a partner; 36 (72%) had children; 36 (72%) had more than one child; 38 (76%) had $\leq 8$ years of schooling (variability: 1 to 20 years). As for occupation, 30 (60%) were employed; 17 (34%) were retirees/pensioners and three (6%) were unemployed.

Participants developed technical activities (administrative, designer, electrotechnical, graphic, painter, welder, electrician, railwayman, waiter, announcer, machine operator, mechanic, and financial manager), or general services (lookout guard, janitor, doorman, gas station attendant, driver, transport worker, self-employed, street cleaner, and warehouse attendant), (56%) worked in construction industry or field activities (44%). In the analysis of categorical thematic content, two categories emerged whose contents are illustrated in Figure 1.

The category “Possibility of diabetes: attitudes adopted or neglected” showed that desire and need were conditioned to a lifestyle (exercise and physical activities), a type of nutrition (diet and type of food consumed), and the practice of self-care (prevention of diabetes and its complications), whereas the category “Diabetes and self-care: social practice of care,” which addresses the membership or not to diabetes control, was mentioned from the prevention perspective (visits to professionals), nutrition, exercise, and physical activity. In both
categories, the research identified fragments of discourses depicting representational dimensions, and their origins presented according to the components of self-care according to Orem, allowing us to deduce the representational functions and socio-cognitive processes constituent of TSR.

Figure 1. Illustrative scheme of the TSR’s procedural approach according to content analysis categories, representational dimensions and origins, community graph of co-occurrence analysis, and dendrogram. Note: contents extracted from NVIVO Pro-1 and Iramuteq.
Field journal allowed to characterize the scenario and the assistance as: 1) hexagonal architectural structure, with a large waiting room that had fixed banks arranged around the offices, and 2) institutional scheduling favouring users’ approach by name, with a dynamic flow, influenced by the time of each appointment. Researchers used a mobile chair for approximation between the interviewer-interviewee, and those who consented to participate were privately invited to a room near the office for the interview.

**DISCUSSION**

The variables of age, marital status, and schooling were like the ones found in another investigation among men\(^3\), and the age group was expanded when compared to the age profile that is the focus of the National Health Policy of Men, which is 25 to 59 years old\(^4\). It is because the early diagnosis of a comorbidity chronic such as a DM requires a search for care in specialized services to ensure survival and quality of life\(^2\).

The variables of profession, occupation, number of children, and self-declared skin colour were consistent with the national estimates for men\(^3,4\). The profession and occupation justify the low level of education of the participants. All participants sought multiprofessional care at the secondary level, although this research did not address comorbidity or the type of treatment.

Human behaviours are linked to socially shared concepts, values, and impressions that portray different knowledge, information, and attitudes\(^6\) and justify the participants’ arguments regarding their self-care practices\(^9\). In the participants’ speech, self-care is addressed from the perspective of prevention and/or control of chronic non-communicable diseases, focusing on lifestyle change and not restricted to the DM approach. The knowledge of these contents should integrate the data collection process of nurses since they can support therapeutic decisions and favour the care process in an expanded conception\(^5\).

Identifying behaviours linked to gender archetypes can clarify the dimensions and origins of men’s symbolic constructs and explain their behaviours through DM, to the extent of favouring the structuring of therapeutic conducts for stimulating them for self-care and constitute a viable strategy for health professionals\(^10\).

In the category, “Possibility of Diabetes: attitudes adopted or neglected,” the study recognized health services as places where there is a possibility of access to health professionals, routine visits, and examinations, and obtaining recommendations on self-care actions and the need for a lifestyle change.

Among the representational dimensions, there are two subgroups: those that highlighted the adherence to DM prevention measures and those that are aware of the importance of self-care for preventing symptoms of the disease, linked to idealized healthy eating habits (e.g., reduced sugar and increased fruit intake); physical activity; abstention from alcohol and tobacco; adherence to professional guidelines (Figure 1). Such contents explain the functions: knowledge – by mentioning information and learning about healthy lifestyle habits arising from common sense – and orientation – by filtering socially shared content, reconciling them with their values and adopted way of life\(^11\).

Other participants recognize their negligence and non-appreciation of self-care, expressing carelessness with health and the postponement of health promotion practices based on comments addressing sedentary lifestyle, alcoholism, smoking, and irregular eating, and the connection of these behaviours with the possibility of exacerbation of comorbidity (Figure 1). Among these participants, it is possible to infer the functions: identity - portraying behaviours of neglect in self-care - and justification - as far as it correlates their unhealthy behaviour and lifestyle with the presence of diabetes\(^11\).

When mentioning the types of food, their quantity, and frequency, they show up linked to a dietary pattern detaching from the necessary caloric, metabolic, and organic demands. It can be translated as an inability of participants to engage in self-care to meet the universal requirements related to eating, which justifies the vulnerability to the clinical worsening of DM.

A survey of adults in a city of Sao Paulo, in three sectional studies\(^12\) identified the relevance
of the diet, adherence to physical activity, use of oral hypoglycaemic agent or insulin in the control of DM, in the prognosis of glycaemic levels, and the prevention of associated complications, corroborating the results of this investigation.

The origins of such representations were built from pieces of knowledge, information behaviours, attitudes, and valuations about adopted habits, sexual performance, prevention of NCDs, and search for successful aging. Furthermore, the origin of events that occurred with family, friends, and acquaintances who neglected professional recommendations, with unfavourable consequences in the evaluation of the investigated group. Such experiences allow to participants identify carelessness, illness, ignorance, link these situations to the non-adherence to the professional guidelines received.

Living with family members, friends, and acquaintances practicing healthy everyday habits, who have the disease and/or present complications arising from non-adherence to the treatment, led to reflections that made them understand what they should/should not follow. Such representational constructs justify the adherence to preventive behaviours.

DM can impact aging because of the acute episodes of the disease, impairment of vision, and expression of sexuality, as mentioned in this investigation. A survey of men with age 40 years old, carriers of DM type 2, corroborated such fact, concluding that the age is a limiting factor when compared to male sexual dysfunction due to DM and confused as a factor arising from the senescence process, which motivated the recommendation for therapeutic approaches focused on self-care.

In the category “Diabetes and self-care: social practices of care,” the disease was recognized as a multifactorial event that requires lifestyle changes (healthy eating, sleep, and stress control, regular physical activity, abstinence from licit and illicit drugs, treatment adherence and health guidance). Such components depict the functions of knowledge, guidance, and justification, demonstrating that participants’ knowledge guides and justifies their behaviours, although they act inconsistently sometimes when prioritizing socially pleasurable behaviours, such as alcoholic beverage consumption and the ingestion of high fat and high-calorie foods at social events.

The study also depicted self-care actions (consultations, routine exams, and controls, attending professional orientations, and correct use of medications) for the control of DM and its complications. From the perspective of the imagetic dimension, which depicts a social memory, in which people with DM, normatively, must change their lifestyle and join the periodic professional follow-ups, the functions of identity, orientation and justification emerge by representing the practice of activities, initiated, and performed by individuals, for their benefit, for the sake of your health. Such content describes requirements for developmental self-care, that is, those that express actions that are details of universal care that arise because of DM.

The restriction in the consumption of sugars and carbohydrate sources is justified by this information being present and being shared in the social group, depicting a consented content. Hence the need for the restructuring of eating habits among diabetics as one of the requirements of health deviation, evidencing a learning about being with DM, having to adjust your lifestyle, and adhering to therapeutic measures and professional recommendations.

The existence of a socioeconomic and structural support network for healthy eating, combined with a personal commitment to eat food in adequate quantities and types, implies building a consistent routine for people with DM. It is a self-care requirement to avoid health deviation, as it seeks to obtain health care as support for habits and building preventive habits.

Sugar consumption was mentioned as the cause of DM change, what motivated the commitment to reduce the intake of carbohydrates, sweets, and fried foods, depicting the informative and behavioural representational dimensions and referring to functions of knowledge and guidance.

There is evidence that social habits (family and friends’ gatherings or leisure events) favour the consumption of hyperlipid and hypercaloric foods that impact the glycaemic index, requiring behavioural change and engagement to abstain.
from soft drinks and alcoholic beverages at social events\textsuperscript{(12-13)}. A study with people with type 2 diabetes (cases) and not diabetic (controls), with 30\% participation of men, identified that the perception of the sweet taste threshold in the group Cases was higher when compared to that of the control group, justifying the increase in the intake of sweet foods in group Cases\textsuperscript{(15)}.

In addition, in the evaluation of 362 adult people with diabetes, the study identified statistical significance (\textit{p-value} < 0.05) for the association between resilience and DM self-care (healthy eating, professional guidance, desire to eat sweets, and assessment of glycaemic level)\textsuperscript{(16)}. There is evidence of the association between healthy eating, physical activity, and drug treatment (oral hypoglycaemic agents and insulin), maintaining glycaemic levels and reducing complications\textsuperscript{(17)}.

The practice of physical activity was aimed together with balanced nutrition, use of medicines, and control of diabetes and high blood pressure, including the adherence to physical exercise favourable to healthy behaviour, yet there is a dichotomy between such perception and its insertion in the participants’ daily lives. There is evidence of benefits of practicing regular physical activity as a strategy for glycaemic control, improvement of insulin sensitivity, and reduction of associated complications, such as cardiovascular and kidney diseases\textsuperscript{(2-4)}.

The practice of physical activity can be justified (justifying function)\textsuperscript{(11)} to access additional treatment for DM control and engagement in self-care exercises in health promotion\textsuperscript{(5,16)}. There are people who, mistakenly, tend to think that the practice of a physical activity is enough for compensating for the harm of an unruly diet, a fact that is not able to regularize pancreatic activities in the control of DM\textsuperscript{(17)}.

There is evidence that the search for professional care helps in the treatment, monitoring, and evolution of the disease, medical exams, and adherence to professional recommendations, preventing health problems and promoting well-being through the practice of physical activity, healthy food, and search for support networks\textsuperscript{(17-18)}.

By analysing the participants’ discourse on contexts, occasions, and motives in the light of TSR\textsuperscript{(9)} and the occurrence of male (dis)engagement in self-care, it is possible to identify that the symbolic elements explain how therapeutic relationships are built and accessed in everyday life\textsuperscript{(4)}. The self-care actions\textsuperscript{(5)} refer to how the participants portray the health promotion measures concerning the DM, conceive prevention and treatment bound to diet, physical activity, regular use of medications, adherence to routine visits at primary/secondary care levels\textsuperscript{(2)}.

When participants justified their own or others’ disengagement in DM prevention for self-care deficit\textsuperscript{(5)}, there was a link to low adherence to health promotion, disease prevention, and DM control actions, resulting from sociocultural issues linked to gender, living, and working conditions or disbelief that they may get sick and get complications. There is evidence that non-adherence to treatment deserves professional attention for factors that can be modified by self-care actions\textsuperscript{(9)}.

Among the reasons that justified non-adherence to self-care and prevention measures for DM, the study identified: the prioritization of an unhealthy lifestyle and pleasurable during a period of life; the fear of having recognized the fact of being diabetic or not being accepted socially; the insecurity of having their conduct/masculinity questioned or disease discovered; the threat of having their persona challenged by social subgroups and adoption of lifestyle detached from that adopted in its family and social contexts, which requires behavioural adaptations\textsuperscript{(19-20)}. It is due because the self-care deficit consists in the loss of the ability of the individual to carry out their continuous and adequate self-care, requiring support care, and education from the perspective of the theory of the nursing system\textsuperscript{(5)}.

The difficulty in maintaining habits and routines of healthy behaviours in everyday life and avoiding socio-family environments adverse to professional recommendations results in weaknesses and discontinuity of self-care and treatment, causing instability in glycaemic levels and motivating a self-concept of inability to maintain adequate conduct to the process of coping with the disease, treatment, and complications\textsuperscript{(18)}.
Participants based the SRs in complications and manifestations of DM, planning them by the triad “diet, the practice of physical activity and regular use of medication.” Such a tripod is corroborated by national and international recommendations on the DM approach(2,4). Then, arising the need for the participants to engage in self-care actions with the purpose of seeking benefits to health, well-being, and maintenance of life, contributing to their completeness, functioning, and development(5).

The theoretical-methodological (TMF) and theoretical-philosophical framework (Orem’s theory) triangulation, allied to a graphical representation of results (co-occurrence graph), constitutes a contribution in the nursing field and minimizes limitations resulting from the use of only one approach to TMF (procedural).

FINAL CONSIDERATIONS

The representational symbolic constructs and perceptions about self-care concerning DM described by men participants in this study showed a concern focused on the change of lifestyle, mostly on healthy eating practices and physical activity, compliance with professional recommendations, and use of medicalization when sick.

The analysis of the representational dimensions identified according to Orem’s theory observed two groups of human responses: those linked to non-adherence to self-care, self-care deficit, referring to the support and education system, and those linked to adherence to self-care in health. These findings are essential contributions to health care planning. In the search for professional care, users should be sensitized and welcomed by the health team at the outpatient level, aiming to maximize healthy practices and prevention of DM and its complications.

REPRESENTAÇÕES SOCIAIS DO AUTOCUIDADO NA PERCEPÇÃO DE HOMENS COM DIABETES

RESUMO

Objetivo: compreender as representações sociais de homens com diabetes sobre o seu autocuidado. Método: abordagem processual das representações sociais com amostra por tipicidade (n=50), composta de homens atendidos num serviço ambulatorial mineiro. Coletaram-se dados de caracterização e realizaram-se entrevistas individuais em profundidade durante três meses. Foram tratados os dados, usando softwares SPPS versão 26, NVivo Pro11® e Iramuteq com análise de conteúdo (coeficiente de Pearson ≥0,70), e atendidos os requisitos ético-legais. Resultados: idade predominante ≥50 anos. Emergiram dos discursos duas categorias: 1) Possibilidade do diabetes: atitudes adoptadas ou negligenciadas - enfocando adequações em hábitos alimentares; 2) Diabetes e autocuidado: prática social do cuidado enfocando a necessidade de controle da alimentação e prática de atividade física, visando à prevenção de complicações associadas. Conclusão: a adesão/negligência ao autocuidado evidenciadas remetem à necessidade de fortalecimento dos sistemas de apoio ao grupo referente às ações de prevenção de doença e promoção da saúde, visando a controle dos fatores de risco modificáveis e dos níveis glicêmicos e diagnóstico precoce para o adiamento/manejo das possíveis complicações.


REPRESENTACIONES SOCIALES DEL AUTOCUIDADO EN LA PERCEPCIÓN DE HOMBRES CON DIABETES

RESUMEN

Objetivo: comprender las representaciones sociales de hombres con diabetes sobre su autocuidado. Método: enfoque procesal de las representaciones sociales con muestreo por conveniencia (n=50), compuesta de hombres atendidos en un servicio ambulatorio de Minas Gerais-Brasil. Se recogieron datos de caracterización y se realizaron entrevistas individuales en profundidad durante tres meses. Foron tratados los datos, usando softwares SPPS versión 26, NVivo Pro11® e Iramuteq con análisis de contenido (coeficiente de Pearson ≥0,70), y atendidos los requisitos ético-legales. Resultados: edad predominante ≥50 años. Surgieron, de los discursos, dos categorías: 1) Posibilidad de la diabetes: actitudes adoptadas u olvidadas - enfocando adecuaciones en hábitos alimenticios; 2) Diabetes y autocuidado: práctica social del cuidado enfocando la necesidad de control de la alimentación y práctica de actividad física, teniendo por objetivo la prevención de complicaciones asociadas. Conclusion: la adhesión/negligencia evidenciada al autocuidado remiten a la necesidad de fortalecimiento de los sistemas de apoyo al grupo referente a las acciones de prevención de enfermedad y promoción de la salud,
buscando controlar los factores de riesgo modificables y los niveles glucémicos y diagnóstico precoz para el aplazamiento/manejo de las posibles complicaciones.


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**Corresponding author:** Cristina Arreguy-Sena. Rua Espírito Santo, 1262 apto 202 Centro Juiz de Fora. CEP: 36.016.200. E-mail: cristina.arreguy@gmail.com

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