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Self-perceived health and associated factors in basic healthcare users in Vitória de Santo Antão, Pernambuco, Brazil

Autopercepção da saúde e fatores associados em usuários da Atenção Básica à Saúde, de Vitória de Santo Antão, PE

Abstract

Introduction: Self-perceived health analyzes health conditions considering biological, psychological and social aspects, and constitutes an instrument to guide the health needs of a population. **Objective:** This article evaluated the self-perception of health and its associated factors in users of weight loss groups in primary healthcare in the city of Vitória de Santo Antão-PE, Brazil. **Methods:** A cross-sectional analytical study was conducted with 24 users. Self-perceived health was analyzed through the question "How do you consider your health status?", with positive and negative responses being grouped and associated with demographic and socioeconomic conditions, health and lifestyle, diet profile and nutritional status. **Results:** The prevalence of negative self-perceived health was 83.3%, being associated with a higher daily intake of medication ($p = 0.017$) and failure to follow the Ten Steps to Healthy Eating ($p = 0.010$). **Conclusion:** The high prevalence of negative self-perceived health indicates a need for greater understanding of how the factors associated with the health-disease process influence the way a subject perceives their own health in order to promote specific and effective health interventions in this population.

Keywords: Primary healthcare. Self-perception. Health conditions. Weight loss.

Resumo

Introdução: A autopercepção da saúde analisa as condições de saúde considerando aspectos biológicos, psicológicos e sociais, sendo um instrumento norteador das necessidades em saúde de uma população. **Objetivo:** Este artigo avaliou a autopercepção da saúde e seus fatores associados em usuários frequentadores de grupos de emagrecimento da atenção básica à saúde do município de Vitória de Santo Antão-PE. **Métodos:** Foi realizado um estudo transversal analítico com 24 usuários. A autopercepção da saúde foi analisada através da pergunta "Como você considera o seu estado de saúde?", sendo as respostas agrupadas em positiva e negativa e associadas com as condições demográficas e socioeconômicas, de saúde e estilo de vida, perfil alimentar e estado nutricional. **Resultados:** A prevalência da autopercepção negativa foi de 83,3%, sendo associada a uma maior ingestão diária de medicamentos ($p=0,017$) e o não seguimento aos Dez Passos Para Uma Alimentação Saudável ($p=0,010$). **Conclusão:** A elevada prevalência da autopercepção negativa da saúde indica a necessidade de maior entendimento sobre como os fatores associados ao processo saúde-doença influenciam a forma como o sujeito percebe sua própria saúde, de modo a promover intervenções específicas e efetivas em saúde nessa população.

Palavras-chave: Atenção Primária à Saúde. Autopercepção. Condições de Saúde. Emagrecimento.

INTRODUCTION

An individual's health status can be subjectively measured through self-perceived health, reflecting an individual perception which includes biological, psychological and social aspects.^{1,2}

Self-perceived health became an epidemiological measurement in 1950, as it is considered a practical method with good validity and reliability, low cost for use by health services, and is recommended for analyzing the health of populations and helping to identify their priority needs.^{3,4}

Recent studies have demonstrated that negative self-perceived health is associated with a predictor of higher risk of mortality, inadequate dietary profile, presence of chronic non-communicable diseases (NCDs) and health risk behaviors.^{3,5-7}

The pursuit of weight loss is marked by self-perceived health and nutrition patterns which directly impact the diet profile.⁸ Toral & Slater⁹ suggest that an individual may misinterpret their own consumption and adopt incorrect eating practices when they consider their diet to be good or bad, or when they consider them to be healthy or not.

It is known that "wanting to lose weight" presupposes a change in behavioral habits which may be mistakenly implicated in dysfunctional beliefs about health, diet and body weight.¹⁰ Thus, the importance of collective spaces such as diet and nutrition groups can demystify information about health and diet through diet reeducation actions in order to consider the comprehensiveness of an individual to promote changes which positively impact self-perceived diet and health.^{8,11,12}

In this context, knowing how a subject perceives their health can be a holistic approach to understand aspects of the health-disease process, as well as decisions about an individual's eating practices. Thus, the objective of this study was to evaluate the self-perceived health in users who frequent basic healthcare weight loss groups in Vitória de Santo Antão-PE, Brazil, and analyze its relationship with socioeconomic and demographic factors, health conditions and lifestyle, diet profile and nutritional status.

METHODS

Study design and sample

A cross-sectional, analytical study with a quantitative approach approved by the Ethics and Research Committee of the Academic Center of Vitória (CAV-UFPE) under number 3,641,845.

The municipality of Vitória de Santo Antão has approximately 138,757 inhabitants. Of these, only 60 go to weight loss groups offered in seven of the 39 Basic Health Units (UBS) there, being conducted by three of the five Extended Nucleus of Family Health and Primary Care (NASF-AB) teams in the municipality.

The sample consisted of 24 adult and older adult users of both genders who frequent the weight loss groups, from October to December 2019. It is worth noting that the Municipal Health Department was undergoing a selection process during this period which resulted in reducing the number of nutritionists and less coverage for weight loss groups, thus justifying the smaller sample size.

Participation was voluntarily consented and informed through signing the Free and Informed Consent Form (ICF). The exclusion criteria were: women in gestation or lactation and physically or mentally disabled due to having different dietary patterns or difficulty in answering the questionnaire.

Data collection

The research instrument was a structured questionnaire (adapted from Lindemann et al.¹). Negative self-perceived health was considered the dependent study variable generated through the following question: “How do you consider your health status?”. The response options were: excellent, good, fair and poor, subsequently being grouped into positive (excellent and good) and negative (fair and poor) self-perception for analysis purposes.

Negative self-perceived health was associated with four categories of independent variables. First, demographic and socioeconomic conditions were considered: gender, age (in full years, categorized as 20-59 and 60 or more), self-reported skin color (white, non-white), marital status (no spouse, having a spouse), education (illiterate, literate), family income (1 monthly minimum salary or less, or > 1 minimum monthly salary), occupation (works, does not work) and number of people in the household (1-3, 4 or more).

The second category included health and lifestyle conditions: presence of NCDs (yes, no), use of daily medication (yes, no), physical exercise (yes, no), smoking (yes, no), consumption of alcoholic beverages (yes, no), presence of a community health agent (CHA) in the territory (yes, no), use of *UBS* services (yes, no), knowledge of *NASF-AB* (yes, no), attempted weight loss on their own (yes, no), consultation with a nutritionist (yes, no), number of participations in weight loss groups (< 5 times, > 5 times).

The third category was related to the diet profile (obtained by following the Ten Steps to Healthy Eating contained in the New Diet Guide for the Brazilian Population¹³ and an adaptation to the Food Consumption Markers in Primary Care¹⁴ elaborated by the Food and Nutrition Surveillance System - *SISVAM*): knowledge of the ten steps for healthy eating (know, do not know), follow the ten steps for healthy eating (none, follow 3 or more steps), habit of consuming meals while watching a screen (yes, no), amount of daily meals (up to 4, 5 or more), consumption of beans the day before (yes, no), consumption of fresh fruits and vegetables the day before (yes, no), consumption of processed meats the day before (yes, no), consumption of sweetened drink the previous day (yes, no).

Finally, the last category included nutritional status (eutrophy, overweight). This was obtained following the reference values for determining BMI (body mass index) of the World Health Organization.^{15,16} To do so, an anthropometric assessment was performed to measure weight and height, and users were instructed to remain in orthostatic position and wearing as little clothing as possible on the scale and its attached stadiometer. The measured data were converted into BMI using the formula: [Weight (Kg)/Height m²].

Statistical analysis

Data were tabulated using the Microsoft® Excel 2007 program and analyzed using the SPSS statistical package version 20.0. Sample characterization and bivariate analysis were performed between negative self-perceived health and independent variables. Significance values were set at $p \leq 0.05$.

RESULTS

The sample consisted of 24 users, the majority of whom were adults (66.7%), women (95.8%), non-white (70.9%) and had a spouse (58.3%). Regarding socioeconomic conditions, most of the subjects were literate (70.8%), did not work (87.5%) and the monthly family income was one minimum salary or less (75%) for up to three people at home (62.5 %), according to Table 1.

Tabela 1. Sample characterization of participants in the weight loss groups of Primary Healthcare (n=24). Vitória de Santo Antão-PE, Brazil, 2019.

Variables	n	%
<i>Demographic and Socioeconomic Conditions</i>		
<i>Gender</i>		
Male	1	4.2
Female	23	95.8
<i>Age in years</i>		
20-59 years	16	66.7
60 or older	8	33.3
<i>Self-referred skin color</i>		
White	7	29.2
Non-white	17	70.9
<i>Civil status</i>		
No spouse	10	41.7
Have spouse	14	58.3
<i>Education</i>		
Illiterate	7	29.2
Literate	17	70.8
<i>Family income</i>		
1 monthly minimum salary or less	18	75
>1 minimum salary	6	25
<i>Occupation</i>		
Working	3	12.5
Not working	21	87.5
<i>Number of people living in the household</i>		
1-3	15	62.5
4 or more	9	37.5
<i>Health and lifestyle conditions</i>		
<i>Presence of NCDs</i>		
Yes	16	66.7
No	8	33.3
<i>Use of daily medication</i>		
Yes	18	75.0
No	6	25.0
<i>Practice exercise</i>		
Yes	15	62.5
No	9	37.5
<i>Smoking habit</i>		
No	24	100
<i>Consumption of alcohol</i>		
Yes	1	4.2
No	23	95.8

Tabela 1. Sample characterization of participants in the weight loss groups of Primary Healthcare (n=24). Vitória de Santo Antão-PE, Brazil, 2019.9 (Continues)

Variables	n	%
<i>Demographic and Socioeconomic Conditions</i>		
<i>Presence of CHA in their region</i>		
Yes	20	83.3
No	4	16.7
<i>Utilization of UBS services</i>		
Yes	24	100
<i>Knowledge about the NASF-AB</i>		
Yes	12	50
No	12	50
<i>Tried losing weight on their own</i>		
Yes	18	75
No	6	25
<i>Consultation with a nutritionist</i>		
Yes	15	62.7
Never	9	37.5
<i>Number of weight loss group meetings attended</i>		
<5 meetings	14	58.3
>5 meetings	10	41.7
<i>Diet profile</i>		
<i>Knowledge of the Ten Steps to Healthy Eating</i>		
Yes	4	16.7
No	20	83.3
<i>Following the Ten Steps to Healthy Eating</i>		
None	21	87.5
3 or more	3	12.5
<i>Eating meals and watching a screen</i>		
Yes	16	66.7
No	8	33.3
<i>Quantity of daily meals</i>		
Up to 4	16	66.7
5 or more	8	33.3
<i>Consumption of beans the day before</i>		
Yes	14	58.3
No	10	41.7
<i>Consumption of fresh fruits and vegetables the day before</i>		
Yes	22	91.7
No	2	8.3
<i>Consumption of processed meats the day before</i>		
Yes	4	16.7
No	20	83.3

Tabela 1. Sample characterization of participants in the weight loss groups of Primary Healthcare (n=24). Vitória de Santo Antão-PE, Brazil, 2019.9 (Continues)

Variables	n	%
<i>Demographic and Socioeconomic Conditions</i>		
<i>Consumption of a sweet drink the day before</i>		
Yes	13	54.2
No	11	45.8
<i>Nutritional status</i>		
Eutrophy	3	12.5
Overweight	21	87.5
<i>*Study outcome</i>		
<i>Self-perceived health</i>		
Positive	4	16.7
Negative	20	83.3

Source: The authors.

For health and lifestyle conditions, a predominance of the sample have NCDs and use medication daily (66.7%), exercise (62.5%), do not smoke (100%) and do not consume alcohol (95.8%). Table 1 also shows that 83.3% have CHA in their territory and use the services offered by the *UBS* (100%); however, 50% say they do not have knowledge about *NASF-AB*. Many subjects were not regular users of weight loss groups (58.3%), have tried to lose weight on their own (75%) and have already consulted with a nutritionist (62.7%). With regard to the diet profile (Table 1), 83.3% were unaware of the Ten Steps to Healthy Eating and 87.5% do not follow any of these. The subjects eat meals while watching screens such as cell phones, computers, or television (66.7%), eat up to four meals a day (66.7%) and they consumed beans (58.3%), fresh fruits and vegetables (91.7%) and a drink sweetened with sugar (54.2%) the day before, and avoided consumption of processed meats (83.3%). Finally, 87.5% were overweight and 83.3% had negative self-perceived health.

Table 2 shows a higher prevalence of negative self-perceived health in non-white users (88.2%), with less education and income (85.7% and 88.8%), as well as in patients with chronic diseases (93.8%) and overweight (85.7%). In relation to the meetings in the weight loss groups, the subjects who attended regularly showed less negative self-perceived health (70%). However, these data were not statistically significant.

Table 2. Association between independent variables and negative self-perceived health among users of weight loss groups in Primary Healthcare. Vitória de Santo Antão-PE, Brazil, 2019.

Variables	N	n	Negative self-perceived health	P-value
Demographic and Socioeconomic Conditions			%	
<i>Gender</i>				0.833
Male	1	1	100	
Female	23	19	82.6	
<i>Age in years</i>				0.407
20-59 years	16	14	87.5	
60 or older	8	6	75.0	

Table 2. Association between independent variables and negative self-perceived health among users of weight loss groups in Primary Healthcare. Vitória de Santo Antão-PE, Brazil, 2019.(Continues)

Variables	N	n	Negative self-perceived health	P-value
			%	
Demographic and Socioeconomic Conditions				
<i>Self-referred skin color</i>				0.222
White	7	5	71.4	
Non-white	17	15	88.2	
<i>Civil status</i>				0.120
No spouse	10	8	80	
Have spouse	14	12	85.7	
<i>Education</i>				0.903
Illiterate	7	6	85.7	
Literate	17	14	82.3	
<i>Family income</i>				0.146
1 minimum monthly salary or less	18	16	88.8	
>1 minimum salary	6	4	66.7	
<i>Occupation</i>				0.437
Working	3	2	66.7	
Not working	21	18	85.7	
<i>Number of people living in the household</i>				0.130
1-3				
4 or more	15	14	93.3	
	9	6	66.7	
Health and lifestyle conditions				
<i>Presence of NCDs</i>				0.910
Yes	16	15	93.8	
No	8	5	62.5	
<i>Use of daily medication</i>				0.017*
Yes	18	17	94.1	
No	6	3	50.0	
<i>Practice exercise</i>				0.128
Yes	15	11	73.3	
No	9	9	100	
<i>Consume alcohol</i>				0.167
Yes	1	0	0	
No	23	20	87.0	
<i>Presence of CHA in the region</i>				0.544
Yes	20	17	85.0	
No	4	3	75.0	
<i>Knowledge about the NASF-AB</i>				0.705
Yes				
No	12	10	83.3	
	12	10	83.3	

Table 2. Association between independent variables and negative self-perceived health among users of weight loss groups in Primary Healthcare. Vitória de Santo Antão-PE, Brazil, 2019.(Continues)

Variables	N	n	Negative self-perceived health %	P-value
Demographic and Socioeconomic Conditions				
<i>Tried to lose weight on their own</i>				0.288
Yes	18	14	77.8	
No	6	6	100	
<i>Consultation with a nutritionist</i>				0.514
Yes	15	12	80.0	
Never	9	8	88.9	
<i>Number of weight loss group meetings attended</i>				0.128
<5	14	13	92.8	
>5	10	7	70.0	
Diet profile				
<i>Knowledge of the Ten Steps to Healthy Eating</i>				0.115
Yes	4	2	50.0	
No	20	18	90.0	
<i>Following the Ten Steps to Healthy eating</i>				0.010*
None	21	19	90.5	
3 or more	3	1	50.0	
<i>Eating meals and watching a screen</i>				0.593
Yes	16	13	81.3	
No	8	7	87.5	
<i>Quantity of daily meals</i>				0.660
Up to 4	16	13	81.2	
5 or more	8	7	87.5	
<i>Consumption of beans the day before</i>				0.437
Yes	14	11	78.6	
No	10	9	90.0	
<i>Consumption of fresh fruits and vegetables the day before</i>				0.688
Yes	22	18	81.8	
No	2	2	100	
<i>Consumption of processed meats the day before</i>				0.544
Yes	4	3	75.0	
No	20	17	85.0	
<i>Consumption of a sweet drink the day before</i>				0.363
Yes	13	10	76.9	
No	11	10	90.9	
<i>Nutritional status</i>				0.437
Eutrophy	4	2	66.7	
Overweight	20	18	85.7	

N = total sample number; n = number of users who report negative self-perceived health; *p<0.05 statistically significant difference.

Source: The authors.

Negative self-perceived health was significantly associated with users who use medication daily ($p = 0.017$) and do not follow the Ten Steps to Healthy Eating ($p = 0.010$), as shown in Table 2.

It was not possible to carry out the statistical analysis of smoking or the use of *UBS* services because these variables present 100% of cases in a single category.

DISCUSSION

Negative self-perceived health was found in 83.3% of the subjects and only significantly associated with the variables of daily medication use and failure to follow the Ten Steps to Healthy Eating. Although other studies show a relationship of more variables with this outcome, our results should not be considered insignificant since the prevalence of self-perceived health and its associated factors differ between the various studies, as each studied region has different cultural, geographical, economic aspects and access to health and food.^{17,18}

The high prevalence of negative self-perceived health in this study requires special attention, especially from professionals and managers of primary healthcare, as it characterizes a poor indicator of health status. In comparison to primary care users in Pelotas-RS (41.6%)¹ and Porto Alegre-RS (21.7%)², our prevalence has more than doubled, reinforcing the need for more specific interventions in this population in order to improve and elucidate the factors that lead to such a poor assessment of one's health. However, it is known that socioeconomic inequality and access to health is greater in the North and Northeast regions compared to the South Region,¹⁹ and this may justify greater negative self-perceived health in the subjects herein.

Regarding the population characteristics, the high percentage of women in the sample (95.8%) stands out, possibly due to the greater demand for weight loss due to the beauty standards imposed by society and/or greater concern with health and diet issues which can also be linked to aesthetics. However, this follows an alert for a more diligent approach by men to attend health services, as the search for information reflects greater knowledge and self-criticism about health and diet.^{8,11}

Although the association with socioeconomic conditions is not significant for the outcome, it is worth highlighting the higher prevalence of negative self-perceived health in non-white users with less education and income, reinforcing the hypothesis that inequality reflects worse health indicators.^{20,21}

Unlike the study by Lindemann et al.,¹ the presence of NCDs and the practice of physical activity were not associated with the outcome. On the other hand, in the same study there was also no relationship between self-perception and alcohol and cigarette consumption, unhealthy eating habits or nutritional status. Despite the non-association, the prevalence of negative self-perceived health in patients with chronic diseases (93.8%) and overweight (85.7%) draws attention, justifying the relationship between self-perceived health and the prediction of morbidity and mortality.

Half of the users did not know about the *NASF-AB*, even though they attended weight loss groups performed by it; furthermore, negative self-perceived health was lower in users who attended the groups regularly. The *NASF-AB* was created to increase the scope and resolution of primary healthcare actions,²² although recent studies show that users do not recognize the *NASF-AB* team by its acronym; however, when explaining its meaning and performance, they are able to attribute an improvement in quality of life to participation in its activities.^{23,24} These results reflect the importance of better disseminating the multidisciplinary care provided by *NASF-AB* to the community.²⁴

Negative self-perceived health was associated with daily use of medication, similar to the study by Bortoluzzi et al.²⁵ The continuous use of medications, possibly due to the presence of morbidities, may contribute to a less optimistic self-perception of health.^{7,26}

Failure to follow the Ten Steps to Healthy Eating was also associated with negative self-perceived health ($p = 0.010$), and the literature is scarce regarding this relationship. This is higher than found in the study by Lindemann et al.,¹ in which 87.5% of users also did not follow any steps.

The Ten Steps to Healthy Eating created by the Diet Guide for the Brazilian Population¹³ provides recommendations about adequate and healthy eating, thus configuring itself as an instrument for change in Brazilian eating behavior. However, not following any of the steps can promote diet insecurity, since information to the population contained in this guide favors adopting healthier food choices.²⁷

We did not find studies in the literature which point to an association of self-perceived health with the Food Consumption Markers¹⁴ prepared by *SISVAN*. This form was created to monitor diet consumption practices and collaborate in diagnosing the diet and nutritional situation, in addition to providing subsidies for planning Primary healthcare services.²⁸ Negative self-perceived health was prevalent even though subjects had consumed beans and fruits/vegetables and did not consume processed meats the day before, thus suggesting that consumption on the previous day may not be the usual consumption.

Finally, although the study has achieved its objective, the fact that this study was only conducted with weight loss groups is considered a limitation, as it led to a smaller sample. In addition, it was not possible to establish a causal association between negative self-perceived health and the associated factors as it is a cross-sectional study. However, knowledge regarding self-perceived health in this population can be useful for healthcare planning and contribute to the success of interventions performed by health professionals in weight loss groups.

CONCLUSION

Negative self-perceived health was highly prevalent and was associated with greater daily intake of medications and failure to follow the Ten Steps to Healthy Eating. Having knowledge about self-perceived health is important for designing and prioritizing effective health actions, as it provides professionals with information about the health-disease process and subsidies for a holistic approach about users' beliefs and perceptions in order to promote healthy life practices.

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