

Hyposodic diet in the perception of hospitalized hypertensive individuals

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Abstract

This research aimed to determine the perception of hypertensive individuals following a hyposodic diet in a public hospital in the city of Florianópolis, Brazil. This qualitative research was carried out through 15 semi-structured interviews applied to patients hospitalized for four or more days and kept on a hyposodic diet. The analysis model comprised two categories: following a hyposodic diet and limits for following a hyposodic diet. The low adherence to a hyposodic diet was related to tastelessness, the way meals were prepared, individual intolerance and difficulties in consuming some foods. The facilitating factors for acceptance were: sodium restriction incorporated into the eating habits, assumption that excess salt is bad for health, and the role played by the family in the adherence to treatment. The research concluded that to improve the acceptance of a hyposodic diet in a hospital it is necessary to associate the nutritional factors with the sensorial aspects, considering the dietary preferences of patients.

Key words: Sodium-Restricted. Food Service, Hospital. Patient Acceptance of Health Care. Perception.

Introduction

Arterial hypertension is an important challenge for worldwide public health due to its high prevalence and concomitant risk for cardiovascular and kidney illnesses. Currently, over 25% of the worldwide population are hypertense and there are estimates that this percentage may reach 29% up to 2025,^{1,2}

A hyposodic diet, although cited worldwide as one of the most effective ways to control hypertension, has one of the lowest rates of adherence.^{3,4} This nonadherence tends to worsen in hospitalizations because hospital food is known for presenting characteristics such as lack of flavor and low temperature as well as being perceived as something forbidden or allowed, depending on the disease.⁵ The rejection of a hyposodic diet can lead to an insufficient intake, resulting in inadequacy of energy and nutrients in the body.^{4,6} Despite the negative consequences of this diet's insufficient intake in the hospital environment, little is known about the reasons for patient non-compliance. Some studies have highlighted that low dietary intake by the hospitalized patient involves aspects such as palatability of preparations, combined with lack of salt;^{4,7-10} cold temperature of food that should be served hot;^{8,10} the time;^{8,10} presentation of the meal;^{7,8} lack of orientation of the patient by the healthcare team, the interference in socialization (difficulty eating outside of the home and family conflicts, because of the forbidden consumption of preparations rich in sodium) and the lack of options for foods with hyposodic content, resulting in limited food choices.^{4,9}

The high prevalence of hypertension, coupled with low consumption of a hyposodic diet, highlights the importance of studies that seek to understand the factors that influence the consumption of sodium, as this is effectively a consensus on non-pharmacological treatment of this disease. Thus, the objective of the research was to understand the perception of hypertensive individuals in relation to a hyposodic diet in a public hospital in Florianópolis, Santa Catarina.

Method

This is an exploratory study with a qualitative approach, developed in a public hospital in the city of Florianópolis. The qualitative approach answers questions that cannot be quantified because they delve into the world of actions and meanings of human relationships. Moreover, in this type of study, the results can generate assumptions for future research.¹¹

15 individuals were interviewed, aged between 29 and 89, with length of stay between five and 35 days. Data collection was conducted in September 2007. Data such as age, sex and diagnosis of patients were obtained from medical records. This step enabled the patient selection according to previously planned inclusion and exclusion criteria. Inclusion criteria included: being hospitalized

for more than four days and receiving a hyposodic diet with normal consistency; having more than one hospitalization and signing the Term of Consent. The study excluded patients with dysphasia, unconscious, confused or sedated, pregnant women, patients on enteral or parenteral nutrition therapy and treatment for kidney and liver disease.

For patients who met these criteria, we performed a first contact, asking them questions about the possibility of participating in the research. For those who answered yes, the interview took place at the time most convenient for the respondent, having signed the consent form. All interviews were conducted at the patients' bedside. Their duration ranged from 15 to 30 minutes and they were recorded on a digital recorder.

The technique used for data collection was a semi-structured interview. The study by Poulain¹² provided support for the development of an analytical model consisting of two categories: *Consumption of a hyposodic diet in the hospital* and *Limits for the consumption of a hyposodic diet in the hospital*. Starting from the guiding question, "What do you think of the meals you are receiving at the hospital?" and the answers obtained, other questions were employed in order to clarify or explore the information commented by patients, always taking care not to digress from the central theme.

The interviews were conducted to achieve a theoretical saturation,¹³ that is, when they produced no more new information and achieved the purpose of the research, making it unnecessary to have a numerical criterion to ensure its representativeness¹¹ and the relationship between categories are well established and validated.¹¹ To meet the theoretical saturation criterion, the interviews were transcribed daily. Once transcribed, the reports were compared with the corresponding recording.

The data were analyzed using the content analysis technique, which aimed to identify the categories that responded to the general objective of the research. Sorting elements into categories requires identifying what each has in common with the others.¹³

Some reports were transcribed in the results and in order to ensure the anonymity of participants, the letters H (men) and M (women) were used, followed by patient age (Ex: H 48; M 57).

This study was approved by the Ethics Committee on Human Research of the Federal University of Santa Catarina, case number 209/07.

Results and discussion

Content analysis resulted in the systematization of meaning units into categories that can help understand how patients perceive the hyposodic diet in the hospital environment.

Consumption of hyposodic diets: control, family support and incorporation of eating habits

From the reports, elements that may facilitate the consumption of hyposodic diet in the hospital were identified. Among them is the restriction of salt when already incorporated in the feeding habits, the conception that excess salt is harmful to health and the role of the family in treatment adherence.

“At home the food is also controlled. Because I’ve had high blood pressure for quite a while. So salt is controlled, my food is controlled.” (H 66).

The concept that excess salt is harmful to health can contribute to improve the consumption of the hyposodic diet. In some reports, knowledge about the recommendations of this diet and its therapeutic function proved to be facilitators of self care.

“Eating less salt is better, because I was taking high blood pressure medicine at home because we use more salt. And not here, I’m not taking it and my blood pressure is always 10/6, 11/7.” (M 57).

“I think they should do in a way that we can eat. At home I eat just a little salt anyway, my food is more bland.” (M 64).

Despite the importance of knowledge for adherence, this information is often neglected. Mellen et al.,¹⁴ when assessing the prevalence of nutritional counseling and physical activity for hypertensive patients, found that, despite clear evidence of the effectiveness of lifestyle changes such as primary and secondary treatment of hypertension, the number of individuals who receive this kind of guidance is still low. Only 35% of respondents had received nutritional counseling and 26% were oriented to exercise.

The family seems to have an important role in the development and maintenance of these eating habits at home.

[...] “she [the wife] takes some precautions and prepares the food already with low salt.” (H 66).

Hypertension causes limitations in lifestyle not only in the hypertensive but in their household.¹⁵ Therefore, the role of the family in the development and maintenance of the family habit can assist in the adherence to the dietary treatment, as evidenced in reports. Family support is one of the elements of safety for patients to start taking this new perspective on life.

Intake limits of the hyposodic diet: salt and flavor, family context, form of food preparation and lack of appetite

Though they consider their nutrition apparently good and understand the need for control, some patients reject it. Or, eating with no salt is synonymous with obligation and lack of taste:

“I find it very pretty [the presentation], but it has no flavor. Because it has no salt. Salt is the king of flavor! It’s missing, isn’t it? If not, no way! For me it only comes one gram of salt, so I only eat what has a little salt. But still, if it’s cooked bland it’s not good. So they’re just messing with us, it only fills my stomach.” (M 69).

Stanga et al.,⁸ Yabuta et al.¹⁰ (2006) and Demário et al.¹⁶ also identified lack of flavor as a cause for the lower food intake and, consequently, lower nutrient intake. The taste of hospital food is often seen as secondary in detriment of the nutritional, hygienic and sanitary function .⁵ In restricted diets such as hyposodic, preparations become unpalatable, complicating treatment adherence and reducing the patients’ caloric intake.⁸

To ease the lack of flavor of hyposodic diets, some strategies can be incorporated into the hospital food, including the personalization of diets, which aims to bring the hospital diet into the food habits of the patient. Another action is the selection of foods with different shapes, textures and colors. The visual appeal can be a way to increase food intake at the hospital.¹⁷ (HESS, 1997). Spices and herbs, when used correctly, can enhance the flavor of foods and are an alternative to salt.¹⁸

By analyzing the aspects that may inhibit consumption of the hyposodic diet, it can be seen that the family can both contribute to and limit or preclude this process.

[.] “My son-in-law complains with little salt... I live with my daughter, I am a widow. So if the food is lacking salt, my son-in-law says: Hey, are we out of salt? Want me to go get some? Then we have to put regular salt. Then his pressure rose more.” (M 67).

“At home everything is awkward because I cook myself, my wife works, it’s not the same thing. Then I exaggerate!” (H 48).

Living alone without family support or family members who do not participate in the dietary change to improve the health of the family member can contribute to nonadherence to the hyposodic diet.¹⁵ This support is recognized for contributing to the acceptance of a hyposodic diet in the hospital.

The manner of preparing food in the hospital seems to interfere with the intake of a hyposodic diet, especially when it doesn’t resemble the dietary practices of patients. In this sense, aspects related to insufficient use of herbs to flavor foods and type of cooking are identified, especially

baked and fried preparations, which are preferred over stews. Complaints have arisen during the reports, but there is a trend towards understanding and resignation to the hospital service.

[...] “at home, I put a lot of spice, herbs, everything I want to. And here, we can not do that, because it’s a ton of people eating, there’s no way we can do that. I think there really is no chance.” (M 57).

Corbeau¹⁹ argues that hospitalized individuals have different preferences and food habits, built before hospitalization. Learning to respect their preferences and habits could be a strategy for constructing, in conjunction with the patient, of a healthier relation with food.

Food habits and preferences can interfere with the consumption of a hyposodic diet because the home spice refers to memories, sensations and flavors that meals served at the hospital do not provide. Food goes beyond satisfying physiological hunger, as there is a need to satisfy appetites, desires to re-experience sensations, pleasures and recall social ties that accompany the taste.^{19,20}

[...] “At home there’s quality, love, everything! There’s affection... the food is made with more love” [...]. (H 66).

Foods are not identified by the patient when reduced to a nutrient rule, standard or routine. Therefore, hospital food is far from incorporating other food habits than only nutrients, and its sensorial and symbolic dimensions are not always considered.¹⁹

Moreover, while comprising the limitations of services related to hospital food, there are expectations regarding the meal, and food preferences were identified. The preferences are similar, in preparation or composition, to those consumed at home. Salads, fruits, rice and beans and soup were the foods most often cited.

“Listen, what I liked most was the soup. Because am I used to it, at home I also have soup in the evening.” (H 68).

The expectations are also related to the perception that hospital food should be nutritionally correct and healthy:

“I like lots of salad and fruit, they could give us more of it, because since we’re in the hospital, it’s good for our health!” (M 71).

In the study by Watters et al.²¹ investigating the perceptions of adults about hospital nutrition and food service through focus groups, patients demonstrated that the food served in hospitals should be a model of a healthy diet.

Garcia²² argues that feeding practices originating from health concerns appear to be conflicting, with feeding behavior consisting of representations constructed either by concern for the health or

for the palate. Thus, in a given situation, feeding may be accompanied by guilt, like in the reports of patients who do not follow the diet at home.

The food also causes unease and, therefore, it is rejected. The rejection was also related to its consistency and hence the impossibility of consuming it.

“I can’t eat eggs because it’s bad for my liver and there were eggs yesterday already, then I put it aside and don’t eat anything. I only ate the salad.” (M 68).

“Apples, I can’t eat [laughs], because I have no teeth... My food has to be a little softer...” (M 71).

Data by Pedroso, Sousa & Salles²³ from a research using focus groups with nutritionists noted that the individualization of the diet seems to be a challenge for professionals involved in the production of meals, due to the standardization of the process. Sousa and Proença⁵ argue that it is difficult to take the patient into account in the production process, because the flow of food follows the logic of standardization and division of labor.

In the same sense, the disease interferes with appetite. Respondents reported sensations that eventually made feeding impossible, although considered attractive.

“Everything is good. There’s some salad, which we like to eat. But it’s just eating, it’s bad. Then I don’t eat, I leave almost everything...” (M 68).

Demário, Sousa and Salles¹⁶ observed that the disease has altered the appetite of patients, particularly if accompanied by malaise and pain.

As for the time, although it’s not the patient’s usual time, they refer to a need for adaptation, because they believe to be the correct time, or even, they conform to a reality that seems immutable.

“It’s kind of early, but what can we do? We have to face it!” (H 48).

“I’m already used to it! I’ve been here for almost 40 days!” (M 57).

In the research by Demário et al.,¹⁶ hospital meal times were considered a model to be followed. The authors state further that these results can demonstrate the control and discipline involved in hospital food.

The notion of the need for control, as highlighted in the reports, can reveal, in part, the concept of medicalisation of hospital food.¹⁹ And still, the fear of being misinterpreted when complaining about the conditions of care and feeding.¹²

Conclusions

In the study site, hypertensive individuals realized that the hyposodic diet presents a lack of flavor due to the absence of salt in the cooking process and the method of preparation differs from food habits at home. Other factors mentioned were lack of family support, lack of appetite caused by the disease and individual preferences and intolerances to certain foods. Therefore, to add the sensorial aspect to the nutritional aspect, observing feeding preferences of patients, can improve the consumption of the hyposodic diet during hospitalization.

It should be noted that neglecting the flavor in the preparation of the hyposodic diet is a frequent problem in hospital food, and that the addition of spices, herbs and salt in a controlled way in cooking can enhance the flavor of preparations.

Knowledge and understanding of these aspects by the health team can transform hospital food in an experience that combines sensory and nutritional aspects.

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