

INTERVENTIONS FOR BEARERS OF NON-COMMUNICABLE CHRONIC DISEASES: EXPERIENCE REPORT AND EPIDEMIOLOGICAL STUDY

Intervenções para portadores de doenças crônicas não-transmissíveis: relato de experiência e estudo epidemiológico

Intervenciones para enfermedades crónicas no comunicables: informe de experiencia y estudio epidemiológico

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ABSTRACT

Objective: To report the experience of implementing health promotion and disease prevention activities for patients with non-communicable chronic diseases, and describe this public and estimate the association between health and life habits and the sexes. **Method:** experience report and quantitative cross-sectional study carried out with patients with non-communicable chronic diseases. Sociodemographic, health status and lifestyle data were subjected to statistical analysis using the T-student and Chi-square tests. **Results:** there was a statistically significant difference between systolic blood pressure values according to gender. In the activities, the participants were participative, presenting positive evaluations. **Conclusion:** educational and interventional actions contribute to the exchange of scientific and popular knowledge. Health actions should be integral and directed also to the male public.

Descriptors: Health education, Disease prevention, Health promotion, Hypertension, Diabetes mellitus.

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RESUMO

Objetivo: Relatar a experiência da implementação de atividades de promoção da saúde e prevenção de agravos para portadores de doenças crônicas não-transmissíveis, além de descrever esse público e estimar a associação entre hábitos de saúde e de vida e os sexos. **Método:** relato de experiência e estudo quantitativo transversal, realizado com portadores de doenças crônicas não-transmissíveis. Os dados sociodemográficos, de estado de saúde e hábitos de vida foram submetidos à análise estatística por meio dos testes T-student e Qui-quadrado. **Resultados:** houve diferença estatisticamente significativa entre os valores de pressão arterial sistólica segundo o sexo. Nas atividades, os participantes foram participativos, apresentando avaliações positivas. **Conclusão:** as ações educativas e interventivas contribuem para a troca de saberes científicos e populares. As ações em saúde devem ser integrais e direcionadas, também, ao público masculino.

Descritores: Educação em saúde, Prevenção de doenças, Promoção da saúde, Hipertensão, Diabetes mellitus.

RESUMEN

Objetivo: Informe sobre la experiencia de implementar actividades de promoción de la salud y prevención de enfermedades para pacientes con enfermedades crónicas no transmisibles, y describa este público y calcule la asociación entre la salud y los hábitos de vida y los sexos. **Método:** informe de experiencia y estudio transversal cuantitativo realizado con pacientes con enfermedades crónicas no transmisibles. Los datos sociodemográficos, del estado de salud y del estilo de vida se sometieron a análisis estadísticos utilizando las pruebas T-student y Chi-cuadrado. **Resultados:** hubo una diferencia estadísticamente significativa entre los valores de presión arterial sistólica según el género. En las actividades, los participantes fueron participativos, presentando evaluaciones positivas. **Conclusión:** las acciones educativas e intervencionistas contribuyen al intercambio de conocimiento científico y popular. Las acciones de salud deben ser integrales y dirigidas también al público masculino.

Descriptores: Educación en salud, Prevención de enfermedades, Promoción de la salud, Hipertensión, Diabetes mellitus.

INTRODUCTION

Health promotion and disease prevention are guiding principles of the practices offered in health services, especially in Primary Health Care (PHC). Disease prevention refers to epidemiology, seeking to reduce and control the transmission of infectious diseases, in addition to decreasing the risk of specific diseases related to already established pathologies. Health promotion, in turn, can be defined as a multidimensional practice, which aims to modify economic, social and lifestyle factors, promoting a healthy lifestyle and reducing general vulnerability, starting with the empowerment of the community itself to act to improve their quality of life and health.¹⁻²

One of the strategies for health promotion and disease prevention is related to health education, which can be understood as a set of knowledge and practices, applied by health professionals, with space for reflection and empowerment, encouraging changes in lifestyle habits.³ By promoting educational measures in different areas, with

the use of strategies, such as that of educational groups, it contributes to the opening of dialogues with the subjects and their families.

PHC, due to its attributes such as comprehensiveness, longitudinality and coordination of care, in addition to being the individual's first contact with the health care network, becomes a privileged place of intervention, enabling "improvement in the identification of health problems, prevention, health promotion with good living, better adherence, understanding and leadership in the construction of the necessary health treatments."⁴

In this context, Brazil, like the other Latin American countries, has undergone intense changes, especially in the last 30 years, which characterized the demographic and, consequently, epidemiological transition. Thus, the Brazilian health scenario presents a reduction in mortality from infectious and parasitic causes and an increase in mortality from external causes and chronic noncommunicable diseases (CNCDs), the latter leading the rates.⁵⁻⁶

This study is justified considering the scarcity of literature on this topic in this scenario, in addition to the importance of interventional practices. The aim of this study is to report the experience of implementing health promotion and disease prevention activities for patients with CNCDs, especially for those with Systemic Arterial Hypertension (SAH) and Diabetes Mellitus (DM), in addition to describing the profile of this public and estimating the association between the variables of health and life habits and the female and male sexes.

METHODS

This is an experience report and a cross-sectional quantitative study, carried out with patients with CNCDs, from August to December 2018, in a Basic Health Unit (Unidade Básica de Saúde — UBS) in the metropolitan region of Belo Horizonte, Minas Gerais, Brazil, as part of of the "New Life: Actions for Health in Nova Vista" ("Nova Vida: Ações para a Saúde no Nova Vista") (registration 403461) Extension Project.

After prior verbal authorization from the manager of the aforementioned Institution, the Situational Diagnosis of Nursing and Health (SDNH) was carried out as a method of identifying and analyzing a reality and its needs, aiming at the preparation of organizational proposals.

The study population consisted of 162 patients with SAH and/or DM, participating in health education groups. These, popularly called "Hiperdia" (Hyper, derived from Systemic Arterial Hypertension, and Dia, derived from Diabetes Mellitus), were carried out weekly, addressing topics related to health promotion, such as healthy eating, physical activity and quality of life, in addition to prevention of diseases.

As a theoretical reference for the elaboration of the

meetings, the notion of practices based on listening and dialogue was used, through interactive and interventional methodologies, as dynamics, aiming to provide autonomy to the participant and a better understanding of the themes addressed - pointed out by Paulo Freire.⁷

After the dynamics, doubts were clarified and, at the end of the actions, there was a measurement of noninvasive blood pressure and capillary blood glucose. In addition, when the medical professional was present, prescriptions for medications related to SAH and DM were renewed.

The educational actions were carried out in community areas close to the UBS, with the management of the municipality, the service professionals and diabetic and hypertensive users in the coverage area (AA) of the UBS as invited guests.

For data collection, a semi-structured instrument, developed by the authors, was used, which contained questions for sociodemographic characterization, such as sex and age; health status issues, such as systolic and diastolic blood pressure, capillary blood glucose and *High Density Lipoprotein* (HDL) and *Low Density Lipoprotein* (LDL) values; and lifestyle habits, such as smoking and alcohol consumption. It is noteworthy that the totals of the variables varied because, for some of them, there was loss of data, not reaching the total *n* of 162.

In addition, a database was elaborated, submitted to statistical analysis using measures of central tendency and frequencies. For qualitative variables, absolute and relative frequencies were calculated. For quantitative variables, mean (standard deviation) or median (interquartile range) were calculated, according to the symmetry of the variables, in addition to minimum and maximum values. The *T-student* and *Chi-square* tests were applied, in order to verify the statistical association between two quantitative or qualitative variables. For data analysis, the program *Statistical Software* (Stata), version 14.0 (Stata Corp. Texas, USA) was used.

All involved were informed about the research objective, how the research would be directed and about their rights as participants. Free and informed consent was given through verbal consent, obtained during contacts with participants. In addition, all care to make the cases unidentifiable was taken by the researchers, avoiding their identification and preserving the ethical aspects of the experience report. Finally, it should be noted that this intervention is linked to the Project "New Life: Actions for Health in Nova Vista" ("Nova Vida: Ações para a Saúde no Nova Vista") (registration 403461).

RESULTS AND DISCUSSION

The study population consisted of 162 patients with SAH and/or DM, participating in health education groups. Table 1 shows the sociodemographic characterization of the group participants, in addition to the participants' lifestyle and health conditions. Most of them — 95 (59.4%) — were

female and 101 participants were between 50 and 70 years old (65.2%). Systolic blood pressure (SBP) values ranged between 90 and 220, with a median of 140 mmHg. The diastolic blood pressure (DBP) values varied between 40 and 120, with an average of 102 mmHg. Capillary glycemia (CG) was verified only in patients with DM, ranging from 70 to 463, with a median of 155 mg/dl.

HDL values varied between 24 and 143, with a median of 55 mg/dl, while LDL values ranged from 43 to 178, with a 114 mg/dl mean. A small portion of the participants, 7 of them (14.9%), said they smokers at the time of data collection, while 14 (29.8%) said they consumed alcohol (Table 1).

Table 1 - Sociodemographic characterization, lifestyle and health conditions of the participants. *Sabará*, MG, Brazil, 2018.

Variables	N	%	Mean	SD	Median	IQ	Min-Max
Sex							
Female	95	59.4	-	-	-	-	-
Male	65	40.6					
Age (years old)							
< 50	18	11.6	-	-	-	-	-
50 - 70	101	65.2					
> 70	36	23.2					
Health conditions							
SBP	-	-	-	-	140	120-160	90-220
DBP	-	-	82	11.25	-	-	40-120
CG	-	-	-	-	155	108-220	70-463
HDL	-	-	-	-	55	46-63	24-143
LDL	-	-	114	39.8	-	-	43-178
Life habits							
Smoking	7	14.9	-	-	-	-	-
Alcohol consumption	14	29.8	-	-	-	-	-

Notes: SD = standard deviation; IQ = interquartile range.
Source: Elaborated for the purposes of this study.

There was a statistically significant difference between the SBP values according to sex ($p = 0.0217$). For the other variables, there was observed no statistical significance (Table 2).

Table 2 - Association between the sociodemographic variables, lifestyle and health conditions of the participants and their sex. *Sabará*, MG, Brazil, 2018.

Variables	Women Mean / %	Men Mean / %	p-value
SBP	135	144	0.0217*
DBP	81	83	0.2019
CG	175	184	0.7091
HDL	61	49	0.2606
LDL	128	104	0.1695
Smoking	10	20	0.9570
Alcohol consumption	20	29.2	0.4889

Note: *p-value ≤ 0.05 = significant
Source: Elaborated for the purposes of this study.

Finally, in relation to the implementation of health promotion and disease prevention activities for CNCDs patients, it was observed that the participants were

participative. All evaluations were positive.

This experience report and epidemiological study demonstrated an effective and constructive experience of implementing and carrying out educational actions with CNCDs patients enrolled in a PHC service. Therefore, the effectiveness of the approach regarding the process of awareness of the subjects is emphasized.

The health problems resulting from CNCDs are the main cause of death, especially in the elderly population, as it is a scenario that is not only Brazilian, but worldwide. SAH and DM have become an important public health problem, causing 30 to 40% of morbidities in the adult population.⁸⁻⁹

In addition, they are morbidities whose presentation profile is similar, such as etiopathogenesis, chronicity, need for permanent control, as well as related risk factors: obesity, dyslipidemia and sedentary lifestyle. Thus, the treatment of both involves changes in lifestyle, such as food and physical activity, in addition to drug treatment and multidisciplinary follow-up.⁹ Therefore, given the similarity of the diseases, it is justified to adopt coping strategies that involve both pathologies.

The Strategic Action for Tackling NCDs, developed in 2011 by the United Nations (UN), values health promotion actions, whose fundamental strategy is health education. Thus, health is perceived with multidimensional characteristics and the individuals are active subjects in the educational process, seeking autonomy in their care. It is noteworthy that the ESF is an important space, developing health promotion actions, disease prevention, treatment and rehabilitation.^{8,10}

With regard to educational activities, it highlights those active methodologies as those presented in this work, which stand out compared to traditional methods. In these methods, knowledge is fragmented, reductionist and the subject is a mere spectator; in the active methodologies, the autonomy generated is capable of providing co-responsibility, in addition to being related to the subject's daily practice.^{8,10} Therefore, the interactive and interventional methodologies adopted in the groups are more appropriate to achieve the objectives: the promotion of the quality of life and health of individuals.

However, the implementation of these active methodologies requires changes in the professionals' work processes, requiring the health team to know its population and work together with it, not only imposing norms and conduct according to scientific evidence. Knowledge then becomes joint and spontaneous construction.¹⁰

Therefore, the importance of carrying out and maintaining health education groups, especially those focused on CNCDs, is emphasized, whose interventions must be continuous and permanent, reinforcing monitoring, bonding and longitudinality of care.¹⁰

Still in relation to the results of this study, there were statistically significant differences between the values of

SBP within the sexes. Historically, public health policies have been focused on children and women, especially in the reproductive period. On the other hand, men were (and still are) treated in a mold of masculinity, which they cherish for the surveillance of gestures and emotions, which reflects in the care of their own body and, consequently, in health.¹¹

It is, therefore, a reality of health services, especially in health promotion actions: the majority presence of women. This panorama, although secular, can be verified today, as found in the present research.

In this perspective, the socially constructed gender labels produce more significant self-care practices in women, seen as more fragile. Men are left to neglect and neglect their own health, which triggers the detection of diseases in advanced stages and premature deaths.¹¹

These aspects may justify the statistical association found in the present study between higher levels of PAS and the male gender, raising the need to promote policies aimed at men's health, such as the National Policy for Integral Attention to Men's Health (Política Nacional de Atenção Integral à Saúde do Homem — PNAISH), created in 2008, by the Ministry of Health (Ministério da Saúde), whose objectives are to promote comprehensive health actions directed at the male public, reducing the rates of morbidity and mortality from preventable and preventable causes and increasing the life expectancy in this population.¹¹

Some limitations in this work must be recognized, among them the performance of educational and interventional actions in only one PHC service. In addition, the study had limitations in terms of data loss in some variables, in addition to the absence of retrospective data to assess the impact of educational and interventional actions.

Despite these potential limitations, there is a need for a health education model aimed at promoting health in patients with CNCD, such as DM and SAH, aiming at the effective control of diseases, their risk factors and their aggravations, promoting better quality of life.¹⁰

CONCLUSIONS

The educational and interventional actions implemented in the context of PHC, when developed through interactive and interventional methodologies, such as those in this study, contribute to the exchange of scientific and popular knowledge among users, teachers, students and health professionals, providing the construction of new knowledges.

In addition, the presence of a statistically significant difference between the SBP values according to sex suggests that health actions should be comprehensive and directed, also, to the male audience.

This study therefore presents vast contributions to the area of health and nursing, as it signals the need for continuous awareness to develop practices and tools that,

together with the responsible agencies, can contribute to a real and significant improvement in the current situation of these patients, in addition to the development of lines of care directed to them.

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