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ORIGINAL ARTICLE

Men's perceptions on educational intervention participation at workplace

Percepções de homens sobre participação em intervenção educativa em local de trabalho

Percepciones de hombres sobre participación en intervención educativa en lugar de trabajo

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ABSTRACT

Objective: todescribe the application of educational intervention performed with working men and identify, according to their perceptions, the main results obtained. **Methods:** a descriptive and exploratory research, of qualitative nature, developed in a municipality of Southern Brazil, with 35 metallurgists. Data were collected between March and June 2014, through the recording of the operating groups and participant observation. Transcripts and field diaries were submitted to content analysis. **Results:** participants intensified their interest in the search for health information, and some of them managed to implement changes in lifestyles, especially in relation to eating habits and sedentarism, and the support of the group was perceived as motivating for the changes. **Final considerations:** health education activities that embrace meaningful themes for participants and are built by a cohesive group whose members support each other, favor lifestyle modification.
Descriptors: Health Education; Cardiovascular Diseases; Men's Health; Clinical Trial; Nursing.

RESUMO

Objetivo: descrever a aplicação de intervenção educativa realizada junto a homens trabalhadores e identificar, segundo as percepções destes, os principais resultados obtidos. **Métodos:** pesquisa descritiva e exploratória, de natureza qualitativa, desenvolvida em um município do Sul do Brasil, com 35 metalúrgicos. Dados foram coletados entre março e junho de 2014, por meio da gravação dos grupos operativos e observação participante. As transcrições e os diários de campo foram submetidos à análise de conteúdo. **Resultados:** os participantes intensificaram o interesse pela busca por informações sobre saúde, e alguns destes conseguiram implementar mudanças nos estilos de vida, especialmente em relação aos hábitos alimentares e sedentarismo, sendo que o apoio do grupo foi percebido como motivador para as mudanças. **Considerações finais:** atividades de educação em saúde que abarcam temáticas significativas para os participantes e construídas por um grupo coeso, cujos integrantes se apoiam mutuamente, favorecem a modificação do estilo de vida.
Descritores: Educação em Saúde; Doenças Cardiovasculares; Saúde do Homem; Estudo de Intervenção; Enfermagem.

RESUMEN

Objetivo: describir la aplicación de intervención educativa realizada junto a hombres trabajadores e identificar, según las percepciones de éstos, los principales resultados obtenidos. **Métodos:** investigación descriptiva y exploratoria, de naturaleza cualitativa, desarrollada em um município del sur de Brasil, con 35 metalúrgicos. Los datos fueron recolectados entre marzo y junio de 2014, por medio de La grabación de los grupos operativos y observación participante. Las transcripciones y los diarios de campo se sometieron alanálisis de contenido. **Resultados:** los participantes intensificaron el interés por La búsqueda de información sobre salud, y algunos de ellos lograron implementar câmbios em los estilos de vida, especialmente em relación a los hábitos alimentarios y sedentarismo, siendo que el apoyo del grupo fue percibido como motivador para los cambios. **Consideraciones finales:** actividades de educación em salud que abarcan temáticas significativas para los participantes y construidas por un grupo cohesivo, cuyos integrantes se apoyan mutuamente, favorecen la modificación del estilo de vida.
Descriptores: Educación en Salud; Enfermedades Cardiovasculares; Salud del Hombre; Ensayo Clínico; Enfermería.

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INTRODUCTION

Internationally, since the 1970s, the themes related to the health-disease of the male population have been an important and emerging field of research in the field of Public Health[1]. In Brazil, human health began to be a priority at the end of the first decade of the 2000s, based on the elaboration of the *Política Nacional de Atenção Integral à Saúde do Homem* (freely translated as Brazilian Policy for Comprehensive Carefor Human Health), in which the use of health services began to be investigated with more emphasis from a gender perspective[2]. In this same period, the number of studies that investigated different aspects related to men's health, such as male participation in family planning[3], their life habits[4] and the main conditions that affect them[5-6].

However, even with the increasing production of knowledge about human health, there remains the colossal challenge of promoting cultural and health care modifications that prepare health services and their professionals to receive men in a qualified way and to enable them to feel encouraged to seek primary health services, as do women[7].

The low accessibility of men to the primary care services also predisposes the greater vulnerability of these individuals[8]. Men often adopts a lifestyle that is potentially damaging to one's own health, denying the quality of one's life[9], among other factors, by the historically and culturally established role of manly, fearless man and provider[1]. Moreover, male vulnerability is amplified by the work environment and established relationships, and can often be considered as sources of psycho emotional deterioration. This, in turn, has the potential to increase the number of people affected by psychic and/or somatic diseases, including cardiovascular diseases[10].

In this sense, it seems appropriate to include activities related to the promotion of health within the work environment[11].Such activities should have as main objective to positively impact the quality of life of this population group, through the reflection on information and knowledge related to the most relevant issues for the men themselves and that provide these subsidies for empowerment in the practice of self-care[12]. Educational activities included in the daily life of the working individual are advantageous because people in the formal job market usually have little time to seek health care[13], and because they are more effective in recruiting participants in the workplace[12].

There is a broad consensus that primary prevention of cardiovascular disease is an effective measure and valuable[13]. A healthy lifestyle can contribute to better health and also avoid problems related to absenteeism and loss of productivity at work[11]. In the international literature, it has been observed that health promotion programs atworkplace[11-13], which have adopted different intervention strategies, have led to changes in the profiles of modifiable risk factors for cardiovascular diseases in apparently healthy individuals with high risk of becoming ill or in those diagnosed with cardiovascular disease.

However, qualitative analyzes of male perceptions regarding participation in educational activities at the workplace and the results obtained with the intervention have not been reported in the same proportion[7]. This makes it difficult, in addition to access to means and instruments for the planning and implementation of new actions, to understand how health professionals can adapt or improve educational activities and methodological approaches used, so that the practice meets the interests and needs of men's health.

OBJECTIVE

This study aims todescribe the application of educational intervention performed with working men and identify, according to their perceptions, the main results obtained.

METHODS

Ethical aspects

This study was developed in accordance with Resolution 466/12, of the National Health Council, and approved by the Research Committee on Human Beings of the *Universidade Estadual de Maringá*. Participants signed the Free and Informed Consent Form, in two copies, and agreed to record the audio of the meetings. For the anonymity of participants, these were identified by the letter "M" of Man, followed by an Arabic number corresponding to the order of participation in the research and by the group they belonged to (Example: M20, Group B).

Theoretical-methodological framework

The intervention was developed along the lines of the operational groups[14], which has as a characteristic the establishment of bond and the accomplishment of tasks. The theoretical framework used to conduct the groups was the Model of Care for Chronic Conditions (*Modelo de Atenção às Condições Crônicas*) in Primary Health Care[15], more specifically, the assumptions related to levels 1 and 2 that incorporate health promotion interventions related to behavioral changes and in lifestyle.

Type of study

This is a descriptive-exploratory, qualitative study carried out during an educational intervention developed with 35 men working in a metallurgical industry in the Maringá-Paraná Metropolitan Area between March and June 2014.

Methodological procedures

The intervention was conducted by nurses from the same nucleus of studies and who were prepared from the aforementioned frameworks. The mediating nurses presented to the study participants the objectives, expectations, how the work would be developed and the justifications for the development of the study, as well as obtaining access to subjects of interest to participants as part of an initial contact that preceded the application of the intervention.

Participants were divided into four subgroups, according to the methodological framework, each group should consist of a maximum of 20 people. This is because it is necessary to ensure that the mediator and participants can simultaneously look at each other and express themselves. Thus, during educational activities, men were arranged in a circle[14].

For three months, the groups met each week in meetings of approximately 50 minutes, each on a specific day of the week, during lunch break. A frequency higher than this could hinder the maintenance of the interactional focus, especially if there were many events in the life of the members between meetings, with participants tending to focus more on life episodes and resolutions of specific crises, distancing them from the group and intervention[16].The lunch break at the company was two hours and, to facilitate the workers' access to the groups, meetings were held shortly after lunch, during rest period and in a reserved room provided by the company.

The subjects discussed in the meetings were previously determined by the mediator nurse (the main author of this study) and by the men participating during the first meeting, with a focus on chronic conditions and cardiovascular risk factors, including: hypertension, *Diabetes Mellitus*, stroke, infarction, prostate cancer, erectile dysfunction and cardiovascular health, healthy eating, physical activity, work attitudes, hypercholesterolemia, smoking, alcohol consumption, overweight and obesity.

In order for men to participate in educational activities based on a multidisciplinary perspective, the themes were worked by several health professionals, such as nutritionists, physiotherapists, doctors, physical educators and nurses. Meetings were held by the main investigator (a female nurse), assisted by a nurse who acted as participant observer and who was also responsible for the audio recording of meetings and keeping records of nonverbal behaviors of men.

After the spontaneous arrangement of participants in circles, the professional invited and scaled to conduct the educational activity in the group meeting began an expositive approach dialogued from words, expressions or questioning about the delimited topic, such as "What do you understand by...?", "Have you experienced any experience about...?", "What have you heard about or read about...?". The professional followed a contextualization of the subject, based on technical-scientific information, shared mostly with the use of audiovisual resources, with little exploitation of textual language, in simultaneous articulation with the interventions done by men.

Professionals sought to conduct meetings from a practical perspective on each guiding theme. It was sought to highlight everyday elements and speeches of encouragement and motivation emitted by men, so that they could think about their own possibilities of actions for self-care. Moreover, during each meeting, open-ended questions were held to boost discussion among participants. At the end, the main researcher, who had a greater bond with groups members, intervened, in order to return to the possible self-care actions, culminating, then, with the definition of tasks to be exercised during the week. Still, as an evaluation of the activities, it was sought to encourage reports that allowed to understand how these men were noticing and experiencing educational activities.

Study setting

The research was developed in the matrix of a metal-mechanic company in the Metropolitan Region of the municipality of Maringá, in the state of Paraná, Southern region of Brazil. This company, which has three branches located in the states of São Paulo, Goiás and Mato Grosso do Sul started their activities in 1986. The company operates in the field of transportation equipment manufacturing, especially for the sugar and alcohol industry, also developing vehicular cranes, road equipment, as well as cargo handling equipment.

Data source

Participants in this study were purposively selected and treated for all men who participated in the applied educational intervention, so that no refusals were observed.

The 35 individuals who participated in health education groups had a mean age of 41.5 years, 15 were white, 28 lived with a partner, and 23 had more than eight years of schooling.It should be noted that, before educational activities, a significant proportion of them had characteristics such as sedentarism (67%), uncontrolled hypertension (64.4%) and overweight (65%).

Collection and organization of data

For this study, a *corpus* of analysis of the material resulting from the transcription of the group recordings was constituted and the field notes recorded during and after meetings, in a room, at the participants' own workplace. For data treatment, the material was submitted to content analysis, thematic modality involving the phases of pre-analysis, material exploration and treatment and interpretation of results obtained[17]. Four researchers performed the coding of the data collected.

Initially, rapid readings were taken to know the material in completeness, and then the readings became more detailed and critical, aiming at identifying the units of meaning that could respond to the objective of the study. At the moment, the techniques of highlighting by color and cutouts of the excerpts were used that would be grouped according to the textual similarity. This exhaustive and systematic process motivated the emergence of preliminary categories that were, *a posteriori,* densified by comparing the findings with the literature on the subject. In this way, the researchers were able to make inferences about the material produced, concerning the perception that the working men had of the educative activities performed.

Data analysis

In order to establish methodological rigor in the analytical process, researchers were constantly guided by the exercise of reflexivity, whose previous assumptions about the theme were recognized and left in suspension[18]. This was necessary, mainly because the study was a prospective intervention that caused the researcher to be in contact with participants for a long period of time. Another aspect that possibly minimized biases in the analysis was the discussions among the research team when inconsistencies arose during the analytical process. Such meetings were necessary to discuss the thematic categories and to reach an agreement. Finally, reliability and confirmability were ensured by maintaining an audit trail, ensuring that all relevant and supporting documentation (field notes, reflective and analytical) was available for future reference[18].

RESULTS

Recovering meanings of health and prevention as a strategy to identify needs: the intervention beginning

Initially, in an attempt to create a rapprochement between the mediating nurses and the men under study, a dynamic was developed at the first meeting of each subgroup about what would be "men talks". At that time, participants were encouraged to express themselves about what they believed to be related to male health and illness. This allowed us to identify aspects of man's relationship with health and the real needs of health information.

> *Health is man talk, it has always been, but is not much publicized* [...] (M35, Group C)

> *Men should take better health care.* [...] *woman takes prevention every year and we men, unfortunately, do not.* (M28, Group B)

Although men recognized the importance of discussing and disseminating more about men's health issues, they attributed to the preventive activities a supporting role, which was justified by the limited availability of time to seek health services.

> *When I had lived in SãoPaulo City* [pause], *I came here thinking that I would have a quieter life. But because of the schedule that I work here, I do not have time, I make a beak every Saturday, Sunday, so I need to rest.* (M33, Group C)

Although the lack of availability of time has been reported by many working men as the main justification for not seeking preventive health services, it was observed that, once they felt more comfortable sharing experiences, they reported which pointed to the existence of prejudice by the work colleagues themselves if the man sought care in health institutions.

> *It's bad, because all the tests that we do here have to have ICD* [ICD 10]*, so I'm ashamed to go to a urologist because of this, you go, take the prostate exam, then the class finds out, it's a jump. It arrives in the ear of somebody, and then the chit-chat starts..Most men do not do it because everyone is making fun of you and you becometarget for jokes*[...] (M6, Group C)

For this participant, the influence of prejudice is evident, especially in relation to the examination of the rectal touch as a barrier that limits the search for the health service. In other words, the shame and fear of becoming playful at the workplace distract man from preventive measures, despite recognizing their importance.

In summary, men reported believing that health prevention was a relevant subject to be discussed among them. However, it was identified that for preventive practice to be developed, it is still necessary to overcome some obstacles, especially those related to health care, and those resulting from culture. It is believed that educational activities at workplace can act as facilitators of the male approach to healthy practices. In the following category, it was possible to identify, from the activities developed during the intervention, the elevation of the interest and concern of participants regarding their own health.

Increased interest in health-related information: the empowerment for self-care during the intervention

Participating men have increasingly demonstrated, throughout educational intervention, interest and concern in seeking more health information.This was perceived from attitudes, such as wanting to participate more actively in meetings and improving one's health status, with the adoption of a healthy lifestyle, which occurred mainly after the construction and establishment of bond between participants and the researchers.

> *I was not going to miss even with a certificate and the arm bandaged* [...] *is once a week only, so cannot lose, we make an effort and come.* (M10, Group A)

It is interesting to note that M10 was away from work for a month and yet attended weekly group meetings. It was possible to verify that after forming, the link between participants and theirs with the researchers, the manifestations of doubts, arose naturally during meetings, since individuals felt at ease to share experiences and even to raise questions related to the day to day and to sexuality.

> *Lemon has vitamin C, right? Drinking water with lemon is good for slimming?* (M33, Group C)

> *The bag juicethat we buy in the market is bad for health?* (M12, Group D)

> *We do gymnastics here twice a week, and on other days, what should I do?* (M9, Group A)

> *I heard that the rivet used by truckers is better than Viagra, is it right?* (M33, Group C)

In general, the doubts were related to the topic addressed during the educational activity. However, in some cases, groupsmembers presented questions that were certainly related to a concern related to their own condition or personal interest. They elaborated questions that the mediators were not always able to answer at that moment, but which were taken up at the later meeting.

> [...]*today, M15 brought his last exams, and asked us to look and explain to him, because he did not understand anything and reported that the doctor had not explained clearly. We took the tests to verify the results and agreed to give you an answer at the next meeting.* (Field Diary – 4thmeeting)

It was also identified that for the interest and the participation of men, it was necessary that the operation of the groups was not rigid and watertight, allowing flexibility and adaptations.

> *Before I started the group today, I know it has nothing to do with it, but my wife asked to ask: what is the difference between normal and transgenic food?* (M6, Group A)

> *About sexually transmitted diseases? Does it have anything to do with the heart?* (M13, Group B)

However, during meetings, working men showed that the fact that they did not seek primary health care in routine or preventive

situations did not mean that they were not interested in obtaining information related to health. In addition, they reported changes that they implemented on a daily basis, based on the information acquired through intervention and the confidence to carry out new practices.

> *I always learn something when I come. Sometimes I eat things I know to be bad, but here I learn what happens if I do things that harm my health. I used to come to work by motorcycle or bus, and with by what I learned here, I feel encouraged to come walking, it's 30 minutes long and 30 more to go back* [...] (M20, Group B)

In fact, it was noticeable that men were seizing and putting into practice the subjects worked, as can be observed in the record made in the seventh week of intervention.

> *Some participants arrived earlier, talking loudly, making jokes and jokes about the amount of 'so-and-so' food. They pointed out that although it had a lot of salad, it was a lot of food* [...]. *After the relaxed arrival, they bet on each other who would lose more weight and watch the balance pointer, each new weighing, besides commenting on the plate of their colleagues, showing that they were vigilant.* (Field Diary – 7thweek)

Experiencing changes and waiting for the follow-up of actions: intervention repercussions

The third thematic axis that emerged from the analysis of group discussion data concerns the benefits and goals that were achieved by some participants and reported during meetings. After the three months of intervention, it was observed that the sedentary individuals did not predominate over the physically active ones; there was a reduction in the group's mean arterial pressure, mainly diastolic and a 35 kg decrease. When the statements were analyzed, it was possible to identify the positive influence that the health education group provided in the lives of the members of this group.

> [...] *when I started there the first time, compared with today, I lost 8 kg; I learned to eat the salad first and then the food and lean meats* [...] (M20, Group B)

> *Now I walk twice a week and lost 8 kg. I have started two months ago* [...] (M19, Group D)

> *Even eating rice, beans, steak and salad, I lost 6 kg, lower my cholesterol and control my diabetes, just know how to weigh the amount.* (M22, Group C)

It was observed that changes were reported by men, mainly in relation to the habits of life. Those who have been able to effectively change habits have spontaneously reported in other spaces in the company (corridors, dining rooms and parking) that they are feeling more confident about self-image,health and a greater willingness to work, as well as mentioning that others in the family were also implementing changes.

> *My daughter is also going with me on walks and with the information I have got and my wife helping, my daughter had already lost 2kg.* (M20, Group B)

Therefore, it reinforces man's potential for self-care and care for the other, both mitigated by the reproduction of behavioral models that distance possibilities of protagonism in relation to health.

> *Today, I know that with little, I can manage to lose weight, not much, I have lost 2kg, but for those who only gained weight, losing that weight without making much effort was very good for me.* (M10, Group A)

> *I do not use more seasoning from these industrialized ones, since I knew it was bad for pressure*[blood]. (M30, Group B)

One finding identified during the intervention was that participants' reports worked as motivators for the other men. For example, those reports that showed the reduction of weight caused important impact in other components of the group, encouraging them to also seek the reduction of body weight.

The fact that the M10 attended the meetings, even when away from work due to health leave, was valued by the group, especially because it presented morbid obesity and difficulties even to sit down. This reflects the intervention work and the results achieved, since it shows the bond formed between participants and health professionals, as well as the commitment of participants with the group.

> *The group started with the news that M10 would not be present, as it had suffered an accident at work that made it impossible for them to go to the company. However, before we even addressed the theme of the day, there was a surprise. M10 arrived all neat and, for this reason, the participants of the group played games with him, but at the same time, they expressed words of encouragement so that the colleague continued to participate: "now, you're talking!wearing shirt and shoe, it looks you are like going to Mass" and"this is what is willing to change, congrats!".* (Field Diary – 8th week)

It was also possible to observe a positive effect of the intervention, regarding the performance of physical activity on the part of the men, mainly in the displacement to the work.

> *I started last week running every day in the morning.* (M31, Group C)

> *Now I come to work by bicycle. I take 40 minutes to get there but on rainy days.* (M1, Group A)

It was identified in men reports effort to modify habits of life, hitherto considered as part of the routine, that is, educational activities were relevant for participants to initiate behavioral modifications in an attempt to achieve a healthier lifestyle.This is known to represent an improvement in health. In addition to the practice of physical activity, reports of behavioral changes involved feeding and smoking cessation.

> *At home, our food has completely modified.* (M30, Group B)

> *I quit smoking* [...] *Since I started here with you* [...] (M3, Group A)

The M3's report was perceived by the group as an important step towards achieving better levels of quality of life.The group was surprised to learn that it was possible to stop smoking with the self-help and encouragement of group participants. However, professionals

need to be sensitized and instructed to identify the ideal moment to approach men, since it is common in the daily practice to meet people who are not yet willing to change, such as M11.

> *It's been so many years since I smoke that it's not now that I'm going to quit smoking or eat different things.* (M11, Group C)

Moreover there were also participants who, although they had acquired knowledge about healthy habits of life and were motivated to implement them, could not obtain positive results, for not being able to implement changes in the personal and/or family routine.

> *It's difficult. For example, yesterday I got home and had no dinner, that's when my son arrived with a pizza to eat, so it's difficult.* (M2, Group A)

It is noteworthy that few were those who showed no interest in improving life habits.However, it is important to emphasize that not always the implemented interventions will cause all participants to present the same degree of motivation or, equally, the responsibility for the change of habits. Faced with heterogeneous groups regarding the degree of motivation for change, the professional may face the risk of demotivation and withdrawal by some participants, which requires the group facilitator flexibility, creativity and reflective and integrative capacity.

> *We were asked, during all the meetings of the last week, if the group would have continuity, since they showed interest in following meetings. This situation was especially identified among those who did not obtain a positive result, besides reporting that other co-workers, who were not in the current group, wanted to participate in the next one, if there were one.* (Field Diary – 12th week)

Although some men did not present positive clinical results at the end of the educational intervention, most of them, however much they were disappointed with the absence of more concrete results, had expectations that the groups continued so that the support in maintaining the style change livelihoods and the acquisition of more information persisted, in addition to reporting that they would strive more forcefully in future attempts to change living habits.

DISCUSSION

Other studies carried out with men also found that they recognized the exercise of the work activity as potentially compromising of health, in addition, that the work itself can prevent/hinder the demand of health services[19-20]. Thus, the workplace should be understood as a favorable environment for the development of educational health programs. As they are inserted in the labor market, men present limitation in the time available to seek information on health, to practice physical and leisure activities, to maintain healthy diet and to seek periodically and preventively the doctor[7].

Educational interventions at workplace are being increasingly used because they can increase the awareness of populations that do not routinely seek health care for prevention[21]. In the particular case of this study, educational intervention carried out along the lines of the operative groups sought, besides providing health information for men of the metallurgical sector, to provide space in which they could understand health as an important subject to be discussed by them. Thus, it was sought to show the relevance of incorporating in their lives the understanding that men, like women, are vulnerable to developing cardiovascular disease, and that small but progressive modifications can prevent such diseases and their aggravations.

Prejudice is related to the non-performance of preventive tests by men[7,22], since prevention can be seen as a violation of the condition of man and of masculinity[23]. Although information is provided on the subject, prejudice and shame may hinder the performance of preventive practices by men. However, educational work developed with the male population reduces prejudice, triggering the search for the doctor more frequently[7,12].

Bonding is indispensable for a positive, constructive and aggregating professional-patient relationship[24]. Above all, in the male population, it is more difficult to establish due to the fact that the health services are still conformed to care for children, women and the elderly.

It is important to note that, on the one hand, it is difficult for men to recognize health needs, on the other hand, identifying that there are limitations in knowledge about sexual health is even more costly[25]. It is emphasized that it is difficult to approach man and his adherence to actions that involve the theme of sexuality. However, when they occur in an objective and qualified way, they have the potential to positively impact the quality of life of them[25]. This highlights the need to develop educational actions related to sexuality, from a gender perspective, especially due to the extensive amount of doubts that arose during the intervention performed in this study.

Thus, the construction of relationships with participants regarding the provision of health guidelines should be premised on the establishment of a supportive relationship mediated by bonding and trust. The modulation of the proposed activities, according to the doubts and needs raised by the groups, should be the priority of the mediating professional[26]. This is especially true when it comes to the male population. For, as a rule, man is seen by society as being strong, virile, invulnerable, owner of his own destiny and immune to any ills. This stems from a series of historical, cultural, and social issues that reproduce the understanding that man to prove strength and masculinity must be far removed from health care[2,27].

In this perspective, the hegemonic and unsubmissive masculine culture produces difficulties of approach with the health and, more specifically, with the Primary Health Care. Indeed, the national literature brings the difference between men and women in relation to the demand for health services[28], which can be observed in other countries, as identified in a study on the rates of consultations among users of the primary care network in the United Kingdom[29].

It has been observed in other studies with men that although they hardly seek information on health at formal points of health care or with professionals, when this information is present in the daily environment, they show great interest[4,30]. It is believed that men should be responsible for their own health and the search for health services to acquire information and solve their needs. However, there are barriers imposed culturally by society itself and limitations of access, coming from the health services themselves. In this way, the present study identifies that educational activities at workplace can constitute a strategy to bring men closer to preventive and promotive practices.

Participants' motivation to transmit information to the families was demonstrated, showing that in some way the participation in the group was presenting effective results. In addition, this fact also evidenced the empowerment of men in relation to care for their own health and that of their family members. It is recognized that from information that is offered to men, they can assume the role of disseminators and replicators of such information and thus cooperate to consolidate health promotion and disease prevention[24].

Within intervention groups, it seems that mutual support is an important tool for maintaining group cohesion and encouraging other participants to feel motivated to follow the proposed activities[31]. In addition, a study carried out in Northeastern Brazilian capital identified that in a support group composed of eight users of psychoactive substances being the majority men. The exchange of knowledge provided by the discussion and the mutual support among participants were pointed out as the main facilitators of the learning about health and self-care and attendance of the individuals in the group[32].

Intervention study, through educational actions, lasting six months, performed with 40 individuals, observed that the practice of physical activity caused a reduction in blood pressure indices[33]. Similarly, a three-month educational intervention with 42 Hispanic Americans with chronic heart disease showed that in the intervention group there was a significant improvement in self-care[34].

A study carried out in the Primary Health Care of a city in the center-west of Brazil, in which the operative group was used as a strategy to cope with the cessation of tobacco use, showed that the dropout rate reached 78%[35]. Despite the possibility that a significant portion of individuals participating in an anti-smoking group may resume smoking over time, as identified in a study conducted in Maringá-PR, Brazil[36], it is clear that this behavior should be continually encouraged by health professionals and, where possible, involve the family in this task, as cessation of smoking is a complex process.

Strategies to arouse in the man greater concern with health, from health education activities, have been defended, since they allow this population to be able to have subsidies to act actively in the own care[37-38]. In addition, an adequate professional approach enables the identification of health problems in an early age among men.

Study limitations

Some limitations are pointed out: the first one relates to the fact that part of the material that constituted the *corpus* of analysis originated from the group discussions. It is believed that the men's responses regarding participation in the intervention and the results obtained could be different if individual interviews had been used. The present study did not encompass globally the perceptions of men about elements of implementation of educational activity (advantages, limitations, observed difficulties, active professionals, resources and strategies used, uptime), thus not offering more subsidies for the evaluation of said intervention and improvement of future work. In addition, some participants may have opted to participate in the intervention because it has been authorized by the company and even had the participation of one of its managers. Thus, some may not have felt comfortable in refusing, lest they be misinterpreted or reprimanded by superiors.

Contributions to the fields of Nursing, Health or Public Policy

This study contributes to the literature on Nursing and Public Health, directed to the health of the man, because it adds knowledge about this population that is situated, in large part, in the margin of the actions carried out by the health services. It advances in order to present an intervention strategy to be carried out in the place where men work and that can bring them closer to health care, presenting good results. In this sense, the results of the present study increase the discussion about the health policy of man, since they extrapolate the description of the male health situation and provide subsidies for the application of interventions, instrumentalizing health professionals.

FINAL CONSIDERATIONS

Analysis of the men's reports during group educational activities showed that participants were interested in health issues, recognized the benefits of participating in the group, and that some were able to implement lifestyle changes, especially in relation to eating habits, to practice physical activity and to use tobacco. Moreover, it was possible to perceive that the prejudice regarding the performance of preventive exams was present in the routine of men. On the other hand, positive evidence identified was related to the possibility that the information offered to men could be replicated and reach a larger number of people, namely family members and co-workers, as well as the fact that cohesion and mutual support function as motivators for modification in the lifestyle of the other members.

Future studies should be carried out with working men, to investigate the possibility of including the family in the educational work, obviously depending on the opening or not expressed by the man himself to approach the family. Even though some men may not have clinically positive results, it is important that the mediator in the group heed positive outcomes that are intermediates in the behavioral change process and may characterize advances in individual sensitization, such as questioning contents and interest in the continuity of the intervention. This is because there are more particular elements and even a psychosocial background that can hinder the change, which may require professional support for coping.

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