This study aimed to investigate stress coping mechanisms used by workers of 16 Family Health Strategy (FHS) teams in Santa Maria, RS, Brazil. Six workers with scores compatible with the Burnout Syndrome, identified through the Maslach Burnout Inventory, and six workers without the syndrome were interviewed in January and February 2007. In the reports’ content analysis, we identified that burned out workers predominantly used individual mechanisms to cope with occupational problems, while non-burned out workers sought collective mechanisms. These findings indicate the importance of interpersonal relationships among FHS team members to cope with occupational stress and the need to develop collective strategies to prevent stress and maintain workers’ health.

DESCRIPTORS: nursing; stress; workers’ health; family health program

MECANISMOS UTILIZADOS PARA ENFRENTAR EL AGOTAMIENTO POR TRABAJADORES QUE ACTÚAN EN EL PROGRAMA ESTRATEGIA DE LA SALUD DE LA FAMILIA

La investigación objetivó investigar los mecanismos para enfrentar el estrés, utilizados por los trabajadores de los dieciséis equipos de la Estrategia de la Salud de la Familia (ESF) de Santa Maria, RS, Brasil. Fueron entrevistados, en los meses de enero y febrero de 2007, seis trabajadores con puntajes compatibles con el síndrome de Burnout, identificados por el Maslach Burnout Inventory, y seis sin el síndrome. En el análisis de contenido de las declaraciones, se identificó que los trabajadores agotados utilizan, predominantemente, mecanismos individuales para enfrentamiento de los problemas laborales, en cuanto los no agotados recurren a mecanismos colectivos. Lo encontrado apunta para la importancia de las relaciones interpersonales entre los miembros del equipo de la ESF para el enfrentamiento del estrés laboral y para la necesidad de construir estrategias colectivas, con el objetivo de prevenir el estrés y mantener la salud del trabajador.

DESCRIPTORES: enfermería; estrés; salud laboral; programa de salud familiar

MECANISMOS DE ENFRENTAMENTO UTILIZADOS POR TRABALHADORES ESGOTADOS E NÃO ESGOTADOS DA ESTRATÉGIA DE SAÚDE DA FAMÍLIA

A pesquisa objetivou investigar os mecanismos de enfrentamento do estresse utilizados pelos trabalhadores das dezesseis equipes da Estratégia de Saúde da Família (ESF) de Santa Maria, RS, Brasil. Foram entrevistados, nos meses de janeiro e fevereiro de 2007, seis trabalhadores com escores compatíveis com a síndrome de Burnout, identificados pelo Maslach Burnout Inventory, e seis sem a síndrome. Na análise de conteúdo das falas, identificou-se que os trabalhadores esgotados utilizam, predominantemente, mecanismos individuais para enfrentamento dos problemas laborais, enquanto os não esgotados recorrem a mecanismos coletivos. Os achados apontam para a importância do relacionamento interpessoal entre os membros da equipe da ESF para o enfrentamento do estresse laboral e para a necessidade de construção de estratégias coletivas, com o objetivo de prevenir o estresse e manter a saúde do trabalhador.

DESCRITORES: enfermagem; estresse; saúde do trabalhador; programa saúde da família
INTRODUCTION

The Family Health Program (FHP), currently labeled Family Health Strategy (FHS), was created in 1994 and proposed to change the primary care model according to the health surveillance rationale, incorporating the basic principles of the Unique Health System (SUS). The FHP was created with a view to meeting the growing need to decentralize and establish health services at a city level, based on integral healthcare delivery and problem-solving capacity\(^1\).

The FHP aims, among other things, to diminish the distance between health teams and the population, created by territorial, economic, political and cultural issues of the health model current at the time\(^2\) of its creation. Its principles include community participation in the identification of health problems, follow-up and evaluation of health teamwork and definition of priorities\(^1\).

FHS care is focused on the family, which is perceived in its social and physical environment, and acknowledges healthcare as a citizen’s right, expressed through improved life conditions, case-resolving and humanized services\(^1,3\). The FHS also recommends interdisciplinary work in which health team members, composed of workers from different areas, work together and complement each other’s work, aiming for a holistic approach of individuals, valuing them in their socioeconomic and cultural context with respect, commitment and ethics\(^1\).

This care model envisions the inclusion of workers in the community, so that they become references in health care for the population living in their scope area. In this way, FHS members work directly with people who live different realities, oftentimes permeated by misery, violence, poor hygiene and living conditions and several hardships and impossibilities, which may arouse feelings of powerlessness due to limitations that many times compromise the healthcare workers aim for\(^3\). This complex scenario requires adaptation, knowledge and competence to put care in practice\(^2\).

Members of the family health teams need to have the right profile for care delivery to the population and face the dynamics of problems, so as to reduce the risk of suffering and stress\(^5\). Thus, workers need to use coping mechanisms, that is, a set of cognitive efforts and behaviors in permanent change, developed by individuals to meet external and internal demands, which are considered to depend on one’s own resources. These mechanisms are used to facilitate, eliminate or alter the situation or event causing the disturbance (problem-solving strategies) and to regulate emotional responses caused by a stressful event (emotion-focused strategies)\(^6\).

Cognitive actions and reevaluations focused on coping with problems are called control strategies and cognitive actions and reevaluations of escape are avoidance-coping strategies. To effectively face occupational problems and conflicts, cognitive actions and reevaluations need to occur concomitantly\(^7\).

We highlight that the set of workers’ beliefs about the world, values, motivation and commitment (in relation to occupation for instance), as well as their life style (i.e. impatient, competitive), are psychological aspects that do not depend on external phenomena as potential stressors\(^6\).

Individuals develop varied coping mechanisms over life in the face of a conflictive situation, due to the interaction among multiple factors. That is why several studies\(^2,4,6\), addressing occupational stress, seek to understand the mechanisms workers use to deal with conflicts in the workplace, so as to understand the occupational and relational dynamics as well as the ways these individuals express themselves.

Coping stems from the need to adapt to the context one works and lives in. However, some groups of workers often face situations that demand considerable coping, like in the case of health workers. The work of these professionals includes direct and intense contact with people\(^8\) who are experiencing, most of the times, suffering caused by pain, illness or proximity to death, and sometimes have several needs (i.e. economic, psychic and social, among others).

Health workers mediate stress that originates in the workplace through the use of personal or group resources, while cognitive evaluation and the value attributed to it determine which coping strategy will be used and, consequently, the emotional and somatic reactions triggered by this process\(^6\).

Commitment and expectation associated to the organizational context and interpersonal relations at work are factors that contribute to personal achievement, but also lead to occupational stress. When the frequency and duration of stressful situations and events increase, coping resources tend to deplete and chronic stress emerges\(^6\).
Chronic occupational stress or burnout syndrome is characterized by workers’ emotional exhaustion, depersonalization and lack of professional achievement due to ineffective strategies for coping with stressful situations. In spite of the burnout syndrome being included in the International Classification of Diseases and Related Health Problems (ICD Z73.0), many workers are not familiar with it and it is not common to associate occupational stress to health disorders or occupational diseases. However, it is considered a severe health problem that has affected an increasing number of workers in the world, harming the physical and mental well being of individuals and groups they are inserted in. Considering that FHS workers present stress that affects their bodies and that most research in the field is restricted to symptomatology, we aimed to investigate stress coping mechanisms used by workers in the Family Health Strategy.

**METHOD**

This descriptive study used a qualitative approach to select burned out workers (with scores compatible with burnout, evaluated through the Maslach Burnout Inventory (MBI), and non-burned out workers. Then, we used a qualitative approach to know the coping mechanisms these workers used to deal with problems and conflicts in their daily work routine.

Data collection was carried out in January and February 2007, after the Research Ethics Committee at Rio Grande do Sul State University had approved the research project (protocol No. 2006643).

The study’s quantitative stage was performed with 86 workers at FHS units in Santa Maria, RS, Brazil: 12 physicians, 13 nurses, 19 nursing technicians, five dentists and eight dental assistants, totaling 57 professionals, as well as 29 community health agents. Participants signed the free and informed consent term and answered the Maslach Burnout Inventory. Afterwards, workers who presented scores equal to or higher than the 75th percentile on the subscales depersonalization and emotional exhaustion and up to the 25th percentile on professional achievement (inverse score) on the MBI, were selected for interviewing and composed the group with Burnout. Workers who obtained scores up to the 25th percentile on the subscales emotional exhaustion and depersonalization and equal to or higher that the 75th on professional achievement were also selected and composed the group of workers without Burnout.

**RESULTS**

Among the participants, three community health agents, two nursing technicians and one physician, all female, 21, 27, 28, 29, 30 and 40 years of age, were considered burned out. Among those identified as non-burned out, there were: one community health agent, three physicians, one nursing technician and one nurse, 31, 34, 44, 48, 61 and 68 years, three of whom were women.

Interviews were fully transcribed and submitted to content analysis, aiming to know the meaning and structure of the content of the participants’ reports.

Chi-square was used for the qualitative variables and Student’s t-test for continuous quantitative analysis, to test for association between demographic characteristics – gender, age, professional category (with higher education or not), marital status (with a partner or not) and time of work – and the mean instrument scores. The only significant difference found was between the average ages of burned out and non-burned out workers (p=0.034). The individuals with Burnout were younger (average age of 29.2 and 47.6 years, respectively).

Opposite to the results of another study and expectations at the beginning of this study, the social reality of the families and the community is not a factor that causes exhaustion in workers. On the contrary, it generates satisfaction because it gives meaning to the work they realize, both for workers with burnout and those without it. According to them: 

[...] satisfaction at work is seeing that hurt people end up happy [...] they get here with pain and leave happy, for them [...] because

**Table 1 – Distribution of the average scores of Family Health Strategy workers on the Maslach Burnout Inventory. Santa Maria, RS, Brazil 2007**

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Group n=86 Average</th>
<th>SD</th>
<th>Burned out n=6 Average</th>
<th>Non-burned out n=6 Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depersonalization</td>
<td>9</td>
<td>3</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>23.9</td>
<td>7.2</td>
<td>31.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Personal achievement</td>
<td>13.8</td>
<td>4.8</td>
<td>9</td>
<td>18.6</td>
</tr>
</tbody>
</table>
they are well taken care of, are welcomed, they leave well [...] they leave praising your work (Worker with Burnout). [...] doing a great job, having a feedback and create ties with families (Worker without Burnout).

The interpersonal relationship among team members, however, was found to be a source of dissatisfaction and suffering for burned out workers, who consequently do not ask colleagues to help and solve problems, as observed in this report: [...] we don't trust anybody here, there's no way to make friends in the workplace, they're colleagues [...] since we have no one to share with, you get overwhelmed (Worker with Burnout).

Observing the coping mechanisms workers used to deal with problem or conflictive situations at work, we found that burned out workers frequently use individual mechanisms in these events.

Physical exhaustion and avoidance strategies\(^8\) appear in the report of workers with burnout: [...] I'm depressed, I'm very tired because of the eight-hour daily workload (…) I'm trying to forget, to delete the problems I have at work, I started to take natural medicine and started to delete things, I had too much headache, neck pain (Worker with Burnout).

The workers with Burnout reported, many times during the study, that lack of social support and difficult interpersonal relationships within the work team, which frequently made them use individual coping mechanisms, among which they highlight those focused on emotion\(^6\), such as crying, which may be a form of emotional release or exhaustion.

On the other hand, non-burned out workers pointed out several collective strategies to solve problems and few individual strategies and, as opposed to burned out workers. They seek help in the work team or from other colleagues and in other health units or services: we do like, call another unit [...] we go to the unit and talk to the team, with the physician, with the nursing technician [...] sometimes we call a politician [...] go to the radio [...] talk to the neighbors (Worker without Burnout).

The time of experience in the profession was mentioned by the non-burned out as a determinant factor to cope with occupational problems. They reported that their experience enabled them to stay calm and rationalize in the face of stressful situations which, consequently, permitted problem solving. These reports converge with statistical analysis results of the instrument, which reveal that early age is significantly correlated \((p=0.034)\) with Burnout syndrome scores. Older workers (average of 47.6 years of age) presented lower values on the subscales of emotional exhaustion and depersonalization and high values on professional achievement.

Another characteristic observed in the non-burned out workers group was the use of problem-solving coping strategies, while the other group used avoidance and emotion-focused coping strategies. The use of problem-solving coping strategies facilitated problem solving, alleviated or eliminated them, which in turn favors individuals' work and health.

**DISCUSSION**

The interviews revealed that burned out workers tend to focus on themselves, so that they are able to live with or bear the situation considered stressful. They use personal resources and avoidance coping strategies, which generates suffering and frustration at work, at the same time as it does not solve the problem.

The perception of lack of support from the work team and lack of trust in colleagues appear in the reports of workers from the burned out group and compels them to use their own resources to cope with problems, which aggravates stress and consequently leads to suffering. These workers refer to social support from a functional perspective, characterized as a set of real or perceived structural elements, provided by others to solve practical problems and/or facilitate daily tasks\(^12\). It represents the commitment of individuals with proactive control strategies in the face of stressful situations\(^7\).

Emotion-focused stress coping strategies are frequently used in situations considered lasting or unmodifiable. They are an alternative for individuals to divert their thoughts, reduce the level of stress and evaluate the situation better\(^6\). Crying is one of these strategies and helps to alleviate anxiety. However, when an individual has lasting feelings of powerlessness, s/he can develop depression or abuse of alcohol, drugs, smoking and medication\(^8\) to avoid stress. On the other hand, efforts to keep up the appearance of permanent disposition for work, enthusiasm and satisfaction can also lead one to substance use, such as stimulants\(^8,12-13\).

Considering that the mode of work proposed by the FHS is teamwork\(^1\), it demands good relationships among its members and interpersonal relationships determine the efficacy of work.
We believe that the FHS demands individuals to be willing to work in group, since all actions and interventions in this care model are based on collective activities and decisions. Thus, we consider that, when burned out workers use avoidance and emotion-focused coping mechanisms, they do not alleviate, eliminate or alter stressors but, instead, they become vulnerable to illnesses.

According to the frequency, intensity, characteristics and time one is exposed to stressful situations, one’s cognitive ability to evaluate situations deteriorates, adaptation mechanisms are exhausted and a process of physical and emotional exhaustion begins, which leads to the Burnout syndrome that affects the group of burned out workers.

The syndrome is produced by an imbalance between workers’ expectations and work reality, generating psychological and physical manifestations, with repercussions for the personal, family, social and occupational life of individuals. The Burnout syndrome is characterized by physical symptoms like tiredness, irritability, illnesses, especially psychosomatic diseases and defensive behaviors, such as a tendency to become isolated, feelings of omnipotence, lack of interest in work, absenteeism, desire to abandon the job, irony and cynicism.

In addition, the presence of stressed individuals within the team may lead to inefficiency, poor communication, work disorganization, dissatisfaction and diminished productivity, which in turn affect the organizational context and the quality of care delivered to families.

In terms of non-burned out workers, collective work in multidisciplinary teams appeared as a differential in relation to burned out workers. For these workers, the team stands out as a source of support for problem solving and generates satisfaction at work. These findings corroborate studies that appoint social support as an important element for coping with stress.

Work teams do not always work together, since the collective construction of decision systems is different in each social group and relates to the nature of each work organization. However, in the case of the FHS, this care model recommends multidisciplinary work, which is a characteristic that favors group performance.

Non-burned out individuals also reported that time in the profession is a factor that favors decision-making at work. Apparently, past experiences provide support to deal with problem situations, alleviate anguish associated to occupational problems and prevent the Burnout syndrome.

Stress coping mechanisms modify over the years and there is a tendency for immature mechanisms to be replaced by other more developed ones, and for individuals to become more realistic and willing over time. When experiences gained with time in the profession are associated to individuals’ maturity, they enable people to evaluate situations that can be changed and those that cannot, as well as to seek the best mechanisms to deal with problems.

It is important to keep in mind that some people have a chronic tendency to stress, which can be of genetic origin or due to life style, life history, or yet, an interaction between these factors. Thus, stress can be generated by external sources in one’s life and also by one’s inner world, whose effects are mediated by learned coping strategies, especially, during childhood, but which can be developed and incorporated across one’s lifetime.

FINAL CONSIDERATIONS

Confictive situations in the FHS workplace are evaluated and treated differently between burned out and non-burned out workers. The first seek individual mechanisms to cope with problems and the latter seek collective mechanisms.

Workers develop individual and/or collective defenses to cope with suffering. Therefore, we understand that individuals are not passive in relation to work organization, but that they are capable of protecting themselves, developing defenses that hide, avoid or overcome suffering due to the work routine.

In analyzing the reports of non-burned out and burned out workers, we perceive that collective mechanisms to cope with stressful situations favor the former, who focus their strategies on solving problems, while the burned out use individual emotion-focused strategies, trying to regulate their emotional response to conflictive situations, which lead to illnesses.

Interpersonal relationships were determinants for non-burned out workers to cope with occupational stress, develop motivation at work and intervene with problems. For the burned out workers, then, these were sources of suffering and exhaustion at work.
This study’s results are in agreement with research\(^{(4,9,17)}\) carried out by health professionals in other scenarios, in which suffering at work is frequently related to workers’ fragile social support, among other aspects. Therefore, we believe that, despite the study’s limitations, i.e. that each participant attributed a singular value to work and has a different level of commitment and expectations in relation to his/her occupation, this study highlights the organizational context and interpersonal relationships as essential elements for the development of occupational stress coping mechanisms.

REFERENCES