

## PRIMARY PREVENTION OF BURNOUT SYNDROME IN NURSES AT GENERAL HOSPITAL AND HEALTH CENTER FROM VIROVITICA, CROATIA

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**SUMMARY** - The syndrome of burnout at work and secondary traumatization are disorders that can occur in everyone engaged in helping professions. Nursing as a profession falls in this category. The main aim of the study was to familiarize nurses with the risks of burnout syndrome, then to assess the presence of these disorders and to of difference between nurses working at hospital wards and those from healthcare service. Three questionnaires were distributed to the study subjects, in order to sensitize them to the issue. Data analysis and statistical data processing indicated the same points of view in the two groups and pointed to the existence of some individual cases of the syndrome. Statistically significant differences were only found for some answers, as shown in graphs and tables.

**Key words:** *Burnout - professional, psychology; Nurses, psychology; Nursing staff; Risk factors; Social value*

### Introduction

Healthcare profession cannot be compared to any other profession providing help, because the object of our work is human being and his health. Every person who sees his/her own future in providing healthcare feels love for the mankind and knows that every person has the right to health and help when needed. A healthcare professional, a graduate nurse, has a unique role of helping the individual, either sick or healthy, and of performing activities that contribute to health, convalescence or peaceful death. Sometimes we do not achieve success we want to, and sometimes we are not satisfied with what we have done. While doing our job day after day, we may put ourselves into the state of stagnation in which this honorable, humane but also demanding and above all difficult profession starts to lose its initial enthusiasm. We learn how to be professional, how to avoid binding ourselves to people and events at work, but

all these positive and negative results still leave marks upon us. What should we do when we notice weariness in our colleagues or in ourselves?

This was the reason why we decided to conduct this study. We wanted to point to the problem called syndrome of burnout at work and secondary traumatization.

Stress at work and burnout syndrome are caused by unfavorable interaction between an individual and his/her work environment. Definitions vary in regard to the work environment, the individual himself and his/her characteristics. The burnout syndrome is described as a combination of physical and emotional exhaustion due to stress. It is a progressive loss of idealism and energy and meaningfulness of a person's work experienced by people who work in those professions that provide help to others as a result of frustration and stress at work. The syndrome is defined as emotional exhaustion, a feeling of not having emotional control due to enduring exposure to stress situations, depersonalization - a pathologically changed perception of one's identity, loss of self-confidence, and impossibility to judge and make decisions. Burnout at work is not the same as exhaustion. Exhaustion does not involve the change of attitude towards the work and patients.

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Burnout has also been put together with some other negative emotions, e.g., depression, lack of strength, discontent, anxiety, inadequate quality of life, and hopelessness. There are few descriptive models that clear up the development of burnout.

One of these models is transactional model of burnout. This model is open to individual differences because it generally determines primary factors that initiate and contribute to the process of burnout. Work conditions and demands, stress sources that lead to overwork, tension, fatigue, irritability, cynicism, and rigidity take their part in the process. This leads to defensive confrontation, emotional coldness, or retreat.

The ecological model describes burnout as the outcome of interaction between the individual and environment formed in several ecosystems. According to this model, the individual can, due to unfavorable interaction with coworkers or superiors, show a tendency to burnout at work. On the other hand, for most of the people this does not correspond to the real situation because the family, friends, spare time and social circumstances take part in their lives. Therefore, the influence of general circumstances can rightly be set aside as a factor an individual cannot act upon but which affects the entire environment the individual lives and works in, and interacts with. The altered state of the society and great social changes affect every social system, entire social surrounding, and each individual within it.

The interactional model of burnout at work stands by the assumption that general circumstances affect every factor propitious to the inception of burnout. Depending on the interaction between general circumstances (war, peace, stagnation, recession, boom), working environment (organizational level of work with clients, coworkers, superiors), demographic characteristics of the person and private life (family, church community, friends), personal growth and development or emotional exhaustion, reduced efficiency and burnout can occur.

The phase model emphasizes that burnout is a process that passes through four phases: enthusiasm, stagnation, frustration and apathy. This model describes burnout as a process rather than a phenomenon that occurs overnight. The problem is that the process of burnout is determined individually and does not happen the same way to everyone, either by phase or by sequence. Precise delineation between the phases cannot be determined.

The first phase is idealistic enthusiasm, and is characteristic of young people during the first years of work. There is a lot of energy and hope and unreal expectations.

The person expects positive atmosphere, to be accepted by coworkers and to share fairness with everyone. During this phase, the person does not spare her energy and works overtime, which is a risk factor for the development of burnout.

The second phase or the phase of stagnation is a period of time known as 'regaining consciousness', or in other words 'coming to reason'. The person still likes her job but does not have the same enthusiasm in doing it as before. She realizes that there are other interests in her life, e.g., family, friends, home, money, promotion, and professional development.

Frustration occurs in the third phase, when the person starts re-examining the efficiency and meaningfulness of the work. The existence of all sorts of limitations at work make the person re-examine the purpose of her work.

The fourth phase or the phase of apathy is characterized by retreat and avoidance as the form of defense from frustration. The person becomes completely indifferent to the work. She works only to survive, gives little effort and time to work, and escapes any possible responsibility<sup>1</sup>.

Secondary traumatization is traumatization of a helper due to listening over and over to painful experiences, other people's misfortune, and exposure to suffering. Every person providing help to others may come up against it. Secondary traumatization may occur during conversation, after conversation, when the person identifies herself with the person she is providing help to, in the lack of social support from friends and family. It more often occurs in anxious and unstable persons, too sensitive persons with personal problems and crises, persons with reduced potential, and those who are inadequately qualified for providing help to others. Symptoms of the consequences of indirect traumatization are similar to those of direct traumatization, such as nightmares, the contents of which are related to traumatizing experiences of the people offered help, insomnia, lack of appetite and interest in events, depression, anxiety, irritability, and chronic exhaustion. There may also occur physical symptoms such as headache, indigestion, reduced resistance to infection, and increased consumption of alcohol, drugs, tobacco or narcotics<sup>2</sup>.

There are many causes of burnout at work and secondary traumatization, however, they can roughly be divided into personal and environmental factors. Factors that contribute to burnout include everything that can make a person feel insecure and unsatisfied, i.e. everything that can contribute to burnout at work: from ill interpersonal

relations with coworkers, below-standard structure and various events in the society, through personal inexperience or lack of skill and knowledge.

The characteristics of the individual also contribute to burnout at work. The initial enthusiasm of a young person begins to disappear after several years at a job of providing healthcare. It is also induced by the fact that there is not much space for professional progress after completion of high school education. Some young nurses feel incompetent and are scared by patients and their problems. Most of them become competent with time, however, may a novel mode of work be introduced or some specific technical intervention occurs, the previous feeling of incompetence will recur.

Sometimes we burden our mind thinking that we have not done enough for other people, irrespective of discrepancy between that what we know and what we do for the patient. Sometimes we are limited by our knowledge and skills, sometimes by the system structure, and sometimes by the very patient who does not want to help himself. There are persons called workaholics. They interchange their private and social life for work, are unwilling to leave it over to others, believe that others cannot do it right, and feel responsible for everything that is being done. Patients are not only our greatest source of contentment but also of frustration. If the patient is complaining, grumbling, is unsatisfied with the care we provide, it gets us where we are most sensitive, our expertness.

Another great problem which can lead to frustrating situations is to find the right proportion in determining the level of intimacy with the patient. Work conditions are one of the essentials for satisfied medical staff. An inappropriate and unequipped work environment, unsatisfactory microclimate, inappropriate work clothes, constant exposure to patients, lack of place where the nurse can take a break and have conversation and relax, all this can reduce her efficiency and interfere with her providing quality healthcare. This in turn leads to direct dissatisfaction and indifference. Low level of work organization can be a very serious source of stress. This can be seen through uneven burden upon some people, surplus or deficit of work hours, impossibility to have a day-off, unclearly defined work distribution, disproportion of responsibility and authority, some people's 'privileges', inadequate healthcare team management, or unprofessional and irresponsible management<sup>3</sup>. The time and energy the staff should put into their work with patients gets squandered due to the low level of work organization. Indignation becomes even greater because of the restrictive

policy towards healthcare services, which largely restricts the humaneness of a graduate nurse. The amount of medicaments and bandages, and even the amount of food she is allowed to give to a patient are restricted. Out of order or out of date equipment and lack of repair services can cause additional discontent.

The lack of supervision of every healthcare domain can also contribute to the progressive inception of burnout. Various kinds of supervision would help by going through cases, exchanging opinions, coordinating stands, etc. It would give the staff feedback information on the results of their activity, a feeling of competence at work, it would improve their knowledge and make them more content. An unfavorable psychosocial climate, unfriendly or competitive interpersonal relations, an unfriendly work environment, distrust, suspiciousness, obstruction of creativity and independence can only contribute to burnout at work because of the immense energy engaged in surviving in such surroundings instead of engagement with patients. All this is followed by the lack of dedication to the team and institution. Centralized management, characterized by impossibility of making opinions and influence the decisions, is opposed to our profession where democracy, initiative, creativity and independence are needed<sup>4</sup>.

The loss of interest in work is the most obvious symptom of burnout. Patients are tested routinely, formally and insensitively. The symptoms can be classified into four groups, and they manifest at the emotional, mental, physical and social level.

Emotional exhaustion is a phenomenon that manifests itself as insensitivity, emotional emptiness, the person declares herself to be tired of compassion, feels irritable and angry, has no strength or will-power, is sensitive to events in the surroundings, sensitive to the sounds, light, smells, feels helpless, and loses sexual interest. Physical symptoms may also occur, such as nonspecific pain in the back, legs or shoulders, headache, insomnia, qualitative and quantitative sleep changes, palpitations, heavy perspiration, constant fatigue, lack of resistance to infectious diseases, impaired immunity, reduced or increased appetite, indigestion, muscular tension or myalgia, tremor, etc.

Mental problems may occur, e.g., problems in concentration, occasional loss of memory, illogical conclusions, general confusion, pensiveness and pettiness of mind. The person loses her élan and enthusiasm, has no motivation for going to work let alone for helping the patient and listening to his problems. This can lead to depersonalization, which manifests as change in her attitude towards herself

as well as towards others, change in the behavior towards the people who need help. The person becomes insensitive to other people's problems, loses interest in work, ill-treats patients, is not able to give consideration to the patient. She starts talking and working only by the book and house order, and finds all sorts of excuses just for not to be able to please the patient.

The person withdraws in social relationships, is often involved in conflicts and attacks the others, blaming them of her own mistakes. She becomes occupied with problems of her own, her own salary, work conditions, days-off, generally the problems of no interest to her till then. Privately, she spends less time with her family and friends, with or without apology. Being under stress, she becomes inefficient and takes no interest in patients. Because of her inefficiency, she starts questioning her own capability, loses her self-respect and self-confidence. She becomes rigid, unadaptable, and resists changes. She avoids her responsibilities, does not answer telephone and coworkers' calls, avoids any conversation, official or unofficial. Sometimes, it may even happen that a graduate nurse starts doing harm to patients, i.e. giving them wrong treatment. In this case, both the patient and the institution suffer loss. Ultimately, the high price for the consequences of burnout at work is paid by the society as a whole<sup>5</sup>.

## Purpose of the Study

The primary purpose of the study was to provide the basis for some kind of primary prevention for manifestation of burnout syndrome. This can be done merely by providing basic information on the existence of the problem.

The secondary purpose of the study was to assess the existence of burnout syndrome at work and of secondary traumatization, and to identify differences in their manifestation between nurses at hospital wards of the Virovitica General Hospital and those working in primary healthcare service at the Virovitica Health Center.

The following hypotheses were defined for the study purpose:

- 1) There are cases of the burnout at work syndrome and indirect traumatization among nurses.
- 2) There is a difference in the manifestation of burnout syndrome and indirect traumatization between the nurses at hospital wards and those from primary healthcare service.

## Subjects and Methods

### *Study design*

Study samples were selected by analysis of the questionnaires distributed to nurses working at the General Hospital and Health Center in Virovitica. Forty copies of the questionnaire were distributed to nurses at eight work places in Virovitica General Hospital (medical department, pediatric ward, neurology, psychiatry, neonatology, hemodialysis, and intensive care units of medical department and surgical ward), and another 40 copies to nurses at eight work places in Virovitica Health Center (emergency room, outpatient clinics, dental clinics, unit for ability assessment). The questionnaire was accompanied by a leaflet with basic information on the burnout syndrome and indirect traumatization, with a note that the study was to be completed at the High Medical School from Zagreb. Participation in the study was voluntary and anonymous. The study was carried out from January 2 to February 1, 2001.

### *Study tools*

- Questionnaire on general data (age, sex, education, working status) was used for sample selection. There were 14 more questions, to familiarize the subjects with the study issue.

Concerning the fact that nurses identify themselves as helpers, and that the main purpose of the study was 'information is prevention', we decided to use three questionnaires from the manual 'Psychological and spiritual help for helpers', with due permission from the authors<sup>6</sup>.

- Why do we help others? questionnaire by Professor Mirjana Krizmanić. The questionnaire contains five statements with two possible answers to choose (options offered from 'a' through 'i');

- Questionnaire for evaluation of the syndrome of indirect traumatization by Professor Mladen Havelka. The questionnaire contains 14 statements with optional answers to choose: never - rarely - often;

- Questionnaire for self-evaluation of burnout at work by Professor Gordana Fučkar. The questionnaire contains 40 statements with optional answers to choose: 0=no answer, 1=no, 2=rarely, 3=often, 4=yes.

### *Data analysis*

Results of the study were submitted to statistical analysis by use of the Windows SPSS program. Quantitative data were analyzed by use of frequency charts and expressed as absolute numbers and percentage. Mann-Whitney test was

also employed. Qualitative data were expressed as statistical significance calculated by use of (2-test and Pearson's coefficient of correlation (R). The results showing statistically significant difference are presented in Results section in the form of tables and graphs<sup>7,8</sup>.

### Sample selection

Upon questionnaire collection, the sample was formed. There were 57 usable questionnaires, 31 of them from the General Hospital (group I) and 26 from Health Center (group II). Group I consisted of 31 nurses (all female) working at the Virovitica General Hospital, whereas group II included 26 nurses and medical technicians working in primary healthcare service at the Virovitica Health Center, five (19.2%) of them male and 21 (80.8%) female. Comparison of the two groups showed no statistically significant difference according to age, sex, or years of work. They were mostly female, mean age 42.5 years, and mean work years 18.5, with 13.3 years on the same job.

## Results

Questionnaire: Why do we help the others?

Analysis of answers to the questionnaire yielded no statistically significant difference between the responders from hospital wards and those from primary healthcare service, except for some answers as indicated in tables and graphs.

The use of cross-charts showed the following combinations of answers to be most common:

Question 1: A - I help people because helping is part of my job + D - I help people because I cannot watch other people suffering with my arms crossed.

Question 2: A - I help others in the context of my daily work + C I help others whenever I have an opportunity to.

Question 3: F - when I help someone I expect positive results of this help + I - when I help someone I expect personal content.

Question 4: B - my experience teaches me that many helpers help others because they expect 'the good to be returned by the good' + E - my experience teaches me that many helpers help others because of their kindness and high ethics.

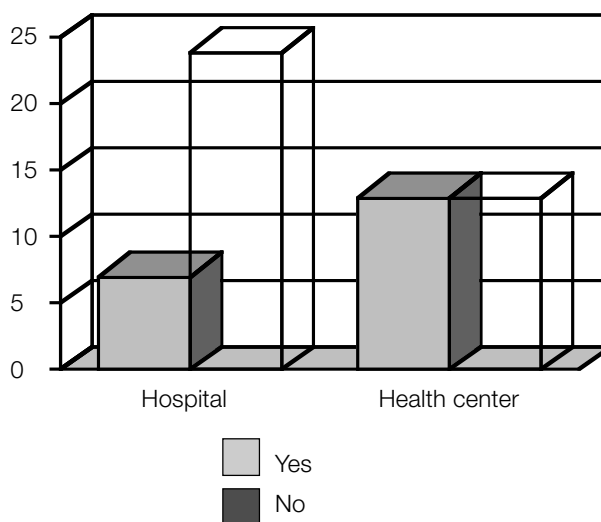
In case of question 4, a statistically significant difference was found for answer E (my experience teaches me that many helpers help others because of their kindness and high ethics) ( $\chi^2=4.04980$ ;  $p=0.0442$ ).

Distribution of results is presented in Table 1 and Fig. 1.

Table 1. Distribution of answers to question 4E

|       | Hospital |      | Health center |      | Total |       |
|-------|----------|------|---------------|------|-------|-------|
|       | n        | %    | n             | %    | n     | %     |
| Yes   | 7        | 22.6 | 13            | 50.0 | 20    | 35.0  |
| No    | 24       | 77.4 | 13            | 50.0 | 37    | 64.9  |
| Total | 31       | 54.4 | 26            | 45.6 | 57    | 100.0 |

Fig. 1. Distribution of answers to question 4E



Question 5: A - my experience teaches me that people do not show a tendency to help others because they do not have appropriate knowledge about helping people in need + D - my experience teaches me that people do not show a tendency to help others because they have problems of their own.

Analysis of answers to question 5 showed a statistically significant difference for answer D (my experience teaches me that people do not show a tendency to help others because they have problems of their own) ( $\chi^2=0.18327$ ;  $p=0.0258$ ).

Distribution of results for answer 5D is presented in Table 2 and Fig. 2.

A statistically significant difference was also observed for answer E (my experience teaches me that people do not show a tendency for helping others because they think

Table 2. Distribution of answers to question 5D

|       | Hospital |      | Health center |      | Total |       |
|-------|----------|------|---------------|------|-------|-------|
|       | n        | %    | n             | %    | n     | %     |
| Yes   | 23       | 74.1 | 9             | 34.6 | 32    | 56.1  |
| No    | 8        | 25.8 | 17            | 65.3 | 25    | 43.8  |
| Total | 31       | 54.4 | 26            | 45.6 | 57    | 100.0 |

Fig. 2. Distribution of answers to question 5D

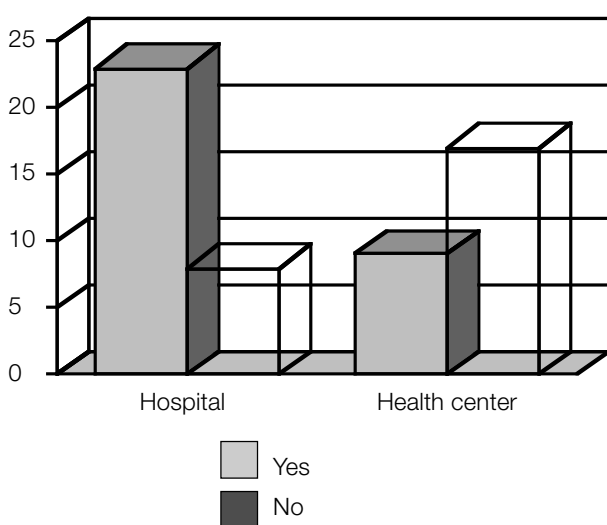
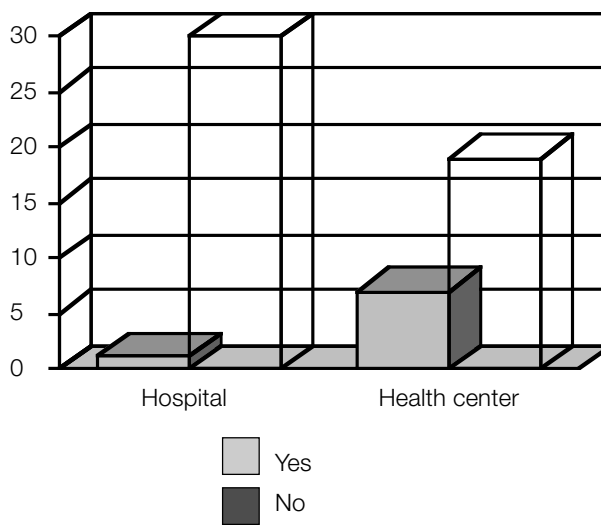


Table 3. Distribution of answers to question 5E

|       | Hospital |      | Health center |      | Total |       |
|-------|----------|------|---------------|------|-------|-------|
|       | n        | %    | n             | %    | n     | %     |
| Yes   | 1        | 3.2  | 7             | 26.0 | 8     | 14.0  |
| No    | 30       | 96.8 | 19            | 73.1 | 49    | 85.9  |
| Total | 31       | 54.4 | 26            | 45.6 | 57    | 100.0 |

Fig. 3. Distribution of answers to question 5E



that everyone can and should help himself) ( $\chi^2=4.50401$ ;  $p=0.0338$ ) (Table 3, Fig. 3).

The results obtained from cross-charts indicated the majority of study subjects to practice their profession because of their altruism, whereas a very small percentage of them considered they helped the others because of mutual support, i.e. for the reciprocal nature of helping.

#### Evaluation of the secondary traumatization syndrome

The answers obtained by the questionnaire were first divided into two groups and then submitted to Mann Whitney test. The answers were similar and yielded no statistically significant difference. This was followed by factor analysis using Kaiser criterion and Varimax rotation. Three complex questions or factors were thus obtained, two of them being different and the third containing the same points in common with the others. The three factors could be observed as three characteristic and basic points of view of the issue.

After rotation, factor transformation matrix yielded the following results:

Factor 1 - questions 7, 10, 11, 12, 13

Q7. Since I have been helping the others, I do not sleep well and I have some physical problems as well.

Q10. After talking to sufferers, I feel unhappy and helpless.

Q11. I have heard so much about various horrors that I cannot watch television reports of human suffering, diseases and troubles any longer.

Q12. I wake up at night recalling what people told me about their suffering.

Q13. I am tired from listening to all those troubles.

Factor 2 - questions 1, 2, 3, 6, 12

Q1. Listening to people who suffered I feel crying myself.

Q2. Something lumps in my throat when listening to what people tell me about their suffering and trouble.

Q3. I get frightened listening to what kinds of horror can happen to people.

Q6. I feel helpless listening about the suffering I cannot alleviate.

Q12. I wake up at night recalling what people told me about their suffering.

Factor 3 - questions 4, 6, 8, 9, 10, 14

Q4. I cannot stop thinking about the suffering I heard from people I have been helping.

Q6. I feel helpless listening about the suffering I cannot alleviate.

Q8. I have heard so much about the suffering and misfortune that it annoys me when someone complains of some quite irrelevant problem.

Q9. After conversation with the people who suffered great loss I need to talk to someone about it.

Q10. After talking to sufferers I feel unhappy and helpless.

Q14. Helplessness of people who could help themselves annoys me.

#### *Self-evaluation of burnout at work*

Analysis of the questionnaire revealed a statistically significant difference for the following 10 of 40 statements: Nos. 5, 8, 13, 16, 24, 26, 29, 31, 32 and 33. Distribution of answers to statement No. 5 (it seems to me that all my work does not have much sense) is presented in Table 4.

A statistically significant difference was observed, while Mann Whitney test yielded  $p=0.0892$ . Affirmative answer to the statement was given by 32% of subjects from hospital wards, and negative by 88.5% of subjects from health center. With such a high percentage of affirmative answers, the weariness and indifference for work were quite conceivable.

Distribution of answers to the statement 'I imagine that there is nothing to be done anyway that could really help these people' is presented in Table 5. There was a statistically significant difference, while Mann Whitney - Wilcoxon test yielded  $p=0.07$ . The results obtained on this question confirmed the previous statement on the higher percentage of hospital nurses expressing their discontent.

Distribution of answers to statement No. 13: 'I have noticed that I have become insensitive towards the patients' is shown in Table 6 and Fig. 4. There was a statistically significant difference, while Mann Whitney - Wilcoxon test yielded  $p=0.07$ . Most of the subjects gave negative answer to the statement, however, a higher percentage of affirmative answers was recorded among hospital nurses.

Distribution of answers to statement No. 16: 'It seems to me that all patients have more or less the same problems, and yet they all speak of them as if nobody else has ever experienced them' is shown in Table 7. There was a statistically significant difference, while Mann Whitney test yielded  $p=0.06$ . With their answers to this statement,

Table 4. Distribution of answers to statement No. 5: 'It seems to me that all my work does not have much sense'

|               | No answer |   | No |     | Rarely |      | Often |      | Yes |     | Total |       |
|---------------|-----------|---|----|-----|--------|------|-------|------|-----|-----|-------|-------|
|               | n         | % | n  | %   | n      | %    | n     | %    | n   | %   | n     | %     |
| Hospital      | 0         | 0 | 2  | 6.4 | 19     | 61.3 | 9     | 29.0 | 1   | 3.2 | 31    | 54.3  |
| Health center | 0         | 0 | 2  | 7.7 | 23     | 88.5 | 1     | 3.8  | 0   | 0   | 26    | 45.6  |
| Total         | 0         | 0 | 4  | 7.0 | 42     | 73.7 | 10    | 17.5 | 1   | 1.7 | 57    | 100.0 |

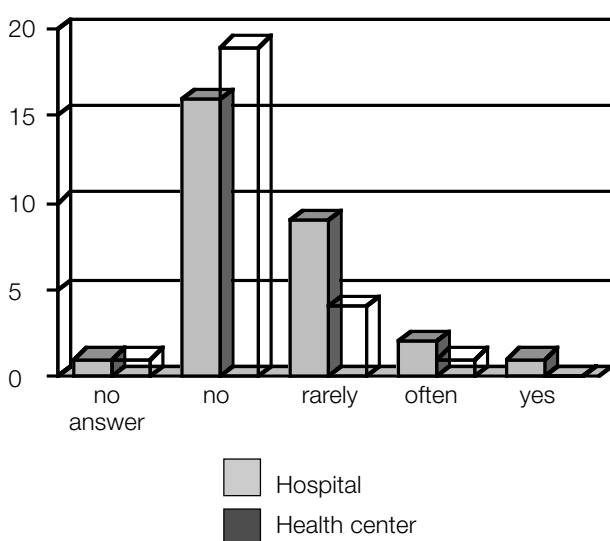
Table 5. Distribution of answers to statement No. 8: 'I imagine that there is nothing to be done anyway that could help these people'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |     | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|-----|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %   | n     | %     |
| Hospital      | 2         | 6.4 | 12 | 38.7 | 10     | 32.2 | 4     | 13.0 | 3   | 9.7 | 31    | 54.3  |
| Health center | 1         | 3.8 | 17 | 65.4 | 7      | 27.0 | 1     | 3.8  | 0   | 0   | 26    | 45.6  |
| Total         | 3         | 5.3 | 29 | 50.9 | 17     | 29.9 | 5     | 8.8  | 3   | 5.3 | 57    | 100.0 |

Table 6. Distribution of answers to statement No.13: 'I have noticed that I have become insensitive to the patients'

|               | No answer |     | No |      | Rarely |      | Often |     | Yes |     | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|-----|-----|-----|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %   | n   | %   | n     | %     |
| Hospital      | 1         | 3.2 | 17 | 54.8 | 10     | 32.2 | 2     | 6.4 | 1   | 3.2 | 31    | 54.3  |
| Health center | 1         | 3.8 | 20 | 76.9 | 4      | 15.4 | 1     | 3.8 | 0   | 0   | 26    | 45.6  |
| Total         | 2         | 3.5 | 37 | 65.0 | 14     | 24.6 | 3     | 5.3 | 1   | 1.7 | 57    | 100.0 |

Fig. 4. Distribution of answers to statement No.13



Whitney test yielded  $p=0.03$ . Both study groups showed discontent with their achievements at work, however, their percentage was higher among hospital nurses.

Distribution of answers to statement No. 26: 'I am not in the mood to associate with my friends and colleagues' is shown in Table 9. There was a statistically significant difference, while Mann Whitney test yielded  $p=0.05$ . Affirmative answer to this statement was given by a very low percentage of hospital nurses and by 15.4% of those working at health center.

Distribution of answers to statement No. 29: 'I have noticed that I am terrified by the thought of going to work tomorrow' is presented in Table 10 and Fig. 6. There was a statistically significant difference, while Mann Whitney - Wilcoxon test yielded  $p=0.0016$ . Affirmative answer to this statement was given by 12.7% of hospital nurses and none from the health center.

Distribution of answers to question No. 31: 'I am asking myself what is it that could make me happy' is shown

Table 7. Distribution of answers to statement No.16: 'It seems to me that all patients have more or less the same problems, and yet they all speak about them as if nobody else have ever experienced them'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |      | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|------|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %    | n     | %     |
| Hospital      | 0         | 0   | 7  | 22.6 | 9      | 29.0 | 8     | 25.8 | 5   | 16.1 | 31    | 54.3  |
| Health center | 1         | 3.8 | 13 | 50.0 | 6      | 23.0 | 6     | 23.0 | 0   | 0    | 26    | 45.6  |
| Total         | 1         | 1.7 | 20 | 35.0 | 15     | 26.3 | 14    | 24.6 | 5   | 8.8  | 57    | 100.0 |

as many as 41% of hospital nurses and 23% of study subjects from healthcare center confirmed their indifference to patients' problems.

Distribution of answers to statement No. 24: 'I have an impression that most patients do not appreciate what we are doing for them at all' is presented in Table 8 and Fig. 5. There was a statistically significant difference, while Mann

in Table 11. There was a statistically significant difference, while Mann Whitney test yielded  $p=0.025$ . The rate of responders to this question was 28% among hospital nurses, and none from the health center.

Distribution of answers to statement No. 32: 'I think I would not recommend this profession to anyone' is shown in Table 12. There was a statistically significant



Table 8. Distribution of answers to statement No.24: 'I have an impression that most patients do not appreciate what we are doing for them at all'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |      | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|------|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %    | n     | %     |
| Hospital      | 1         | 3.2 | 4  | 12.9 | 7      | 22.6 | 10    | 32.2 | 9   | 29.0 | 31    | 54.3  |
| Health center | 0         | 0   | 7  | 22.6 | 9      | 34.7 | 8     | 30.8 | 2   | 7.7  | 26    | 45.6  |
| Total         | 1         | 1.7 | 11 | 19.2 | 16     | 28.0 | 18    | 31.6 | 11  | 19.2 | 57    | 100.0 |

Fig. 5. Distribution of answers to statement No.24

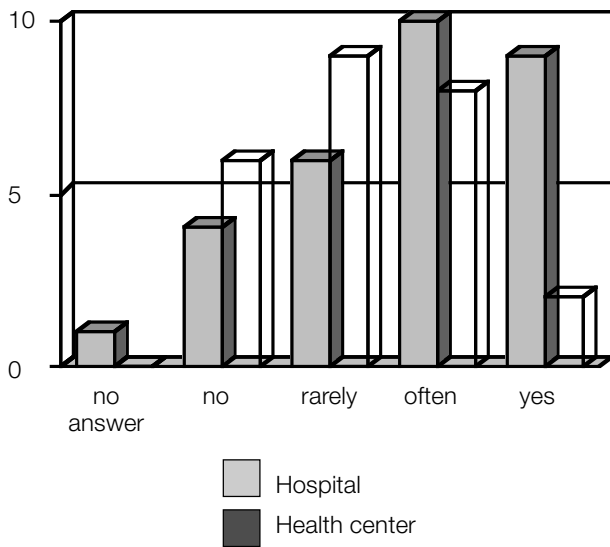


Fig. 6. Distribution of answers to statement No.29

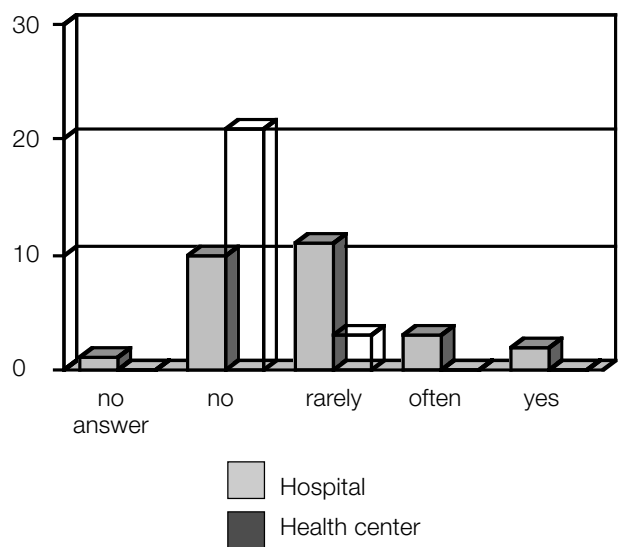


Table 9. Distribution of answers to statement No.26: 'I am not in the mood to associate with my friends and colleagues'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |     | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|-----|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %   | n     | %     |
| Hospital      | 3         | 9.7 | 17 | 54.8 | 9      | 29.0 | 1     | 3.2  | 1   | 3.2 | 31    | 54.3  |
| Health center | 0         | 0   | 2  | 7.7  | 20     | 77.0 | 4     | 15.4 | 0   | 0   | 26    | 45.6  |
| Total         | 3         | 5.3 | 19 | 33.3 | 29     | 50.9 | 5     | 8.8  | 1   | 1.7 | 57    | 100.0 |

Table 10. Distribution of answers to statement No.29: 'I have noticed that I am terrified by the thought of going to work tomorrow'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |     | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|-----|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %   | n     | %     |
| Hospital      | 1         | 3.2 | 11 | 35.5 | 12     | 38.8 | 4     | 13.0 | 3   | 9.7 | 31    | 54.3  |
| Health center | 0         | 0   | 22 | 84.0 | 4      | 15.4 | 0     | 0    | 0   | 0   | 26    | 45.6  |
| Total         | 1         | 1.7 | 33 | 57.9 | 16     | 28.0 | 4     | 24.6 | 3   | 5.3 | 57    | 100.0 |

Table 11. Distribution of answers to statement No. 31: 'I ask myself what it is that could make me happy'

|               | No answer |      | No |      | Rarely |      | Often |      | Yes |      | Total |       |
|---------------|-----------|------|----|------|--------|------|-------|------|-----|------|-------|-------|
|               | n         | %    | n  | %    | n      | %    | n     | %    | n   | %    | n     | %     |
| Hospital      | 4         | 12.9 | 13 | 41.9 | 8      | 25.8 | 5     | 16.1 | 1   | 13.0 | 31    | 54.3  |
| Health center | 1         | 3.8  | 19 | 73.0 | 6      | 23.0 | 0     | 0    | 0   | 0    | 26    | 45.6  |
| Total         | 5         | 8.8  | 32 | 56.1 | 14     | 24.6 | 5     | 8.8  | 1   | 1.7  | 57    | 100.0 |

Table 12. Distribution of answers to statement No. 32: 'I think I would not recommend this profession to anyone'

|               | No answer |     | No |      | Rarely |      | Often |     | Yes |      | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|-----|-----|------|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %   | n   | %    | n     | %     |
| Hospital      | 1         | 3.2 | 12 | 38.8 | 8      | 25.8 | 3     | 9.7 | 7   | 22.6 | 31    | 54.3  |
| Health center | 1         | 3.8 | 18 | 69.2 | 4      | 15.4 | 2     | 7.7 | 1   | 3.8  | 26    | 45.6  |
| Total         | 2         | 3.5 | 30 | 52.6 | 12     | 21.0 | 5     | 8.8 | 8   | 14.0 | 57    | 100.0 |

Table 13. Distribution of answers to statement No. 33: 'I have an impression that there is so much to do that I could not finish it in spite of all the effort'

|               | No answer |     | No |      | Rarely |      | Often |      | Yes |      | Total |       |
|---------------|-----------|-----|----|------|--------|------|-------|------|-----|------|-------|-------|
|               | n         | %   | n  | %    | n      | %    | n     | %    | n   | %    | n     | %     |
| Hospital      | 0         | 0   | 9  | 29.0 | 11     | 35.5 | 6     | 19.4 | 5   | 16.0 | 31    | 54.3  |
| Health center | 1         | 3.8 | 16 | 61.5 | 6      | 23.0 | 3     | 11.5 | 0   | 0    | 26    | 45.6  |
| Total         | 1         | 1.7 | 27 | 47.4 | 17     | 30.0 | 9     | 15.8 | 5   | 8.8  | 57    | 100.0 |

difference, while Mann Whitney - Wilcoxon test yielded  $p=0.041$ . The answers to this statement suggested that the level of discontent with the profession was higher among hospital nurses (even 42%).

Distribution of answers to statement No. 33: 'I have an impression that there is so much to do that I could not finish it in spite of all my efforts' is presented in Table 13. There was a statistically significant difference, while Mann Whitney - Wilcoxon test yielded  $p=0.016$ . There were 31% of affirmative answers among hospital nurses and a very low percentage among those from health center.

## Discussion

New ways of doing the job and new technical procedures that develop on a daily basis put a registered nurse in front of an explicit demand: we have to be perfect in every way. When our emotional support or our emphatic

understanding is needed, we give it without hesitation. On the other hand, who is concerned about us? Who is the one to support us?<sup>9-11</sup> One of the symptoms of burnout syndrome is emotional exhaustion. Emotionally exhausted helper cannot offer appropriate support but becomes more dissatisfied, thus increasing the possibility of burnout. If a person under stress reacts with physical symptoms, he/she can endanger the safety of the patients. Studies have indicated that nurses help each other the best through mutual understanding and support. Good communication, association with coworkers, supervision, independence in decision making, proper distribution of duties, and a good team leader are the main factors that result in the reduction of both stress and burnout<sup>12</sup>.

It was confirmed by the answers provided by our study subjects. Their answers also confirmed that these factors were deficient in their working environment. We should know how to recognize the symptoms of burnout and indirect traumatization rather than ignore them. Although

the present study included a relatively small number of subjects, the preventive role of recognizing the problem should by no means be ignored. In order to be able to successfully cope with the problem (stress at work), we should first of all be aware of it. There was another study that made us think of the problem seriously. This study has revealed that nurses experience more stress situations than teachers because their work is less recognized by the society than the teachers' work<sup>13</sup>. We can confirm this statement by several answers from our questionnaire on self-estimate on burnout. A half of the subjects agreed that the patients did not appreciate our work and efforts we made to their benefit. Most of the study subjects have chosen their profession on their own altruism and identified themselves as helpers. However, their initial enthusiasm has decreased with time. After twenty years spent on the job of providing healthcare, a half of the subjects have changed their opinion and they would not recommend this profession to anyone. An additional reason for it is the above mentioned statement that non-recognition by the society is a major source of stress.

Evaluation of the secondary traumatization syndrome yielded three different groups of statements. These statements show how many symptoms nurses really experience, which indicate that the problem exists. The symptoms such as insomnia, helplessness, exhaustion, anxiety, fear (apprehension), and indifference for other less important problems clearly show that they need professional help.

An institution which takes care of their employees should have plans for prevention and decrease of stress at work. As stress is a personal experience, it would be best for everyone to apply individual ways of dealing with stress, the ways that suit them best<sup>14</sup>. Working stress is mostly of a chronic nature, it affects us almost imperceptibly day by day. It depends on us how we shall deal with the stress: do we want to temporarily remove the stressor so to make our working environment less difficult, or do we want to influence it on a longterm basis and protect our psychophysical health? Efficient coping with stress implicitly includes a decision on changing our behavior. We have to stop sometimes, look around us, check how do we feel at work, are we content and what is happening to us. If we notice some of the stress signs, we should reconsider what it is that makes us feel tired, discontent, anxious and angry. Only when we recognize the true cause of our troubles, we can go on in coping with stress. To cope with stress in the right way we have to know the stressor characteristics and possibilities of controlling the stress<sup>15,16</sup>.

There are three ways of coping with stress that are presently known. The first one includes change of the situation, elimination of the causes of stress. This can only be done if we have the capability and possibility of restituting our control of the situation, should we have the knowledge and specific skills for treatment. If we feel incompetent at work, we can additionally improve our competence. If the stress is caused by some other persons, we can try to cope with it by direct communication on the problem, we can change the organization and duties at work by appropriate work distribution, i.e. the right person for the right duty.

The second way of coping with stress is retreating from stress, avoiding stress situations, or finding the way not to make such a situation possible. We use this way of coping stress when we realize that it is not possible to change the cause of stress. We shall get out of the way from a critical situation, temporarily give up our ideas, part of the work we shall leave over to others, we shall determine our limits and say 'no' clearly.

The third method is acceptance of a stress situation. It includes prevention by raising our psychophysical resistance through appropriate diet, regular exercise, relaxation techniques, self-encouraging, thinking positive about ourselves and others, setting longterm goals and priorities in our work and life, seeking for support in our environment, keeping close relationships with the persons important to us, preserving our sense of humor, and structuring our spare time<sup>17</sup>.

These are the methods best known and widely used in coping with stress. Some of them can be learned and some are to be built up by each individual in his/her own behavior. It is necessary to know them and to use them in crisis situations at our work.

## Conclusion

We think of stress as of a problem encountered in modern times, a problem of today. To help the others when they are in need, i.e. in disease, it makes a person complete, fills him/her with pleasure. However, helping can 'wound' the helper, it can hurt his/her inner strength and will. Minor stress can challenge and motivate the person, however, when stress becomes too severe, negative emotions arise, resulting in frustration, apathy and burnout. To help and to understand each other, to use humor whenever possible, it is still the best cure for stress.

Although we have not confirmed the given hypotheses, we can be very satisfied with the fact that there are no major problems in the institutions observed. We are also aware that in some other times, the results would probably be different. The questionnaires used in the study will serve to make the problems known and recognized in public. In order to achieve specific results, the testing should be repeated periodically. However, we have achieved our primary goal, i.e. to familiarize nurses with the nature of this problem, thus to make for them possible to prevent the burnout syndrome and secondary traumatization. We are aware that by working in a small community we have some advantages over the others. In such a small community, we are more willing to help and support the people we work with. It is evident from the results of the study.

Providing social support is the most important factor for a person who has experienced stress, and if this help fails to come, the burnout syndrome and indirect traumatization will occur. In order to detect individual cases of the syndrome on time, the most important thing is to make nurses familiar with the problem and the symptoms that may develop. Providing coprotection, feeling that someone cares for us, understanding of the problem, and friendly conversation can be of great help to a person who grows weary. The fact that the majority of study subjects complained of a low level of work organization, and indirectly of the management, tells us how a responsible post it is to be a team manager. A good manager, a job organizer has to take care of every individual. He has to create a good working climate, good job distribution, be flexible in making decisions, allow for free decisions to a certain extent, respect others' opinions, organize group exchange of experiences and going through cases, give information on the success of the work done, organize social gatherings out of work, etc. These are duties of a team leader, however, these also are the factors which, if not present, may lead to stress situations and to the development of burnout syndrome and secondary traumatization. There are many other causes for the onset of the syndrome. Some of them cannot be influenced upon, and it would be better to fight them with the strength of our mind and body, and by the knowledge we have already acquired and are acquiring daily through watching and learning. In the healthcare system, it is difficult to remove stress causes. It is proven in daily practice that best results are achieved by prevention.

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## Sažetak

PRIMARNA PREVENCIJA SINDROMA IZGARANJA U MEDICINSKIH SESTARA U OPĆOJ BOLNICI I  
DOMU ZDRAVLJA U VIROVITICI

*E. Koić, L. Mužinić-Masle, V. Đorđević, S. Vondraček i A. Car-Marković*

Sindrom izgaranja na radnom mjestu i sekundarna traumatizacija su poremećaji koji se mogu pojaviti u bilo kojoj struci koja se bavi pružanjem pomoći drugima. U ovu kategoriju spada sestrinstvo kao struka. Svrha ovoga istraživanja bila je prvenstveno upoznati medicinske sestre s rizicima sindroma izgaranja, a isto ispitati prisutnost ovih poremećaja i utvrditi razliku između sestara na bolničkim odjelima i u službama pružanja zdravstvene skrbi. Ispitanicama su podijeljena tri ankete s pitanjima kako bi se podigla njihova osjetljivost za ovaj problem. Analiza podataka i statistička obrada podataka ukazale su na jednaka stajališta u objema skupinama, kao i postojanje pojedinačnih slučajeva ovoga sindroma. Statistički značajne razlike nađene su samo kod nekih odgovora, kako je prikazano u grafikonima i tablicama.

**Ključne riječi:** *Izgaranje - na poslu, psihologija; Medicinske sestre, psihologija; Sestrinsko osoblje; Rizični čimbenici; Društvena vrijednost*