SELECTED HEALTH BEHAVIOURS OF NURSES

ABSTRACT

Currently, the role of nurses in healthcare is growing. Each day more demanding and responsible, practical tasks are put in front of them. They also have a leading role in the field of health promotion and professional knowledge about a healthy lifestyle. Due to their medical knowledge, they are expected to have a conscious, rational and critical attitude towards shaping and observing pro-health behaviours in their lives. The aim of this study is to compare the selected health behaviours of nurses. The research included 100 nurses and 100 women doing other professions. The respondents were tested with the matched pair selection method, taking into consideration two variables: place of residence and age. The survey questionnaire was used. The nurses show similarities with respect to some health behaviours and show significant differences in the consumption of alcoholic beverages (the amount and kind) or regularity of preventive checks in comparison to others. The profession of nurses due to its specificity and requirement of constant care for ill person results in a very high level of stress. Nurses feel permanent pressure, which entails permission to use stimulants such as coffee, alcohol and to a lesser extent - smoking. Their role as promoters of a healthy lifestyle means that they try to take care of health through control or preventive examinations.

Key words: health behaviours, nurses, women, health psychology.

INTRODUCTION

The profession of a nurse in Poland occupies a high position in the hierarchy of prestige, outperforming even the profession of a doctor.
which is always respected and appreciated. This is proven by the results of research carried out over the years [1, 2]. However, in the situation of assessing fairness and professional integrity, the nursing profession was rated the highest and ranked first [3]. The role of nurses in healthcare is growing. Each day more demanding and responsible practical tasks are put in front of them. They also have a leading role in the field of health promotion and professional knowledge about a healthy lifestyle [4]. Because of their medical knowledge, they are expected to have a conscious, rational and critical attitude towards shaping and observing pro-health behaviours in their lives. However, possessing the appropriate theoretical knowledge does not necessarily result in its use in life, even though health’s significance is particularly valued by nurses [5, 6]. Nevertheless, wanting to be reliable and convincing for the patient, they must believe in the validity of the promoted content, apply it in practice and to be a role model for the patient. As the research shows, nurses who are actively exercising, non-smoking or those who follow a balanced diet are more likely to promote a healthy lifestyle than those who do not observe pro-health recommendations [7, 8, 9]. On the other hand, patients are more likely to follow the recommendations for a correct diet or physical exercise and show greater confidence in nurses who have appropriate body mass [10]. There are many studies conducted in various parts of the world, which emphasize the unsatisfactory level of health behaviours in the lives of nurses [11, 12, 13], in such situation, they cannot be an authority for patients whom they nurse and educate. The results, however, are not unambiguous. Some highlight that young people in particular do not pursue pro-health in their lives, although during their education they received a greater range of current information in this field than their older colleagues [11, 12].

In health psychology, health behaviours are divided into habitual and purposeful. Habitual behaviours are related to the hygiene of everyday life, eating habits, physical activity and rest. They result from socialization and cultural influences. On the other hand, purposeful behaviours are initiated in specific situations related to promotional and preventive activities and appear in situations of life and development changes [14].

This article will show selected health behaviours of nurses, in comparison to their peers who are engaged in professions that are not related to health care.

**AIM**

The aim of this article is to characterise selected health behaviours of professionally active nurses.

**MATERIAL AND METHODS**

In order to answer the basic research questions, 100 nurses and 100 women from the control group belonging to different professional groups were examined. The demographic variables were controlled by matching persons using the pair-selection method, taking into consideration two variables: place of residence (village,
city) and age of the respondents. It has been assumed that controlling these two variables will eliminate some of the important factors that affect the occurrence of certain nurses' behaviour compared to other professional groups. The nurse research group was represented by women aged between 23 and 60. The average age was $M = 39.5$. They were women who mostly lived in cities - 60% and 40% of women came from the village. The control group consisting of women working in other professions was analogous in terms of these two variables.

Education in both groups was represented in three categories: secondary vocational (28% - nurses and 34% - control group), higher vocational at bachelor level (34% - nurses and 26% - control group) and master's degree (38% - nurses and 40% - control group). The examined women had a similar marital status; married women were represented by 70% of female nurses and 63% of women from the control group, unmarried woman by 17% of nurses and 21% of women from the control group and divorced women were represented by 6 nurses and 4 people from the control group. Other marital statuses were very similarly represented by women qualified for both groups.

The research used a questionnaire built for the study *Lifestyle of men and women*, consisting of 79 questions. In the article only its fourth part is used - selected questions related to pro-health and anti-health behaviours. In order to determine the statistical differences between the two groups, the Mann-Whitney U test was used.

**RESULTS**

In the first place, the examined persons were asked what is most harmful to their health. The respondents could choose from the following answers: stimulants, non-compliance with healthy

![FIGURE 1. Factors most harmful to the health](image)

(Chi-square = 6.072, $df = 1, p = 0.01$)
eating rules, not enough physical activity, stress, inappropriate medical care, lack of sleep and other situations which, in their opinion, have significant impact on health. The results are shown in Figure 1.

When comparing factors most harmful to nurses’ health in comparison with other professions, it is noted, that in most aspects there is a large similarity in the responses. According to the respondents, their health is mostly harmed due to stress. Almost 67% of nurses report that they experience this condition at work regularly, while women working in other professions (54%) indicate this fact less frequently ($p = 0.05$). Similarly crucial for all examined is the problem of non-compliance with the rules of healthy nutrition (nurses - 23% and other professions - 30%). Insufficiency in physical activity was pointed out by less than one-fifth of all women surveyed (nurses - 20% and other professions - 22%). A similar number of people indicated the lack of proper length of sleep (nurses - 17% and other professions - 14%). A comparable number of people indicated the lack of proper amount of sleep (nurses - 17% and other professions - 14%). Noteworthy is the fact that in terms of the use of stimulants (alcohol, coffee, cigarettes, energy drinks and others) a statistically significant difference was observed in the statements of both groups of women ($p = 0.01$). Nearly one third of nurses (31%) said that stimulants are an important factor that harms their health, while among women working in other professions, less than one fifth of respondents believe that (16.2%). In order to specify what type of stimulants differentiate nurses and women from the control group, the respondents were asked to determine the frequency of alcohol consumption and smoking.

The results contained in tab. 1 show that both groups of women smoke cigarettes as much as they consume alcohol. Smoking in both groups: nurses and women in other professions remains at a similar, moderate level. The dispersion of the results indicates that in both groups, women smoke cigarettes habitually (about 10%), and similar percentages of women (about 10%) declare that they used to smoke cigarettes. Among the respondents declaring that they smoke occasionally in various life and social sit-

| Stimulants          | N    | M   | sd  | t    | df   | p     |
|---------------------|------|-----|-----|------|------|-------|
| **Smoking cigarettes** |      |     |     |      |      |       |
| Nurses              | 100  | 3,40| 1,015| 0    | 198  | 0,268 |
| Other professions   | 100  | 3,40| 1,128|      |      |       |
| **Drinking alcohol** |      |     |     |      |      |       |
| Nurses              | 100  | 3,65| 0,857| -0,964| 198  | 0,61  |
| Other professions   | 100  | 3,76| 0,754|       |      |       |
uations, there were 11% of nurses and 12% of women from the control group. As the results of the research show, in the situation of smoking cigarettes, the attitudes are more extreme: either they smoke habitually or not at all, and only a small group of people fall into the category of occasional smokers. Among the respondents about 70% of nurses declare that they never smoked cigarettes compulsively, while among women in the control group - about 60%. Overall, it should be pointed out that the average responses for both groups due to smoking were identical.

Alcohol consumption also occurs at a very similar rate in both groups of women and falls within the range of the answer from “I rather not drink” to “I drink sometimes” during special events and circumstances. The vast majority of nurses said they consume alcohol sometimes (37%) or rarely (49%). Among nurses, 4% reported that they consume alcohol on the daily-basis, while women working in other professions did not indicate this type of frequency. Nurses who declared themselves as not drinking any alcohol represent about 10% of the respondents, while among women doing other professions, the number was close to approximately 20%.

Analysis of the collected material indicates that the difference between the two groups of women in terms of alcohol consumption is not only quantitative (frequency of consumption), but also qualitative (the type of alcohol). Nurses definitely prefer wines (p = 0.01) or liqueurs, at the same time much less frequently reach for beer or other home-made alcohols that are consumed by the groups in other professions (p = 0.01). Analysing the attitude of women against the consumption of alcohol, it was found that women doing other professions are more often inclined to this type of attitudes and behaviours than women who work as nurses (p = 0.05).

**Tab. 2. The kind of alcohol drunk**

| Kind of alcohol | Nurses | Other professions | Chi-square | df | p   |
|-----------------|--------|-------------------|------------|----|-----|
| vodka           | 13%    | 10%               | 0,364a     | 1  | 0,547|
| wine            | 52%    | 34%               | 5,114a     | 1  | 0,015|
| beer            | 12%    | 31%               | 7,185a     | 1  | 0,014|
| liqueurs        | 17%    | 9%                | 1,177a     | 1  | 0,097|
| do not drink at all | 6%    | 16%               | 4,009a     | 1  | 0,045|

Among other things, health-related behaviours include: sports activity, healthy nutrition, performing periodic and preventive examinations and observing the principles of a healthy lifestyle. Therefore, the respondents were asked about the aforementioned measures of healthy functioning in everyday life.

Respondents participating in the study differ significantly in terms of regular medical ex-
aminations \( (z = 4.843, p = 0.001) \) and prophylactic \( (z = -5.783, p = 0.001) \), to the disadvantage of women working outside the health care system. On the other hand, there were no statistically significant differences in physical activity between the two groups studied, healthy eating and their relationship to health. When answering a question about healthy eating, both, nurses and women working in other professions more often chose the middle options. Such a low indicator of extreme answers may suggest that the respondents are not sure whether they have appropriate eating

| Questions                                                                 | Nurses       | Other professions | U- Man Witney Test |
|---------------------------------------------------------------------------|--------------|-------------------|-------------------|
| 53. Do you regularly do any physical activities?                          | 3.10, 0.931  | 3.12, 0.891       | -0.147, 0.441     |
| 70. Is physical activity connected with health, in your opinion?          | 4.31, 0.662  | 4.37, 0.597       | -0.673, 0.401     |
| 38. Do you think your diet is healthy?                                    | 3.11, 0.952  | 2.96, 0.942       | 1.120, 0.338      |
| 78. Do you regularly undergo basic examinations?                          | 3.84, 0.950  | 3.13, 1.116       | 4.843, 0.001      |
| 79. Do you undergo preventive checks?                                    | 3.91, 0.922  | 3.05, 1.095       | 5.783, 0.001      |
| 69. Do you think you lead a healthy lifestyle?                            | 3.22, 0.917  | 2.93, 1.167       | 2.242, 0.825      |

**Chart 2. Assessment of one’s own health conditions**

(Chi-square = 6.274, df = 4, p = 0.180)
In the following question, the respondents were asked to evaluate, as generally as possible, their current health condition. The results are shown in Figure 2.

The results show that both nurses and women from the control group perceive their health condition very similarly. The greatest number of people chooses the answer that their health condition is 'neither good nor bad' (nurses - 66% and other professions - 60%). 25% of nurses and 36% of women in the control group see their health as "bad" or "very bad", while 9% of nurses and only 3% of women working in other professions rated their health as good. Out of 200 respondents taking part in the research, only one evaluated her health condition as 'very good'.

Looking for correlation between one’s own health assessment and the frequency of smoking and drinking alcohol, with the help of Kendall rank correlation coefficient for pairs, it was found that there is an inverse relationship between the frequency of smoking and the general evaluation of one’s own health condition (tau-b Kendall = -0.172, p = 0.013). This kind of relationship was not found between the evaluation of one’s own health condition and excessive alcohol consumption (tau-b Kendall = -0.046, p = 0.287). The respondents who frequently consume alcohol claim that such alcoholic beverages as beer or wine, despite being drunk regularly or often, do not harm their health as much as nicotine.

At the final stage of the research, the respondents were asked if they cared for their health condition. The results are shown in Figure 3.
Analysing the respondents’ answers, it may be concluded that a vast majority of surveyed women show a high awareness related to taking care of their own health. The total of 84% nurses and 76% of women from the control group indicated that they take fairly good care of their health or that it is definitely important to them. A small part of women from both groups answered that they do not care about their health or have an indifferent attitude towards it (nurses - 5% and other professions - 9%).

Both nurses and women representing other professions care about their own health. However, women from the control group more often indicate rather interim activities with preventative character (67%), while 77% of nurses regularly care about health problems through medical examinations, also having greater awareness of the consequences of these neglects for the further course of the illness and its treatment. In turn, a systematic pro-health attitude (e.g. sports and general fitness exercises) concerns 16% of women working in other professions and only 6% of nurses. Among the group of women who declared high awareness of the need to take care of their own health, the vast majority of people (around 87%) found that they completely do not consume alcohol and about 79% who do not smoke or never smoked cigarettes habitually.

**DISCUSSION**

Analysing the health behaviours of nurses and women working in other professions, unrelated to health care, the first to be compared are the factors that respondents claimed to harm their health the most. Among the mentioned factors, the first place in both groups occupied stress, which for nurses is significantly more intense ($p = 0.5$). Stress, as an inseparable element of nurses' work, is emphasised in many publications [9, 15, 16, and 17]. It makes it impossible to focus on the tasks performed, causes loss of motivation to work and triggers many unpleasant symptoms. However, among the most differentiating factors for both groups are stimulants (cigarettes, alcohol, and coffee). Almost one third (31.0%) of nurses reported that stimulants are an important factor that harms their health ($p = 0.1$), while among women in the control group there is less than one fifth of them (16.2%). A more detailed analysis shows that smoking in both groups is maintained at a similar, moderate level, and approximately 10% of women are addicted to nicotine in both groups. In turn, 70% of nurses declare that they did not smoke cigarettes, while in the control group it is 60% of women surveyed. The obtained results are similar to those received by A. Remigrońska and A. Włoszczak-Szubzda. In their research, nurses also excessively used stimulants and the vast majority (78%) did not smoke cigarettes [9]. Polish nurses, compared to their colleagues from Ireland perform better, as 56% of nurses were non-smokers according to research in this country [18], and less favourably than nurses in Australia, among whom 87% of respondents were non-smokers.
Drinking also occurs at a very similar frequency in both groups and usually takes place during special events. The significant difference concerns the type of alcohol consumed. Nurses definitely prefer more exquisite and more expensive alcohols, while women from the control group reach for more available ones like beer or other home-made alcohols (p = 0.1). Among women doing other professions there are more abstinent than among nurses (p = 0.05). In this study 37% of nurses consume alcohol at times, 49% rarely, and 10% are non-drinkers. In the Remigronsku and Włoszczyk-Szubzda research [9], nurses who drink alcohol occasionally were 67% and abstainers 22%. In Australian studies nurses had higher scores than the general Australian population, indicating risky drinking [11]. Nurses also drink a lot of coffee, because more than three-quarters of the respondents (76.7%) say that it is the most frequently consumed drink. Noteworthy, is the fact that smokers, when assessing their state of health, perceive certain ailments as the effects of smoking, while people who drink alcohol do not notice such dependence. However, this is not something typical for nurses, because such regularities were also noticed in other groups of respondents [19].

When comparing pro-health behaviours such as: physical activity, correct eating habits, performing periodic and prophylactic examinations, it was found that women from both groups differ significantly in terms of regularity of medical and prophylactic examinations (p = 0.001). Nurses in regard to this are distinctly more advantageous as they systematically carry out preventive examinations, while women from the control group - interim. This may result not only from a greater awareness of the consequences of negligence, but also from easier access to medical facilities. Nonetheless, there were no differences in physical activity, nutrition or perception of health condition, although many publications report negligence in these aspects of lifestyle. In the studies of M. Muszalik et al. low physical activity, irrational nutrition and overweight as well as the low number of preventive examinations being done by nurses were the greatest threat to their health [20]. Nurses in other countries have similar problems [11, 13, 21, and 22]. The reasons mentioned for this state are, among others, overburden, stress and shift work.

CONCLUSIONS

According to nurses the factors that harm health the most are stress and stimulants.

The vast majority of nurses do not smoke and occasionally consume alcohol.

Nurses regularly carry out medical and prophylactic examinations, while women from the control group carry out interim medical examinations.

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Аннотация
В настоящее время роль медсестер в здравоохранении возрастает. Каждый день перед ними ставятся все более сложные и ответственные практические задачи. Они также играют ведущую роль в области укрепления здоровья и профессиональных знаний о здоровом образе жизни. Ожидается, что благодаря своим медицинским знаниям они будут иметь осознанное, рациональное и критическое отношение к формированию и наблюдению за здоровым поведением в своей жизни. Целью данного исследования является сравнение выбранного поведения медсестер в отношении здоровья. В исследование были включены 100 медсестер и 100 женщин, занимающихся другими профессиями. Респонденты были протестированы с использованием метода парного отбора с учетом двух переменных: места проживания и возраста. Опросный лист был использован. Медсестры демонстрируют сходство в отношении некоторых видов поведения в отношении здоровья и показывают существенные различия в потреблении алкогольных напитков (количество и вид) или регулярность профилактических осмотров по сравнению с другими. Профессия медсестер из-за ее специфики и необходимости постоянного ухода за больным человеком приводит к очень высокому уровню стресса. Медсестры испытывают постоянное давление, которое влечет за собой разрешение на использование стимуляторов, таких как кофе, алкоголь и в меньшей степени - курение. Их роль как пропагандистов здорового образа жизни означает, что они пытаются заботиться о здоровье посредством контрольных или профилактических осмотров.

Ключевые слова: здоровое поведение, медсестры, женщина, психология здоровья.
повинні мати свідоме, раціональне та критичне ставлення до формування та дотримання поведінки про-здоров’я у своєму житті. Метою даного дослідження є порівняння обраної медичної поведінки медичних сестер. Дослідження включало 100 медсестер і 100 жінок, що займаються іншими професіями. Респонденти тестувалися методом підбору парної пари, враховуючи дві змінні: місце проживання та вік. Було використано опитування. Медсестри виявляють подібність деякої поведінці здоров’я і демонструють значні відмінності в споживанні алкогольних напоїв (кількість і вид) або регулярність профілактичних перевірок у порівнянні з іншими. Професія медсестр через свою специфіку та вимогу постійного догляду за хворими призводить до дуже високого рівня стресу. Медсестри відчувають постійний тиск, що тягне за собою дозвіл на використання стимуляторів, таких як кава, алкоголь і в меншій мірі - куріння. Їх роль як пропагандистів здорового способу життя означає, що вони намагаються піклуватися про здоров’я через контроль або профілактичні огляди.

**Ключові слова:** здоровьова поведінка, медсестри, жінки, психологія здоров’я.

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