The quality of life and readiness of Polish nurses to take new competences of drug prescribing

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Abstract

Satisfaction with life in the case of nurses is closely related to their professional work and is an important factor affecting the quality of work and patient care.

An analysis of the readiness of Polish nurses depending on the level of life satisfaction.

The study was conducted from January to November 2016 in randomly selected 13 health care facilities and 756 nurses in the South-Eastern part of Poland. The study used the satisfaction with life scale and the author’s questionnaire.

Nearly 75% of the nurses surveyed declared (reported) a low and average level of satisfaction. The level of satisfaction significantly influenced the readiness of nurses to administer medicines and write prescriptions. Nurses who had a higher level of life satisfaction were also more prepared to prescribe foodstuffs for particular nutritional uses (rho = 0.095, P = 0.0952), medical devices (rho = 0.117, P = 0.0012), potent drugs (rho = 0.138, P = 0.0011), intoxicants (rho = 0.078, P = 0.0311), and psychotropic drugs (rho = 0.085, P = 0.0196).

Nurses who had a higher level of life satisfaction were also more prepared to administer medicines, especially foodstuffs for particular nutritional uses, medical devices, potent drugs, narcotic drugs, and psychotropic drugs.

Abbreviations: EU = European Union, M = the arithmetic mean, OSC = Outpatient Specialist Care, P = the level of significance was P < 0.05, PHC = Primary Health Care, SD = the statistical measure of the results spreading around the expected values, SWLS = satisfaction with life scale.

Keywords: life satisfaction, nurse, readiness, writing prescriptions

1. Introduction

Quality of life is a multiaspect term considered in the context of: psychology, medicine, sociology, philosophy, and social economy. According to the WHO, quality of life is “the perception of one’s own life situation in the context of cultural conditions, value system, and in relation to their goals, norms, and interests”. Based on this definition, Saxen and Orley have identified factors that have a significant impact on the quality of life. They are: physical health, mental state, relationships with others, the degree of independence, and the environment in which a person lives. The concept of quality of life has an impact on the sense of life satisfaction, which, according to Juczyński, is the result of comparing their own situation with the standards they have set. According to Jaracz, this satisfaction with life affects the quality of life. These concepts are related to the satisfaction of various areas of human life, for example, professional work. Hence, the satisfaction of life is often the result of a sense of job satisfaction which is an important element of human life. The fields of personal and professional life permeate each other and affect each other. This applies in particular to occupations aimed at helping others to which the nurse profession belongs. Hence, the sense of satisfaction in the nurses’ profession will result from their job satisfaction and vice versa.

Exercising the nurse’s profession and caring for the patient often requires personal involvement; hence, the good psychophysical condition and resistance to stress are of great importance. A nurse’s attitude toward the profession is also essential. The attitude should embrace: taking care of the prestige of the profession, the way of thinking about other people and herself, such as feeling her own dignity, values, and qualifications update. The nurse’s work requires her to be involved and can be a source of great satisfaction from helping the needy and accompanying patients in their special moments of life such as illness and death.

The requirements currently imposed on people performing the profession of nurse have increased significantly. Nursing in many countries has become a more complex profession requiring experience and the necessary knowledge to effectively manage patient care. To fulfill these tasks competently, feeling well and job satisfaction are key elements supporting or even strengthening...
motivation, willingness to work, and personal development, which in turn translates into improved quality of patient care. The conducted research in this area shows that a high level of job satisfaction is influenced by good relations between employees, clearly defined duties, and support of superiors. Improper work organization, lack of opportunities to raise qualifications, bad relations with superiors, and too high requirements reduce satisfaction with the work performed. Consequently, care and concern for ensuring the satisfaction of a nurse becomes one of the most important tasks improving the quality of medical care and the image of this profession in the process of managing and organizing the work of this professional group.

The introduction in Poland since January 1, 2016 of new entitlements for nurses authorizing their prescription of medicines, foodstuffs for particular nutritional purposes, and medical devices is a response to social and systemic expectations of nurses and the above changes taking place in this profession. Although in Poland, these solutions are a novelty, they have been successfully operating for many years in other countries around the world bringing many benefits to both patients and the entire health care system.

The increase in nurses’ professional prestige resulting from the extension of their rights to the possibility of prescribing medicines is a factor that can positively affect the improvement of job satisfaction and quality of life, which in turn will increase the readiness to take up new competences by Polish nurses.

The aim of the study was to analyze the readiness to prescribe medicines and write prescriptions depending on the level of life satisfaction among Polish nurses.

2. Methods

2.1. Study group

The research was conducted among nurses employed in 13 randomly chosen treatment entities, after obtaining consent from their directors. Consent was expressed by signing a consent form attached to the questionnaire. The questionnaires were provided to the respondents directly during face to face meetings. The purpose and validity of the study was also explained, while the nurses involved in the study obtained information about how to correctly complete the form. Participation in the study was voluntary and anonymous, and the completion of the questionnaire was considered as a consent for participation in this study. A total of 736 nurses participated in the study, including 414 nurses of Primary Health Care (PHC) and 342 nurses in Outpatient Specialist Care (OSC). They constituted a representative sample (23%) of all nurses employed in PHC (1923) and OSC (1102) in the Subcarpathian Province of Poland.

Criteria for selecting respondents who agreed to participate in the study are as follows.

Inclusion criteria:

- Active nurses working in PHC and OSC in the Subcarpathian Province (South-Eastern Poland).
- Nurses registered in the District Council of Nursing, having the right to practice
- Nurses with at least 1 year of professional experience
- Nurses present during data collection and willing to participate in the study
- Informed consent to participate in the study

Exclusion criteria:

- Nurses working in hospitals
- Nurses working in facilities other than PHC and OSC
- Nurses not registered in the District Council of Nursing and not having the right to practice
- Nurses who have <1 year of work experience
- Other employees of PHC and Ambulatory Specialist Care
- Nurses who did not agree to participate in the study
- Nurses who have resigned from participating in the study at any stage
- Incorrectly completed questionnaires

2.2. Statistical analysis

The estimation method and the following statistical methods were used:

1. To present statistical data, the method of descriptive statistics was used: the arithmetic mean (M), the value of which determines the average level of a given variable, and the standard deviation (SD), the statistical measure of the results spreading around the expected value.

2. The verification of differences between variables measured on the qualitative scale was made using independence test χ², taking into account in tables 2 × 2, the Yates continuity correction, and the Fisher exact test results.

3. Bonferroni method was also used while comparing the proportions of columns to specify the differences.

4. Differences between quantitative variables were tested using the Mann–Whitney U test and Kruskal–Wallis test for calculating the Spearman rho correlation coefficient. This was related to the lack of normality of quantitative variable distributions (verified by the Kolmogorov–Smirnov and Shapiro–Wilk tests) and the lack of parallelity of the compared groups (verified by the compliance test and the binomial test).

The level of significance was P < .05.

The calculations were carried out with the IBM SPSS Statistics 20 program.

2.3. Research

The research was carried out in 2 stages: 1st stage: pilot study; 2nd stage: proper research.

2.3.1. Pilot study. The pilot study was conducted in January 2016 on a group of 34 POZ nurses. The aim of the study was to check the correctness of completed questionnaires in terms of understanding the questionnaire. The average age of the respondents was 38.32 ± 9.81 years (23–55 years), more than half of them were married (58.8%), people with at most 1st degree studies and specialization (64.7%), and urban residents (58.8%). The pilot study used the Author’s Questionnaire and the satisfaction with life scale (SWLS). The reliability of the SWLS was high (Cronbach alpha 0.891), all scale questions correlated positively with each other (Pearson ratio 0.529–0.797), as well as with the overall scale score (Pearson ratio 0.636–0.808). The obtained result indicates a good understanding of the tool.
2.3.2. Proper research. The study was conducted between January and November 2016 between the POZ and AOS nurses in the Subcarpathian region (South-Eastern part of Poland). The study participation was voluntary and anonymous. The respondents first received oral information about the study and then written information about its purpose, voluntary nature. The respondents were assured that their consent or refusal to participate would not affect their continued employment in a given health care institution. To ensure data confidentiality, questionnaires were marked with numbers. Correctly completed questionnaires were equivalent to the consent of the participants to participate in the study. A total of 1320 questionnaires were distributed, of which 800 (i.e., 60%) were collected back. After verifying all the questionnaires, 44 questionnaires were rejected due to the incompleteness of the answers provided. Definitely, the data from 756 surveys were plotted on the sheet and analyzed statistically.

The research method used in this work was a diagnostic survey carried out using a questionnaire technique. The Author’s Survey Questionnaire was built from 2 parts. The first part of the questionnaire contained questions about sociodemographic variables of the subjects. The second part of the questionnaire contained questions about the opinions and knowledge of the respondents regarding the prescribing of medicines and writing prescriptions. To examine readiness to prescribe prescriptions, 2 components have been distinguished, which sum up 69.2% of the variance in total (the first explains 48.7% of the variance and the other 20.5% of the variance, together they give a satisfactory result of almost 70% of the explained variance). In the first component, we have foodstuffs for nutritional use, medical devices and medicines ordered by a doctor, and in the other component, powerful drugs, intoxicants, psychotropic drugs, and antibiotics.

The questionnaire was built based on the 5-point Likert scale. In addition, a standardized questionnaire was used: SWLS.[19] Adaptation of the Polish version of the SWLS (tool description, its psychometric properties, test manual, and Polish norms) was developed by Juczyński. The questionnaire contains 5 statements assessed on a 7-point scale. The subject assesses to what extent each of the statements relates to his/her existing life. The subject of the measurement is the assessment of life satisfaction, which is the result of comparing one’s own satisfaction with the standards set by themselves. Points are summed up, and the result ranging from 5 to 35, determines the level of life satisfaction. Interpreting the results, one must relate to the characteristics of the sten scale. The results in the range of 1 to 4 sten are considered low, and within 7 to 10 sten as high, which corresponds to the area of 33% of the lowest results, and the same as the highest in the scale. Results within 5 to 6 sten are treated as average. Cronbach alpha reliability index is satisfied and amounts to 0.81.[1]

The SWLS results: Factor analysis for the SWLS resulted in 1 component (varimax rotation) explaining 57.9% of variance, which is a satisfactory result, comparable to the result obtained by the author of the questionnaire.

3. Results

3.1. Characteristics of the group studied

There were 756 nurses in the study group, including 414 (54.8%) of the respondents employed in Primary Care Health facilities and 342 (45.2%) persons employed in OSC. About 222 of the respondents (29.4%), kept another position (most often that of habitat nurse 146, i.e., 19.3%) or of a coordinating nurse (76, i.e., 10.1%).

The average age of the respondents was 47.76 ± 9.63 years and ranged from 22 to 69 years. There were no statistically significant differences between the age of PHC nurses (49.62 ± 9.96 years) and the age of OSC nurses (47.93 ± 9.27 years). Most of the respondents were married (603, 79.8%), while 79 were unmarried (10.4%), 42 (5.6%) divorced, or 32 (4.2%) widowed. Differences between the place of work and the marital status of the respondents were not statistically significant. About 293 (38.8%) nurses lived in the country, 210 (27.8%) were examined in the capital of the district, 191 (25.3%) people in the capital of the voivodship, and 62 (8.2%) of the respondents live in other cities. More PHC group nurses – live in the country (177, 42.8%) compared to OSC nurses (116, 33.9%). In the voivodship city, there were more OSC nurses (100, 29.2%) than PHC ones (91, 22.0%). For the respondents, the main work places were district town (312, 41.3%) and the capital of the voivodship (266, 35.2%). There were 100 (13.2%) respondents working in the country and 78 (10.3%) nurses in another town. Different places of residence of the studied groups were statistically significant, as it was found that the capital of the voivodship was significantly more often the OSC nurses’ workplace (142, 41.5%), and a village more often the workplace of PHC nurses (76, 18.4%).

Among the respondents, there were 343 (45.4%) nurses with a secondary nursing education; 157 (20.8%) with undergraduate education and 104 (13.8%) nurses with a master’s degree. A nursing education and specialization in the field of nursing were presented by 73 (9.7%) people, and 1st-degree studies and a nursing specialization by 38 (5.0%). Only 41 (5.4%) of the respondents had a master’s degree in nursing and a specialization in nursing. There were no statistically significant differences between the level of education of PHC nurses and the level of education of OSC nurses. About 411 (54.4%) nurses had a work experience of over 20 years; 159 (21.0%) nurses of 16 to 20 years; 71 (9.4%) nurses of 11 to 15 years; 68 (9.0%) nurses of 6 to 10 years; 47 (6.2%) nurses of 1 to 5 years. Differences between work experience in the nursing profession and the study groups were not statistically significant.

The most frequently researched nurses were employed in public health care institutions (644, 85.2%), the remaining 112 (14.8%) nurses worked in nonpublic care institutions. Among the nurses examined, 404 (53.4%) had a specialist course, including 225 (54.3%) PHC nurses and 179 (52.3%) OSC nurses. The differences were not statistically significant. The nursing qualification in the field of nursing was held by 345 (45.6%) people, including significantly more often PHC nurses (218, 52.7%) than OSC nurses (27, 37.1%). Nearly 1 out of 3 respondents completed the training course (247, 32.7%), including 135 (32.6%) POZ nurses and 112 (32.7%) OSC nurses (statistically insignificant difference P > .05). There were 141 (18.7%) people specialized in nursing, including 77 (18.6%) PHC nurses and 64 (18.7%) OSC nurses (statistically insignificant difference, P > .05). Other forms of postgraduate education (postgraduate studies) were held by 59 (7.8%) nurses, of whom more often by OSC nurses (35, 10.2%) than by PHC nurses (24, 5.8%). About 95 (12.6%) of the respondents did not have additional qualifications. Lack of additional qualifications characterized OSC nurses significantly more often (36, 16.4%) than PHC nurses (39, 9.4%).

3.2. Level of life satisfaction

The average life satisfaction score was 19.71 ± 5.41 points, with results in the range of 5 to 35 points. Half of the respondents...
received no more than 20 points, and 75% of people achieved at most 24 points (Table 1).

The average level of life satisfaction of PHC nurses (19.49 ± 5.44) did not differ significantly from the average level of life satisfaction of OSC nurses (19.96 ± 5.37) (Table 2). The results of the life satisfaction scale were compared to the adopted norms, low level of life satisfaction among 43.7% of nurses (N = 255). The average level of life satisfaction was found in 40.6% of people (N = 307), and 25.7% of nurses (N = 194) had a high level of life satisfaction. Differences between the studied groups of PHC and OSC nurses and life satisfaction were not statistically significant (Fig. 1).

The conducted research showed that among the surveyed PHC and OSC nurses, the majority of people with average and low level of life satisfaction prevailed, which together accounted for nearly 75% of the studied group. Differences between PHC and OSC nurses and satisfaction with life in categorical terms were not statistically significant. Factors such as marital status, experience of motherhood, place of work and residence, form of employment, the manner of work performed, and work experience did not significantly affect the feeling of life satisfaction. The level of life satisfaction increased slightly as the self-assessment of one's financial situation increased (P = .0284), while the factor that significantly influenced the feeling of life satisfaction was the education of nurses (P = .0013) and having additional qualifications, in particular specialization in nursing (P = .0035). With the age of nurses, the level of life satisfaction slightly decreased (rho = −0.087, P = .0172), and the lowering self-estimation of health significantly affected its reduction (P < .0001).

### 3.3. Readiness versus life satisfaction

Readiness to medicines prescribing was associated with the respondents’ life satisfaction. Nurses who had a higher level of life satisfaction were also more prepared to prescribe foodstuffs for particular nutritional purposes (rho = 0.095), medical devices (rho = 0.117), potent drugs (rho = 0.138), intoxicants (rho = 0.078), and psychotropic drugs (rho = 0.085). This relationship was visible only among PHC nurses, since higher readiness to medicines prescribing among PHC nurses was found in the case of food for special nutritional purposes (rho = 0.145), medical devices (rho = 0.158), strong drugs (rho = 0.197), and psychotropic drugs (rho = 0.194). In addition, it was shown that PHC nurses who had a higher level of life satisfaction were more prepared to administer antibiotics and chemotherapeutics (rho = 0.176). In the case of OSC nurses, the impact of life satisfaction on readiness to administer medicines was not visible (P > .05) (Table 3).

Taking into account the results of the SWLS in terms of categories (low/average/high), it was found that the level of readiness to prescribe drugs/foodstuffs was significantly different between the PHC and OSC nurses who had an average or high level of life satisfaction. In the case of differences in the average life satisfaction, a significantly higher level of readiness was presented by PHC nurses than by OSC ones, which in particular concerned foodstuffs for particular nutritional uses, narcotic drugs, and psychotropic drugs. Among PHC and OSC nurses with a high level of satisfaction with life, significant differences in readiness to administer medicines concerned all those mentioned, with the exception of strong drugs and intoxicating drugs, nurses presented a higher level of readiness for prescribing medicines/foodstuffs (Table 4).

### 4. Discussion

#### 4.1. Quality of life in generally

The quality of life and the sense of life satisfaction are terms defining human contentment in various areas of life. It can be health, social position, occupied position, professional successes, type of work performed, as well as family, social life, material, and living conditions. Therefore, when assessing the quality of life, the functioning of an individual in various spheres of life, including professional work, should be considered.[20]

Analyzing the sense of general life satisfaction among nurses, one should point out to the satisfaction related to the work performed, the sense of professional autonomy, general working conditions, interdisciplinary team relations, patient relations, remuneration, and individual characteristics such as age, sex, place of residence and work, and a personal family situation. Individual attitude and attitude of the individual toward life and values that make one happy are also vitally important.[9] According to Ostrowiecka and co-workers, the sense of satisfaction among nurses is a strong factor motivating to better perform at work and positively influences the quality of medical services provided.[21,22]

In the literature, one can notice the great interest of researchers in the problem of quality of life. Most of the work on the life satisfaction of nurses focuses in particular on the job satisfaction component.[20,21,23–28]
The analysis of the conducted research showed that among the surveyed PHC and OSC nurses the majority were people with average and low level of life satisfaction, they together accounted for nearly 75% of the examined group. Differences between PHC and OSC nurses and life satisfaction in categorical terms were not statistically significant. Similar, average results were obtained by Wysokiński et al examining the satisfaction of Polish nurses’ life also by means of SWLS in a quantitatively group (891 nurses), residing in 3 provinces: Mazowieckie, Kujawsko-Pomorskie, and Lubelskie.[27]

4.2. Factors influencing
An important element affecting the sense of satisfaction with the life of nurses is their satisfaction and satisfaction with their professional work, which seems understandable due to the specificity of this profession. The results we obtained correlate with those results of Doroszkiewicz and Bień satisfaction surveys conducted among habitat nurses, whose work is related to the care of older people.[23] Research results in this area carried out by other authors show that nurses, especially in Poland, do not

| Table 3 |
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| **Readiness to ordination of medicines/drugs and satisfaction with life (SWLS).** |
| SWLS (scale 5–35 points) | Total (N = 756) | PHC (N = 414) | OSC (N = 342) |
| --- | --- | --- | --- |
| Foodstuffs for particular nutritional uses | Rho 0.095 | 0.145 | 0.037 |
| P | .0092 | .0031 | .4926 |
| Medical products | Rho 0.117 | 0.158 | 0.069 |
| P | .0012 | .0012 | .2041 |
| Potent drugs | Rho 0.138 | 0.197 | 0.060 |
| P | .0001 | .0001 | .2650 |
| Narcotic drugs | Rho 0.078 | 0.191 | -0.063 |
| P | .0311 | .0001 | .2485 |
| Psychotrop medicines | Rho 0.085 | 0.194 | -0.054 |
| P | .0196 | .0001 | .3192 |
| Antibiotics/chemotherapy | Rho 0.065 | 0.176 | -0.071 |
| P | .0722 | .0003 | .1924 |
| Only drugs previously ordered by a doctor | Rho 0.022 | 0.050 | 0.006 |
| P | .4556 | .3129 | .984 |

P < .05 statistical significance.
OSC = Outpatient Specialist Care, PHC = Primary Health Care, Rho = Spearman rank correlation coefficient, SWLS = satisfaction with life scale.

| Table 4 |
| --- |
| **Readiness to ordination of medicines/drugs and satisfaction with life (SWLS).** |
| SWLS (N = 756) | Low | Average | High | P |
| --- | --- | --- | --- | --- |
| Foodstuffs for particular nutritional uses | M | SD | M | SD | M | SD | P |
| Medical products | 2.45 | 1.35 | 2.71 | 1.33 | 2.75 | 1.36 | .0235 |
| Potent drugs | 1.78 | 0.99 | 2.09 | 1.21 | 2.14 | 1.22 | .0030 |
| Narcotic drugs | 1.47 | 0.76 | 1.44 | 0.70 | 1.69 | 1.02 | .0827 |
| Psychotrop medicines | 1.57 | 0.88 | 1.66 | 0.96 | 1.82 | 1.14 | .1440 |
| Antibiotics/chemotherapy | 1.61 | 0.67 | 1.79 | 1.07 | 1.84 | 1.17 | .2730 |
| Only drugs previously ordered by a doctor | 3.28 | 1.55 | 3.36 | 1.44 | 3.45 | 1.40 | .6863 |

P < .05 statistical significance.
M = arithmetic mean, SD = standard deviation, SWLS = satisfaction with life scale.
belong to the group satisfied with their lives, where up to 50% of nurses declare lack of satisfaction with their work. In other countries, this is as follows: 41% in the United States, 38% in Scotland, 36% in England, 33% in Canada, and 17% of nurses in Germany declare no satisfaction with life.[27,39,40]

Kunecka obtained different result in this respect in a nationwide professional satisfaction survey conducted among 1066 nurses. The obtained high score indicating that nurses in Poland are satisfied with their work may be the result of the fact that the respondents were participants of courses and trainings, so they were people holding higher positions and having higher remuneration.[21]

Factors such as marital status, experience of motherhood, place of work and residence, form of employment, and the manner of work did not significantly affect the satisfaction of the respondents in comparison with the Center of Public Opinion Research results, which state that the vast majority of Poles as a reason for their life satisfaction indicate having children and family.[31] Also in the work of other researchers, the relationship between the workplace and the perceived level of satisfaction was indicated, namely nurses working in nonpublic health care facilities had a higher level of job satisfaction than their colleagues working in public institutions.[23]

Further analysis of the results showed that the level of satisfaction increased slightly with the increase in the estimation of the financial situation (P = .0284), which seems to be understandable because satisfaction with the material aspect of work means job satisfaction and, consequently, an increase in quality of life. Unfortunately, the level of earnings of nurses in Poland does not ensure financial stability and is disproportionate to the work performed and the required education. The above state of affairs results in translates lack of financial satisfaction with the job and a sense of frustration.[32] According to Zielińska-Więczkowska and Buska, low wages in this professional group are a significant problem affecting the sense of satisfaction.[33]

According to Sedlak & Sedlak Research Centre, the average monthly earnings of nurses in 2017 amounted to 2665 PLN gross (USD 740 or EUR 634), the average gross monthly salary in 2016 in Poland being: 4047 PLN gross USD 1.124 or EUR 963).[34,35]

The results of our own research showed that the work experience of the respondents did not significantly affect the life satisfaction. This level was slightly higher only among people whose work experience ranged from 6 to 10 years in comparison to other nurses surveyed. However, the factor that significantly differentiated the feeling of life satisfaction was nurses' education and specialization. These are the factors that influence the possibility of professional development and promotion. In the studies of Van der Heijden and Kunecka, there was no direct correlation between the level of education and life satisfaction. Kunecka, on the contrary, points out that the specialization in the field of nursing, which is more than the master's degree, is appreciated (also financially) by employers, and this easily results in an increase in the level and quality of life.[7,24] With the age of nurses, the level of life satisfaction slightly decreased, and the lowering of self-estimation of health significantly brought about its reduction, which seems understandable because the better health condition undoubtedly improves the quality of life.[36]

4.3. Readiness versus life satisfaction

Analyses of the research results also showed that the level of satisfaction significantly influenced the readiness of nurses to administer medicines and write prescriptions. Nurses who had a higher level of life satisfaction were also more prepared to prescribe foodstuffs for particular nutritional uses (rho = 0.095, P = .0092), medical devices (rho = 0.117, P = .0012), potent drugs (rho = 0.138, P = .0001), intoxicants (rho = 0.078, P = .0311), and psychotropic drugs (rho = 0.085, P = .0196). However, this readiness was visible only among primary care nurses, who were found to be more ready to regulate foodstuffs for particular nutritional uses (rho = 0.145, P = .0031), medical devices (rho = 0.158, P = .0012), potent drugs (rho = 0.197, P = .0001), and psychotropic drugs (rho = 0.194, P = .0001). In addition, it was shown that PHC nurses with a higher level of life satisfaction were more prepared to administer antibiotics, chemotherapeutics (rho = 0.176, P = .0003) than OSC nurses, in the case of whom the impact of life satisfaction on readiness to administer medicines was not noticeable. Findings in earlier conducted studies, by Binkowska-Bury et al, presenting opinions of nurses on nurse prescribing, show that nurses should be allowed to prescribe medical products (72.9%; P < .001) and medications previously prescribed by doctors (66.0%; P < .025) as well as foods designated for special medical purposes (50.1%; P = .079).[37]

The results of the SWLS in terms of categories (low/average/high) showed that the level of readiness to prescribe drugs/agents differed significantly between the PHC and OSC nurses who had an average or high level of life satisfaction. In the case of differences regarding average life satisfaction, PHC nurses presented significantly higher levels of readiness than OSC, which in particular concerned foodstuffs for particular nutritional uses, narcotic drugs, and psychotropic drugs. Among PHC and OSC nurses with a high level of satisfaction with life, significant differences in readiness to administer medicines concerned all those mentioned, with the exception of strong drugs and intoxicating drugs; however, PHC nurses presented a higher level of readiness to prescribe drugs/medication. However, the level of life satisfaction did not significantly affect the readiness of PHC and OSC nurses to write referrals for diagnostic tests. Similar results were obtained by Rożanski analyzing data from the survey of qualified employees. According to the researcher, satisfaction with life and work is related to readiness to learn and to take on new challenges. In his analysis, the author states that the higher the satisfaction with life and work, the greater the readiness to learn and develop.[25]

According to Thakkar and Pandya job satisfaction favors and is directly proportional to the commitment to work and, consequently, also affects the quality of work.[26] Laguna also confirms that satisfaction can become one of the factors motivating employees to undertake various types of development activities. Her research shows that high job satisfaction is related to undertaking development activities and expanding professional competences.[38]

4.4. Limitations on the study

There are limitations on the study:

- Age of the respondents: The research was conducted in a group of nurses whose average age was 48 years, which is comparable with the age of nurses working in PHC and OSC.
- The research was carried out in the Subcarpathian Voivodeship (South-Eastern Poland), and, in the future, other regions of the country should also be included in the study.
- Short period of validity of the legal act extending the nurses' rights to write prescriptions in relation to the start date of the tests.
Lack of other research and literature on prescribing by nurses due to the novelty of these powers in Poland.

5. Conclusion
The level of the sense of life satisfaction in the examined group of nurses was on the average and low level and concerned almost 75% nurses from the studied group.

Differences between the examined groups of PHC and OSC nurses and life satisfaction were not statistically significant.

Sociodemographic factors that significantly influenced the level of life satisfaction were age, work experience, education, and additional qualifications.

With the age and seniority, the level of life satisfaction of the nurses surveyed decreased. Nurses with a higher level of education and additional qualifications had a significantly higher level of life satisfaction than nurses with lower education without additional qualifications.

The level of life satisfaction of the nurses examined significantly influenced their readiness to prescribe medicines. Nurses with a higher level of life satisfaction were more ready to administer drugs, in particular foodstuffs for specific nutritional uses, medical devices, potent drugs, narcotic drugs, and psychotropic drugs.

The level of readiness to administer medicines depending on the level of life satisfaction differed significantly between PHC and OSC nurses. PHC nurses had a higher level of readiness for prescribing.

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