INTRODUCTION

Professional work is an important part of human life which is why a great importance is attributed to satisfaction from it, which is correlated with life satisfaction in general. Research indicates a relationship between the level of job satisfaction and employee engagement, loyalty and low absenteeism (Carter & Tourangeau, 2012). Professional satisfaction is particularly important in medical professions, where patients' satisfaction with the quality of services is often dependent on the level of job satisfaction of medical staff (Kvist et al., 2012). A frequent occurrence in the medical professions is occupational burnout.

In the 1990s, Beth Hudnall Stamm developed the theory of professional quality of life. She indicated the importance of factors related to the relationship between professionals and those who receive their help. Stamm created the CS-CF concept (Compassion Satisfaction-Compassion Fatigue), which assumes the influence of three environments affecting the person providing help: current situation at work, the surroundings of the person to whom assistance or care is provided, and personal circumstances (Stamm, 2010).

Well-being of nurses and working conditions—Are polish nurses different from doctors and midwives in terms of professional quality of life?

Monika Bąk-Sosnowska | Magdalena Gruszczyńska | Aleksandra Tokarz

Abstract

Aim: The aim of the study is to assess the differences in the professional quality of life between nurses, midwives and doctors.

Design: Cross-sectional study.

Methods: A total of 297 participants were surveyed: 165 nurses, 101 doctors and 31 midwives. We used ProQol questionnaire with three subscales (compassion satisfaction-CS, burnout-B, compassion fatigue-CF) and own questionnaire (social-demographics data).

Results: Burnout and CF were average in a group of nurse and midwives, low in group of doctors. In group of nurses, a relationship was observed between compassion satisfaction and: job seniority \( (p < .01) \), basic place of work \( (p < .01) \), self-assessment of work situation \( (p < .01) \), as well as between burnout and: job seniority \( (p < .05) \), form of employment \( (p = .03) \), basic place of work \( (p = .002) \), self-assessment of work situation \( (p < .01) \). In group of midwives was only the relationship between the self-assessment of work situation and: CS \( (p < .01) \) and burnout \( (p < .01) \) were shown.

Keywords

burnout, quality of life, stress
These environments affect the psychological context of the work and contribute to two emotional states in the person who provides the professional help (Stamm, 2010):

1. compassion satisfaction—a positive aspect of work, the pleasure derived from doing your work, helping others and having contact with co-workers;
2. compassion fatigue—a negative aspect of work in a given profession, fatigue caused by constant contact with people who have experienced an injury or are suffering, fatigue with a state of constant compassion towards victims, and victims who are given direct help and support.

Compassion fatigue often leads to:

1. occupational burnout—a sense of hopelessness, a reduced sense of coping with professional tasks, reduced work efficiency; the feeling that effort and commitment to work do not make sense nor have meaning;
2. secondary post-traumatic stress—the result of an interpersonal relationship with a person who has suffered a trauma (e.g., view and number of injuries, medical intervention, contact with the suffering of the victim, listening to her relationship with the injury); secondary traumatic stress can manifest itself in anxiety, the imagination of a traumatic event, problems with sleeping, avoiding situations reminiscent of trauma.

The profession of physician, nurse, midwife has a specific nature. Shift work, frequent shortages of personnel, a high level of psychological load resulting both from the nature of the work and often being under time pressure, responsibility for the health and life of the patient, experiencing emotional and physical violence in the workplace, and hospital infections are just some of the factors reducing satisfaction level (Azam, Khan, & Alam, 2017; Delgado et al., 2020; Rees, Wirihana, Eley, Ossieran-Moisson, & Hegney, 2018). The low level of satisfaction often leads to burnout syndrome, which is often the reason for resignation from the profession (Hasselhorn et al., 2008; Zhang, Zhang, Han, Li, & Wang, 2018). Burnout is defined as emotional exhaustion, depersonalization and a lack of personal accomplishment caused by professional helping other people (Maslach & Jackson, 1981). Burnout has high prevalence among United States (US) healthcare professionals, over one-half of physicians and one-third of nurses experience symptoms (Reith, 2018). The study examined polish physicians confirmed this data. It showed that in three aspects of burnout (psychophysical exhaustion, lack of commitment and ineffectiveness of undertaken professional activities) results were on the verge of average and high values, while disappointment with work obtained high results. Every second examined physician declared a high level of occupational burnout syndrome in each of the four aspects (Makara-Studzińska, Zaluski, Tylec, & Panasiuk, 2019).

In the scientific literature published over the last 10 years in Pubmed, no studies have been found that compare simultaneously different groups of medical workers. This is the first study in Poland where the professional quality of life of doctors, nurses, and midwives was estimated using ProQol. Research concerns only the level of occupational burnout in each medical profession and the level of quality of life. The majority of available surveys indicate the relationship of burnout syndrome in medical professions with excessive burden of duties, lack of control and influence on the situation, ethical dilemmas, and working under time pressure (Elwood, Mott, Lohr, & Galovski, 2011; Marć, Bartosiewicz, Burzyńska, Binkowska-Burry, and Januszewicz (2018); Rees et al., 2018; Selmanovic et al., 2011; Zhang et al., 2018; Gojdź, Bąk-Sosnowska, Kołodziej, Zajchowski, & Skrzypulec-Plinta, 2015).

Research on the professional quality of life among medical professions indicates that the increase in the level of satisfaction and prevention of occupational burnout are influenced by: temperament, optimism, having hobbies, living with a partner, satisfying interpersonal relationships in the workplace, and working within an interdisciplinary team where people can get support (Delgado et al., 2020; Miller, Unruh, Wharton, Liu, & Zhang, 2018; Tanaka et al., 2020). Reports also emphasize that the female gender is associated with an increased level of job satisfaction and a lower level of compassion fatigue (Miller et al., 2018; Roney & Acri, 2018).

In Poland, nurses are the largest occupational group in the healthcare sector, and at the same time, their number is decreasing each year. Research carried out in 2000 and 2014 among European Union countries showed that Poland ranks sixth from the bottom with regard to the number of nurses per 1,000 inhabitants (Haczyński, Skrzypczak, & Winter, 2017). It should be emphasized that 2/3 of the population of Polish nurses is aged 41–60, and almost 85% are over 40 years old (Haczyński et al., 2017; Kuziara, Hudzik, Michalska, & Ożga, 2018), which means that their number will decrease each year, creating a greater workload for those active professionally. As of 31/12/2017, there are 291,800 nurses and 37,568 midwives in Poland (NIPiP, 2017). The data of the Supreme Medical Chamber also indicate that there are 146,312 professionally active doctors in the country, of whom 41,101 are women (NIL, 2018).

The main goal of the study is to assess the differences in the professional quality of life between nurses, midwives and doctors. The second objective concerns the analysis of the relationship between professional quality of life and selected work conditions.

2 | METHODS

2.1 | Participants

The research covered 685 people, being medical staff of public hospitals in the Silesia region (Poland). Inclusion criteria were as follows: having the right to practice as a nurse, midwife, or doctor, holding a current job in the profession mentioned above, a minimum of 1 year of professional experience and agreement to participate in the study. Exclusion criteria were as follows: diagnosed depression, currently being on maternity leave or sick leave exceeding 7 days, being in the period of termination of employment and withdrawal of agreement for participation in the study.
2.2 Measures

The diagnostic survey method and the questionnaire technique were used to carry out the research. The research tool was the questionnaire of the Professional Quality of Life Scale (ProQol) by B. Hudnall Stamm, C. Higson-Smith, A. Hudnall, H. Stamm (ProQol, 2017). This questionnaire contains 30 statements about positive and negative experiences as a helping person. Each statement corresponds to a 5-point scale of response, which reflects the frequency of experiencing the described situations in the last 30 days (1-never, 2-rarely, 3-sometimes, 4-often and 5-very often). The appropriate number of points allows their reference to three subscales: compassion satisfaction (CS), burnout (B) and compassion fatigue (CF). According to the instruction of authors, it is also possible to determine the intensity of each subscale (low, medium and high). The reliability and validity found for the Professional Quality of Life Scale (ProQOL) is as follows: $\alpha = 0.88$ ($n = 1,130$) for CS, $\alpha = 0.75$ ($n = 976$) for B, $\alpha = 0.81$ ($n = 1,135$) for CF (Stamm, 2010). In our study, the Polish translation of ProQol questionnaire was used (https://proqol.org/uploads/ProQOL).

The study also used a questionnaire containing questions on: sex, age, marital status, place of residence, education, profession, work practice, form of employment, number of jobs, basic place of work and self-satisfaction with work.

2.3 Study organization and ethical considerations

The study was conducted between February and April 2017 in three hospitals in the Silesia region (Poland). These hospitals were randomly selected from 54 public hospitals in the region. Convenience sampling technique was used. All employees involved there in the profession of doctor, nurse and midwife were invited to participate in the study. Hospital managers informed them during the briefings about the possibility of taking part in the study and about the place where the questionnaires are available. The persons were informed also about the purpose of the research, its anonymity, its voluntary nature and non-payment for participation. Surveys were provided to respondents in paper form, they were filled out in person, without time limits, in breaks from official duties. They remained in the centres for 2–3 weeks and then were personally received by researchers. We regarded completion and submission of the questionnaire as consent to participate. This study was approved by the institutional review board for medical studies at the author's home institution. Data were saved only in the researcher's study database, and participants’ employers were not able to access and did not know who participated in the study.

2.4 Statistical analysis

Statistical analysis of data was made using the Statistica program (v.13, Statsoft, Poland). The Shapiro–Wilk test was used to assess the normality of distributions. Due to the fact that most of the distributions were not normal, the work adopted the principle of using non-parametric tests: Kruskal–Wallis H test for comparing three study groups together, Mann–Whitney U test and Pearson’s Chi2 test for comparing groups in pairs, Spearman’s rank correlation (R) for studying relationships between variables. In all statistical analyses, the statistical significance level $\alpha = .05$ was adopted ($p$-value < .05).

3 RESULTS

Among the group of 596 people eligible for the study, 56.711% of them took part in it. Some questionnaires (12.130%) were fulfilled incompletely and rejected. Finally, the study group of 297 people was divided into three subgroups: group A (nurses), group B (doctors) and group C (midwives). The visual selection process of the subjects is shown in Figure 1.

The largest group among the respondents were women (80.47%), people with a master’s degree or medical doctors (48.82%), married (57.55%), working in a hospital (86.86%) working in full time (84.51%), with only one job (56.56%) and generally satisfied with work (71.04%). Details on the analysed sociodemographic and occupational variables are provided in Table 1.

The mean age of the respondents was $42 \pm 10$ years, the youngest person was 22 years old and the oldest was 60. The average length of service in the profession was $19 \pm 10$ years, with a minimum of 1 year and a maximum of 40 years. A detailed breakdown of these variables and professional quality of life in the study group is presented in Table 2.

The level of compassion satisfaction was average in all studied subgroups. The level of burnout and compassion fatigue was average in the group of nurses and midwives, and low in the group of physicians. Details on the level of particular subscales of professional quality of life in the studied subgroups are presented in Figure 2.

It has been shown that the level of professional quality of life of Polish medical personnel depends on the profession. Study groups differed significantly in terms of compassion satisfaction ($p < .01$) and burnout ($p < .01$). Detailed analyses between pairs show that doctors declared the highest level of professional satisfaction and the lowest level of burnout. Nurses declared the opposite—they were characterized by the highest level of burnout and the lowest level of satisfaction. In terms of these two variables, the differences between the subgroups turned out to be statistically significant. However, there were no significant differences in the level of compassion fatigue, although the highest level of this variable was observed in midwives, not much lower in nurses and the lowest in doctors. Details are presented in Table 3.

In particular subgroups, the relationship between professional quality of life and the following determinants of work was analysed: form of employment, number of jobs, basic place of work, work practice and self-assessment of work situation.

In the group of nurses, a relationship was observed between:
1. compassion satisfaction and work practice ($R = -0.21, p < .01$), basic place of work ($u = 919.5, z = -3.35, p < .01$) and self-assessment of work situation ($\chi^2 = 52.28, p < .01$). Nurses working shorter, employed in a hospital and assessing their professional situation well or very well had a greater job satisfaction.

2. burnout and work practice ($R = 0.16, p < .05$), form of employment ($\chi^2 = 8.57, p = .03$), basic place of work ($u = 966.00, z = 3.088, p = .002$) and self-assessment of work situation ($\chi^2 = 72.67, p < .01$). The more burned out were those nurses who had been working longer, were working full-time, were employed in a hospital, and were less satisfied with the professional situation.

In the group of midwives, only the relationship between the self-assessment of work situation and compassion satisfaction ($\chi^2 = 25.89, p < .01$) and burnout ($\chi^2 = 35.54, p < .01$) was shown. A better assessment of their professional situation by midwives was associated with their greater professional satisfaction and less professional burnout.

In the group of physicians, there was no correlation between the variables studied and compassion satisfaction, burnout, and compassion fatigue.

The relationships described above are presented graphically in Figure 3.

**DISCUSSION**

The quality of life related to work remains a little-explored research area. People spend more and more time at work; it has also become more and more complex and demanding. Research shows that the conditions and nature of work, income, employment stability, autonomy and the possibility of professional development are factors that have a significant impact on job satisfaction (Delgado et al., 2020; Monroe, Morse, & Price, 2020; Ruiz-Fernández, Pérez-García, & Ortega-Galán, 2020). To a large extent, this also applies to medical professions where the profession often becomes a social role that imposes a series of duties and obligations on people. Medical professions are characterized by a similar nature: responsibility for the health and life of the patient,
working under time pressure, a large number of duties with a shortage of personnel, shift work, etc. However, within each profession, there are specific tasks or characteristic variables that can affect the feeling of job satisfaction. Both internal (personality) and external factors related to specific working conditions in a given profession contribute to shaping the professional quality of life (Jarrad & Hammad, 2020; Tanaka et al., 2020). External factors have become the source of interest of the authors of this study, focusing them on analysing the relationship between working conditions and specific dimensions of professional quality of life.

Our research has shown that people working longer in the profession are characterized by a lower level of professional quality of life, with a higher rate of burnout and compassion fatigue. This result may seem justified considering that the specificity of medical professions is characterized by the presence of various types of stressors that promote the emergence of occupational burnout. The longer the stressor lasts, the greater are its negative effects. The obtained results are consistent with the research Ruiz-Fernández et al. (2020).

Additionally, Demirci et al. examined 90 people of various specialisms working with oncological patients. The study involved,
among others, gender, age, work practice, and marital status of the subjects. Maslach Burnout Inventory was used. The conclusion was that factors related to professional burnout were being under 35 years of age and having over 10 years of work experience (Demirci et al., 2010). Also Poppa et al. in a study with 263 doctors working in emergency departments showed that the level of occupational burnout is higher in people who have worked in the profession longer (Popa et al., 2010).

In our study, full-time employment turned out to be a factor reducing the level of burnout compared with working on commission, while having one job compared with several was conducive to job satisfaction. One of the basic human needs, apart from purely physiological needs, is the need for security. Employment stability satisfies this need to a large extent. In addition, the lack of necessity to work in several places at the same time, which often involves adjusting the roster, many hours of work, and more frequent absenteeism at home, results in a greater comfort of life, and, consequently, pleasure and satisfaction with it.

However, it should be noted that the results of the research indicated the above-mentioned relationships primarily in the group of nurses. In the group of physicians, there was no correlation between the variables studied and occupational satisfaction, professional burnout, and compassion fatigue. Similar results were obtained by Gojdź et al, who examined 222 Polish gynaecologists and obstetricians. The same tool was used to determine the professional quality of life as in this study (ProQol). The results obtained by the authors

**FIGURE 2** The level of professional quality of life in study subgroups

**TABLE 3** Differences between subgroups in the area of professional quality of life

|                | Group | Total rank | Average rank | H    | p       | p for two-sided comparisons |
|----------------|-------|------------|--------------|------|---------|----------------------------|
| Compassion satisfaction | A³   | 2,036,250  | 12,340       | 34.61| <.001   | <.001(A/B)                 |
|                 | B⁴   | 1,880,300  | 18,616       |      | <.001   | .04 (A/C)                  |
|                 | C⁵   | 508,750    | 16,411       |      | .63     | .63 (B/C)                  |
| Burnout        | A³   | 2,865,950  | 17,369       | 31.11| <.001   | <.001(A/B)                 |
|                 | B⁴   | 1,168,300  | 11,567       |      | .01     | .01 (A/C)                  |
|                 | C⁵   | 391,050    | 12,614       |      | 1.00    | 1.00 (B/C)                 |
| Compassion fatigue | A³   | 2,586,950  | 15,678       | 5.62 | .06     | .07 (A/B)                  |
|                 | B⁴   | 1,339,800  | 13,265       |      | 1.00    | 1.00 (A/C)                 |
|                 | C⁵   | 498,550    | 16,082       |      | .33     | .33 (B/C)                  |

³N = 165;
⁴N = 101;
⁵N = 31.
indicated the average level of burnout, compassion fatigue and compassion satisfaction in this group. The reduced subjective sense of health turned out to be a risk factor of low satisfaction, while the risk of burnout increased along with a decrease in the number of professional training courses (Gojdź et al., 2015).

Our own results showed at the same time the highest level of professional quality of life of physicians, in comparison with nurses and midwives. The professional position of physicians in Poland is relatively high in contrast to the professional position of nurses and midwives, who are still often treated as auxiliary staff, and not as a member of the therapeutic team. Traditionally, the profession of a nurse is a less independent profession, compared to a that of a doctor, with a lower level of responsibility. On the one hand, these can be factors protecting against the occurrence of burnout, but as it turns out, they also reduce the sense of job satisfaction. Referring to Maslow’s needs theory a person, after satisfying their basic needs, is striving for self-fulfilment. Achieving this need largely affects the sense of life satisfaction. Assuming that, as mentioned in the introduction, work for many people is an important element of life, one can conclude that professional self-fulfilment will be the source of their life satisfaction. Physicians as a professional group have greater opportunities for professional development. At the same time, the profession itself is prestigious in Poland, which in itself can be a source of satisfaction for the people who carry it out. Currently, many people who practice in Poland in the nursing or midwifery profession have higher education, and often also professional specialization. One could expect that, at the graduate level, people starting work in these professions will be treated as equals alongside people starting their work as a doctor. Additionally, by raising professional qualifications in terms of both knowledge, skills and competences, the employer is expected to use the acquired knowledge in practice. Unequal treatment of representatives of individual medical professions, both by the medical community and patients themselves, in addition to large disproportions in remuneration for work with a similar level of education and workload can cause frustration and reduce the level of satisfaction with the profession. Kędra, subjecting 357 nurses to research, indicates the following factors affecting the lack of job satisfaction: a feeling of low prestige of the profession, a sense of inadequacy of remuneration for the requirements and workload, and unacceptable relation of earnings to other professional groups (Kędra & Sanak, 2013). In contrast, in a study by Chmiel–Połeć in which 663 students of nursing and midwifery participated, the vast majority of respondents consider their chosen profession to be too low paid (Chmiel–Połeć, Binkowska-Bury, & Boratyn-Dubiel, 2018).

The source of differences in the professional quality of life among representatives of specific medical professions demonstrated in the study may also be the fact that in Poland there is still too little emphasis on the cooperation of the interdisciplinary team. On the one hand, the team gives the opportunity to influence the situation of each member; on the other hand, it is a source of support which is an important resource in the work of helping another person. In addition, it should be noted that Poland is a country struggling with a shortage of nursing staff, which leads to a significant overload of duties, which in turn promotes overwork and chronic stress (Haczyński et al., 2017). Chronic stress promotes burnout, lowering the feeling of satisfaction (Monroe et al., 2020). The obtained results are consistent with the reports of other authors who emphasize that the factors determining the level of job satisfaction are satisfying interpersonal relationships at work, professional achievements, the possibility of professional development, autonomy, recognition of superiors, and respect (Jarrad & Hammad, 2020; Monroe et al., 2020). Research conducted among nursing staff indicates large deficits in the implementation of the above conditions, which may be confirmed by the results obtained in the study (Babiarczyk, Fraś, Ulman-Włodarz, & Jarosova, 2014; Kupcewicz, Szczypiński, & Kędzia, 2018).

Another factor differentiating the surveyed professional groups and which may affect the sense of job satisfaction are the significant differences in the remuneration of nursing and midwifery staff in comparison with physicians. Kunecka’s research carried out in a group of 1,261 nurses showed that low pay is one of the factors of dissatisfaction with their profession performed (Kunecka, 2010). In the group of nurses and midwives, the self-assessment of one’s work situation has the greatest significance for the sense of professional satisfaction and professional burnout. It can therefore be concluded that the assessment of working conditions is very subjective and will
be a factor decreasing or raising the level of satisfaction, and thus reduce or increase the level of burnout.

In practice recognizing the differences in the professional satisfaction of nurses and midwives can be important for the design of working conditions, which, as many studies indicate, are important for satisfaction with the performed duties.

4.1 | Limitations

The authors of this study are aware of the limitations resulting from non-parallel groups of subjects. However, it should be noted that among the groups examined, nurses constitute the most numerous professional group, in comparison with midwives and physicians (NIL, 2018; NIPiP, 2017). In addition, when analysing factors that may affect professional quality of life, the authors did not take into account in the study the family situation of the subjects (including the number of children in the household, the presence of a life partner); quality of interpersonal relations in the workplace (with superiors, colleagues); professional qualifications or the branch where the respondents worked, which may be of particular importance when it comes to the nature of the work performed. For this reason, the study should be considered as an introduction to possible further, more extensive analysis.

4.2 | Clinical implications

Identifying factors that increase job satisfaction can be important for healthcare policy makers. It is important to identify factors that can eliminate the risk of burnout, as this can serve as an attempt to find best practices for better results for nurses and patients.

5 | CONCLUSIONS

1. Polish physicians, nurses and midwives differ in terms of compassion satisfaction and burnout. However, they do not show differences in the level of compassion fatigue.

2. In the groups of nurses and midwives, the self-assessment of one’s own work situation has the greatest significance for the compassion satisfaction and burnout. In the group of physicians, work conditions do not affect the professional quality of life.

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CONFLICT OF INTEREST
All authors declare that they have no conflicts of interest.

AUTHOR CONTRIBUTIONS
Bąk-Sosnowska M., Gruszczynska M and Tokarz A.: Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. Bąk-Sosnowska M. and Gruszczynska M.: Manuscript draft or revising it critically for important intellectual content. Bąk-Sosnowska M., Gruszczynska M and Tokarz A: Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Bąk-Sosnowska M. and Gruszczynska M: Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

DATA AVAILABILITY STATEMENT
We declare that upon request, data will be provided.

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