Basic Study

Levels of vocational satisfaction, burnout and compassion fatigue of health professionals working in pediatric clinics

Oğuz Koyuncu, Sevda Arslan

ORCID number: Oğuz Koyuncu 0000-0001-9981-0625; Sevda Arslan 0000-0003-1961-1496.

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Abstract

BACKGROUND
Burnout and compassion fatigue are affecting the quality of professional life.

AIM
To investigate the levels of vocational satisfaction, burnout, and compassion fatigue and factors that may be related to health professionals working in children’s clinics.

METHODS
The study sample was in the west of Turkey. Data were collected using the questionnaire form and the quality of life scale for employees.

RESULTS
The findings obtained in this study showed that the level of vocational satisfaction of female health professionals and the burnout level of male health professionals were higher. The professional satisfaction of the doctors was lower than that of the nurses and midwives, and the mean score of burnout and fatigue was high.

CONCLUSION
Further studies are needed on this topic to help improve the factors that may affect the professional quality of life of health professionals.

Key Words: Health professionals; Professional life quality; Professional satisfaction; Burnout; Compassion fatigue

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INTRODUCTION

Vocational satisfaction may occur when employees evaluate their jobs [1-6]. It is crucial for hospitals and employees to know the level of satisfaction of working individuals in their professional lives and what parameters may influence them. Vocational satisfaction is one of the most significant factors that increase the productivity of working individuals by corporate metrics [5-7].

Some vocational groups require close contact with people. Intense emotional responses are observed in these individuals, as employees in these professions are in close contact with people for long periods. Health professionals are especially at risk concerning burnout, as they are exposed to high levels of stress due to their institutional structure and working conditions. It should not be forgotten that a high risk of burnout will have negative effects on the professional quality of life [1,8,9].

Compassion has been one of the virtues of all religions and societies since the start of recorded history and has been defined as the feeling of being related to pain and suffering in other individuals [4,10-12]. It is an indispensable and essential quality for health professionals. Negative feedback sent to health insurance companies related to patient satisfaction has recently increased. Thus, the concepts of compassion and compassionate care have started to attract more significance [10-15]. The concept of compassion is considered to be an excellent component in health professionals worldwide [4-12]. Recently, studies on compassionate care scales have been conducted and compassionate healthcare models have been created worldwide. We define compassionate care as a care model that can be shown as the quality level of hospitals; can create satisfaction for patients and their relatives; has no financial costs; accelerates recovery; and has positive physiological effects on patients [10-15].

It may be emotionally exhausting and traumatizing for health professionals to care for sick or dying children. In addition, the fact that parents experience this process one-on-one and under intense stress may be redirected to healthcare professionals as a separate trauma. Exposure to these traumas for a long time may cause many physical, psychological and emotional problems in healthcare professionals working in pediatric clinics [4,10,12,14]. This study aimed to investigate the level of vocational satisfaction, burnout, compassion fatigue and other potentially related factors in pediatric clinics.

MATERIALS AND METHODS

This research was a descriptive study to investigate the levels of vocational satisfaction, burnout, and compassion fatigue and other factors that may be related to health professionals working in children’s clinics.

Population and sample

The study population worked in the Child Health and Disease Clinics of the Hospitals of Sakarya Province between 1 November and 15 December 2018 and who had direct contact with patients. The study was conducted on 128 healthcare professionals...
working in children’s clinics on the same date and who agreed to participate in this research.

**Data collection tools and questionnaire**

The data in this study were collected using the questionnaire form created by the researchers and the quality of life scale for employees (QoLSE).

There were questions regarding the sociodemographic (e.g., gender, age, marital status, and educational status) and study characteristics that were thought to be related to professional quality of life, vocational satisfaction, burnout and compassion fatigue in the personal information form created by the researchers. QoLSE was developed by Stamm[16] to detect the symptoms of vocational satisfaction, burnout, and compassion fatigue, and a Turkish validity and reliability study was performed by Yeşil et al[17]. The scale is a self-report assessment tool consisting of three subscales and 30 items. Items 1, 4, 15, 17 and 29 needed to be reversed and calculated during the evaluation of the scores obtained from the scale. The items in the scale were evaluated on a six-digit chart ranging from never (0) to very often (5).

**Data assessment**

While the relationships between the scores obtained from the scale were evaluated using correlation analysis, the relationships between the sociodemographic and professional characteristics of the healthcare professionals and the scores obtained from the scale were evaluated by Mann–Whitney U test in binary groups and Kruskal–Wallis tests in more than two groups.

**Ethical aspects of this research**

Ethical principles and rules were followed during this research. To conduct this study, ethical approval from the Sakarya University Faculty of Medicine Ethics Committee was obtained (dated 142.07.2018 and numbered 142). The purpose of this study was explained to the health professionals included in the sample, and their written and verbal consent was obtained.

**RESULTS**

The average age of health professionals participating in this study was 31.54 years. The majority of them were women (84.4%), married (61.7%), nurses (64.8%), undergraduate graduates (47.7%) and had no children (53.1%) (Table 1). The rate of the health professionals who worked 3–5 years in child health and disease was 35.2%. It was seen that 57% of health professionals were assigned by the administrative supervisor, 78.1% of them were on duty, and 88.3% of them worked at the public hospital. A total of 85.2% of the health professionals participating in this study worked overtime in the last 6 mo. A total of 89% of the participants were partially or completely dissatisfied with their working conditions and the reasons for dissatisfaction included insufficiency of the main social facilities (31.3%), communication problems in the work environment (24.2%), and inappropriateness of physical conditions (21.1%). A total of 51.6% of the participants encountered child death in the clinic where they worked in the last 6 mo. Within the scope of this research, the average weekly working hours of health professionals was 51.80 (Table 2). A total of 19.04% of the researchers stated that their encounters with child deaths had positive effects in terms of gaining experience in intervention, and 66.6% of them stated that they had negative effects emotionally (sadness, pain, grief) within the scope of this research. It was seen that 42.85% of them were affected between 1 and 3 d when the duration of exposure was examined (Table 3). The mean scores of female healthcare professionals in QoLSE Vocational Satisfaction Sub-dimension, and the mean scores of the male healthcare professionals in QoLSE Burnout Sub-dimension were significantly higher than those of the females healthcare professionals ($P < 0.05$).

When examined according to occupations, doctors’ Vocational Satisfaction Sub-dimension mean score was significantly lower than that of nurses and midwives ($P < 0.05$), while the Burnout Sub-dimension and Compassion Fatigue Sub-dimension mean scores were significantly higher ($P < 0.05$). In the comparison made by looking at the educational status of the health professionals participating in this study, the Vocational Satisfaction Sub-dimension average score of postgraduate graduates was significantly lower, while the Burnout Sub-dimension average score was significantly higher ($P < 0.05$). The mean score of the Vocational Satisfaction Sub-dimension of the employees with night shift work compared to other groups was significantly lower ($P$...
### Table 1 Distribution of health professionals by sociodemographic characteristics (n = 128)

| Features                  | n   | %  |
|---------------------------|-----|----|
| Age, mean ± SD (min–max)  | 31.54 ± 9.123 (19.0–64.0) |    |
| Gender                    |     |    |
| Male                      | 20  | 15.6 |
| Female                    | 108 | 84.4 |
| Profession                 |     |    |
| Doctor                    | 26  | 20.3 |
| Nurse                     | 83  | 64.8 |
| Midwife                   | 19  | 14.8 |
| Marital status             |     |    |
| The married               | 79  | 61.7 |
| Single                    | 49  | 38.3 |
| Having children            |     |    |
| No                        | 68  | 53.1 |
| 1                         | 29  | 22.7 |
| 2                         | 25  | 19.5 |
| ≥ 3                       | 6   | 4.7 |

< 0.05). In the comparison made according to the satisfaction of the health professionals with their working conditions, the Vocational Satisfaction Sub-dimension mean score of the dissatisfied people was significantly lower and the Burnout Sub-dimension mean score was significantly higher (P < 0.05) (Table 4).

### DISCUSSION

It is stated that the low level of professional satisfaction of health professionals leads to a weakened relationship with their patients, negative attitudes towards their profession, or failure to fulfill their job-related responsibilities. However, to our knowledge, it has been reported that patients are more satisfied with the care and treatment of health professionals with high professional satisfaction[18-21]. Health professionals suffer from burnout syndrome and fatigue, which is the most important determinant of work quality of life[1,2,3,9,22,23]. Burnout and compassion fatigue in healthcare professionals may result in decreased patient satisfaction and unhealthy results[1,2,3,9,22,23].

Female healthcare professionals constitute 84.4% of the group that participated in our study. The reason for this is that there are more female healthcare professionals in the nurse and midwife vocational groups in Turkey[6,7,24]. In this study, the rate of participants whose educational status was undergraduate and graduate was 72.7%. The postgraduate education level was 25%. This ratio is between 3% and 21% in studies conducted in Turkey[5,6,7,18,24]. The reason why it is higher compared to other studies may be the increase in the number of nurses and midwives with undergraduate degrees and the participation of doctors in the study group.

A total of 57% of the health professionals participating in our study had been appointed by the administrative supervisor to the clinic where they worked and 78.1% of them worked night shifts. This may reduce the quality of professional life and cause burnout and compassion fatigue in health professionals. A total of 70.3% of the health professionals participating in this study worked in departments where the number of staff was not sufficient, and they had been on duty for 3 wk per month for the last 6 mo. They had to come to work several times and 85.2% worked although they were ill.

It has been determined that health professionals are not partially or completely satisfied with their working conditions. They expressed the reasons for dissatisfaction as insufficient social facilities (31.3%), lack of communication in the environment (24.2%) and inappropriateness of physical conditions (21.1%). It was also found that
| Features                                                                 | n   | %    |
|-------------------------------------------------------------------------|-----|------|
| Working time in child health and disease                                |     |      |
| < 1 yr                                                                  | 32  | 25.0 |
| 1–2 yr                                                                  | 10  | 7.8  |
| 3–5 yr                                                                  | 45  | 35.2 |
| ≥ 6 yr                                                                  | 41  | 32.0 |
| How did she/he settle in the clinic where she worked?                   |     |      |
| By myself                                                               | 37  | 28.9 |
| My profession                                                           | 18  | 14.1 |
| By administration                                                       | 73  | 57.0 |
| How it works                                                            |     |      |
| Continuous day                                                          | 22  | 17.2 |
| Seizure                                                                 | 100 | 78.1 |
| Other*                                                                  | 6   | 4.7  |
| Hospital worked                                                         |     |      |
| Public hospital                                                         | 113 | 88.3 |
| Private hospital                                                        | 15  | 11.7 |
| Overtime work in the last 6 mo                                          |     |      |
| Yes                                                                     | 109 | 85.2 |
| No                                                                      | 19  | 14.8 |
| Satisfaction with working conditions                                    |     |      |
| Yes                                                                     | 14  | 10.9 |
| No                                                                      | 52  | 40.6 |
| Partially                                                               | 62  | 48.4 |
| Reasons for dissatisfaction                                             |     |      |
| Communication problems in the working environment                       | 31  | 24.2 |
| Inadequate social facilities                                            | 40  | 31.3 |
| Incompatibility of physical conditions in the environment               | 27  | 21.1 |
| Economic shortcomings                                                   | 15  | 11.7 |
| Failure to rise on duty                                                 | 1   | 0.8  |
| Other                                                                   | 14  | 10.9 |
| Confrontation with child death in the clinic working in the last 6 mo   |     |      |
| Yes                                                                     | 66  | 51.6 |
| No                                                                      | 62  | 48.4 |
| Weekly average hours of operation mean ± SD (min–max)                   | 51.80 ± 11.918 (32.0–120.0) |      |

*In some clinics, they work with an 8-h shift system or 08:00-00:00 and 16:00-00:00 h.

their professions did not satisfy or only partially satisfied them economically. In another study, inconveniences in the working system (42.8%), economic inadequacy (32.2%) and lack of social opportunities (25.4%) were the main reasons for dissatisfaction with occupational life[24]. The average weekly working hours of the health professionals participating in the study were 51.8. According to Eurostat data, the average weekly working hours of full-time employees in the EU-28 is 37.1[25]. This period is specified as 45 h in labor law, but is 51.8 h, which is above international
Table 3 Effects of health professionals participating in this research when they come against child deaths in the last six months (n = 42)

| Features                              | n   | %  |
|---------------------------------------|-----|----|
| Positive effects                      |     |    |
| Gaining experience in intervention    | 8   | 19.04 |
| Getting used to death                 | 2   | 4.76  |
| Negative effects                      |     |    |
| Emotional (sadness, pain, grief)      | 28  | 66.6 |
| Decreasing from professional motivation| 4   | 9.52  |
| Affected times                        |     |    |
| < 1 d                                 | 10  | 23.80 |
| 1–3 d                                 | 18  | 42.85 |
| 3–10 d                                | 5   | 11.90 |
| > 10 d                                | 9   | 21.42 |

standards, in many developing countries. It was found that 22% of working individuals had an average weekly working time of > 48 h in all countries in a study conducted by the International Labor Organization[25].

A total of 19.04% of the health professionals participating in this study stated that their encounters with child deaths had positive effects on gaining experience in intervention, and 66.6% stated that they had negative emotional effects (sadness, pain, grief). Given the duration of the effects, it was seen that 42.85% were affected between 1 and 3 d. This indicates that because doctors, nurses and midwives are working long hours, the negative effects of child mortality during working hours should be considered. We note that the negative effects of the event occurring in one shift may continue into the next shift. These negative effects affect the professional quality of life, burnout and compassion fatigue.

In this study, the average QoLSE Vocational Satisfaction Sub-dimension and QoLSE Burnout Sub-dimension scores of female healthcare professionals were significantly higher (P < 0.05). Similarly, Cañadas-De la Fuente et al[26] found that burnout syndrome was higher in male nurses. In Kılıç’s[7] study, the mean scores of the female nurses’ Traumatic Stress Symptoms Scale and QoLSE Burnout and Coordination Fatigue Sub-dimensions were significantly higher (P < 0.05) than those of male nurses.

When examined according to occupations, doctors’ Vocational Satisfaction Sub-dimension mean score was significantly lower than that of nurses and midwives (P < 0.05), while the Burnout Sub-dimension and Compassion Fatigue Sub-dimension mean scores were significantly higher (P < 0.05). To our knowledge, there is not any research into this subject.

In the comparison made by looking at the educational status of the health professionals participating in this study, the Vocational Satisfaction Sub-dimension average score of postgraduate graduates was significantly lower, while the Burnout Sub-dimension average score was significantly higher (P < 0.05). In the study of Kılıç[7], the mean score of QoLSE Vocational Satisfaction sub-dimension of nurses trained at high school level was statistically higher than that of nurses at other education levels. Nurses who received their education at a master’s level mean score of QoLSE Compassion Fatigue Sub-dimension was significantly higher than that of nurses at other education levels.

The mean score of the Vocational Satisfaction Sub-dimension of the employees who worked night shifts was significantly lower than in the other groups (P < 0.05). These conditions may decrease the quality of the professional life of the health professionals working night shifts and cause burnout and fatigue to be more frequent [7,18,27].

In this study, a significant negative correlation was found between the weekly average working hours of the health professionals and QoLSE Vocational Satisfaction Sub-dimension. A significant positive correlation was found between the weekly average working hours and the Burnout Sub-dimension. A weak positive correlation was found between the weekly average working hours and Compassion Fatigue Sub-dimension (P < 0.05). In this study, the professional satisfaction of nurses working > 40 h/wk was lower than that of nurses working ≤ 40 h/wk[5,17]. In a study by Marcum
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Table 4 Distribution of the scores of health professionals scored from quality of life scale for employees sub-dimensions (n = 128)

| Features of health professionals | QoLSE vocational satisfaction sub-dimension | QoLSE burnout sub-dimension | QoLSE mercy fatigue sub-dimension |
|----------------------------------|--------------------------------------------|----------------------------|----------------------------------|
|                                  | mean ± SD | Med (min–max) | mean ± SD | Med (min–max) | mean ± SD | Med (min–max) |
| Gender                           |           |               |           |               |           |               |
| Female                           | 34.86 ± 9.0 | 35.0 (9.0-50.0) | 17.58 ± 6.23 | 17.50 (2.0-36.0) | 15.50 ± 6.86 | 14.0 (0.0-40.0) |
| Male                             | 26.45 ± 10.9 | 25.50 (8.0-49.0) | 23.10 ± 6.70 | 24.50 (9.0-36.0) | 15.45 ± 6.93 | 15.0 (3.0-31.0) |
| P value<sup>a</sup>              | 0.001      | 0.001          |           |               |           |               |
| Profession                       |           |               |           |               |           |               |
| Doctor                           | 28.76 ± 9.30 | 29.0 (9.0-49.0) | 23.50 ± 5.65 | 24.50 (9.0-36.0) | 18.65 ± 7.23 | 17.0 (8.0-40.0) |
| Nurse                            | 34.53 ± 9.53 | 36.0 (8.0-50.0) | 17.20 ± 6.25 | 17.0 (2.0-36.0) | 13.90 ± 6.63 | 13.0 (0.0-37.0) |
| Midwife                          | 35.78 ± 9.86 | 36.0 (8.0-50.0) | 16.94 ± 6.02 | 17.0 (7.0-26.0) | 15.94 ± 6.15 | 16.0 (5.0-27.0) |
| P value<sup>b</sup>              | 0.14       | 0.000          |           |               |           |               |
| Education status                 |           |               |           |               |           |               |
| Medical career high school       | 38.33 ± 9.55 | 40.0 (17.0-50.0) | 17.47 ± 6.33 | 17.0 (6.0-26.0) | 13.80 ± 7.59 | 15.0 (0.0-25.0) |
| Two-year degree                  | 33.65 ± 9.69 | 35.0 (9.0-48.0) | 18.90 ± 7.14 | 17.50 (10.0-36.0) | 16.30 ± 8.12 | 13.50 (7.0-37.0) |
| Bachelor degree                  | 34.15 ± 9.84 | 35.0 (8.0-50.0) | 16.75 ± 6.07 | 17.0 (2.0-33.0) | 14.44 ± 5.92 | 13.0 (3.0-27.0) |
| Master degree                    | 30.9 ± 9.01 | 30.50 (9.0-49.0) | 21.84 ± 6.27 | 22.0 (9.0-36.0) | 17.78 ± 6.97 | 17.0 (8.0-40.0) |
| P value<sup>b</sup>              | 0.039      | 0.007          |           |               |           |               |
| Hospital worked                  |           |               |           |               |           |               |
| Public hospital                  | 32.38 ± 9.61 | 33.0 (8.0-50.0) | 18.97 ± 6.33 | 19.0 (6.0-36.0) | 15.46 ± 6.84 | 14.0 (0.0-40.0) |
| Private hospital                 | 42.33 ± 5.80 | 44.0 (33.0-50.0) | 14.46 ± 7.40 | 13.0 (2.0-27.0) | 15.73 ± 7.11 | 17.0 (5.0-25.0) |
| P value<sup>b</sup>              | 0.000      | 0.029          |           |               |           |               |
| How it works                     |           |               |           |               |           |               |
| Continuous day                   | 41.59 ± 8.06 | 44.0 (18.0-50.0) | 15.81 ± 5.79 | 15.0 (6.0-27.0) | 14.04 ± 6.5 | 12.50 (5.0-27.0) |
| Night shift                      | 31.75 ± 9.29 | 32.50 (8.0-50.0) | 18.94 ± 6.30 | 19.0 (6.0-36.0) | 15.67 ± 6.31 | 15.0 (0.0-37.0) |
| Other<sup>a</sup>                | 34.0 ± 9.71 | 36.0 (18.0-44.0) | 19.83 ± 11.78 | 22.0 (2.0-33.0) | 17.83 ± 14.37 | 12.0 (3.0-40.0) |
| P value<sup>b</sup>              | 0.000      | 0.109          |           |               |           |               |
| Satisfaction with working conditions |       |               |           |               |           |               |
| Yes                              | 38.14 ± 10.91 | 44.0 (19.0-50.0) | 15.57 ± 6.0 | 17.50 (7.0-26.0) | 15.0 ± 5.98 | 13.0 (7.0-25.0) |
| No                               | 29.80 ± 11.0 | 29.50 (8.0-50.0) | 21.03 ± 7.06 | 21.0 (6.0-36.0) | 14.92 ± 7.99 | 15.0 (0.0-40.0) |
| Partially                        | 35.64 ± 7.13 | 36.0 (14.0-49.0) | 16.91 ± 5.58 | 17.0 (2.0-28.0) | 16.08 ± 5.99 | 15.0 (6.0-28.0) |
| P value<sup>b</sup>              | 0.020      | 0.009          |           |               |           |               |

<sup>a</sup>Mann-Whitney U test.

<sup>b</sup>Kruskal-Wallis test. QoLSE: Quality of Life Scale for Employees.

et al.[28] of factors related to compassion fatigue and burnout in American nurses included age, years worked as a nurse, working environment, coping mechanisms and specialties.

In the comparison made according to the satisfaction of the health professionals with their working conditions, the Occupational Satisfaction Sub-dimension mean score of the dissatisfied professionals was significantly lower, and the Burnout Sub-dimension mean score was significantly higher (P < 0.05). It is crucial not to ignore employee satisfaction to ensure patient satisfaction. To achieve this satisfaction, managers need to take the necessary steps to improve working conditions.
CONCLUSION

The right of health professionals to choose the clinic where they work; the fact that they do not constantly change the places where they work; a low number of night shifts; and adequate numbers of personnel have positive effects on the quality of professional life. It may be appropriate to reduce overtime hours, and if not, overtime wages should be sufficient and regular to satisfy employees. It can be suggested to improve the working conditions and make them more favorable, and to satisfy employees economically and emotionally. The average weekly working hours can be 45, as stated in labor law. Health professionals who are met with child deaths should be given the necessary time to overcome the negative effects that they experience. Factors that help reduce compassion fatigue and burnout, as well as factors that allow staff and managers to be appreciated, will increase the quality of professional life. Health professionals and managers should work together to create a healthy work environment, increase professional satisfaction and prevent burnout and fatigue.

ARTICLE HIGHLIGHTS

Research background
Burnout and compassion fatigue are affecting the quality of professional life.

Research motivation
Doctors and nurses working in pediatric clinics caring for sick or dying children for a long time can develop compassion fatigue. This may affect their professional quality of life.

Research objectives
This study has been done to determine the levels of professional satisfaction, burnout and compassion fatigue of nurses and doctors working in pediatric clinics and related factors.

Research methods
This was a descriptive study.

Research results
The mean scores of female healthcare professionals in Quality of Life Scale for Employees (QoLSE) Vocational Satisfaction Sub-Dimension and the mean scores of the male healthcare professionals in QoLSE Burnout Sub-Dimension were significantly higher than those of the females \( (P < 0.05) \). When examined according to professions, the QoLSE Occupational Satisfaction Sub-Dimension mean scores of doctors were significantly lower than those of the nurses and midwives \( (P < 0.05) \), while the QoLSE Burnout Sub-Dimension and Empathy Fatigue Sub-Dimension mean scores of the doctors were higher \( (P < 0.05) \). In the comparison made according to the satisfaction of health professionals with their working conditions, the QoLSE Occupational Satisfaction Sub-Dimension mean score of the dissatisfied professionals was significantly lower and the QoLSE Burnout Sub-Dimension mean score was significantly higher.

Research conclusions
The working conditions of health professionals should be improved physically and socially, and time should be given to allow them to get rid of the negative emotions they have experienced after child deaths.

Research perspectives
In this context, it is essential to collect information that will improve the risk profile associated with burnout syndrome among health professionals working in the field of child health and diseases. Future research should focus on identifying the protection factors or positive aspects that enable healthcare professionals to successfully cope with burnout.
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