



Professional Quality of Life of Turkish Nurses and Midwives and Job Satisfaction

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ABSTRACT

Objectives: The aim was to examine the job satisfaction and professional quality of life of Turkish nurses and midwives.

Design, Settings, and Participants: This cross-sectional study was conducted between September 2012 and September 2013. Participants were a convenience sample of 442 people working in health institutions in the city of Aydın.

Methods: Data were collected using a questionnaire developed by the researchers based on the literature, the Professional Quality of Life Scale and the Minnesota Job Satisfaction Scale. Data were analysed with descriptive statistics Pearson Correlation and stepwise multiple linear regression.

Results: Weak but statistically significant positive correlations were found between compassion satisfaction and burnout, and between burnout and compassion fatigue. In addition, a weak but statistically significant positive correlation was found between scores on the Minnesota Job Satisfaction Scale and compassion satisfaction; a weak but statistically significant negative correlation was found between these scores and burnout, and a statistically insignificant negative correlation was found between these scores and compassion fatigue.

Conclusion: The results of this study demonstrate that there is a relationship between job satisfaction and the positive and negative dimensions of the professional quality of life of nurses and midwives, and that various factors have an effect on compassion satisfaction, burnout, and compassion fatigue and job satisfaction.

Clinical Relevance: Taking these findings into account in the management and provision of healthcare services may help managers of nursing/midwifery services and governments to improve employee health, quality of life, job performance and healthcare services.

KEYWORDS

Working life, professional quality of life, job satisfaction, employee health, nurse, midwife.

INTRODUCTION

Quality of life includes an individual's physical functions, mental health, social relationships both inside and outside the family and the extent to which they are affected by their environment. Work and professional life can also influence an individual's quality of life (Yeşil, Ergün, Amasyalı, Olgun, & Aker, 2010). Professional quality of life and job satisfaction depend on individual perceptions of the balance between the demands of the job and how these demands are met. Professional quality of life includes an evaluation of working conditions, the satisfaction or dissatisfaction of employees, efficiency, social environment of the organisation, management style and the relationship between working life and life outside of work (Uğur & Abaan, 2008). While many situations encountered in working life (those related to burnout and secondary traumatic stress) can reduce quality of life, job satisfaction and compassion satisfaction can improve it (Silva, Pacheco de Souza, Borges, & Fischer, 2010). In addition, individual characteristics can also affect employees' perception of stress or job dissatisfaction. Perceived demands are not only limited to workload, but can also relate to occupational health and safety in a harmful or uncomfortable working environment (Silva et al., 2010). The professional quality of life and job satisfaction of nurses and midwives are affected by irregular and difficult working conditions, lack of sleep, tiredness, poor physical conditions in the workplace, highly stressful working environments in units such as oncology and intensive care, an excessive number of patients, complicated interpersonal relationships, insufficient income and ambiguity in duties, authority and responsibilities (Çam & Yıldırım, 2010; Campos de Carvalho, Muller, Bachion de Carvalho, & Melo, 2005; Ergün, Oran, & Bender, 2005). Furthermore, the professional quality of life and job satisfaction of nurses and midwives can also be influenced by the region where they work and by social characteristics. In addition to increasing professional dissatisfaction and stress, working in an environment which is undesirable or not preferred can also reduce quality of care (Campos de Carvalho

et al., 2005). From the perspective of employee health, psychological strain, a lack of control and social support and extreme effort can reduce quality of life and give rise to some conditions such as mental illness, coronary heart disease and musculoskeletal disorders (Silva et al., 2010). All these situations are important because they have a negative effect on employee health, job performance and quality of healthcare; this is an area in which further research is necessary.

Literature review

The quality of life of employees is a subject which is receiving more and more attention. Stamm (2010) defines professional quality of life as "the quality of feelings towards an individual's job as a helper". Stamm (2010) also states that both the positive and negative aspects of an individual's job affect professional quality of life. According to Stamm, the positive aspect of professional quality of life is compassion satisfaction, while the negative aspect consists of compassion fatigue and burnout (Stamm, 2005; Stamm, 2010). Compassion satisfaction is seen in the satisfaction felt when an individual does his/her job well, and in positive feelings about colleagues and about being able to make a contribution to the workplace or wider society (Stamm, 2005). Compassion satisfaction is a concept which improves an employee's quality of life and is accepted as being the opposite of secondary trauma (Young, Derr, Cichillo, & Bressler, 2011).

Burnout is defined by Maslach and Jackson (1981) as psychological stress, emotional exhaustion and perceptions of incapacity to perform in a professional care giving role. It is reported that burnout is related to individuals' feelings of difficulty and hopelessness about being able to perform their jobs effectively, due to a high workload, prolonged intensive stress at work or a non-supportive working environment (Stamm, 2010; Mizuno, Kinefuchi, Kimura, & Tsuda, 2013; Potter et al., 2010). Burnout includes feelings of tiredness, disappointment, rage and

depression (Stamm, 2005). Healthcare workers, particularly nurses and midwives, are at high risk of burnout due to the emotional nature of their work (Mizuno et al., 2013). Burnout has a negative effect on the job performance of nurses and therefore the satisfaction of patients who receive the nursing care (Burtson & Stichler, 2010; Leiter, Harvie, & Frizzell, 1998).

In the nursing literature, compassion fatigue has been defined as a secondary traumatic stress reaction resulting from helping a person who has experienced a traumatic event, and has been documented in some nursing studies (Burtson & Stichler, 2010). Another term which is used to define compassion fatigue is secondary trauma (Young et al., 2011). Stamm (2010) defines compassion fatigue/secondary trauma as a negative emotional state resulting from an individual's exposure to work-related trauma and fear. Workplace trauma may be primary, secondary or both. In secondary trauma, individuals repeatedly hear about traumatic events or are repeatedly exposed to work-related secondary stress (Stamm, 2005; Stamm, 2010). It has been reported that the features of compassion fatigue are chronic tiredness, irritability, fear of going to work, an increase in physical ailments and an inability to take pleasure in life. This condition, accompanied by confusion and hopelessness, can appear suddenly without warning (Potter et al., 2010). Researchers have reported that the work environment of nurses has work-related stressors, and that this reduces nursing care (Burtson & Stichler, 2010).

It can be seen that the concepts of compassion fatigue and burnout are clearly related and are sometimes ambiguously defined. While Figley (2002) defines compassion fatigue as a unique form of burnout, Stamm (2010) states that the compassion fatigue dimension of professional quality of life consists of the two components of burnout and secondary traumatic stress. Both concepts are important from the perspective of the health and satisfaction of both patients and workers in health care organisations (Potter et al., 2010).

Job satisfaction is the positive or negative state of perception resulting from an individual's evaluation of his or her job (Kavlu & Pinar, 2009). In the literature, it can be seen that various concepts and models have been developed with the aim of explaining job satisfaction. The first of the theorists to develop these concepts and models was Abraham Maslow. Maslow looked at the concept of job satisfaction, which he based on hierarchy of needs theory, from the perspective of meeting needs (Lu, While, & Barriball, 2005). It has been reported that job satisfaction among nurses is affected by individual factors (age, marital status, education, personal characteristics and socio-cultural environment) and organisational factors (working environment and conditions, wages, management style and relationships with managers, workplace communication and opportunities for development and promotion) (Çam & Yıldırım, 2010). In a study of 10,319 nurses in four different countries, Aiken, Clarke and Sloane (2002) reported that nurses who worked in hospitals with weak organisational support for nursing care were twice as likely to report dissatisfaction with their jobs. In a systematic review examining the job satisfaction of nurses working in hospitals, Lu, Barriball, Zhang and While (2012) reported that the job satisfaction of nurses was clearly related to working conditions and the organisational environment, job stress, role conflict and ambiguity, role perception and role content, and organisational and professional commitment.

There are some studies in the literature which examine the positive (compassion satisfaction and job satisfaction) and negative (compassion fatigue and burnout) characteristics of the professional quality of life of nurses and midwives. In particular, the negative aspects of professional quality of life have been widely researched among nurses working in oncology and emergency rooms (Potter et al., 2010; Bhutani, Bhutani, Balhara, & Kalra, 2012). A study on heart and vascular nurses reported that the nurses had high compassion satisfaction scores and low compassion fatigue and burnout scores (Young et al., 2011).

Another study evaluating the job satisfaction of midwives showed that on all subscales of the analysis (continuity of care, working pattern, working environment, collegiality and issues relating to midwifery practice), midwives were not satisfied and wanted to make changes (Collins & Ford, 2010). A study of 322 nurses working in emergency rooms in Turkey found that 54.3% had experienced emotional exhaustion, 54.7% desensitisation, and 46% lack of personal accomplishment (Kavlu & Pinar, 2009). This study also reported that as emotional exhaustion and desensitisation increased, job satisfaction and quality of life decreased, and found a significant positive correlation between job satisfaction and quality of life. Another study of 377 Turkish military nurses found a significant positive correlation between levels of exhaustion and depression (Bakir, Ozer, Ozcan, Cetin, & Fedai, 2010). Ye il et al. (2010) reported that as burnout and compassion fatigue rose, levels of psychological disorders increased, while there was a decrease in psychological disorders and burnout with increasing compassion satisfaction.

Nurses and midwives play an important role in the provision of health care services. Therefore, examining the physical, emotional and mental states of nurses and midwives which result from their working environments, and conducting analytical research on the problems present is as important for the people who receive care as it is for care workers. Although nurses and midwives belong to two different professions, with different training and fields of work, it can be seen that in Turkey, there is confusion in fields of employment and that many midwives are employed in jobs related to nursing services and sometimes vice versa. Therefore, in the present study, no distinction was made between professions or field or work, and nurses and midwives working in all areas were examined together. Some studies conducted in Turkey have examined job satisfaction and experience of burnout among nurses working in emergency rooms (Kavlu & Pinar, 2009), the oncology department (Ergün et al., 2005) and university hospitals (U ur & Abaan, 2008). However, there is a need for more knowledge relating to the professional quality of life and job satisfaction of nurses and midwives. The results of the present study may provide a greater understanding of job satisfaction and the compassion satisfaction, compassion fatigue and burnout dimensions of professional quality of life, and aid health care service managers in producing strategies regarding the working conditions of nurses and midwives.

Aim and research questions

The aim of this study was to examine the professional quality of life and job satisfaction of Turkish nurses and midwives. The research questions which guided the study were as follows:

- 1) Is there a correlation between job satisfaction scores and the compassion satisfaction, compassion fatigue and burnout dimensions of professional quality of life?
- 2) Which variables are related to compassion satisfaction, compassion fatigue, burnout and job satisfaction?

METHOD

This cross-sectional, quantitative, study was conducted between September 2012 and September 2013. Participants were a convenience sample of 442 people (294 nurses and 148 midwives) working in health institutions in the city of Aydin. In September 2010, the total number of nurses and midwives working in the city of Aydin was 747. The minimum sample size for the study was calculated with a 95% confidence interval ($\alpha=0.05$), $P=0.50$ and $N=747$, and found to be 322. Five hundred nurses and midwives who were working and had no physical or psychological complaints were invited to participate and data was collected from 450 respondents. Eight data collection forms in which only the questionnaire had been completed and the items on both of the scales left blank were not included in the analysis. Fourteen data forms in which the questionnaire and Professional Quality Of Life Scale had been completed but the Minnesota Job Satisfaction Scale left blank were included in the analysis. Data were collected using a questionnaire developed by the researchers based on the literature, the Professional Quality of Life Scale and the Minnesota

Job Satisfaction Scale. The questionnaire consisted of 22 questions intended to determine the personal information and working life situations of the nurses and midwives. To improve the scope of the questionnaire, the views of three associates who had conducted research in the field of nursing management were sought. A pilot study was conducted with 10 participants to improve the understandability and usability of the questionnaire. As a result of the pilot study, it was not felt necessary to make any changes and the nurses and midwives who participated in the pilot study were included in the final sample.

Professional Quality Of Life Scale: This scale, developed by Stamm (2005) to measure workers' quality of life, is a self-report evaluation tool using a 6-point Likert scale with 30 items and 3 subscales. These subscales provide information about workers' compassion satisfaction, burnout and compassion fatigue. *Compassion satisfaction* expresses the feeling of satisfaction and happiness a worker derives from helping someone who needs help in a professional or work-related setting. High scores on this subscale indicate happiness or satisfaction as a helper. Items 3, 6, 12, 16, 18, 20, 22, 24, 27 and 30 on the scale are those which measure compassion satisfaction. *Burnout* measures feelings of exhaustion caused by difficulties in coping with the problems of working life. High scores on this subscale indicate a high level of burnout. Items 1, 4, 8, 10, 15, 17, 19, 21, 26 and 29 on the scale measure burnout. *Compassion fatigue* measures symptoms caused by experiencing stressful events. Items 2, 5, 7, 9, 11, 13, 14, 23, 25 and 28 on the scale have been developed to measure compassion fatigue. It is recommended that workers who score highly on this subscale receive help or support.

In a reliability and validity study, the alpha reliabilities for the 3 subscales were reported to be 0.87, 0.72 and 0.80 respectively (Stamm, 2005). When evaluating scores on the scale, items 1, 4, 15, 17 and 29 require reverse coding. Items on the scale are scored on a 6 point range from "Never" (0) to "Very Often" (5) (Stamm, 2005). The Turkish version of the scale was developed by Ye. il et al. (2010) and the Cronbach's alpha values have been calculated as 0.848 for the total scale, 0.884 for the compassion satisfaction subscale, 0.575 for the burnout subscale and 0.841 for the compassion fatigue subscale.

Minnesota Job Satisfaction Scale: This scale was developed in 1967 by Weiss, Davis, England and Lofquist, with the aim of determining levels of job satisfaction. This scale is a self-report evaluation tool using a 5-point Likert scale with 20 items designed to determine levels of intrinsic, extrinsic and general satisfaction. The scale has two subscales, intrinsic satisfaction (items 1,2,3,4,7,8,9,10, 11,15,16 and 20) and extrinsic satisfaction (items 5,6,12,13, 14,17,18 and 19). There are no reverse items on the scale. In the evaluation of scores on the total scale and subscales, total scores are considered, high scores indicating high job satisfaction. The adaptation of the scale to Turkish and reliability and validity studies were conducted by Baycan (1985) and the Cronbach's alpha value reported to be 0.77. The scale has been used in some studies conducted in Turkey (Ulusoy & Alpar, 2013).

Data collection

After obtaining official permission for the research, and taking into account the working organisation and busy times of the organisations, nurses and midwives were given information about the research and invited to participate. Those who agreed to take part filled in the self-report data collection forms.

Ethical considerations

Official permission was obtained from the Aydın Provincial Directorate of Health Services (Aydın Valiliği İl Sağlık Müdürlüğü) for the research to be conducted. The study protocol was approved by the ethical committee for clinical research of Adnan Menderes University Medical School. Information about the study was provided to the nurses and midwives who participated, and their verbal consent obtained.

Data analyses

Data from the study were analysed using the PASW 18 package. The personal information data of the nurses and midwives and some of the independent variables of the study were examined with descriptive statistics. Total and average scores on the compassion satisfaction, burnout and compassion fatigue subscales of the ProQOL and the Minnesota Job Satisfaction Scales and its subscales were calculated. Relationships between scores on the compassion satisfaction, burnout and compassion fatigue subscales of the ProQOL, the intrinsic satisfaction and extrinsic satisfaction subscales of the Minnesota Job Satisfaction Scale and the other variables were examined using Pearson Correlation (2-tailed).

In the present study, correlation strength between scores on the different scales was evaluated according to Akgül's (2005) criteria as very weak ($r=0.00-0.25$), weak ($r=0.26-0.49$), medium ($r=0.50-0.69$), high ($r=0.70-0.89$) or very high ($r=0.70-0.89$). A stepwise multiple linear regression analysis was used in the selection of predictors for compassion satisfaction, burnout, and compassion fatigue and Minnesota Job Satisfaction Scale scores. Values at the level of $P<0.05$ were accepted as statistically significant.

The mean age of the nurses and midwives was 34.67 ± 7.03 (range: 20-60). 66.5% of participants were nurses and 33.5% midwives; 12 of the nurses were male. More than half of the nurses had an educational level of high school (11.3%) or a two-year degree (41.9%). A majority were married (72.0%) and perceived their level of income as medium/high (72.1%). The mean length of professional experience was 14.11 ± 8.15 years (range: 0.12-37). It was found that the majority of nurses and midwives worked in state hospitals (51.8%) or university hospitals (35.7%), and were on the permanent payroll (80.3%), while a small proportion (14.1%) worked in managerial roles.

The majority of participants reported that they liked their jobs, that professional and social meetings/activities/training programmes were organised in their workplace and that they participated in these meetings (Table 1).

It was reported that in-service training programmes were organised in the workplace on subjects such as vaccinations, reproductive health, smoking, chemotherapy, dialysis, pain management and department-specific topics; there were also staff induction and administrative meetings and scientific meetings such as seminars, symposia and panels. In addition, social events were organised, including social mixers, breakfasts and dinners. Nurses and midwives who did not participate in the training or administrative meetings stated that their reasons for this were not being included in the programme, being too busy, staff shortages, the new knowledge not being put into practice and the meetings not being interesting. Meanwhile, reasons for not participating in social activities ranged from economic difficulties, having nobody to look after their children, a lack of time, not liking this type of meetings, not wanting to socialise with people from the workplace and gender differences (being a male nurse). Nurses and midwives who reported disliking their jobs gave the following reasons: poorly defined duties, poor working conditions, problems in the operation of the family health system, low level of income, disparity between the work done and income, lack of opportunities for continuous learning, negative views of society and contractual employment.

Mean scores on the ProQOL and Minnesota Job Satisfaction Scales and subscales are shown in Table 2. It was determined that there was a weak but statistically significant positive correlation between compassion satisfaction and burnout ($r=0.183$, $P<0.01$), a statistically non-significant negative correlation between compassion satisfaction and compassion fatigue ($r=-0.046$, $P>0.05$), and a weak but statistically significant positive correlation between burnout and compassion fatigue ($r=0.428$, $P<0.01$).

There was a weak but statistically significant positive correlation between scores on the Minnesota Job Satisfaction Scale and compassion satisfaction ($r=0.445$, $P<0.01$), a weak but

statistically significant negative correlation between these scores and burnout ($r = -0.102$, $P < 0.05$), and a statistically insignificant negative correlation between these scores and compassion fatigue ($r = -0.044$, $P > 0.05$). In addition, an examination of total scores on the Minnesota Job Satisfaction Scale and scores on the intrinsic and extrinsic satisfaction subscales revealed that there were very high and high level positive correlations respectively, and a medium level positive correlation between scores on the two subscales (Table 2).

In the statistical analysis to determine factors affecting compassion satisfaction, burnout, compassion fatigue and job satisfaction scores, the first step was to investigate the multicollinearity of the independent variables. Burns and Grove (2001) stated that correlations greater than 0.65 indicate multicollinearity. In the present study, there was a correlation of 0.954 between age and years of professional experience and a correlation of 0.708 between marital status and having living children; therefore, it was decided to include only years of professional experience and having living children in the model. The correlations between the independent variables included in the regression modelling ranged from -0.48 to 0.50; multicollinearity was not observed.

The second step in selecting the variables affecting compassion satisfaction, burnout, and compassion fatigue and job satisfaction was to do a multiple linear regression analysis using the stepwise method for each of them. In these analyses, the 18 independent variables shown in Table 1 were included in the models. The dependent variables in the models were total compassion satisfaction, burnout, compassion fatigue and Minnesota Job Satisfaction Scale scores. The error term analyses derived from the models indicated that the data met the assumptions of normality, linearity, and homoscedasticity. In addition, it was observed that there was no autocorrelation between the data (Durbin-Watson values were 1.764, 1.692, 1.826 and 1.614 for each model respectively). It was determined that there were 5 cases of extreme values in the model. An examination of the data showing extreme values revealed that these values were not due to any error and the data were included in the model.

The stepwise multiple regression analysis used to determine variables affecting compassion satisfaction revealed 2 variables with statistical significance which increased the explanatory power of the model (Table 3). The variables which made the biggest contribution were disliking the job and not working in a managerial role, in that order. These variables explained 0.9% of the compassion satisfaction variance.

The stepwise multiple regression analysis used to determine variables affecting burnout revealed 5 variables with statistical significance which increased the explanatory power of the model (Table 3). The variables which made the biggest contribution were working in a family health centre, working in a state hospital, disliking the job, being a midwife and not participating in activities organised in the workplace, in that order. This model explained 1% of the variance in experience of burnout.

The stepwise multiple regression analysis used to determine variables affecting compassion fatigue revealed one variable with statistical significance which increased the explanatory power of the model. This variable did not like the job (Table 3). This model explained 0.2% of the variance in compassion fatigue.

The stepwise multiple regression analysis used to determine variables affecting job satisfaction revealed 5 variables with statistical significance which increased the explanatory power of the model (Table 3). The variables which made the biggest contribution were disliking the job, low perceived level of income, working in a state hospital, having degree or postgraduate level education and not participating in social activities organised in the workplace, in that order. Despite increasing the explanatory power of the model, the "working constant day shifts" variable was not statistically significant. This model explained 15% of the variance in job satisfaction.

DISCUSSION

In this cross-sectional study, which used a convenience sample of 442 people with the aim of examining the professional quality of life and job satisfaction of Turkish nurses and midwives, correlations were found between the subscales of professional quality of life, and between these subscales and job satisfaction. In addition, it was observed that the subscales of professional quality of life were influenced by disliking the job, not working in a managerial role, working in a family health centre, being a midwife, working in a state hospital and not participating in activities organised in the workplace. It was also revealed that job satisfaction was reduced by disliking the job, low perceived level of income, working in a state hospital, having degree or postgraduate level education and not participating in social activities organised in the workplace. These results provide us with important information about the professional quality of life and job satisfaction of Turkish nurses and midwives.

In the present study, there were positive correlations between compassion satisfaction and burnout and between compassion fatigue and burnout, and a negative correlation between compassion satisfaction and compassion fatigue. However, another study on this topic conducted with nurses working in heart and vascular intensive care units reported high average compassion satisfaction scores and low average burnout and secondary traumatic stress scores (Young et al., 2011). The unexpected weak positive correlation found between compassion satisfaction and burnout in the present study may be coincidental. In the present study, there was a statistically significant positive correlation between job satisfaction and the compassion satisfaction subscale of professional quality of life, and negative correlations between job satisfaction and the subscales of burnout and compassion fatigue. Similarly, in their study of emergency room nurses, Kavlu and Pinar (2009) reported a positive relationship between job satisfaction and quality of life, and found that as emotional exhaustion and desensitisation increased, job satisfaction and quality of life decreased. Burtson and Stichler (2010) also found a statistically significant relationship between compassion satisfaction and nurse satisfaction. These results are important as they clearly reveal the relationships between job satisfaction and quality of working life.

In the present study, factors related to the positive (compassion satisfaction) and negative (burnout and compassion fatigue) aspects of professional quality of life were examined separately. It was found that disliking the job decreased compassion satisfaction and increased compassion fatigue, while not working as a manager decreased compassion satisfaction. While being a midwife and working in a family health centre decreased likelihood of experiencing burnout, working in a state hospital, disliking the job and not participating in activities organised in the workplace increased it. In their study on this topic conducted with emergency room nurses, Kavlu and Pinar (2009) reported that those working in state hospitals experienced more burnout, while those who had chosen to work in emergency rooms themselves experienced less. Uur and Aban (2008) reported that nurses working in university hospitals evaluated their quality of working life as "good" more often than those working in state hospitals. In another study, Silva et al. (2010) also reported that difficulty of work, disparity between effort and reward and being a registered nurse were related to low scores on the emotional dimension of quality of working life; this dimension, which is related to the mental health aspect of quality of life, is most affected by psychosocial factors in the workplace. Another study of nurses revealed a strong relationship between burnout and symptoms of depression (Bakir et al., 2010). While Ergün et al. (2005) reported that looking after cancer patients had a negative effect on the quality of life of oncology nurses; Potter et al. (2010) found no relationship between oncology experience and quality of working life. Furthermore, in this study of oncology nurses, Potter et al. (2010) reported that compassion satisfaction was increased by having associate's degrees and by working with inpatients, while it was reduced by having professional experience of 6-10 years; those with advanced degrees and professional experience of 6-10

years experienced more burnout and those with bachelor's degrees and general healthcare experience of 6-20 years experienced more compassion fatigue. In their research examining the relationship between the nursing work environments, nursing care and motivational factors, Burton and Stichler (2010) reported a statistically significant relationship between nursing care and compassion satisfaction, and between the nurse job satisfaction subscales stress and burnout. In another study, Poncet et al. (2007) reported that factors related to the experience of severe burnout in nurses working in the intensive care unit were age, ability to choose days off, participation in an intensive care unit research group, conflicts with patients, relationship with head nurse or physicians, caring for a dying patient, and number of decisions to forego life-sustaining treatments in the last week. In a cross-sectional study of 1,283 nurses working in seven hospitals in Taiwan, Lee, Dai, Park and McCreary (2013) reported that none of the subscales of professional quality of life were related to the intentions of nurses to resign. Another cross-sectional study of RNs, physicians, and nursing assistants found that caregivers for critical patients scored significantly lower on the Professional Quality of Life subscale of burnout when compared with those working in a noncritical care unit (Smart et al., 2014). A study conducted in China also reported that professional quality of life decreased with work stress (Zhang, Lan, & Chen, 2011). A survey performed in the south western United States, Kelly, Runge and Spencer (2015) reported that significant predictors of burnout included were lack of meaningful recognition, years of experience and nurses in the young generation. In addition, Kelly et al. (2015) noticed that receiving meaningful recognition, higher job satisfaction, nurses in the middle ages generation, and nurses with fewer years of experience significantly predicted compassion satisfaction. These findings show that professional quality of life is influenced by many factors related to the individual and the working environment, and varies according to the sample used in the study.

In the present study, while working continuous day shifts increased job satisfaction, disliking the job, low perceived level of income, working in a state hospital, having degree or postgraduate level education and not participating in social activities organised in the workplace decreased it. In their study of emergency room nurses in Turkey, Kavlu and Pinar (2009) reported that being married, having children, being a manager and choosing to work in the emergency room themselves had a positive effect on nurses' job satisfaction. Another study conducted in Turkey found a statistically significant positive relationship between collegiality and job satisfaction among nurses (Ulusoy & Alpar, 2013). Meanwhile, a meta-analysis relating to the job satisfaction of nurses reported a strong relationship between job satisfaction and job stress, nurse-doctor cooperation and autonomy (Zangaro & Soeken, 2007). In the study about the perceptions of professional competence of newly graduated nurses, Numminen, Leino-Kilpi, Isoaho and Meretoja (2015) informed that job satisfaction was as a factor explaining to professional competence. These findings are important as they show that the job satisfaction of nurses and midwives depends on many factors, both individual and work-related.

Limitations of the study

The present study has some limitations. Firstly, it was a cross-sectional study. The factors influencing the professional quality of life and job satisfaction of the nurses and midwives might change over time, but this could not be observed in the study. Secondly, the convenience sampling method was used. Therefore, the findings represent the individuals who constitute the sample and cannot be generalised. Thirdly, the self-report method was used to collect data, so the data can only be as reliable as the answers given by the nurses and midwives.

Conclusions and recommendations

In the present study, relationships were found between the positive and negative dimensions of the professional quality of life of nurses and midwives and their job satisfaction, and some factors influencing compassion satisfaction, burnout, and compassion fatigue and job satisfaction were revealed. Taking these findings

into account in the management and provision of healthcare services may help managers of nursing/midwifery services and governments to improve employee health, quality of life, job performance and healthcare services. Accordingly, based on the results of the present study, in the evaluation of units where nurses and midwives work, managers should take the requests of employees into consideration in the organisation of professional and social activities. In addition, legislation could be recommended to improve working conditions and income levels in state hospitals. Further research could be recommended to support the results of this study with different sample groups or to explore different aspects of this subject. In particular, it appears necessary to conduct qualitative research to obtain comprehensive information on the subject of nurses and midwives disliking their work.

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Authorship Contributions

Planning the study: ZK, SŞ; data collection and analysis: ZK, SŞ; preparing the article: ZK, SŞ.

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Conflict of interest

No conflict of interest has been declared by the authors.

Table 1. Independent variables and results of descriptive statistics

Variables	n (%)
Sex (n=442)	430 (97.3)
Female	12 (2.7)
Male	
Profession (n=442)	148 (33.5)
Midwifery	294 (66.5)
Nursing	
Educational Level (n=442)	50 (11.3)
Health vocational high school degree	185 (41.9)
Two year degree	207 (46.8)
Bachelor's/ Master's or Phd degree	
Current workplace (n=442)	41 (9.3)
Family/community health centre	229 (51.8)
State hospital	158 (35.7)
University hospital	14 (3.2)
Private hospital	
Job status (n=442)	355 (80.3)
Permanent	87 (19.7)
Contractual	
Working pattern (n=442)	152 (34.4)
Constant shifts	290 (65.6)
Rotational shifts	
Position in the workplace (n=442)	380 (85.9)
Working as a nurse/midwife/family health worker in a clinical setting	62 (14.1)
Working in a managerial role	
Marital status (n=439)*	316 (72.0)
Married	108 (24.6)
Single	15 (3.4)
Divorced/separated/widowed	
Level of income (n=438)*	122 (27.9)
Low	316 (72.1)
Medium/High	
Professional and social meetings/activities/training programmes organised in their workplace (n=438)*	360 (82.2)
Participate in professional meetings/training programmes in the workplace (n=428)*	401 (93.7)
Participate in social activities organised in the workplace (n=428)*	320 (74.8)
Those who like their job (n=437)*	397 (90.8)

	Mean	SD	Range
Age (years) (n=440)*	34.67	7.03	20-60
Years of professional experience (n=441)*	14.11	8.15	0.12-37
Number of children (n=304)**	1.69	0.55	1-3

*As some questions were left blank, there are differences in n.
**Nurses and midwives with children were included in the calculation.

Table 2. Mean scores on the ProQOL and Minnesota Job Satisfaction Scales and subscales and their correlations

Scale and subscale	Mean±SD	Range	(1)	(2)	(3)	(4)	(5)	(6)
(1) Total ProQOL score (n=442)	69.97±14.86	20-120						
(2) Compassion satisfaction	31.92±8.55	0-50	.631**					
(3) Burnout	23.64±6.33	3-42	.743**	.183**				
(4) Compassion fatigue	14.69±7.33	0-40	.649**	-.046	.428**			
(5) Total Minnesota Job Satisfaction Scale score (n=428)	64.73±12.08	21-98	.192**	.445**	-.102*	-.044		
(6) Intrinsic satisfaction	41.40±7.46	12-60	.199**	.478**	-.086	-.083	.937**	
(7) Extrinsic satisfaction	23.33±5.73	8-39	.147**	.317**	-.104*	.016	.890**	.674**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 3. Variables affecting compassion satisfaction, burnout, and compassion fatigue and job satisfaction scores

Variables	Regression Coefficients		t	95% Confidence Interval for B		Adjusted R Square
	Beta	Std. Error		Lower Bound	Upper Bound	
Compassion satisfaction						
(Constant)	34.848	1.067	32.651***	32.750	36.946	
Disliking the job†	-8.718	1.413	-6.171***	-11.495	-5.941	0.078
Working as a nurse/midwife/family health worker in a clinical setting†	-2.437	1.138	-2.141*	-4.674	-0.200	0.086
Burnout						
(Constant)	22.630	0.487	46.453***	21.672	23.588	
Working in a family health centre†	-4.788	1.040	-4.604***	-6.832	-2.743	0.083
Working in a state hospital†	2.230	0.609	3.663***	1.033	3.426	0.108
Disliking the job†	2.827	1.034	2.734**	0.794	4.860	0.125
Being a midwife†	-1.638	0.625	-2.622**	-2.866	-0.410	0.135
Not participating in social activities organised in the workplace†	1.397	0.667	2.095*	0.086	2.707	0.142
Compassion fatigue						
Constant†	14.369	0.369	38.901***	13.643	15.095	
Disliking the job†	4.159	1.263	3.293	1.676	6.642	0.023

Job satisfaction						
(Constant)	70.350	1.392	50.550***	67.614	73.086	
Disliking the job†	-11.232	2.082	-5.396***	-15.324	-7.139	0.070
Low level of income	-5.729	1.254	-4.568***	-8.195	-3.263	0.111
Working constant day shifts	2.301	1.228	1.874	-0.112	4.714	0.126
Working in a state hospital†	-3.518	1.227	-2.866*	-5.932	-1.105	0.135
Degree or postgraduate education	-2.977	1.220	-2.441*	-5.374	-0.579	0.144
Not participating in social activities organised in the workplace †	-2.804	1.298	-2.161*	-5.355	-0.253	0.152

REFERENCES

1. Aiken, L. H., Clarke, S. P, Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *International Journal for Quality in Health Care*, 14 (1), 5–13.

2. Akgül, A. (2005). *Tıbbi Araştırmalarda İstatistiksel Analiz Teknikleri "SPSS Uygulamaları"*, 3rd Edition, Korelasyon Analizi, (pp. 382-402). Ankara, Turkey: Emek Ofset.

3. Burns, N., Grove, S. K. (2001). *The Practice of Nursing Research*, 4th Edition, Introduction to Quantitative Research, (pp. 37-55). Philadelphia, USA: Saunders Company.

4. Bakır, B., Ozer, M., Ozcan, C. T., Cetin, M., Fedai, T. (2010). The association between burnout, and depressive symptoms in a Turkish military nurse sample. *Bulletin of Clinical Psychopharmacology*, 20 (2), 160-163.

5. Bhutani, J., Bhutani, S., Balhara, Y. P. S., Kalra, S. (2012). Compassion fatigue and burnout amongst clinicians: a medical exploratory study. *Indian J Psychol Med*, 34(4), 332–337.

6. Burton, P. L., Stichler J. F. (2010) Nursing work environment and nurse caring: relationship among motivational factors. *Journal of Advanced Nursing*, 66(8), 1819–1831.

7. Cam, O., Yıldırım, S. (2010). Job satisfaction in nurses and effective factors: review. *Türkiye Klinikleri Journal of Nursing*, 2(1): 64-70.

8. Campos de Carvalho, E., Muller, M., Bacion de Carvalho, P., Melo, A. S. (2005). Stress in the professional practice of oncology nurses. *Cancer Nursing*, 28(3), 187-192.

10. Collins, N. L., Ford, M. B. (2011). Responding to the needs of others: The caregiving behavioural system in intimate relationships. *Journal of Social and Personal Relationships*, 27(2): 235–244.

11. Ergün, F. S., Oran, N. T., Bender, C. M. (2005). Quality of life of oncology nurses. *Cancer Nursing*, 28 (3), 193-199.

12. Figley, C. R. (2002). Compassion fatigue: psychotherapists' chronic lack of self care. *JCLP/In Session: Psychotherapy in Practice*, 58(11), 1433–1441.

13. Kavlu, I., Pinar, R. (2009). Effects job satisfaction and burnout on quality of life in nurses who worked in emergency sevices. *Türkiye Klinikleri Journal of Medical Sciences*, 29(6), 1543-1555.

14. Kelly, L., Runge J., Spencer C. Predictors of compassion fatigue and compassion satisfaction in acute care nurses. *Journal of Nursing Scholarship*, 2015; 47(6), 522–528.

15. Lee, Y. W., Dai, Y. T., Park, C. G., McCreary, L. L. (2013). Predicting quality of work life on nurses' intention to leave. *Journal of Nursing Scholarship*, 45 (2), 160–168.

Leiter, M.P, Harvie, P., Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Soc Sci Med*, 47 (10), 1611–1617.

16. Lu, H., Barriball, K. L., Zhang, X., While, A. E. (2012). Job satisfaction among hospital nurses revisited: A systematic review. *International Journal of Nursing Studies*, 49, 1017–1038.

17. Lu, H., While, A. E., Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *International Journal of Nursing Studies*, 42(2), 211-227.

18. Maslach, C., Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113.

19. Mizuno, M., Kinefuchi, E., Kimura, R., Tsuda, A. (2013). Professional quality of life of Japanese nurses/midwives providing abortion/childbirth care. *Nursing Ethics*, 20(5), 539–550.

20. Numminen, Leino-Kilpi, Isoaho and Meretoja (2015) Newly graduated nurses' competence and individual and organizational factors: A multivariate analysis. *Journal of Nursing Scholarship*, 2015; 47(5), 446–457.

21. Poncet, M. C., Toullic, P., Papazian, L., Kentish-Barnes, N., Timsit, J., Pochard, F., Chevret, S., Schlemmer, B., Azoulay, E. (2007). Burnout syndrome in critical care nursing staff. *Am J Respir Crit Care Med*, 175, 698–704.

22. Potter, P., Deshields, T., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., Olsen, S. (2010). Compassion fatigue and burnout: prevalence among oncology nurses. *Clinical Journal of Oncology Nursing*, 14(5), E56-E62.

23. Silva, A. A., Pacheco de Souza, J. M., Borges, F. N. S., Fischer, F. M. (2010). Health-related quality of life and working conditions among nursing providers. *Rev Saúde Pública*, 44(4):718-725.

24. Smart, D., English, A., James, J., Wilson, M., Daratha, K. B., Childers, B., Magera, C. (2014). Compassion fatigue and satisfaction: A cross-sectional survey among US healthcare workers. *Nursing and Health Science*, 16, 3-10.

25. Stamm, B. H. (2005). Professional Quality of Life Scale IV Tests. Retrieved from http://www.isu.edu/~bhstamm/documents/proqol/ProQOL_vIV_English_Oct05.htm

26. Stamm, B. H. (2010). *The Concise ProQOL Manual*, 2nd Ed. Pocatello, Retrieved from http://proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf

27. Uğur, E., Abaan, S. (2008). Nurses' opinions about their quality of worklife and related factors. *Türkiye Klinikleri Journal of Medical Science*, 28, 297-310.
28. Ulusoy, E. Ç., Alpar, Ş. E. (2013). Colleague solidarity among nurses and the relationship between job satisfactions. *F.N. Hem. Derg.*, 21 (3), 154-163.
29. Yeşil, A., Ergün, Ü., Amasyalı, C., Er, F., Olgun, N. N., Aker, A. T. (2010). Validity and reliability of the Turkish version of the Professional Quality of Life Scale. *Archives of Neuropsychiatry*, 47, 111-117.
30. Young, J. L., Derr, D. M., Cicchillo, V. J., Bressler, S. (2011). Compassion satisfaction, burnout, and secondary traumatic stress in heart and vascular nurses. *Critical Care Nursing Quarterly*, 34 (3), 227-234.
31. Zangaro, G. A., Soeken, K. L. (2007). A meta-analysis of studies of nurses' job satisfaction. *Research in Nursing & Health*, 30, 445-458. an bir çalışmada gösterdi
- Zhang, Q., Lan, Y. J., Chen, H. M. (2011). Association of occupational stress with quality of working life. *Journal of Sichuan University, Medical Science Edition*, 42(4), 540-543.