Stress of Conscience among psychiatric nursing staff in relation to environmental and individual factors

Nursing Ethics
19(2) 208–219

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10.1177/0969733011419239

nej.sagepub.com

Hanna Tuve

Malmö University, Sweden

Mona Eklund

Lund University, Sweden

Christine Wann-Hansson

Malmö University, Sweden

Abstract

The present study aimed at investigating the relationship between environmental and individual factors and Stress of Conscience among nursing staff in psychiatric in-patient care. A questionnaire involving six different instruments measuring Stress of Conscience, the ward atmosphere, the psychosocial work environment, Perceived Stress, Moral Sensitivity, and Mastery was answered by 93 nursing staff at 12 psychiatric in-patient wards in Sweden. The findings showed that Sense of Moral Burden, Mastery, Control at Work and Angry and Aggressive Behavior were related to Stress of Conscience. We conclude that Mastery and Control at Work seemed to work as protective factors, while Sense of Moral Burden and perceptions of Angry and Aggressive Behavior made the nursing staff more vulnerable to Stress of Conscience. Future research should investigate whether measures to increase the level of perceived control and being part of decision making will decrease the level of Stress of Conscience among the staff.

Keywords

coping, nursing staff, psychosocial environment, questionnaire, Stress of Conscience

Introduction

In the past decades, psychiatric in-patient care in Sweden, as well as in other countries, has gone through major changes in order to improve efficiency and meet economic constraints. Concerns about global changes in the psychiatric care, with shortage of psychiatric staff, low nurse-patient ratios, and poor work environments, have been reported by the World Health Organization.¹ These changes may have affected the working conditions of the staff, and Glasberg² maintained that, as a consequence of lack of resources and high levels of demands in health care organizations, a troubled conscience among staff members may be more noticeable today. Moreover, Lützen and Schreiber³ proposed that structural changes in psychiatric

care accentuate the importance of ethical decision making. The working situation for registered nurses and nurse assistants (here termed the nursing staff) in psychiatric in-patient care may be strenuous due to ethical challenges and difficulties that they face in their everyday work. The contradictory nature of nursing in psychiatric in-patient care – the will to do good and the demands for effectiveness – has been found to create stress,⁴ and staff that work in psychiatric care have described that they experience feelings of inadequacy and a troubled conscience.⁵ In a climate of ongoing change, economic constraints and increasing demands on nursing staff working in psychiatric care, there is need for further examination of their working conditions, not least their perception of stress related to ethical and moral issues.

The term *Stress of Conscience* denotes a type of stress that is generated by a troubled conscience,⁶ caused by institutional obstacles as well as self-selected actions or neglect,² which are important aspects of ethical decision making. Conscience per se can be perceived in different ways, as an asset and guide or a burden.⁷ Stress of Conscience has been described as: ‘a product of the frequency of the stressful situation and of the perceived degree of troubled conscience as rated by healthcare personnel themselves’ (p.636).⁶ Studies on Stress of Conscience in psychiatric care are still uncommon. In other settings, however, studies have found that insufficient time for the care, not being able to live up to others’ expectations and having to lower one’s aspirations of providing good care were factors associated with Stress of Conscience, leading to emotional exhaustion among different groups of staff in hospital and primary care.⁸ In elderly care, a relationship between the nursing staffs’ need to suppress one’s own conscience and Stress of Conscience was found⁹ and to be related to burnout.¹⁰ The latter is in agreement with another study among staff members in psychiatric and elderly care, showing that levels of Stress of Conscience were higher among nursing staff suffering from burnout compared to non-burnout staff.¹¹ Stress of Conscience thus constitutes an essential aspect of the nursing staffs’ work situation. Factors of importance for Stress of Conscience need to be further investigated in psychiatric in-patient care in order to facilitate the understanding of the nursing staffs’ working conditions.

One such factor may be the *ward atmosphere*, which refers to the physical environment, social structures and social interaction of a ward,¹² including treatment/nursing/caring processes and actions and the relationships among patients and staff. The ward atmosphere has been widely examined in different psychiatric settings but, to our knowledge, no previous research has examined the relationship between the ward atmosphere and Stress of Conscience. What is indeed known about the ward atmosphere is that a holding and supporting environment is important in order to establish a good helping alliance in psychiatric in-patient care¹³ and that the ward atmosphere is closely related to the quality of care, as perceived by patients.¹⁴ Violence and aggression, which form an aspect of the ward atmosphere, have also been reported to be a source of stress in various studies in psychiatric care.^{15–17} The *psychosocial work environment* is another factor of potential importance for Stress of Conscience, being as it has been found important for the nursing staffs’ working situation. Unlike the ward atmosphere, with its focus on treatment and patients, the psychosocial work environment emphasizes the situation for the nursing staff, in terms of organizational conditions for their work and relational aspects among the nursing staff and between staff and managers. Previous research in psychiatric care has shown that the psychosocial work environment is vital for the staffs’ job satisfaction,^{18,19} and is important in relation to stress.^{15,20} The psychosocial work environment has also found to be related to nurses’ moral sensitivity,²¹ and low staffing levels have shown to be associated with moral distress among Japanese psychiatric nurses.²² Furthermore, conflicts with co-workers were described as a cause of moral distress in an interview study with Irish psychiatric nurses,²³ and lack of time generated Stress of Conscience in different groups of hospital staff.⁸ Previous research thus indicates that the ward atmosphere and the psychosocial work environment are factors of possible significance for Stress of Conscience.

The nursing staffs’ Stress of Conscience may be influenced not only by environmental factors, but also individual factors.²⁴ Thus, when trying to understand Stress of Conscience, individual factors that can be

protective or increase vulnerability are important to investigate. One such factor of possible significance for Stress of Conscience is the nursing staffs' *Perceived Stress*. This involves how unpredictable, uncontrollable and overloaded a person perceives his/her life to be.²⁵ In a recent study moderate levels of Perceived Stress were found for the nursing staff in psychiatric in-patient care.²⁶ Another factor of importance is *Moral Sensitivity*, which can be understood as the staff's contextual and intuitive understanding and awareness of the patients' vulnerability and their situation. It involves the insight into consequences of ethical decisions and may function as a guide in ethical decision making.²⁷ Glasberg et al.²⁸ showed that one of the Moral Sensitivity factors, *Moral Burden*, was related to high levels of Stress of Conscience. Studies have also reported findings that suggest gender differences regarding strategies in moral perceptions and Moral Sensitivity.^{27,29} Moreover, levels of Moral Sensitivity have also been found to be higher among nursing staff working in psychiatric in-patient care with longer experience than among those with less experience. In the same study, Moral Sensitivity was also found to predict moral stress.³⁰ A third aspect that might be important for Stress of Conscience is *Mastery*, which is seen as a coping mechanism and denotes the control people experience they have over situations and factors affecting their lives. It has been defined as 'the extent to which one regards one's life-chances as being under one's own control in contrast to being fatalistically ruled' (p.5).³¹ A high degree of self mastery among health care staff has been found to protect them from the negative effects of care-related stress.³² In psychiatric in-patient care Perceived Stress, Moral Sensitivity and Mastery could be important individual factors and therefore require further investigation in relation to Stress of Conscience.

Both registered nurses and nurse assistants in psychiatric care are facing ethical challenges in their everyday work. These two staff groups have different responsibilities at work and may differ in terms of Stress of Conscience, as shown in a study of registered nurses and nurse assistants in elderly care.⁷ On the other hand, a study in general nursing care showed no differences between occupational groups regarding Stress of Conscience,²⁸ and the issue has to the best of our knowledge not been investigated at all among registered nurses and nurse assistants in psychiatric care.

Aim

The aims of the present study were to investigate perceived Stress of Conscience among nursing staff in psychiatric in-patient care and possible differences among registered nurses and nurse assistants. The aim was also to investigate how factors pertaining to the ward atmosphere and the work environment, as well as the individual factors of Perceived Stress, Moral Sensitivity, and Mastery, and nursing staff characteristics were related to Stress of Conscience.

Methods

Study design and selection of participants

The present study was a cross-sectional survey of nursing staffs' perceptions of the ward atmosphere, psychosocial work environment, and stress in psychiatric in-patient care. Twelve psychiatric in-patient units in the counties surrounding the university from which this study originated were selected. First, clinical directors and unit managers were approached and asked for their approval. All of the approached wards agreed to participate in the study. Following this, an information meeting was held at each ward and a questionnaire was distributed personally to all registered nurses and nurse assistants who worked during the day and had worked at the ward for at least two months. Thus, all the nursing staff who met these inclusion criteria was eligible for the study. The questionnaire was then posted back to the researchers in sealed envelopes. In total, 179 nursing staff (70 nurses and 109 nurse assistants) received the questionnaire. The mean age of

the total sample was 49 years and the proportion of nurses was 39%. The data collection took place between January and April 2009.

Setting and participants

The settings were 12 general psychiatric in-patient wards in southern Sweden, who all agreed to participate in the study. In all, 93 nursing staff participated in the study (response rate = 52%), including 38 registered nurses (response rate = 54%) and 55 nurse assistants (response rate = 51%). A majority (77.4%) of the participants were female, permanently employed (86%), and the mean length of work experience on the current ward was nine years (SD = 8) for all staff. The nurse assistants had a significantly higher mean age (50 years) than the registered nurses (45 years), and they also had a significantly longer work experience in psychiatry (mean = 20 years), in comparison with the nurses (mean = 15 years).

Ethical consideration

This study was approved by the Regional Ethical Review Board (Dnr 380/2008) and complied with stipulations in the Swedish act regulating research ethics. The principles of confidentiality, voluntary participation and informed consent were applied.

Instruments

The *Stress of Conscience Questionnaire (SCQ)*, developed by Glasberg and colleagues,⁶ aims to measure the frequencies of stressful situations and the degree to which these lead to Stress of Conscience. The instrument consists of nine items and has two parts. In the first, the respondents are asked how often they have experienced a certain situation at the work place, using a six-point scale ranging from Never (0) to Every day (5). In the second part, a 100 mm visual analogue scale (VAS) ranging from 'No, not at all' (0) to 'Yes, it gives me a very troubled conscience' (5), is used for each of the nine items. On the VAS scale, the respondents mark their perceived amount of troubled conscience, raised by the situations in the first part. The scores from the first and second part are multiplied to give an index of each item. For the present study, the SCQ was used both as a total index comprising all nine items, with scores ranging from 0 to 225, and as two aggregated scales; *Internal Demands* and *External Demands and Restrictions*.⁶ Higher scores indicate a high amount of Stress of Conscience. Previous studies have reported internal consistency (Cronbach's alpha) of 0.83 for the total SCQ, 0.74 for Internal Demands, and 0.78 for External Demands and Restrictions.⁸

The *Ward Atmosphere Scale (WAS)* used in the present study is a revised version of the WAS originally developed by Moos.³³ This updated Swedish version is based on a revised Norwegian version,^{34,35} and is a self-report scale scored on a four-point scale ranging from zero (totally disagree) to three (totally agree). The revised WAS consists of 83 statements about the psychosocial ward atmosphere, constituting eleven subscales: Involvement, Support, Spontaneous Behavior, Autonomy, Practical Orientation, Personal Problem Orientation, Angry and Aggressive Behavior, Order and Organization, Program Clarity, Staff Control, and Staff Attitude to Expressed Feelings.³⁶ The subscales are to be analysed separately, however, and in the present study five of the subscales had to be removed from the analysis due to low Cronbach's alpha (< 0.5). The present study thus only includes six of the 11 subscales: Involvement, Practical Orientation, Personal Problem Orientation, Angry and Aggressive Behavior, Order and Organization, and Program Clarity. Involvement assesses how active and energetic patients are in the ward; Practical Orientation focuses on the extent to which patients learn practical skills and are prepared for discharge; and Personal Problem Orientation on the extent to which patients seek to understand their feelings and personal problems. The subscale of Angry and Aggressive Behavior measures the extent to which patients argue, become openly angry or

display other aggressive behavior; Order and Organization focuses on how important order and organization are in the ward; and Program Clarity on the extent to which patients know what to expect and how they perceive the clarity of ward rules.³³

Psychosocial work environmental factors were measured using items from the *QPSNordic 34+*, a short version of the General Nordic Questionnaire for Psychological and Social Factors at Work (QPSNordic).^{37–39} Being as the psychometric properties of QPSNordic 34+ appear not to have been tested, items belonging to the established subscales of the full version of QPSNordic were tested to see if they also formed subscales of the QPSNordic 34+ when used in the present study. A Cronbach's alpha of > 0.70 was set as a criterion and five subscales were identified. Empowering Leadership (Cronbach's alpha = 0.85), Role Clarity (Cronbach's alpha = 0.79), and Support from Superiors (Cronbach's alpha = 0.8) were assessed by two items each. Control at Work (Cronbach's alpha = 0.72) was assessed with four items, and Organizational Climate (Cronbach's alpha = 0.77) with six items. Empowering Leadership comprises items concerning the amount of encouragement and help from the leader to take part in decision making and to develop skills. Role Clarity taps the clarity of the goals for the work and the clarity of the expectations put on the nursing staff. Support from Superiors involves the amount of help and appreciation from the supervisors to the nursing staff, and Control at Work focuses on the nursing staffs' perceived control over workload and working pace. The Organizational Climate comprises aspects of group collaboration, communication, the presence of rewards for the work, innovation and organizational regime. All items were scored on a five-point scale, ranging from one (very seldom or never) to five (very often or always).³⁷

The *Perceived Stress Scale (PSS)* is a 14-item scale designed to measure stress in a general and global way, by responses to questions like 'How often have you been upset because of something that happened unexpectedly?' The questions are answered on a five-point response scale (0 = Never, 4 = Very often), with a higher total score indicating greater levels of Perceived Stress (maximum score = 56). A good internal consistency has been shown with Cronbach's alpha values of 0.84, 0.85 and 0.86 in three samples.³¹ The Swedish version has previously been tested among university students and found to have good internal consistency (Cronbach's alpha = 0.82).⁴⁰

The revised *Moral Sensitivity Questionnaire (MSQ)* was used in order to assess Moral Sensitivity.⁴¹ The respondents give their answers to questions such as 'My ability to sense the patient's needs is always helpful in my work', on a six-point scale ranging from Total disagreement (1) to Total agreement (6). The revised version of the MSQ comprises nine statements that form three scales: 'Sense of Moral Burden', 'Moral Strength' and 'Moral Responsibility'.⁴¹ In the present study the third factor 'Moral Responsibility', consisting of two items, showed poor internal consistency (Cronbach's alpha = 0.34) and was only analysed on the item level.

The *Mastery* scale measures the feeling of having control over one's life. Mastery is a self-report questionnaire and the participants rate their answer on a four-point scale ranging from Strongly agree (1) to Strongly disagree (4). The scale comprises seven items, which form an aggregated index,³² and a Swedish version, used for the present study, has shown satisfactory internal consistency.⁴²

The *nursing staff characteristics*, such as age, gender, occupational category, type of employment, and work experience were registered with six different questions.

Statistical analysis

Statistical analyses were conducted with the Statistical Package for Social Sciences (SPSS) (version 17.0). The initial analysis was conducted by using descriptive statistics to analyse the data in relation to nursing staff characteristics. The Mann-Whitney *U*-test was used to assess differences between groups and Spearman rank correlations were used to calculate bivariate relations between variables. The Mann-Whitney *U*-test and Spearman rank correlations were also used in order to identify relevant variables for the

Table 1. Mean, standard deviation (SD), and range for the Stress of Conscience Questionnaire (SCQ), the Perceived Stress Scale (PSS) the Moral Sensitivity Questionnaire (MSQ), and Mastery

Variables (theoretical range)	Nurses Mean (SD, min–max)	Nurse assistants Mean (SD, min–max)
SCQ		
Stress of Conscience (0–225)	43.04 (30.54, 1.9–126.45) ¹	40.12 (35.54, 1.05–153.20) ²
Internal Demands (0–125)	24.68 (17.36, 1.20–71.05) ¹	24.5 (20.88, 0.8–86.75) ³
External Demands (0–125)	27.59 (20.84, 0.45–75.65) ⁴	25 (21.1, 0.55–89.05) ⁵
PSS (0–56)	23.42 (7.28, 13–40) ¹	22.05 (7.68, 7–40) ¹
MSQ		
Sense of Moral Burden (4–24)	13.62 (3.61, 7–21) ³	14.15 (3.64, 5–21) ⁶
Moral Strength (3–18)	14.21 (2.06, 8–18)	14.98 (1.84, 11–18)
Item 1: Feel responsibility (1–6)	4.5 (1.49, 1–6)	4.62 (1.33, 1–6)
Item 9: Rules and regulations (1–6)	3.2 (1.45, 1–6) ⁷	3.85 (1.52, 1–6) ²
Mastery (7–28)	22.68 (3.28, 11–27)	22.84 (3.32, 11–28)

¹ 2 missing values² 7 missing values³ 4 missing values⁴ 1 missing values⁵ 6 missing value⁶ 9 missing values⁷ 3 missing values

logistic regression models, where the p-level for inclusion of independent variables was set at $p \leq 0.1$. The level for statistically significant findings was set at $p \leq 0.05$. All variables in the logistic regression models were dichotomized and used as categorical variables, by using a median cut to create a high and a low group on each variable.

Results

The mean scores for *Stress of Conscience*, as well as the individual factors of *Perceived Stress*, *Moral Sensitivity* and *Mastery*, are presented in Table 1 in relation to staff group. There were no significant differences between registered nurses and nurse assistants regarding any of these variables. The mean scores concerning the total *Stress of Conscience* and the two factors of *Internal Demands* and *External Demands and Restrictions* all indicate a value at the lower end of the scale for both staff groups. Similar levels were found for *Perceived Stress*, while the mean scores for *Sense of Moral Burden* corresponded to the middle alternatives in the rating scale for both registered nurses and nurse assistants. The ratings for *Moral Strength* and *Mastery* revealed scores that were in the upper segments of the range.

The bivariate analyses are presented in Table 2. The ward atmosphere variables *Angry and Aggressive Behavior* and *Order and Organization* showed statistically significant correlations with all three of the *Stress of Conscience* variables. Similarly, two of the work environmental variables, *Role Clarity* and *Control at Work*, were significantly correlated with all three of the *Stress of Conscience* variables, and, in addition, *Organizational Climate* correlated with *External Demands and Restrictions*. The data also showed that *Perceived Stress* had statistically significant correlations with all three *Stress of Conscience* variables. There were significant correlations between *Sense of Moral Burden* and all three of the *Stress of Conscience* variables, as well as between *Mastery* and all of the *Stress of Conscience* variables. Moreover, the nursing staffs' age was significantly correlated with total *Stress of Conscience* and *Internal Demands*,

Table 2. Correlations between Stress of Conscience (SCQ), Ward Atmosphere Scale (WAS), work environment (QPSNordic 34+), Perceived Stress Scale (PSS), Moral Sensitivity Questionnaire (MSQ), Mastery, and nursing staff characteristics variables

Variables	r-scores		
	SCQ	Internal demands	External demands
PSS	.51***	.39***	.50***
WAS			
Involvement	-.09	-.02	-.16
Practical Orientation	.07	.12	.03
Personal Problem Orientation	.07	.08	.06
Angry and Aggressive Behavior	.22**	.27**	.18*
Order and Organization	-.27**	-.26**	-.29***
Program Clarity	-.13	-.02	-.17
QPSNordic 34+			
Empowering Leadership	-.09	-.06	-.13
Role Clarity	-.27**	-.21**	-.33***
Control at Work	-.28***	-.22**	-.34***
Support from Superior	-.02	-.05	-.06
Organizational Climate	-.15	-.04	-.23**
MSQ			
Sense of Moral Burden	.42***	.40***	.38***
Moral Strength	-.03	.04	-.06
Item nr 1	.01	-.04	.06
Item nr 9	-.02	-.01	-.04
Mastery	-.43***	-.26***	-.44***
Nursing staff characteristics			
Age			
Experience on actual ward	-.21*	-.20*	-.17
Experience in psychiatry	-.15*	-.14	-.12
	-.17	-.15	-.13

* $p < .10$, ** $p \leq .05$, *** $p < .01$
 Spearman rank correlation

and there was a significant correlation between the nursing staffs' length of experience on the actual ward and total *Stress of Conscience*. As shown above, there were no differences on *Stress of Conscience* between the two staff groups.

The results of the multivariate logistic regression analyses are presented in Table 3. The analysis of the total *Stress of Conscience* variable resulted in two significant factors: *Sense of Moral Burden* and *Mastery*. The risk for a high level of *Stress of Conscience* was significantly stronger for the nursing staff belonging to the high group on *Sense of Moral Burden* and the low level group on *Mastery*. Three significant factors were related to *Internal Demands*: *Angry and Aggressive Behavior*, *Control at Work* and *Sense of Moral Burden*. Belonging to the high group regarding *Angry and Aggressive Behavior* and *Sense of Moral Burden*, and belonging to the low level group for *Control at Work* increased the risk of perceiving high levels of *Internal Demands*. Finally, *External Demands and Restrictions* resulted in two significant factors. Participants belonging to the high level group for *Sense of Moral Burden* were more than four times more likely to score high levels on the variable *External Demands and Restrictions*. Belonging to a group that rated a low level on *Control at Work* also increased the likelihood of perceiving a high level of *External Demands and Restrictions*.

Table 3. Variables of importance to SCQ

Dependent variable	Independent variable	<i>p</i>	OR	95% CI for OR
Stress of Conscience ¹	Sense of Moral Burden	0.013	3.81	1.332–10.922
	Mastery	0.012	0.26	0.093–0.750
Internal Demands ²	Angry and Aggressive Behavior	0.045	2.94	1.024–8.429
	Sense of Moral Burden	0.050	2.91	1.000–8.489
	Control at Work	0.015	0.26	0.090–0.772
External Demands ³	Sense of Moral Burden	0.008	4.40	1.464–13.226
	Control at Work	0.001	0.15	0.049–0.463

Note: All three models exhibited acceptable goodness-of-fit (Hosmer-Lemeshow test, $p > 0.05$)

¹ 26% explained variance (Nagelkerke R^2)

² 28.1% explained variance (Nagelkerke R^2)

³ 31.9% explained variance (Nagelkerke R^2)

Discussion

The logistic regression analyses demonstrated that Sense of Moral Burden was an important factor in explaining variation in Stress of Conscience, which concurs with findings of a study focusing on staff working in hospitals and primary healthcare centers.²⁸ Our findings are also in agreement with previous research showing that Moral Sensitivity predicted moral stress among nursing staff in psychiatric in-patient care.³⁰ Glasberg et al.⁸ argued that staff with a high level of Moral Sensitivity may experience ethical demands more distinctly, which may lead to a troubled conscience. High Moral Sensitivity combined with a lack of resources to give care in accordance with one's ethical beliefs has been found to make nursing staff vulnerable to moral stress.^{41,43} Moreover, Glasberg et al.²⁸ emphasized the need for support in order for the staff to follow their conscience. A supportive environment thus seems crucial in enabling the nursing staff to follow their moral convictions and be attentive to their Moral Sensitivity. Furthermore, a significant relationship has been found between Moral Sensitivity and clinical supervision among general nurses. In the same study, the group who attended clinical supervision scored higher on Moral Sensitivity, but also higher on stress, than the group without clinical supervision.⁴⁴ This indicates that Moral Sensitivity may be strengthened by the use of clinical supervision, but that communicating and reflecting on ethical and moral issues at the same time increases the risk for Stress of Conscience. This also demonstrates the complex nature and interplay between different aspects of the work environment of the nursing staff.

The findings of the present study suggest that having a high level of Mastery was a protecting factor, reducing the risk for Stress of Conscience. This is compatible with previous research where a high sense of Mastery was found to be a protective factor against stress.³² Mastery involves aspects of control, and it might be that a low sense of mastery may evoke feelings of helplessness, possibly affecting the way the nursing staff experience ethical and moral dilemmas and thus increase the stress related to a troubled conscience. Such an explanation would be in line with that of Lützen et al.,⁴³ who proposed that moral stress occurs when staff are morally sensitive in patient care but lack control over the situation.⁴³ Another aspect of control was also found to be of importance and of having a protective function in the present study. Perceiving a high level of the work environmental variable of Control at Work was related to lower levels of both Internal Demands and External Demands and Restrictions. Control at Work has also been found to be an important beneficial work environmental aspect in previous studies and has been linked to the staffs' health and well-being in dementia care and nursing homes.⁴⁵ Furthermore, perceiving a low level of control was found to predict stress related disorders in a literature review of various occupational groups.⁴⁶ In accordance with those findings, high levels of control have been found to reduce the negative effects high work demands may have on anxiety and depression among psychiatric staff.⁴⁷ Furthermore, low levels of

control have been shown to be associated with stress and poor health among psychiatric nurses in Taiwan.⁴⁸ The present findings emphasize the protective role of perceived control, in terms of Mastery and Control at Work, in relation to Stress of Conscience and yield important implications for future research and interventions. Taking actions that enable the nursing staff to be more involved in decisions, and thus experience more control, could be an important effort in preventing stress caused by ethical and moral issues, but that needs to be investigated empirically.

The ward atmosphere subscale Angry and Aggressive Behavior was related to the Stress of Conscience factor Internal Demands. In psychiatric in-patient wards, the nursing staff daily encounters patients' anxiety and anger, and aggression and violence are complex phenomena that generate complex reactions.⁴⁹ Patient aggression and violence is therefore a commonly investigated area and has been found to be a stressor for psychiatric nursing staff.¹⁵⁻¹⁷ The relationship between the nursing staff and the patients must be considered an important aspect of nursing ethics. One may speculate that patient aggression may evoke ethical and moral dilemmas among the staff, and when they are hindered to follow and act in accordance with their moral and professional convictions, the result may be Stress of Conscience.

No differences were found between registered nurses and nurse assistants regarding Stress of Conscience in the present study, which concurs with Glasberg's et al.²⁸ study of different occupational groups in hospital and primary care centers, but not with a study of nurses and nurse assistants in elderly care.⁷ One explanation for this inconsistency could be that there might be more occupational differences between nurses and nurse assistants in elderly care, compared to other care settings. Just as in Glasberg et al.,²⁸ the nursing staff characteristics seemed to be unrelated to Stress of Conscience. The mean ratings of Stress of Conscience in the present study were similar to that reported by midwives in previous research, yet lower than that among staff working in acute care⁶. The bivariate relationships also showed some significant associations. However, several of these associations were lost in the logistic regression analysis due to collinearity between the independent variables. In some cases the strongest associations in the bivariate analyses (e.g. those with PSS) did not become statistically significant in the logistic regressions, probably due to the dichotomizing of variables.

The limitations of the present study include the relatively low response rate (response rate = 52%), the cross sectional approach, and the small sample size. Possible selection bias, the difficulties in causal interpretations, and limited generalizability should thus be considered when interpreting the findings. However, in terms of the mean age and proportion of registered nurses and nurse assistants, the sample in the present study seemed to be representative of the staff at the 12 wards. There were also some problems with the instruments used. The validity and reliability of the Ward Atmosphere Scale (WAS) have been explored and questioned by several authors^{34,35,50,51} and difficulties in achieving acceptable internal consistency for several of the WAS subscales was also encountered in the present study, which led to the exclusion of several subscales. Moreover, the QPSNordic 34+ does not seem to have been psychometrically tested before, and we took measures to ensure internal consistency in the subscales analysed, which were developed specifically for this study. Further, the third factor of Moral Sensitivity, Moral Responsibility, showed a poor internal consistency and had to be analysed as two single items.

Given the fact that the logistic regression analyses explained 26–32% of the variation in the Stress of Conscience variables, other factors, not investigated in this study, might also be of importance. However, this study fulfilled its purpose by showing how the ward atmosphere, the psychosocial work environment, Perceived Stress, Mastery, Moral Sensitivity and nursing staff characteristics were related to Stress of Conscience.

Conclusions

The findings of the present study highlight the importance of focusing on both environmental and individual aspects in psychiatric in-patient care in order to understand the nursing staff's Stress of Conscience

and their reactions to ethical demands. Further, by including the environment as a source of ethical issues in psychiatric wards, this study has made new contributions to nursing knowledge and ethics. Findings of note are that Mastery and Control at Work could serve as protecting factors against Stress of Conscience, and high levels of Sense of Moral Burden and Angry and Aggressive Behavior could increase Stress of Conscience among the nursing staff. These findings proffer valuable insights into some protective and harmful factors for Stress of Conscience and may help managers to make changes that enhance the working situation for nursing staff in psychiatric in-patient care. For example, the managers can identify possible hindrances in the environment that affect the nursing staff's ability to act in concordance with their ethical beliefs and strive to create a work environment that enables and encourages the nursing staff to reflect and discuss on ethical issues. In order to prevent Stress of Conscience, actions to strengthen the nursing staffs' control and involvement in decisions might be vital. This needs, however, to be empirically tested and findings from this study may generate hypotheses for further research that incorporates both environmental and individual factors in order to understand the nursing staffs' perceived Stress of Conscience.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Conflict of interest statement

The authors declare that there is no conflict of interest.

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