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**STRESS OF CONSCIENCE AND BURNOUT IN HEALTHCARE:
THE DANGER OF DEADENING ONE'S CONSCIENCE**

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ABSTRACT

The overall purpose of this thesis is to investigate whether there is an association between “stress of conscience” — that is, stress related to a troubled conscience — and burnout, and to obtain an enhanced understanding of factors related to stress of conscience and burnout in healthcare. Of the four “studies” included, one uses qualitative research methods and the others use quantitative research methods. The data are based on cross-sectional questionnaire studies (I, II, and IV) and open-ended interviews (III).

We could find no existing suitable instrument for measuring troubled conscience in healthcare, and so we constructed and tested the “Stress of Conscience Questionnaire” (SCQ) (I), a nine-item instrument for assessing stressful situations and the degree to which they trouble the conscience. We included 164 participants in the pilot studies, an additional 444 in the main analysis, and 55 in the test-retest verification. Participants had various occupational backgrounds and were recruited from different parts of Sweden. Our findings suggest that the SCQ is a valid and reliable measurement for use in various healthcare contexts. Cronbach’s α for the overall scale was 0.83, ensuring internal consistency. Explorative factor analysis identified and labelled two factors: “internal demands” and “external demands and restrictions”.

To investigate factors related to stress of conscience and burnout (II, IV) we used a sample of 423 healthcare personnel from various specialities and with various occupations, from a district in northern Sweden. Multiple regression analysis showed that the factors related to stress of conscience (II) were: perceiving that conscience warns us against hurting others while at the same time not being able to follow one’s conscience at work, and having to deaden one’s conscience in order to keep working in healthcare; and also moral sensitivity items belonging to the factor “sense of moral burden”. In addition, deficient social support from superiors, low levels of resilience, and working in internal medicine wards were all associated with stress of conscience. The model explained 40% of the total variance.

Interviews were conducted with 30 healthcare managers, to illuminate their explanatory models of the sources contributing to burnout in healthcare settings (III). The data were analysed using qualitative content analysis. The findings indicate that continuous reorganisation and downsizing of health care has reduced resources, while at the same time demands and responsibilities have increased. These problems are compounded by high ideals and expectations, making staff question their own abilities and worth. All in all this throws healthcare employees into a spiralling sense of inadequacy and an emerging sense of pessimism and powerlessness.

Multiple regression analysis showed that having to deaden one's conscience, stress of conscience from lacking the time to provide the necessary care, the work being so demanding that it influences one's home life, not being able to live up to others' expectations, low social support from co-workers, and low levels of resilience were all related to emotional exhaustion. Other factors that had an impact were being female, being a physician or being other healthcare professional and working in geriatric care or a primary healthcare centre. The full model explained 59% of the variance. Factors contributing to depersonalisation were: having to deaden one's conscience, stress of conscience from not being able to live up to others' expectations and from having to lower one's aspirations to provide good care, deficient social support from co-workers, and being a physician; however, the percentage of variation explained was smaller (30%) (IV).

The findings indicate that burnout is related to being unable to live up to one's moral convictions; thus, it is a consequence of healthcare employees' feeling that they are not acting on their values and for the wellbeing of the patients.

ORIGINAL PAPERS

This thesis is based on the following papers, which are referred to in the text by their Roman numerals:

- I Glasberg AL, Eriksson S, Dahlqvist V, Lindahl E, Strandberg G, Söderberg A, Sørli V, Norberg A. (2006) Development and initial validation of the Stress of Conscience Questionnaire. *Nursing Ethics* 13(6); 633-648.

- II Glasberg AL, Eriksson S, Norberg A. Factors associated with ‘stress of conscience’ in healthcare. Submitted.

- III Glasberg AL, Norberg A, Söderberg A. Sources of burnout among healthcare employees: the perspective of healthcare managers. Submitted.

- IV Glasberg AL, Eriksson S, Norberg A. (2007) Burnout and ‘stress of conscience’ among healthcare personnel. *Journal of Advanced Nursing* 57(4); 392-403.

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INTRODUCTION

This thesis forms part of the Stress of Conscience Study at Umeå University in Sweden (e.g. Dahlqvist et al., 2007; Ericson-Lidman, Norberg, & Strandberg, 2007; Juthberg, Eriksson, Norberg, & Sundin, 2007a; Lützén, Dahlqvist, Eriksson, & Norberg, 2006). The purpose of this project is to explore burnout and stress of conscience – that is, stress related to a troubled conscience (*dåligt samvete*) – in healthcare. My participation began when Professor Astrid Norberg asked me to interview experienced care providers about burnout in healthcare, for a new project that she was planning. She had observed, when reading interviews conducted at the department with various care providers about being in ethically difficult or challenging care situations, that they frequently mentioned, unprompted, that they had a troubled conscience when they could not provide the good care that they wished and believed was their duty to give (e.g. Jansson & Norberg, 1989; Söderberg, 1999; Åström, Norberg, Jansson, & Hallberg, 1994). According to Sørli (2001), care providers experience a troubled conscience in situations of contradictory ethical demands, when they are hindered from taking the “right” action or are otherwise obliged to act in a way that they believe is not good enough or even wrong. This prompted Norberg’s interest in a still under-researched field in healthcare; namely, the possible consequences of a troubled conscience for care providers. Very soon after, the assumption was formulated that having a troubled conscience might be related to burnout in healthcare. Another discovery was that the vast majority of burnout research uses quantitative research methods; thus, another purpose of the project was to make a contribution to the qualitative side of such research, both from an inner perspective (staff on sick leave due to burnout symptoms) and an outer perspective (relatives, co-workers, and managers), in order to obtain an enhanced understanding of burnout.

The roles of healthcare professionals seem to have changed quite fundamentally over the past few decades. When I started my career in 1989 as a registered nurse in Sweden, there was an optimistic feeling in healthcare and in society in general, and a sense of pride in belonging to the healthcare sector. However, there were also a

number of people on sick leave, and musculoskeletal complaints were common among my colleagues at that time. In the mid 1990s, the Swedish healthcare sector went through radical structural changes, with many downsizings and reorganisations. Cost reductions resulted in a 24% staff reduction between 1993 and 2000, while at the same time healthcare expanded in many areas (Federation of Swedish County Councils, 2002); it should be noted, however, that staff numbers did increase somewhat (2.4%) between 2000 and 2006 (SALAR, 2007). This is not a phenomenon unique to Sweden; other European countries went through similar events (e.g. Vahtera, Kivimäki, Pentti, & Theorell, 2000). It is debatable as to what extent resources such as staff have really been reduced. Nevertheless, several studies have shown that the restructurings and perceived downsizings (and the resultant higher workload) of the 1990s influenced working conditions and negatively affected the psychological well-being of personnel, increasing work stress and job dissatisfaction (Brown, Arnetz, & Petersson, 2003; Hertting, Nilsson, Theorell, & Larsson, 2004; Kalimo, Taris, & Schaufeli, 2003; Petterson, Hertting, Hagberg, & Theorell, 2005). Employees are reported to be confronted daily with higher demands, a higher pace, increased job complexity, increased patient turnover, increased complexity of patients' health problems, increased need of care, increased pressure from patients and society, and an increased overall patient load (e.g. Arnetz, 2001; Cronqvist, Theorell, Burns, & Lutzen, 2001). During my years as an ICU nurse I have experienced the impact of developments in medical technology, with increasing job complexity leading to higher demands and resulting in my colleagues attempting to embrace more and more by working harder, and finally becoming overly stressed and some even "burning out". Between 1999 and 2003, the cost of sick leave in Sweden increased by 50% (Hogstedt, Bjurvald, Marklund, Palmer, & Theorell, 2004). This increase in the cost of sick leave must be interpreted cautiously, as other societal restructuring might have also affected it.

It seems as if in today's context of economic restrictions, the resources available are inadequate for all the possible measures that can be taken and that personnel think should be taken. Kelly (1998) has stated that healthcare students in the USA are being taught to do things that they later, in practice, find they do not have the resources for.

This makes them experience prioritisation difficulties in their care work, and feelings of guilt from having to deal with the consequences of not living up to their own standards of good care. Ethically difficult situations are common in healthcare today, and such situations have a particularly pointed effect on the consciences of care providers (e.g. Söderberg, 1999; Sørli, 2001). Doing “right” and “good” are values which have been thoroughly incorporated into the healthcare culture; however, these values are not easily upheld in today’s organisations, which focus more on cost-efficiency. Siegall and McDonald (2004), in their studies among university employees, found that the incongruence between personal and organisational values, which hindered them to fulfil the dictates of their values – that is, conscience – was associated with burnout.

Objectives and outline of the thesis

One focus for this thesis is whether stress of conscience is a factor in developing burnout. The Stress of Conscience Study was constructed on a number of assumptions (Norberg, 2004). Firstly, that how someone reacts to stress of conscience is probably connected to that individual’s perception of conscience; where he or she thinks conscience comes from (its origin), what its nature or qualities are, and what its functions are. Secondly, that healthcare personnel who have high moral sensitivity most likely experience ethical demands more distinctly, and that this may give them a troubled conscience when they do not act in accordance with their interpretation of these demands. Finally, that high levels of resilience and social support might protect personnel, and help them cope with stress of conscience and burnout. We were also interested in the explanations given by healthcare managers for why there are large numbers of people on sick leave due to burnout symptoms.

This thesis touches on three main areas; conscience, stress, and burnout. The enormous breadth and complexity of all three of these concepts means that their exposition here is necessarily quite superficial. The theorists included are those who have had a paradigmatic influence on the concepts of the Stress of Conscience Study, or those

who have influenced its workings. The background section provides an overview of the theories, followed by an examination of contextual factors and empirical research into the different areas. The concepts of moral sensitivity, social support, and resilience, which are used as independent variables in the analyses, are also touched upon. The theoretical framework of the concepts used and the rationale for the thesis are given at the end of the background section. Aims, methods, and summaries of results (*papers I-IV*) are presented in separate sections. Next follows a discussion, beginning with a methodological and ethical reflection on the studies, and continuing with a reflection on the results. The intention is to keep the reflection at a general level, thus keeping it somewhat different from the discussions in the four papers. The discussion closes with an overview of the implications and contributions of this work.

BACKGROUND

Conscience

There are few notions as widely used and as controversial as the term “conscience”. The concept and assumed function of conscience have both shifted substantially since the time of the ancient classical Greek thinkers. The term derives from the Latin *conscientia* and the Greek *suneidesis*. Both these terms carry a double meaning: “either the state (or act) of sharing knowledge or simply knowledge, awareness or apprehension” (Langston, 2001, p. 7). The Swedish term for conscience, *samvete*, is influenced by the German *Gewissen*, a form of shared knowing (cf. consciousness, *medvetande*), also originating from *conscientia* (SAOB, 2007). However, the notion of conscience as a sharing of knowledge has been lost in the modern understanding of the phenomenon (Langston, 2001, pp. 7-8).

The philosophical, theological, and psychological literature contains numerous conceptualisations of conscience; a person’s view of conscience and of its origin, nature, and function depends on that person’s view on life. Some theologians consider conscience to be God’s voice, and thus related to natural law (Hoose, 1999). Freud (1930/1989, p. 83f; Jones, 1966) saw conscience as the integrated values and norms of authorities, coming above all from the parents. He thus linked it to superego. Frankl (1959/2000, pp. 53-55) made a distinction between genuine conscience and superego, thus between individual and social conscience. He claimed that conscience has its roots in unconsciousness, and that it is a phenomenon that transcends the existence of the individual, and is thus something more than the ego (p. 32, 50). Fromm (1947/1975, pp. 143-146, 158-159), on the other hand, distinguished between the “authoritarian conscience”, that is, the internalised voice of authority that we fear displeasing or are keen to please, and the “humanistic conscience”. The humanistic conscience is the voice which calls us back to ourselves, to our humanity, “to become what we potentially are” (p.159). It is independent of external rewards and sanctions, and is based on our intuitive knowledge of what is human and what inhuman. A few

decades earlier, Heidegger (Heidegger, 1927/1962, p. 73) had described conscience as Dasein's call to itself. Ricoeur (1992) argued that the call of conscience originates in something other than oneself, much like Frankl (1959/2000, p. 50). Ricoeur used the metaphor of the voice when referring to conscience; a voice "at once inside me and higher than me" (p. 342), further claiming that "one does not know or cannot say" what the origin of conscience is; whether it is another person, an ancestor, God, or an empty place.

The nature of conscience – what it is – has been argued for with a focus on both feelings (Hume, 1740/2005, pp. 33-39) and reason, the moral law within us (Kant, 1780, p. 18). It could be seen as an inner moral judge that mainly speaks after the deed; prior to the deed, it can only, at best, speak indirectly by means of reflecting on previous deeds (Schopenhauer, 1995, pp. 104-107). Conscience has also been regarded as an important element in the development of virtues, and thus as a key to virtue ethics (Langston, 2001, p. 135). Correspondingly, for Ricoeur (1992, pp. 341-355), conscience is a kind of practical wisdom. Conscience has primarily been understood as an inner moral sense of right and wrong, or good and bad; providing an answer to the question of what one ought or ought not to do in specific situation, a sense of oughtness (Rose, 1999).

Christians consider conscience as a person's most secret core, their sanctuary the law written in a person's heart (Hoose, 1999, p. 63), although the Protestant view differs somewhat from the Roman Catholic and Orthodox view. Conscience has come to be understood as something private, and almost constant. Conscience acts both as a judge and as a guide. It is therefore both retrospective, judging actions done or omitted, and prospective, guiding or directing before we act (Ferguson, Wright, & Packer, 1988, pp. 161-162). Martin Luther saw conscience as a judge of the whole person; that is, not just the actions taken (good or bad) but also the faith of the person, making it an issue of our relationship with God. Our conscience is relieved not through deeds but through Christ. Luther embraced the idea of Thomas Aquinas that conscience can be erroneous, and so following one's conscience is not always good. However, Aquinas

also stated that even if our conscience can err we must follow it, since going against one's conscience is dangerous. This opinion was not shared by Luther, as for him God's word, the script, prevails over conscience. Both these perspectives require working with one's conscience continuously, but they have different solutions. In the Catholic tradition, one goes to the priest to ease one's conscience, but according to Luther only "the word" can give salvation or ease (Langston, 2001, pp. 39-51, 71-77; Luther, 1521/1966, p. 298f). Notions similar to that of conscience have also been described in other world religions such as Judaism and Islam (Hoose, 1999).

Although conscience, in the Christian traditions, is very much seen as something that relates to the individual, there is also an idea that it is "shaped by reference to others" (Hoose, 1999, p. 15). Every person is born into a society and raised according to its values. As we have become more secularised, conscience has become not so much a guide to virtuous behaviour but more a matter of universal or cultural moral codes, stating how we should act towards one another. A common opinion is that a society could not function with individuals without conscience. Under the influence of psychology and Kohlberg's theory of cognitive moral development and his work on moral judgment (e.g. Kohlberg, 1981), conscience as an agency in the growth of personality has been emphasised; people learn and acquire consciences in the same way as for any other cultural practices (Allport, 1955, pp. 68-74). This has brought about a great interest in the development of an integrated conscience in children; that is, how they internalise the values of their families and societies, and build up a reliable inner guide (Kochanska & Aksan, 2004; Stilwell, Galvin, Kopta, & Norton, 1994).

Virt (1987, pp. 168-169) describes four functions or meanings of conscience. *Firstly*, there is conscience from a moral sense, synonymous to responsibility or humanity. *Secondly*, conscience can be regarded in the sense of practical reasoning, meaning that ethical assertions are not merely a matter of emotions but a form of moral judgment. A *third* function relates to the inner judge or master; my inner voice speaking only to myself, as it warns me, judges me, and states my innocence or my guilt. *Finally*, there

is conscience in the sense of heart or conviction, meaning that conscience is more a matter of will than of practical reasoning.

In spite of our often contradictory understanding of its origin, nature, and function, conscience seems to play a vital role in people's lives. According to Kukla (2002), conscience has an ontological dimension, as it springs from our lived experience. It is part of daily life and we cannot maintain a distance from it or escape it; therefore, we *are* our conscience. Even though conscience must be regarded as a positive force in humans, it is its pathology that has been in focus. This is unsurprising, since according to Vetlesen (2001) a good conscience is silent; it is the troubled conscience that speaks to us and affects us. A "good", "clear", or "easy" conscience is seldom discussed; instead, the focus is on a "bad", "unclear", "guilty", "nagging" or "troubled" conscience, or "pangs of conscience". Derrida (Calarco, 2004) believed that any form of a good conscience is an impossibility; and even something we should not strive for. We just have to learn how to live with the "bad conscience". Similarly, Kierkegaard (1994) regarded a troubled conscience as an adequate reaction to life; it is only those who do not take life seriously that never experience a troubled conscience. However, by this he did not mean that a troubled conscience is good per se.

Troubled conscience

There is term confusion with the punitive aspect of conscience. In translations of the German thinkers, the term "*bad conscience*" is often used, a term corresponding to the Swedish "*dåligt samvete*". However, "bad conscience" is not a common expression in modern English, and it is sometimes related to a conscience that is bad in the sense of "incorrect". Instead, other terms as "feelings of guilt" (skuld) and "troubled conscience" are often used for similar notions. Since the term "guilt" has a somewhat different meaning than the Swedish term "*dåligt samvete*", we have chosen to use the term "*troubled conscience*" in our studies. However, when referring to the literature, we have generally employed the term used by the author. Guilt and shame have been described as dimensions of conscience. The feeling of guilt is connected to the

conviction of having harmed someone or transgressed some moral norm. It is a strong feeling involving the self, and since it involves the self it also involves shame (Miceli & Castelfranchi, 1998). However, guilt has been more often associated with personal feelings, whereas shame has been linked to public exposure and loss of status (Gore & Harvey, 1995; Smith, Webster, Parrott, & Eyre, 2002).

Our personal conscience can come into conflict with ideologies, norms, or practices of society. Areas of conscientious conflict may concern the dissonance between person and society, between person and person, or within a person. It is these dissonances that lead to a troubled conscience (Aldén, 2001, p. 102; Virt, 1987, p. 165). Arendt (1971) claims that only “good people” are bothered by a troubled conscience.

Our modern view of conscience and rise of the critical conscience has mostly been influenced by the 1700 century writings of Butler and Kant. Kant (1780, p. 18) perceived conscience as an internal judge, which cannot err and should be obeyed at all times; thus he suppressed the role of practical reason and the close bond to virtues. According to Langston (2001, p. 84), Butler’s and Kant’s view of the infallible, directive, and punitive conscience, as well as “the guarantor of morality” is responsible for the decline of the understanding of conscience as concept and phenomenon. However, Freud gets the credit for its fall (Conn, 1981). Freud (1930/1989, p. 83f) linked conscience to the judging part of the superego, the part that threatens with punishment; a negative censor that stresses people with constant feelings of guilt in their efforts to fulfil the dictates of the superego. He claimed that failing to live up to one’s morality manifests itself as a bad conscience, and thus the phenomenon is conceptually related to moral sincerity. This bad conscience is made up of moral feelings such as shame, guilt, and remorse. Freud saw conscience as something undesirable and even unhealthy (Jones, 1966). Greer (2002) argues that Freud was influenced by Nietzsche’s *On the Genealogy of Morals* in his writing about conscience; however, Freud denied this.

Nietzsche (1887/1989, pp. 60-96) regarded a bad conscience as a social control, originating from social relationships, and felt that its purpose is to oppress people. He uses two different senses, also referred to as development stages, of the term bad conscience (Lindstedt, 1997; Risse, 2001). Firstly, bad conscience (without quotation marks) signifies internalisation of instincts, or the development of the ‘inner world’. This “older form” of bad conscience precedes Christianity and is not connected to guilt. When a community begins to feel indebted to ancestors and to Gods, guilt arises. Secondly, “bad conscience” (with quotation marks), signifies “the feeling of guilt in the guilty person”. The former is a prerequisite for the latter. It is this moralisation of bad conscience into the guilty “bad conscience”, an illness of society, that Nietzsche hopes will be eliminated in order that a new revaluation of values could appear. Obviously, the punitive or burden aspect of conscience has mainly been described by the thinkers and theoreticians most critical of conscience. Nevertheless, most agree that a troubled conscience is something undesirable, even though they see conscience as an asset.

Recent thinkers have again emphasised the fallibility of conscience, and the fact that it is not always obvious what your conscience is telling you. Murphy (1997) concludes that although conscience is fallible, one should still follow the dictates of one’s conscience, since acting contrary to one’s conscience produces a troubled conscience that affects one’s mental health and well-being. Acting against conscience represents a disharmony between one’s judgments; between one’s beliefs and one’s actions. Allport (1955) also concludes that a troubled conscience is an intense suffering. He describes it as a “sense of violated value, a disgust at falling short of the ideal self-image” (p. 73). This feeling in adults is not, however, so much a fear of punishment; rather, it originates from values and desires incorporated in the person. Childress (1979) argues that violation of one’s conscience also leads to an essential loss of integrity, wholeness, and harmony in oneself. Thus, feelings arising when acting against what one believes to be true or good and right seem to shatter people in a way that is destructive of their psychological health.

Moral sensitivity

Moral sensitivity makes people attentive to their conscience; individuals with high moral sensitivity are probably more aware of moral problems, that is, what should be done in specific situations (cf. Lützén et al., 2006), thus making them more likely to experience a troubled conscience. According to Brown (1994) and Davis (1979), the concept of moral sensitivity seems to be closely related to the concept of conscience. The concept of moral sensitivity is a further development of the 18th century theory of moral sense. Though similar notions have been described since the time of Plato, the actual term “moral sense” was first used by the third Earl of Shaftesbury, and further developed by two of his contemporaries, Hutcheson and Hume (Almer, 1939, pp. 103-108). Moral sense was described as an ability that helps people understand which actions would lead to positive consequences without using any conscious reasoning. Similarly to conscience, it makes people aware of their moral responsibility towards other people and society. The term “moral sensitivity” has also been used by Rest and colleagues (e.g. Rest, 1994, pp. 22-25; Rest, Narvaez, Thoma, & Bebeau, 2000) to describe the first step of four in real-life moral decision-making, following the influence of Kohlberg’s ideas on moral judgment). The other three steps are moral judgement, moral motivation, and moral character. Rest et al. describe moral sensitivity as an awareness of how our actions affect others, which is of importance for how we interpret moral situations.

Tymeniecka (1984) has described moral sense as “a benevolent sentiment towards all living things” (p. 44). Bishop and Scudder (1990) have argued that it is an essential quality among those care providers who show especially good care for their patients. Lützén (1997) used the concept of moral sensitivity to explain nurses’ insights into psychiatric patients’ vulnerability in relation to decreased autonomy. A further development of moral sensitivity includes the awareness of potential moral conflicts and the significance of establishing good relationships with patients. Moral sensitivity is, furthermore, described as an “attention to the moral values involved in a conflict laden situation and a self-awareness of one’s own role and responsibility” (Lützén et al., 2006, p. 189). Thus, both moral sensitivity and conscience precede any decision to

act or not to act. Unlike conscience, however, moral sensitivity has not been discussed as a retrospective judge of actions taken or not taken.

One of the assumptions in this thesis is that moral sensitivity is related to stress of conscience. Researchers have discussed the idea that people who have a high level of moral sensitivity will develop moral competence and thus experience less moral distress. On the other hand, being too morally sensitive may mean having difficulty coping with moral distress (Corley, 2002; Lützén, Cronqvist, Magnusson, & Andersson, 2003; Tiedje, 2000; Wilkinson, 1987). In the literature about conscience, people with an oversensitive conscience have been portrayed as obsessive and paralysed in moral actions (Ferguson et al., 1988, p. 162). Moral sensitivity, like conscience, seems to be a question of the “doctrine of the mean”; virtue lies somewhere between excess and deficiency, the exact point depending on circumstances (cf. Aristotle). At the extremes — “overly sensitive” or “too insensitive” — moral sensitivity creates suffering for the individual and for the people around them; and communities and societies could not function if people had “no” conscience or were “insufficiently” morally sensitive.

Troubled conscience in healthcare

Healthcare is a moral endeavour, and so failure in attempts to do “good” can result in a troubled conscience, aggravated by the fact that healthcare personnel demand high standards of themselves in their contact with patients (Sørli, Kihlgren, & Kihlgren, 2005). The troubled conscience is probably more evident in today’s healthcare context than before the reorganisation of the 1990s and the concomitant demands for decreased spending and difficult prioritisation, since decisions resulting in suffering for others are always more difficult to make up-close.

Conscience in healthcare concerns the feeling of responsibility to give good care in a situation, despite the lack of resources and opportunities to implement good care. There are certain issues specific to the field of healthcare. On one hand, care providers

have a professional and moral obligation to give the best possible care to vulnerable individuals, and they are trained to be open and sensitive to their patients' needs. On the other hand, healthcare resources are restricted (Kelly, 1998). According to Lützen, Cronqvist, Magnusson, and Andersson (2003), care providers often feel personally responsible for moral issues over which they have no power. This feeling of responsibility is aggravated by the fact that organisational structures and priorities are not made clear. Feeling that one is personally responsible for the quality of care, and being uncertain about one's professional responsibility, have been reported as potential stress factors (e.g. Cottrell, 2001; Grace, 2001).

Fagerström (2006) describes healthcare as a struggle between “being” and “not being” a good care provider; between what one wants to achieve and what one can achieve. Failing at providing good care means failing at being “good”. Care providers seem to have a strong and distinct apprehension of the ethical demand to provide good care. Smith and Godfrey (2002) also found a strong connection between doing the right thing and being a good care provider. A troubled conscience is more complex than external factors preventing us from doing or being “good”; this implies that care providers are good, and the environment, for example the previously-described reorganisations and downsizings, is against them. Reasonably troubled conscience also concerns inner conflicts within a person (cf. Virt, 1987).

References to the conscience made by healthcare personnel have been described in a wide variety of situations (Bernal, Hoover, & Aroskar, 1987; Brown, 1996; McCullough, 2004). One is the refusal to perform certain actions for reasons of conscience, for example abortion or the withdrawal or withholding of life support; thus, the conscience is involved in ethical decision-making (Dickens & Cook, 2000; Spencer, 1998; White, 1999). Most literature on conscience in healthcare is concerned with “appeals to conscience”, that is, conscientious objection or refusal. Particularly in the USA, the right to refuse care due to religious, ethical, or moral beliefs has been much discussed. Wicclair (2000) and May (2001) discussed the rights of conscience in healthcare and the need to limit these rights, to avoid lessening the tolerance of

alternative values and to protect patients' rights. At the same time, the responsibility for moral decision-making is increasingly being transferred to individuals, leaving them with the responsibility to decide what is good (Virt, 1987, p. 166). Other descriptions of conscience in healthcare refer to aspects such as human errors, whistle blowing (Ahern & McDonald, 2002; Faunce, Bolsin, & Chan, 2004), and conflicts of obligations (Childress, 1997). Dahlqvist et al. (2007) found that the perception of conscience among healthcare personnel varies greatly. Conscience was perceived as an authority, a warning signal, an asset, a burden, as demanding sensitivity, and as depending on culture.

In a study among retired Swedish care providers, participants narrated that cleanliness, order, and a clear conscience were important in nursing care around the 1950s. Having a clear conscience meant having a good relationship with others, doing your duty, doing what is good and right, and trying to be a good person. The retired care providers stated that they still had troubled (bad) conscience over things that happened a long time ago (Lindahl, Gilje, & Norberg, 2004). Most descriptions involving conscience referred to very disturbing and upsetting experiences, which may have occurred many years ago. However, there were also descriptions of everyday value conflicts, as healthcare personnel regularly, on an everyday basis, have to make choices between values (cf. Sørli, 2001). von Post (1998) describes troubled conscience as a value conflict; nurses take on the responsibility and guilt for not being able to give the quality of care they want to give. In today's healthcare, there seems to be an intrinsic discordance between professional values and organisational values, which makes it difficult for healthcare employees to work on the basis of their own values, that is, what they believe to be right. Peter and Liaschenko (2004) found that one reason for nurses leaving nursing is value conflicts, that is, not being able to provide quality care due to nursing' becoming more technical and task-orientated instead of caring-orientated. However, the value conflicts might rather be a consequence of the ethical climate of not discussing values, since from a superficial point of view values may differ while on a deeper level they are more mutual (cf. Lindseth, Marhaug, Norberg, & Udén, 1994).

Stress

There is terminological confusion — which could almost be seen as approaching chaos — regarding the concept of stress. Cotrell (2001) concluded that “Stress is an imprecise term, which attempts to define what in essence is a complex, multivariate and multilevel phenomena” (p. 162). Several theoretical frameworks initially originating from two domains, physiology and psychology, have been developed in order to better understand the process that causes stress reactions (Cooper & Dewe, 2004). The concept of stress, as we use it today, was first described by Selye in 1936. Selye described stress as an unspecific response to all kinds of stimuli and demands. He discriminated between eustress (essential for humans), distress (bad stress), hyperstress (overstress), and hypostress (understress). Psychological models emphasise the individual’s evaluation of the potential harm. Lazarus and Folkman (1984, pp. 19-21) conceptualised psychological stress as a relationship between the person and the environment, focusing on the cognitive appraisal of the situation.

Over the last four decades or so, intensive research has been conducted into stress, and the concept of stress has gone through a significant development and amplification. Stress research comes from several perspectives, which have generated different models of stress and consequently different views on stressors, mediators, and interventions (Kasl, 1998). Research on work-related stress appeared in the 1950s and 1960s, with primary focus firstly on role conflict and role ambiguity, and later also on role overload. The common factor in most work stress models is the misfit or imbalance between demands and individual resources. The job demand-control model (JD-C) of Karasek and Theorell (1990) has dominated research on work stress over the last 20 years, and has gained an almost paradigmatic function. This model identifies two crucial aspects in the work situation; job demand and job control. Social support was added to the model in the 1980s (Johnson & Hall, 1988). There have been some difficulties in applying the model to healthcare employees. de Jong et al (1999) suggested that we need to focus on different kinds of job demands, such as the

emotional, since stressors related to interactions with patients are central to healthcare. Another conceptual model often used in work stress research is the effort-reward imbalance model (ERI) (Siegrist, 1996), which suggests that stress is defined by an imbalance between the efforts put in by the worker and the rewards received.

The manifold consequences of stress are one reason for the continuing interest and intense research on stress. Stress-related health disorders have increased almost epidemically in Sweden over the last few decades, particularly in the public sector (Harder, Svärd, Wigforss, & Hedén, 2000; Hogstedt et al., 2004). The association between stress and ill health is supported by empirical studies, and about 60% of work-related illness in Sweden is believed to be due to stress (e.g. Perski & Grossi, 2004). Various perspectives have led to a debate regarding the extent to which stress-related illness is due to individual or environmental reasons, although the main focus is on environmental factors.

Stress in healthcare

Healthcare is widely perceived as one of the most inherently stressful employment sectors (Anderson, Cooper, & Willmott, 1996; MacDonald, Karasek, Punnett, & Scharf, 2001; McGrath, Reid, & Boore, 2003; Weinberg & Creed, 2000), and so there has been extensive research into work stress in healthcare. The majority of research deals with the identification of sources of stress, that is, the stressors (Lambert & Lambert, 2001). One conclusion from the research on stress is that there are a vast number of stressors in healthcare, and most stressful events seem to involve multiple stressors. The factors identified as stressors are complex, and some factors might not be stressful in isolation (Healy & McKay, 1999; Hopkinson et al., 1998). Furthermore, one reason for the diversity of stressors identified could be the use of different concepts and measures.

Work overload, role conflict, and role ambiguity seem to be the most critical work factors in creating stress, while factors related to patients seem to cause less stress.

This conclusion was reached over a decade ago by Tyler and Cushway (1995), who implied that intrinsic factors such as “death and dying” were receiving too much attention. Then again, according to other researchers (e.g. Erlen & Sereika, 1997; McVicar, 2003), caring for the emotional needs of patients is an important source of stress, and may even be the main one. Erlen and Sereika (1997) found, however, that stress levels increased with the increase of other demands, for instance keeping up with new developments in healthcare, having too much to do, having too many interruptions, and insufficient numbers of staff. Another major source of stress is interpersonal relations at work, such as being subject to group pressure and having opinions not accepted by the work group (MacDonald et al., 2001); or too many expectations from others (Edwards, Burnard, Coyle, Fothergill, & Hannigan, 2000). In some cases, the organisational structure is the direct source of stress, creating stressors such as organisational injustice (Kivimäki, Elovainio, Vahtera, & Ferrie, 2003), a lack of organisational involvement (Kirkcaldy & Martin, 2000), and a misunderstanding by management of the needs of the department (McGowan, 2001).

A major theme in stress research is the importance of being in control of one's work situation; that is, being able to influence decisions or being given the opportunity to be involved (Troup & Dewe, 2002). However, research in healthcare regarding lack of control at work is contradictory. Mäkinen, Kivimäki, Elovainio, and Virtanen (2003) emphasised that, for healthcare personnel, increased responsibility and role expansion in “primary nursing” diminished the potentially favourable effects of increased autonomy and control. Reid et al. (1999) identified extensive responsibility as the most frequently reported stressor. Nurses regarded their contact with patients as highly rewarding, but felt burdened by a strong sense of being constantly responsible for their patients. Likewise, Nordam, Sørli, and Forde (2003) concluded that physicians felt stressed by the responsibility and loneliness involved in decision-making.

Overload at work might lead to overload at home, as couples are usually now both employed, and share family responsibilities (Majomi, Brown, & Crawford, 2003). Cushway and Tyler (1996) found that the strongest and most relevant sources of stress

were not the ones leading to most psychological distress. For instance, work-home conflicts were not a major source of stress, but they were the main predictor of poor health. Wheeler (1998) has argued that stress research has spent decades highlighting the determinants of stress in nurses, but has offered few solutions for the problems. He has also stated that although the studies highlight common sources of stress, “a common source of stress does not necessarily represent the most important source of stress for any given individual” (p 40). Stress is to a large extent a matter of perception, as it always involves a “feeling self”. The past decade’s radical changes in healthcare have generated changes in the sources of stress. For instance, we now have the knowledge to do more than we have resources for, raising new issues of standards, ethics, and morality in healthcare.

Moral distress in healthcare

A concept somewhat similar to that of stress of conscience is moral distress. Moral distress was first described in 1984 by Jameton (1993), and since then the term has been used in several studies (e.g. Corley, Elswick, Gorman, & Clor, 2001). In Sweden, Silfverberg (1996) has used the term “ethical stress”, as has Raines (2000), while Lützén et al. (2003) have used the term “moral stress” for similar notions. Jameton (1993) defined moral distress as a negative feeling occurring when institutional or other constraints make it difficult or even impossible for nurses to act according to their moral conviction – that is, their values. Similar conceptualisation was given by Corley et al. (2001), who developed the Moral Distress Scale (MDS) from research on the moral problems that nurses are confronted with. Healthcare employees experience strain when they are in situations of contradictory ethical demands and when they feel they know what should be done but are prevented from acting in line with this insight. The MDS assesses three factors; “individual responsibility”, “not in the patient’s best interests”, and “deception”. According to Hanna (2004), the conceptualisation of moral distress is unequivocal and not distinct. For instance, moral distress seems to differ depending on whether the focus is on norms or feelings. It lacks a clear and

inclusive definition, and is problematic since its definition is based on the way in which it arises.

Various sources of moral distress have been described. However, most refer to injustices towards patients, failings in patient advocacy, and personnel not being able to work in accordance with their own values or provide adequate care (Austin, Bergum, & Goldberg, 2003; Corley, 2002; Corley et al., 2001; Georges & Grypdonck, 2002; van der Arend & Remmers-van den Hurk, 1999). Most researchers have investigated moral distress in nurses; however, Källemark, Höglund, Hansson, Westerholm, and Arnetz (2004) showed that other categories of healthcare personnel also experience moral distress. They concluded that moral distress occurred when institutional constraints prevented staff from acting according to their moral belief system, but also when staff did follow their morals and in doing so were forced to clash with, for example, legal regulations.

Wilkinson (1987) argued that moral distress leads to feelings of frustration, anger, and guilt, stemming from an inability to act according to one's values. According to Kelly (1998), moral distress is a consequence of not preserving one's moral integrity, that is, not being able to live up to one's moral convictions. Moral integrity is connected to self and identity, and so, in the words of Kelly, "When moral integrity is threatened so are self and identity" (p. 1137). Consequently, moral distress is closely related to self-criticism and self-blame. Kelly concludes that the degree of moral distress seems to be connected to the degree of personal responsibility and accountability for patient care, and also to moral ideals about nursing.

Moral distress is primarily described in relation to institutional obstacles, while stress of conscience can also cover stress due to, for instance, self-selected actions or neglect, an aspect also addressed by some research into moral distress. The concepts of morality and conscience are closely related but not synonymous. Conscience can be in agreement with morals, or it can be opposed to and critical of them (cf. Ricoeur, 1992, pp. 342-352). This is evident, for instance, in Arendt's (1963/1994, pp. 278-279; 1971)

thoughts on conscience and evil, and Eichmann's trial for war criminality in Nazi Germany. The court ruled that even if Eichmann did nothing wrong in terms of the morals of the culture he was living in, his conscience should have objected to those morals. According to Frankl (1959/2000, p. 32), conscience is a pre-moral "value perception" which emerges prior to any formulated moral.

Burnout

Burnout is a major problem in the Western world today. Along with depression, burnout is the main cause for long-term sick-leave in Sweden. The term "burnout" was first introduced in the scientific context by Freudenberg in 1974, and since then there have been abundant articles about this topic; however, most have been non-empirical and without theoretical analysis. About 30 definitions or conceptualisations of burnout have been presented, with different foci (Hallsten, Bellaagh, & Gustafsson, 2002; Schaufeli & Enzman, 1998). One major difference is whether burnout is viewed as a state or a process, although most researchers today regard burnout as a process. A second divergence is whether burnout is regarded as a "disease" or an "illness" – that is, a natural reaction to a strained life situation (Hallsten et al., 2002). Burnout is not included in any of the internationally accepted classification systems for diagnoses (e.g. DMS-IV or ICD-10). In Sweden, however, burnout (or, rather, "exhaustion syndrome") was recently added as a supplementary diagnosis by the National Board of Health and Welfare (2003, 2005). Similar symptoms have been referred to by other names, such as "neurasthenia", "depressive exhaustion", and "tedium", giving rise to a confusion of terms. Despite criticism, though, "burnout" is the international term of choice.

Burnout has been described as a psychological response to chronic stress at work (Maslach, Schaufeli, & Leiter, 2001). Still, there are important distinctions between stress and burnout. Stress refers to an adaptation process including physical and mental reactions, whereas burnout represents a breakdown in adaptation. In addition, burnout comprises the development of dysfunctional attitudes and behaviour (Schaufeli &

Enzman, 1998). It has also been argued that burnout can only be experienced by those with high goals and expectations, who expect to find the meaning of life in their work, while anyone can experience stress (Pines & Keinan, 2005). However, many today argue that burnout can be experienced by anyone, not only those who have burned for a cause (e.g. Hallsten et al., 2002).

The most influential conceptualisation or model of burnout is that of Maslach et al. (e.g. 1996), which defines burnout by the three dimensions of emotional exhaustion, depersonalisation, and reduced personal accomplishment. In brief, emotional exhaustion refers to being worn out, depersonalisation refers to a negative response to others, and reduced personal accomplishment refers to a negative response to self. Demerouti et al. (2000) proposed a model of burnout consisting of two dimensions; high job demands leading to exhaustion, and a lack of resources leading to disengagement.

Burnout in healthcare

What makes burnout so complex is not only the diversity of definitions but also the distinction between causes and consequences, and causes as direct antecedents or moderators; and the impact of individual factors. Burnout has been associated with several factors. To summarise, as with stress, the sources of burnout in healthcare are multiple and complex, and influence each other. Nonetheless, the increasingly poor psychosocial work environment is believed to be one of the major reasons for the increase in burnout from the mid 1990s to recent years.

The lack of longitudinal studies and the reported stability of burnout symptoms over time make it difficult to differentiate between the consequences and the sources of burnout. The negative consequences and the costs of burnout for the society, the organisation, and the individual are evident; they include reduced job satisfaction (Faragher, Cass, & Cooper, 2005; Lee & Ashforth, 1996), reduced patient satisfaction (Leiter, Harvie, & Frizzell, 1998), absenteeism manifested as sick leave and turnover intention (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Geurts, Schaufeli, &

Rutte, 1999; Leiter et al., 1998), reduced empathic ability (Åström, 1990), and above all suffering for the individual and their family.

Factors which appear to contribute to burnout in healthcare include the overall social climate, factors at work and within the family, and personal factors. Most previous research suggests that exposure to an extensive workload is the strongest predictor of burnout, followed by lack of social support at work (Duquette, Kerouac, Sandhu, & Beaudet, 1994). Early burnout research, influenced by Maslach and co-workers, mostly focused on the working environment. Recently, burnout researchers have begun to discuss more holistic conceptual frameworks. A work organisation is a part of the surrounding society, and is consequently affected by it. People exist in a life world possessing a wide variety of roles, and so an individual's work influences other life areas, and vice versa (Peeters, Montgomery, Bakker, & Schaufeli, 2005). For instance, home demands such as household management seem to be associated with burnout (Demir, Ulusoy, & Ulusoy, 2003). Nevertheless, neither personal nor work demographics, nor personality characteristics, seem to be major determinants of burnout (e.g. Burke & Greenglass, 2001; Duquette et al., 1994).

Too high, too many, or unrealistic expectations from other people, such as co-workers, supervisors, patients, and families, seem to be a source of burnout (Edwards et al., 2000). Leiter (1998) stated that "burnout results from the gap between individuals' expectations to fulfil their professional roles and the structure of the organisation" (p. 1613) (cf. moral distress). Altun (2002) found, similarly, that the personal and professional values that are incorporated or prioritised by nurses influence the degree of burnout. The mismatch between the person and the work in terms of values is one focus of the burnout model of Maslach and Leiter (1997). As with stress research, most burnout studies are quantitative, partly since the concept was formulated early on, and several scales for measuring burnout were developed. In recent years some qualitative studies have appeared, mostly Swedish. For instance, Ekstedt and Fagerberg (2005) found from interviews with people suffering from burnout that

burnout is preceded by a discordance between values at work and one's own values and ideals.

Corley et al. (2001) argued that nurses' roles in the organisation constrain them from carrying out their values, leading to a role conflict since their "roles convey more responsibilities than rights" (p. 254). Nurses often have "person knowledge", that is, they know the patient's needs; and they may favour an approach that is not supported by institutional policy, other staff members, or the patient's relatives. Emotional contagion — sharing and taking on the emotions of another person — has been associated with burnout (Omdahl & O'Donnell, 1999). In addition, Payne (2001) showed that "accepting responsibility" was related to emotional exhaustion. Although a troubled conscience is a dissonance between values, and conflicting values seem to be a source of burnout, we have not found any studies that associate burnout with a troubled conscience, although Nordam, Torjuul, and Sørli (2005) have suggested that such a relationship might exist. In addition, Severinsson (2003), and Sundin-Huard and Fahy (1999) have used data from interviews with healthcare personnel to argue that burnout may be related to moral distress. Stilwell et al. (1994) argued that "an acute sense of moral failure may act like an immediate stressor" (p. 138), while chronic moral dilemmas can lead to reactions associated with chronic stress.

Protective factors

Several factors have been put forward that impact the relationship between stressors and stress reactions. A comprehensive perspective on stress and burnout should take into account both personal and contextual factors – that is, the idea that there are protective factors which provide support and strength in stressful situations (Harrison, Loiselle, Duquette, & Semenic, 2002). Thus, personal resources such as hardiness, resilience, and other personal strengths, as well as contextual resources such as social support, might mitigate burnout and perceived stress of conscience.

Many studies have shown that *social support* is an important resource for coping with work stressors, indicating its positive effect on well-being (Bradley & Cartwright, 2002; Muncer, Taylor, Green, & McManus, 2001). These studies have explored the effect of support from organisations, supervisors, co-workers, family and friends, and others. The importance of social support from leaders and co-workers for helping care providers cope with occupational stress has been particularly emphasised (Viswesvaran, Sanchez, & Fisher, 1999). Several meanings of social support have been proposed, but it can be roughly defined as “the availability of helping relationships and the quality of those relationships” (Leavy, 1983, p. 5). A meta-analysis by Viswesvara et al. (1999) argued that the effect of social support on work stressor-strain relations is threefold; it can have a direct effect by directly reducing the strain experienced, it can mitigate the perceived stressors, and it can have a moderating (or buffering) role thus weakening the relationship between stressors and strain. The moderation of social support between work variables and health is a focus in the demand-control-support model, which postulates that high demands, low control and low social support are related to adverse health outcomes (Johnson & Hall, 1988; Karasek & Theorell, 1990).

Studies investigating the relationship between social support and burnout have produced somewhat inconsistent results (Halbesleben & Buckley, 2004); nevertheless, social support is believed to offer protection against burnout (e.g. Tummers, van Merode, & Landeweerd, 2002). The inconsistent results have a number of reasons, mostly related to the conceptualisation of social support; for instance, what type of social support is being provided (emotional, instrumental, informational, and so forth), and who is providing it (managers, co-workers, family members, and so forth). The types and sources of support which are perceived as useful and desirable by one person may be regarded as negative by another. Ericson-Lidman et al. (2007) found that there is a distinction between given and received social support, and that who the giver is makes a difference. Hupcey (1998) also showed that even if support is provided with good intentions, it may be perceived as negative by the receiver.

The role of the person in the stressor-strain relation was already recognised in early stress research, for example that by Lazarus and Folkman (1984), whose “stress, appraisal and coping model” emphasised the characteristics of the person on one hand and the nature of the environment on the other. Research into the impact of personal characteristics has raised some debate in both work stress and burnout research. Nevertheless, sensitivity and vulnerability to stressors seem to differ from person to person. Personal resources such as hardiness (Harrison et al., 2002) and a sense of coherence (Söderfeldt, Söderfeldt, Ohlson, Theorell, & Jones, 2000) have been shown to be important for coping with stressors; they have a protective effect. Burnout has been associated with several negative personal characteristics, including neuroticism and negative moods (Langelaan, Bakker, van-Doornen, & Schaufeli, 2006; Zellars, Hochwarter, Perrewe, Hoffman, & Ford, 2004), negative affectivity (Spector, Zapf, Chen, & Frese, 2000), negative self-image (Jeanneau & Armelius, 2000), lack of hardiness (Duquette, Kerouac, Sandhu, Ducharme, & Saulnier, 1995), poor locus of control (Schmitz, Neumann, & Oppermann, 2000), and a low sense of coherence (Kalimo, Pahkin, Mutanen, & Toppinen-Tanner, 2003). Hallsten et al. (2005) proposed in a recent large multi-occupational study that people with “performance-based self-esteem” are more prone to burnout than others. It is, however, difficult to conclude whether burnout is an effect of the personal characteristics or whether it is the other way around (Jeanneau & Armelius, 2000). There has also been debate over whether personal characteristics have a direct or a moderating effect.

Resilience is a concept belonging to the salutogenic paradigm, which focuses on explaining health and strengths instead of disease and weaknesses. Resilience has been conceptualised as a form of personal inner strength (Nygren, 2006). Discussion of the concept has included the question of whether it is congenital – one either has it or not – or a developable characteristic (Jacelon, 1997), but most research points to its being a characteristic that can be developed or undermined. Resilience has been described as a personality characteristic that affects the ability to recover from adverse events, in that it helps people to adapt and restore balance, and consequently avoid the negative effects of stress (Wagnild & Young, 1993). It is the ability to bounce back in situations

of stress and hardship (Dyer & McGuinness, 1996), and thus seems to be concerned with coping skills. Resilience is closely related to other personal strength characteristics, such as self-esteem and a sense of coherence (Nygren, Randstrom, Lejonklou, & Lundman, 2004), and also self-transcendence and purpose in life (Nygren, Aléx, Jonsén, Gustafson, Norberg, & Lundman, 2005).

Theoretical presumptions underlying the thesis

The major assumption of this thesis is that conscience guides or directs people on how to be and how to act; it is the inner voice described by Ricoeur as being (1992, p. 32) “at once inside me and higher than me”. A troubled conscience is a discrepancy or disharmony between the inner voice (e.g. desires, inclinations, and beliefs) and the action taken or omitted. It can arise both when an individual does not follow the voice of their conscience, and also when they follow it and in doing so negatively affect others. Another cause could be conflicting demands; it is possible that no matter what an individual attempts or does, the result will be a troubled conscience. It could also be caused by someone’s not being the person that they think they should be or want to be, making it a question of integrity (cf. Allport, 1955). Further complicating this is the fallibility of conscience. The term “stress of conscience” refers to stress related to a troubled conscience. Stress depends on the individual’s perception of environmental demands and resources, and his or her ability to handle these demands (cf. Lazarus & Folkman, 1984). Since we use the Maslach Burnout Inventory (MBI) in our studies, our understanding of burnout emanates from its definition by Maslach and co-workers (1996) as a psychological syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment.

“Moral sensitivity” refers to the awareness of the moral nature of a situation and of how our actions affect others. Although the concepts of moral sensitivity and conscience are closely related, they do not seem to be the same. Moral sensitivity is about seeing and reflecting on the vulnerability of others (cf. Lütznén et al., 2006), whereas conscience is more of a guide or demand for how to be or act.

Although some argue that the terms “morals” and “ethics” can be used synonymously (e.g. Nilstun, 1994, pp. 124-125), the stance of this thesis is that they are separate in conformity with e.g. Ricoeur (1992, pp. 240-296). “Ethics” refers to rules and principles, whilst “morals” refers to the use of ethics in general or in a particular situation.

Rationale for the thesis

There is a relatively large amount of knowledge today about burnout and work stress. We know from interview studies that troubled conscience is a problem among people working in healthcare. Healthcare personnel in Sweden spontaneously talk about a troubled conscience, and also seem to use the term in common parlance. We know from the literature that a troubled conscience has a negative impact on the individual, as conscience comprises our deepest integrated values and so it is dangerous to go against one’s conscience. We wanted to find out what consequences, if any, a troubled conscience has for healthcare personnel. We were particularly interested in the consequences it may have for the development of burnout, so that in the long run we might develop knowledge of ways to prevent burnout and also find new ways to support those who have already burned out.

In order to examine the consequences of a troubled conscience, to supplement data gained from interviews, we had to find a way of measuring the experience of a troubled conscience. Since our interest was the punitive aspect of conscience, it appeared natural to relate troubled conscience to the stress concept, that is, stress of conscience. There are several questionnaires that measure work-related stress; however, none relates to conscience. Thus it was our intention to estimate on one hand how one’s conscience comes into conflict with other values and on the other hand to estimate what happens when one does not follow one's conscience.

The definitions in literature of the concepts used in this thesis are unequivocal and not distinct, making it difficult to capture and describe a clear theoretical conceptualisation of the concepts. However, we are interested in people's own experiences of the phenomena, and thus our studies rely on self-report questionnaires; personnel's own assertion of, for instance, feelings of troubled conscience.

Stress and burnout are major problems in the industrial countries, and much research has been conducted regarding various aspects of these topics. However, surprisingly few studies have had a moral basis. Morality is an important issue, especially in healthcare, as everyday healthcare practice raises questions about morals and ethics. In addition, few studies have had a qualitative design. We chose to interview healthcare managers in order to obtain an enhanced understanding of burnout, since these managers are often accused of causing burnout, are crucial for implementing actions against stress and burnout, have a duty to implement such actions, and have a broad insight into organisational structures; and yet, their perspectives have largely been missing in research.

It seems logical to assume that the perceived lack of resources in today's healthcare organisations, combined with high demands, leads to frustration and stress of conscience among healthcare personnel, and that this has significant consequences.

AIMS OF THE THESIS

The target of this thesis was healthcare personnel. The overall purpose was to investigate whether there is an association between stress of conscience and burnout, and to obtain an enhanced understanding of factors related to burnout and stress of conscience in healthcare.

Specific aims

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|-----------|---|
| Paper I | To construct and validate the Stress of Conscience Questionnaire (SCQ), aimed at assessing stressful situations in healthcare that may give rise to a troubled conscience, and the degree of troubled conscience that arises in these situations. |
| Paper II | To analyse the importance of a number of factors which could reasonably be thought to be associated with stress of conscience in healthcare: personal and work demographics, perception of conscience, moral sensitivity, social support, and resilience. |
| Paper III | To investigate the perspectives of healthcare managers on factors contributing to the increase of people on sick leave for burnout symptoms, by illuminating their explanatory models of the sources contributing to burnout in healthcare settings. |
| Paper IV | To analyse the importance of contributing factors of burnout in healthcare personnel. The hypotheses tested were: <ul style="list-style-type: none">• Emotional exhaustion and depersonalisation can be explained by the levels of “stress of conscience”.• Emotional exhaustion and depersonalisation can also be explained by personal and work demographic variables, social support, and resilience. |

METHOD

Setting and participants

An overview of the study characteristics in papers I-IV is presented in Table 1.

Paper I

Participants were recruited from different regions in Sweden, but predominantly from northern Sweden. The pilot studies included 164 participants and the main analysis an additional 444. The main analysis comprised four samples; (1) a convenience sample of municipal healthcare personnel in a mid-sized community in northern Sweden ($n = 155$); (2) all midwives in a large region in northern Sweden ($n = 103$); (3) a purposive sample of hospital personnel who volunteered to answer the questionnaire at a large university hospital in northern Sweden ($n = 47$); and (4) participants at a national healthcare conference ($n = 139$). In addition, test-retest validation was performed using a convenience sample of 55 nursing students and registered nurses (RNs) in part-time master education.

Papers II and IV

The study presented in papers II and IV had a cross-sectional design, including all personnel currently working during October 2003 in a healthcare district in northern Sweden. The healthcare district is located in a rural area with about 46 000 inhabitants, one small hospital – close to 160 beds – and eight primary healthcare centres spread over a large area. The response rate was 75%. After excluding all administrative personnel such as secretaries, assistants, and cleaners, and also employees working in psychiatric care, the total sample contained 423 people who had answered the questionnaires. Most participants were female (84%). The mean age was 45 years ($SD = 10.21$); 86% were either married or cohabiting, and 57% had children living at home. Almost 50% were RNs, 27% were Enrolled Nurses (ENs) including one nursing aide, 11% were physicians, and 13% had other occupations (mostly physiotherapists, occupational therapists, and social workers). They worked in different units, which were divided into emergency care, surgical care, internal medicine, eldercare, primary

healthcare centres, and others. Primary healthcare centres were by far the largest group (39%); the remaining five groups varied between 12% and 14%. The mean time spent working in healthcare was 21 years (SD = 10.54), of which 11 years (SD = 9.28) were at the current workplace. The mean time worked per week was 35 hours (SD = 6.80), and 58% of respondents worked irregular shifts.

Paper III

The participants consisted of 30 healthcare managers from three districts in Northern Sweden; eight from a community with a university hospital and about 110 000 inhabitants; 13 head managers, the district manager, and three head nurses from the setting of study II; and the head manager and all four unit managers at a psychiatric clinic in a smaller community. Of the participants, 17 were female and 13 were male; their mean age was 55.4 years (range 32-74); and they had been working in healthcare for an average of 25.6 years (range 1-44), of which 12.7 years had been spent in management (range 1-40). The participants held various occupational backgrounds; they comprised 13 RNs, 11 physicians, three behavioural scientists, one occupational therapist, one trained social worker, and one psychologist.

Ethical approval

The study was approved by the Ethics Committee of the Faculty of Medicine, Umeå University (§ 451/01, dnr 01-386). The participants were given written and oral information about the study. Completion and return of the questionnaire were regarded as informed consent. The managers also gave their informed consent to participate. All participants were assured of the voluntary and confidential nature of the participation and responses.

Table 1 Overview of the studies

Paper	Participants	Collection of data	Year	Analysis	Status
I	163 + 444 + 55 healthcare employees	Stress of conscience questionnaire (SCQ)	2002 - 2003	Descriptive statistics, item analysis, and exploratory PCA	Published
II	423 healthcare employees	A questionnaire folder; SCQ (outcome) PCQ Moral sensitivity Social support RS Demographics	2003	Descriptive statistics and multiple regression	Submitted
III	30 healthcare managers	Interviews	2003	Qualitative	Submitted
IV	423 healthcare employees	A questionnaire folder; Maslach Burnout Inventory (outcome) SCQ Perceptions of conscience (PCQ) Social support Resilience scale (RS) Demographics	2003	Descriptive statistics, canonical correlation, and multiple regression	Published

Collection of data

Measures

The focus of *paper I* was to describe the construction and validation of the *Stress of Conscience Questionnaire (SCQ)*. This is a nine-item questionnaire that assesses stress related to troubled conscience in healthcare personnel. Each item consists of two parts, A and B. Part A evaluates the frequency, or how often a certain stressful situation occurs at the participant's workplace. The responses are given on a six-point scale ranging from "never" (0), through "less than once every six months" (1), "more than once every six months" (2), "every month" (3), "every week" (4), to "every day" (5). Part B evaluates the intensity, that is, the perceived amount of troubled conscience that the situation in part A evokes when it occurs. The responses are given on a 10-cm

visual analogue scale (VAS) divided into six grades, ranging from “No, not at all” (0) to “Yes, it gives me a very troubled conscience” (5). An index is calculated by multiplying the part A score by the part B score of the same item to produce the total “stress of conscience” for each item. The higher the score, the more stress of conscience; the maximum score for an item is 25. Adding the scores for all items gives a total sum index. The SCQ can be used to derive a total score, ranging from 0 to 225 ($\alpha = 0.83$), as well as scores on two aggregate factors: “internal demands”, which includes five items ($\alpha = 0.74$), and “external demands and restrictions”, which also includes five items ($\alpha = 0.78$) (item 1 is included in both dimensions). In the analysis of *paper II*, SCQ was used as a dependent variable, while in *paper IV* it was used as an independent variable in burnout and a dependant variable in the canonical correlation with “perceptions of conscience”. Internal consistencies (Cronbach’s α) reported in this section are as calculated in the sample of *papers II* and *IV*.

The *Perceptions of Conscience Questionnaire (PCQ)* (Dahlqvist et al., 2007) comprises statements reflecting a variety of common perceptions of conscience: where people think conscience comes from (its origin), what its nature or qualities, are and what its functions are. The participants are asked to indicate their personal viewpoint on 15 statements. Responses are given on a six-point Likert-type scale ranging from “no, totally disagree” (1) to “yes, entirely agree” (6). No sum of scores can be calculated, and thus the PCQ is used as 15 individual items. It has been shown to be valid and reliable for use in Swedish settings ($\alpha = 0.71$).

Moral sensitivity was assessed with the revised Moral Sensitivity Questionnaire (Lützén et al., 2006); a previous measure, the Moral Sensitivity Questionnaire (Lützén, Nordin, & Brolin, 1994), was used as the basic model. The revision was made to allow use in different units and occupations, but also in order to “adapt it to present day practice” (p. 190). The measure includes nine items ($\alpha = 0.69$) comprising three factors: “moral burden”, “moral strength”, and “moral responsibility”. Responses are given on a six-point Likert-type scale ranging from “total disagreement” (1) to “total agreement” (6). These items were also used as nine individual variables, as some

multicollinearity between the PCQ and moral sensitivity items might be expected. However, all the individual items represent the multidimensional concepts (or rather phenomena) we are measuring, to a greater or lesser extent. The revised Moral Sensitivity Questionnaire is a valid and reliable measure of moral sensitivity among healthcare personnel in Sweden.

The SCQ, the PCQ, and the revised Moral Sensitivity Questionnaire are presented in the Appendix.

The Social Interactions Scale from the General Nordic Questionnaire (Lindström et al., 2000), was used to assess *social support*. The General Nordic Questionnaire, which has been proved to be valid and reliable for use in the Nordic countries, focuses on the psychological and social work environment. The Social Interactions Scale consists of nine items covering support from immediate superior (three items, $\alpha = .88$), co-workers (two items, $\alpha = .77$), and family and friends (three items, $\alpha = .71$). Responses are scored on a five-point scale ranging from 'very seldom or never' (1) to 'very often or always' (5).

Resilience was assessed using the 25-item Resilience Scale (RS) developed by Wagnild and Young (1993). On this instrument, participants indicate their personal view of themselves. Responses are scored on a seven-point scale ranging from "disagree" (1) to "agree" (7). This scale is used as a total score ($\alpha = 0.89$), with a higher score indicating a higher degree of resilience; scores range from 25 to 175. A Swedish version of the RS has been proved to be valid and reliable for use in Sweden (Nygren et al., 2004).

Personal and work demographics collected were: age, gender, marital status, children living at home, occupation, present workplace, working schedule (shift worked), employment status (hours worked per week), years in healthcare, and years at present workplace.

Burnout was used as an outcome variable in *paper II*. It was assessed with a valid Swedish translation of the Maslach Burnout Inventory (MBI) (Hallsten, 1985; Maslach et al., 1996). The MBI consists of three subscales: emotional exhaustion (EE) (nine items, $\alpha = 0.90$), depersonalisation (DP) (five items, $\alpha = 0.69$), and personal accomplishment (PA) (eight items, $\alpha = 0.80$). Items are scored on a seven-point scale ranging from “never” (0) to “daily” (6). Previous studies have shown varying factorial structure of the three burnout dimensions in the MBI. Personal accomplishment seems to be the most unstable of the three subscales, and some have argued that it is more of a personality trait (Cordes & Dougherty, 1993; Shirom, 2003). We therefore chose to exclude this subscale, and so only emotional exhaustion (the core dimension of burnout) and depersonalisation were used as dependent variables in *paper IV*. High levels of EE and DP and low levels of PA indicate an increased risk of burnout. While Maslach et al. (1996) provide cut-off data for a categorical rating of low, moderate, or high burnout, they recommend use of the original numerical scores in statistical analyses (p. 9), a practice followed in our study.

Interviews

Paper III presents a qualitative interview study based on open-ended interviews with a rather controlling and leading opening question. Each interview began with the question: “*From your experience, what changes in healthcare might have contributed to the increase in sickness absence of healthcare personnel due to burnout?*” The participants described their experiences, without interruption. Previous to the interviews, a written topic guide had been developed on the basis of burnout research literature and the results from previous studies by the research team. This topic guide included a number of targeted questions, mostly focusing on changes in, for example, personnel, medical treatment, values, responsibility, and work climate during the managers’ time in healthcare. Most topics were brought up spontaneously by the interviewees, and the guide was referred to at the end of the interview to ensure that all topics were covered. The interviews lasted between 25 and 90 minutes; they were

tape-recorded and later transcribed verbatim, including non-verbal information (such as sighs, laughter, and silence).

Analysis of data

Statistical methodology

Analyses were performed using the SPSS software package, version 11.0 (SAS Institute, Inc., Cary, NC, USA) (*I, II, IV*), and the statistical programming language R (R Development Core Team 2005) (*II, IV*). In all statistical tests, $p < 0.05$ was considered to indicate statistical significance. The large sample size provided adequate statistical power to ascertain the associations reported in *papers II and III*, even though the design of the studies does not imply the necessity of power analysis. The sample quantity is justified by the use of sub-samples in validation (*I*) and the large number of items (*II, III*). After ensuring for normality of distribution and the assumptions of homoscedasticity and linearity, parametric statistical tests were used, although some data were on an ordinal level (Munro, 2001).

Descriptive statistics, such as means, medians, standard deviations, frequencies, and ranges, were used to obtain an overview of the data. To test for reliability (internal consistency), item analyses, as item–total sum correlations, squared multiple correlations, Cronbach's α , and alpha-if-deleted values were reported. In addition, principal component analysis was used to test the congruence between the measure and the underlying concepts, and thereby analyse the construct validity (*I*).

Pearson's correlation coefficients were used to assess correlations between variables (*II, IV*). Student's *t* test and variance analysis (ANOVA) with Bonferroni correction of *p*-values were used to estimate differences between groups in stress of conscience, emotional exhaustion and depersonalisation. Multiple linear regression analyses with stepwise and non-automatic inclusion were conducted to determine the impact of the independent variables on the dependent variables. In the analyses presented in paper *II* with SCQ as outcome variable, demographics were entered first, followed by PCQ and

Moral Sensitivity items, and finally social support and RS scores. A canonical correlation was performed to assess the relationship between PCQ and SCQ items (*IV*) and to determine which PCQ items to include in the regression a canonical correlation was done; a canonical correlation examines patterns of relations between a set of dependent variables (SCQ) and a set of independent variables (PCQ). Two separate regression analyses, controlling for age and sex, were used to determine the importance of the independent variables on emotional exhaustion and depersonalisation. The variables were entered in three steps; firstly demographic variables, secondly SCQ and PCQ items, and finally social support and RS scores/variables.

Interpretation of text

The interviews (*III*) were analysed using *qualitative content analysis* (Graneheim & Lundman, 2004). This is a method of interpretation that focuses on similarities and differences in a text. The method has its roots in structuralism and a more quantitative paradigm. In nursing research qualitative content analysis has been applied to a number of data – i.e. observations and interviews – which have been converted into a text. Some degree of interpretation is always involved in analysing a text. However, the depth of the interpretation varies, thus falling into different level categories and/or descriptive themes. Categories should be as mutually exclusive as possible, which is not easily achievable when considering human phenomena and experiences. In contrast, themes are threads of meaning running through (for example) meaning units, codes, and categories, and are often not mutually exclusive. When using qualitative content analysis, the interpretation is always made in the light of a context (Graneheim & Lundman, 2004).

The text was first read through several times, and phrases, sentences, or paragraphs containing the same central meaning – i.e. meaning units – relevant to the aim were marked. Next, the meaning units were condensed to a shorter text while still retaining the core meaning, and also abstracted to a higher logical level, giving strings of text.

These “text strings” were labelled with codes, brought together and compared for similarities and differences, and grouped into different level categories in a systematic way. It should be noted that the phases were not necessarily executed in this linear order, and there was an ongoing shifting between the different phases. After this, the text and results of the analysis were reflected on, in unfolding a thematic explanatory model of the participants’ perceptions of the phenomenon. In the analysis, there was a continual shifting between description and interpretation; between what the text expressed or conveyed, and the interpreted meaning. During the process, the categories and explanatory model were continuously reflected on among the co-authors and among the other researchers involved in the Stress of Conscience Study.

RESULTS

Paper I

Since no suitable questionnaire, for our purpose, was found we constructed and validated a questionnaire concerning stress of conscience (SCQ). The SCQ combines the frequency of exposure to stressful situations, which supposedly leads to troubled conscience in the healthcare setting, with the degree of troubled conscience. The SCQ focuses on the respondent’s own assertion of this feeling, and so no definition of the concepts was given in advance, and also since the perception of concepts as troubled conscience varies between individuals

Content validity was assessed in relation to the reviewed literature, most of it empirical, about strain in healthcare, and also to experiences in the research team, making the SCQ empirically grounded. Face validity was achieved by items being confirmed or reformulated in expert panel reviews. To ensure construct validity, different versions of the questionnaires were tested in groups of healthcare professionals. An explorative principal component analysis (n = 395) of the final nine-item questionnaire revealed two underlying factors (table 2) that were regarded as theoretically relevant and sensible/logical expressions of stress of conscience. The two factors were (i) internal demands and (ii) external demands and restrictions. Internal

demands reflect personal wishes and desires that also might be described as integrated ideal images, whereas external demands and restrictions express more outer circumstances that influence one's work and family life.

Table 2 Factor loadings and Cronbach's α for the two-factor solution (n = 395). Loadings ≥ 0.4 included

Items	<i>Factor I</i> (internal demands)	<i>Factor II</i> (external demands and restrictions)
2. Are you ever forced to provide care that feels wrong?	.63	
4. Do you ever see patients being insulted and/or injured?	.79	
5. Do you ever find yourself avoiding patients or family members who need help or support?	.61	
9. Do you ever lower your aspirations to provide good care?	.68	
1. How often do you lack the time to provide the care the patient needs?	.56	.53
3. Do you ever have to deal with incompatible demands in your work?	.46	.63
6. Is your private life ever so demanding that you don't have the energy to devote yourself to your work as you would like?		.68
7. Is your work in healthcare ever so demanding that you don't have the energy to devote yourself to your family as you would like?		.75
8. Do you ever feel that you cannot live up to others' expectations of your work?	.42	.54
<i>Cronbach's α</i>	<i>.76</i>	<i>.75</i>

Note: The items included in the respective factor are in bold type.

Three items had loadings on both factors, pointing to factorial complexity. This, along with Cronbach's alphas – 0.83 for the total scale and 0.76/0.75 respectively for the two factors – points to unidimensionality. Only one item loads within 0.05 of the highest one, thus considered equal and assigned to both factors. Factorial complexity is not off beam from a statistical standpoint; it only makes the interpretation more difficult. A weakness is the absence of concurrent validity and the result of the test-retest is a weakness. Still, the SCQ is considered to be a valid assessment of stress of conscience in healthcare professionals, with acceptable reliability.

Paper II

A preliminary analysis was conducted with the purpose of analysing which variables should be included in the multiple regression analyses. Pearson's correlation analysis showed that both SCQ factors were negatively correlated both to support from superiors and co-workers and to resilience, indicating that employees who report high levels of stress of conscience experience little support from superiors and co-workers, and also report low levels of resilience. Five PCQ items showed statistically significant correlations with SCQ factor I (internal demand) and nine with SCQ factor II (outer demands and restrictions). In the Moral Sensitivity Questionnaire, three items (items 4, 6, and 8) showed statistically significant correlations with both SCQ factors.

SCQ factor I, "internal demands", revealed only one statistically significant finding that employees working in internal medicine care had higher mean scores than those belonging to the "other" workplace group – e.g. paediatric care, obstetric/gynaecology care, and so on.

SCQ factor II, "external demands and restrictions", also revealed only one statistically significant finding, that women had higher mean scores than men. In the total score for the SCQ there were no statistically significant differences either in *t*-tests or ANOVAs for personal and work demographics.

The regression models for "internal demands" and "external demands and restrictions" were almost identical, indicating some degree of unidimensionality in this scale. We therefore decided to present the multiple regression analysis for the total SCQ score. As in the univariate analysis, almost all of the demographic variables proved to be statistically insignificant; the sole exception was working in internal medicine, which explained 2.0% of the variance. The greatest unique contribution to the variance (34.8%) represented PCQ and Moral Sensitivity items. High levels of stress of conscience were related to perceiving that conscience warns us against hurting others, while at the same time not being able to follow one's conscience at work and having to deaden one's conscience in order to continue working in healthcare. In addition, three out of four items from the "sense of moral burden" factor in the revised Moral

Sensitivity Questionnaire made statistically significant contributions to the model, namely: doing more than one's strength allows as a result of having the ability to sense the needs of the patient, having difficulty in dealing with the feelings aroused when a patient is suffering, and feeling inadequate as a result of having the ability to sense the needs of the patient. Experiencing lack of social support from superiors and low levels of resilience were also associated with higher levels of stress of conscience, but only explained 2.8% of the variance in stress of conscience.

Paper III

Analysis of the healthcare managers' perceptions of sources of burnout revealed an explanatory model with three main categories and a total of 14 sub-categories. The first main category was *continual downsizing and reorganisation*, leading to lack of work peace, insufficient staffing levels, vagueness in the organisation, and decreasing influence on one's work. The second was *increased demands and responsibilities*, including more heterogenic and advanced tasks, increased need of care, more difficult prioritising, burdensome ideal images, increased expectations of healthcare, and increased demands in society and private life. The lack of resources meant that these increased demands and responsibilities turned into burdens. Finally, the third main category stemmed from the managers' descriptions of distrust between management and personnel, a lessened respect among employees, a lack of confidence in one's role, and diminished professional pride, which came together to form a *sense of lack of worth*. This sense of lack of worth seemed to be influenced by the continual downsizing and reorganisation, and the increased demands and responsibilities. A thematic synthesis emanating from and permeating all categories revealed an emerging sense of pessimism and powerlessness in the organisation, and a prevailing sense of inadequacy.

The pessimism and powerlessness stemmed from the negative consequences of diminishing resources and supportive structures. They emerged from managers' descriptions about budgetary cutbacks, understaffing, an ever-changing organisation

with unrealistic cutbacks and rationalisations, and a vague organisation leading to role conflicts and ambiguity. As one manager stated; “*There's always something changing*”. This created a negative and poor work environment involving distrust and disrespect, which influenced the relationships among personnel and with management. The pessimism and powerlessness also emanated from the sense of lack of worth. The healthcare sector seems to have a generally lower standing in society today, and the focus is mostly on the problems penetrating this sector. The low prestige of some specialities adds to this sense. Interestingly, personnel working in either geriatric care or primary healthcare centres showed higher levels of emotional exhaustion than those working in the other units or specialities (IV). Lack of worth seemed to be about how one's work is valued by others, as well as how it is valued by oneself.

The managers described a chronic work overload, with personnel having to manage more than before and having more obligations than they had time for, in keeping up with the high pace in care work. It seems that new and more complex work tasks, an increased throughput of patients, and a more complicated care model with new ways of handling diseases, have led to new, higher, and different demands and responsibilities being placed on personnel. In addition, the demands from society and private life are increasing. The participants described increasing demands in society in general, with changing social structures; this was partly due to urbanisation and changing family structures, which together mean that the experience of security in life does not exist in the same way as before. Not being able to fulfil these increased and often incompatible demands and responsibilities leaves personnel with a sense of inadequacy.

Paper IV

After the preliminary analyses to conclude which variables should be included in the multiple regression analyses, two stepwise regression equations were calculated, one for EE and one for DP (Table 3). The demographic variables were entered first, followed by the other hypothetical variables. Factors associated with EE were: being

female, being a physician, belonging to the “other” occupation group (e.g. physiotherapists, occupational therapists, social workers, and psychologists), working in geriatric care or primary healthcare centres, low social support from co-workers, and low levels of resilience. Also related to EE were the PCQ item “having to deaden one’s conscience in order to keep working in healthcare”, and three SCQ items, namely stress of conscience from “lacking time to provide the care needed” (item 1), “one’s work being so demanding that it influences home life” (item 7), and “not being able to live up to others’ expectations at work” (item 8). All the variables together accounted for 59.3% of the variance in EE, and the PCQ and SCQ items explained the variance by as much as 48.1%. Thus, when personnel experience stress of conscience and having to deaden their conscience, emotional exhaustion scores are most likely high.

The independent variables affecting DP were: being a physician, experiencing low social support from co-workers, the PCQ item “having to deaden one’s conscience”, and the SCQ items “not being able to live up to others’ expectations” (item 8) and “having to lower one’s aspirations to provide good care” (item 9). The full model accounted for 30.3% of the total variation in DP, of which PCQ and SCQ items explained 22.2%.

Table 3 Hierarchical regression analyses of emotional exhaustion (EE) (n=401) and depersonalisation (DP) (n=399)

<i>Variables</i>	<i>Emotional exhaustion</i>			<i>Depersonalisation</i>		
	β	ΔR^2	<i>F</i>	β	ΔR^2	<i>F</i>
Model 1		0.062	(6, 394) 5.84***		0.060	(3, 395) 9.46***
Age	ns			ns		
Gender (female)	0.08*			ns		
Physician	0.15***			0.25***		
Other	0.15***					
Geriatrics	0.08*					
Municipal health centres	0.07*					
Model 2		0.481	(10, 390) 49.72***		0.222	(6, 392) 26.99***
SCQ item 1	0.18***					
SCQ item 7	0.30***					
SCQ item 8	0.20***			0.14**		
SCQ item 9				0.26***		
PCQ item 11	0.15***			0.19***		
Model 3		0.112	(12, 388) 49.54***		0.021	(7, 391) 25.76***
Co-worker support	-0.14***			-0.16***		
Resilience	-0.16***					
<i>R² total</i>		0.593			0.303	

β = standardised beta-coefficient from final-step, ΔR^2 = change in explanation rate in each step.

Results from F-tests displayed as *p<0.05; **p<0.01; ***p<0.001; ns = non-significant.

Of the SCQ items affecting EE, the most important one was item 7, followed by items 8 and 1. These items represent factor 2 in the SCQ scale, that is, external demands and restrictions. For DP, on the other hand, the most important factor was item 9, which belongs to factor 1, internal demands. Item 8 affected both EE and DP, though it was less important in DP. Thus it seems as if feeling or perceiving that one is unable to live up to other people's expectations is particularly crucial for developing burnout among healthcare personnel.

DISCUSSION

Methodological and ethical considerations

Traditionally, the quality of research relates to its being rigorous and trustworthy; that is, valid, reliable, and generalisable. In this thesis, both quantitative and qualitative methods were used to investigate the phenomena of stress of conscience and burnout.

There are limitations to our studies that should be recognised. The most evident limitation (*paper I*) relates to concurrent validation, that is, the relationship to other similar instruments or single items. At the time of planning this study, we could find no instrument to evaluate troubled conscience in healthcare, and hence concurrent validation was ruled out. Retrospectively, we think that we could have included an instrument for either work stress, or for moral distress. Then again, the work of refining a measurement instrument is never quite complete, and so this issue can be addressed in future studies. Future studies should also conduct further test-retest validation; the test-retest subjects in our study included a number of nursing students, some of whom might have had little experience of working in healthcare; this might have influenced the low test-retest correlation in item 2 (“Are you ever forced to provide care that feels wrong?”).

Another possible limitation is that the two SCQ factors, “internal demand” and “external demands and restriction” were not statistically obvious. This might reflect the fact that the items in the SCQ ultimately deal with *me* as a person. The scale was found to be close to unidimensional. Another important point is that the situations described in the questions might not lead to troubled conscience for some people, but rather to aggression, frustration, or other feelings. There was some discussion within the research team regarding whether the index ($A*B$) should be discarded in favour of only using the *B* parts of the questions, that is, the degree of troubled conscience. However, it was decided that the concept of demands in healthcare incorporates the experience of both the frequency of the stressor and the emotional exertions of the stressors, and that both are equally important in order to be able to assess the total stress

on a person. This point has also been raised by other researchers (e.g. Corley, Minick, Elswick, & Jacobs, 2005; Söderfeldt et al., 1997).

Despite this, and owing to the satisfactory results of the parametric testing of the SCQ, we regard it as a valid and reliable measure of stress of conscience in Swedish healthcare settings. A strength of the SCQ and this work is that it touches on a new creative aspect not studied previously. Our ambition was explorative; to understand more about stress, burnout, and troubled conscience, emanating from the idea of stress of conscience, and to find out if there is empirical support for our theoretical notion.

Another major issue is the use of a cross-sectional design in *papers II and IV*, which means that we cannot draw any conclusion about causality. Nor can we speak of the independent variables as “affecting” burnout or stress of conscience; we have only shown that there is a relationship between variables. A possible weakness of multiple regression analysis is the assumption of linear relationships between variables. In order to develop theoretical clarity and test a full model, structural equation modelling techniques for analysing the paths or internal structure of correlations in a model might be valuable. Although analysis indicated no severe multicollinearity (i.e. the risk of reduced model stability caused by correlations among explanatory variables), there is a risk of measurements overlapping. An attempt to handle this was made by using SCQ, PCQ, and Moral Sensitivity variables as individual items.

These studies rely on self-report measures, posing the problem of possible underestimation or overestimation of the actual levels. These people are most likely not burned out; rather, some of them experience higher levels of burnout than others according to the MBI, making burnout levels low to moderate. In addition, people on sick-leave were excluded. These results attest to people’s perceptions, which might not mirror reality. Nonetheless, it is our belief that how we perceive things is just as significant as the reality.

The samples of participants were limited in composition. Especially problematic was the group unevenness regarding gender, occupation, and present workplace; however, this unevenness does reflect the reality of Swedish healthcare. Conversely, a particular strength is the inclusion of different occupational groups and specialities, a weakness of many other stress and burnout studies. The study presented in *paper I* included participants from different parts of Sweden and different organisations. However, the participants in the studies presented in *papers II and IV* were recruited from a restricted rural area of northern Sweden, and this issue should be taken into consideration when interpreting these results. All these participants came from the same organisation, and since the context is shared they could be expected to report some similar perceptions. Another concern is the limited background data on participants in *paper I*, making further analysis difficult.

Finally, the independent variables explained only part of the explained variance. The results should be judged with caution, keeping in mind that the studies included a limited number of explanatory variables. A more complete understanding of the contributing factors would require further exploration to explain the proportion unexplained. Nevertheless, the SCQ explained quite a large proportion of the variation in burnout. Tyler and Cushway (1995) concluded that stress measures seldom account for a large amount of the variance in psychological distress measures. There are many studies about burnout pointing to various important factors, and thus we had no real chance of covering a large amount of variance; in fact, it is rather remarkable that we did manage to explain such a large amount of the variance.

One concern raised in the research group was the danger of literally accepting research results, without reflecting on what we were measuring. For instance, the resilience scale (RS) which measures some structure of inner strength. This raises the question of whether strength and independence is the ultimate desirable characteristic in today's healthcare (cf. Strandberg & Jansson, 2003). Previous research shows that people with hardy personalities are less prone to burnout (Duquette et al., 1995), and Carmel and Glick (1996) have found that compassionate-empathic physicians reported more

emotional exhaustion than other physicians. Another weakness in our work is the prior lack of use of the RS among healthcare personnel; as with the SCQ, PCQ, and moral sensitivity measures, an instrument's being previously almost unused makes comparison impossible.

Research should also always be justified from an ethical standpoint. Burnout research may involve disclosing some sensitive information. When a coding list exists, as was the case in papers II and IV (for such purposes as reminder letters), this can compromise the extent to which data can be regarded as confidential. The coding list was handled by one person, and was inaccessible to others. Another concern is that since the questionnaires were distributed by the managers, there may have been the notion of this being something imposed by management. These possible concerns were addressed in the introductory letter. Moreover, the questionnaires were returned directly to the researchers, in prepaid envelopes, and so the participants knew that the managers had no knowledge about who had answered the questionnaire and who had not. Still, the limited contact in a mail survey between researchers and participants makes it difficult to address possible concerns directly.

Many researchers have advocated the use of mixed methods when studying complex phenomena, to obtain different perspectives and a fuller picture; quantitative and qualitative methods act as complements (Happ, Dabbs, Tate, Hricik, & Erlen, 2006; Williamson, 2005). A recurrent concern in qualitative research is the question of objectivity (*III*). Analysis and interpretation of texts inevitably implies an abstraction of the data, in which certain points are emphasised and others are diminished. Lindseth and Norberg (2004) point out that even if there are several possible interpretations of a text, they are not all equally realistic or logical. All three authors (*III*) participated in the analysis, and the results were discussed within a burnout researcher team consisting of five doctoral students and five to seven PhDs disclosing the phenomenon from different perspectives. Researchers' pre-understanding is a concern in qualitative research. Although it probably does have some impact on the result, and descriptions of researchers' pre-understandings are common in qualitative research, the pre-

understanding that makes the largest impact we can not apprehend or grasp, hence we are “blinded” to it (Lindseth & Norberg, 2004). This can be addressed by an open and honest discussion. Naturally, our pre-understanding also influenced our interpretation of the results of the quantitative analyses. Part of our theoretical understanding has been shown in the background section.

The issue of quality criteria in qualitative research is much debated. Some state that qualitative research should be judged using the same terms as quantitative research, while others state that a different set of terms should be used. The latter stance has generated a number of new concepts and strategies for establishing trustworthiness (Rolfe, 1993), for instance credibility, dependability, and transferability (Graneheim & Lundman, 2004). Trustworthiness in qualitative research has, to a large extent, been ensured post-hoc; that is, validity is claimed by presenting the results in a comprehensive manner. According to Morse et al. (2002), reliability and validity strategies must be implemented integrally and in a self-correcting way during the whole research process. Our primary method of meeting the demand of validity criteria (*III*) comprised a systematic and rigorous processing of the text and a logical methodological coherence; that is, following and sharing the outlines of qualitative content analysis. Notes were made after every interview covering the ideas and feelings generated by the interview, and including a short summary of the topics that had emerged. We also attempted to carefully describe the context and the procedure of data collection, transcription, and analysis, to present the results clearly and distinctly in accordance with the “text”, and to make our arguments on the grounds of fact.

One restriction (*III*) relates to the sample; that is, “only” interviewing healthcare managers about sources of burnout among healthcare employees. As stated earlier, we regarded managers’ perspectives as valuable, since they are often accused of causing burnout, and burnout is part of their daily life. In addition, their position (being “in-between”) probably gives them a broad insight into organisational problems, and more importantly, their perceptions influence the work environment and the actions taken to prevent work stress and burnout. It is their job to “work” with burnout; that is, to be

responsible for prevention and rehabilitation. Each interview was conducted by one of two researchers (25 by one researcher and five by the other); both were women, nurses, and participants in the Stress of Conscience Study. The same interview guide was used and the procedure was discussed among the researchers. No systematic difference could be detected in the interviews.

Interviews always pose a risk of bringing up difficult memories in the interviewees. Some of the managers had either themselves been or had relatives that had been on sick-leave for burnout. In addition, managers or management are often described as “causes” of burnout. It is the interviewer’s duty to be observant and sensitive about feelings that appear and respondents exposing more than they intend during the interview. Several managers talked about management using the word “they”, hence putting themselves in the employees’ situation, and showing that this was not such an easy subject for managers to narrate. However, the interviewees were people who were used to standing up for their opinions. The managers gave their consent to participate and were guaranteed confidentiality, and the number of participants makes recognising a particular manager difficult. They did not talk about particular individuals but about burnout in general, and thus there was little risk of exposing people.

Reflections on the results

The quantitative studies (*I, II, IV*) provide evidence that stress of conscience exists and seems to be a factor that should be taken into consideration in terms of occupational health among healthcare employees. The results largely support our assumptions as described on p. 9. In addition, continual reorganisation and downsizing of health care has reduced resources and simultaneously increased demands and responsibilities, leaving employees with a sense of lack of worth and ultimately throwing them into what seems to be a prevailing spiralling sense of inadequacy and an emerging sense of pessimism and powerlessness (*III*). Care providers seem to have a high awareness of ideal images, and the right and good thing to do. These ideal images are hard to live up to in the context of scarce staff resources and time pressure. They comprise expectations from others but also from oneself.

Care providers seem to have — or are often required to have — a close relationship with their patients, making it more difficult to ignore the ideal image of doing good and right. Ideological changes in healthcare to a more holistic or personalised care have made healthcare professionals more personally involved in patient care (Muscroft & Hicks, 1998). According to Peter and Liaschenko (2004), this proximity is not unproblematic and might even contribute to moral distress and moral ambiguity; making difficult decisions is always more difficult up close. Ultimately, it is having the burden of moral responsibility but not the necessary power or control over the situation, and having to see up close the consequences of cutbacks on patient care. Perhaps, all in all, this makes care providers more sensitive to failure. On the other hand, because of the tightening resources and ambiguous demands and responsibilities, care providers do not really seem to know what they should live up to or what is expected of them; there is no yardstick against which to measure these ideal images. It should be noted, though that while the reference to ideal images may sound as if these are unachievable picture perfect images, this is not necessarily the case. They can just as easily be realistic images of how healthcare should be or should function in a society with reasonable available resources.

A pioneering result of our studies is the empirical evidence supporting a relationship between stress of conscience and burnout (*IV*). To our knowledge, no empirical study has addressed burnout in relation to troubled conscience using quantitative research methods. However, the statistical effort of this work lies close to qualitative research, as we have used more descriptive measures in order to see patterns. Diminishing stress of conscience seems to be vital for our psychological health, though far from all healthcare employees reported that they experience stress of conscience. The most striking factors related to stress of conscience were a lack of time, work having an influence on one's home life, not living up to others' expectations, and having to lower aspirations to provide good care. Not living up to others' expectations was the only factor related to both EE and DP. High and unrealistic expectations are factors quite frequently related to burnout (Schaufeli & Enzman, 1998), albeit mostly in the context

of individuals' expectations regarding, for example, the organisations, personal effectiveness, and patients' progress. This has been equated with idealism, and concepts such as disillusionment, omnipotence, optimism, and irrational beliefs. However, in our studies, the focal point was the expectations of others, which might stem from real external demands but could also be self-imposed or imagined demands. It seems as though we have a need for confirmation from others as well as from ourselves; that we need to feel good enough in order to feel good. Sørli (2001, pp. 22-27) likewise found that confirmation from others was not enough for care providers; they also needed confirmation from themselves in order not to feel "pain".

Surprisingly few relationships were found between work and personal demographics and either stress of conscience (*II*) or burnout (*IV*); especially regarding stress of conscience. Research findings are inconclusive about the extent to which demographics affect work stress and burnout, and most researchers argue that their influence is minor (Ahola et al., 2006; Bryant, Fairbrother, & Fenton, 2000; Gyllensten & Palmer, 2005; Kirkcaldy & Martin, 2000). There are some indications that personnel who are female, are younger, have less work experience, are unmarried, and have a higher level of education are more prone to burnout (Maslach et al., 2001). On the other hand, two recent Nordic studies have associated burnout in various professionals with increased age (Ahola et al., 2006; Lindblom, Linton, Fedeli, & Bryngelsson, 2006). In our study, women showed statistically significantly higher levels of emotional exhaustion than men (*IV*). Remarkably, no gender differences remained in the multiple regressions regarding stress of conscience (*II*). Research concerning conscience and gender is scarce. Gibbs et al. (1984) have indicated that women use more appeals to conscience in their moral judgments than do men. Research about moral development and reasoning (Lifton, 1985; Norberg & Uden, 1995; Ryan, David, & Reynolds, 2004) has suggested that gender differences are not as pervasive as, for instance, Gilligan and Attanucci (1988) have argued. Lütznén et al. (2000) suggested that there might be some gender differences in moral sensitivity among care providers (nurses and physicians). Women needed to find their actions meaningful to a larger extent than did men, and women also had a more negative

attitude to coercion. Myyry and Helkama (2002) found no gender differences in the total moral sensitivity score; however, men and women focused on different issues when they interpreted the situations, with men putting more emphasis on autonomy.

Not unexpectedly, and as shown in many previous studies, lack of social support was associated with burnout (*IV*) (e.g. Lindblom et al., 2006) and social support was negatively associated with stress of conscience (*II*). The divergence between SCQ and burnout was that stress of conscience was associated with lack of support from superiors (*II*), and burnout (both EE and DP) with lack of support from co-workers (*IV*). One explanation might be that good social relationships with co-workers may alleviate the chronic stress felt at work and the progress of burnout, whereas superiors to some extent are responsible for the constraints that prevent personnel from working according to their own values and providing good care, thus increasing stress of conscience. In addition, low levels of resilience seemed to make a contribution towards explaining high levels of both stress of conscience (*II*) and burnout (*IV*); this is a predictable result, as resilience or inner strength has been described as a driving force that facilitates or helps people handle stressful situations (Nygren, 2006, p. 38).

An interesting result is the seemingly large impact that deadening one's conscience has on both stress of conscience (*II*) and burnout (*IV*). This is, however, not surprising, given Fromm's description of the humanistic conscience as our innermost values, the "expression of our true selves" (Fromm, 1947/1975, p. 159). The serious consequences of deadening one's conscience seem to derive from conscience being linked to integrity and identity, and thus involving the self. However, the danger of deadening one's conscience is probably affected by whether it is the authoritarian or the humanistic conscience that we are deadening. Deadening the authoritarian conscience that reflects outer societal values might not be as dangerous as deadening the humanistic conscience that is more deeply rooted in integrity. Schopenhauer (1995, pp. 195-197) argued that the pang of conscience concerns not only what we have done, but ultimately *what we are*. He further stated that our actions are connected to our character as symptoms are to a disease, and that conscience is our acquaintance with

ourselves. The answer to the question of whether we acted morally or not leads to satisfaction or dissatisfaction with who we are. Similarly, Jenkins (1955) maintained that a troubled conscience shakes our confidence in ourselves. This differs broadly from person to person; one person's conscience might strongly object to conduct that another's will accept or perhaps not even notice.

Georges and Grypdonck (2002) concluded that the inability to resolve moral problems in healthcare is associated with feelings of personal and professional disillusionment, and the decay of personal integrity. Dwyer (1994) described how medical students in situations of ethical difficulty chose to deaden their conscience and adjust to the prevailing system and paradigm, resulting in a negative impact on their identity and self; Kelly (1998) has described a similar phenomenon among nursing students. Doing something that harms others not only alarms the conscience, but it also damages the sense of self. Juthberg et al. (2007a) concluded that care providers in eldercare deaden their conscience in relation to external demands in order to be able to collaborate with co-workers, and in relation to internal demands in order to uphold their identity as "good" care providers. They further argue that care providers desire to be "good", but that this is not always attainable, so to uphold this notion they have to deaden their conscience.

Nonetheless, we can most likely deduce that deadening our conscience is damaging for our well-being (*II, IV*), although we are not saying that one always should or can follow it. Even the thinkers who state that the conscience should always be followed agree that conscience is fallible; it is the danger of going against one's conscience that makes them take this stance (Ramsay, 2001). Attesting to the fallibility of conscience means that some believe that one does not know which voice or what is speaking. Hence, a further complication is the question of whether it really is our conscience that is speaking to us; according to Luther, we do not always know (Zachman, 1993, pp. 63-65). However, when we recognise our troubled conscience we can begin working with it and thus ease it. It is when we ignore or deaden our conscience that it seems to become dangerous. Juthberg, Eriksson, Norberg, and Sundin (2007b) found a

relationship between burnout and a conscience that must be deadened, which cannot be expressed or followed at work, and which is being avoided; a situation which is interpreted as the conscience being suppressed. Suppressing one's conscience is an attempt to stay whole and true to oneself, but it actually damages wholeness and aggravates the risk of losing oneself, thus losing wholeness, integrity, and harmony in the self.

Conscience represents the core ethical values; the utmost limit that nobody can cross without serious consequences for moral integrity and peace of mind (Aldén, 2001, pp. 160-170). Values can simplistically and inconclusively be conceptualised as constructions of core beliefs and ideals that are upheld by individuals or groups, embedded in judgments, decisions, behaviour, attitudes, and preferences (Deth & Scarbrough, 1998). On an everyday basis, people have to make choices between values. In healthcare, especially, incongruence or conflict between different values has been raised, and has often been put forward as a conflict between personal and organisational values (e.g. Perkel, 2002). However, it is not as simple, for instance, Sarvimäki and Benkö (2001) described four categories of values – the scientific, the aesthetic, the ethical, and the economic – that guide the care process. These can be either explicit and open or implicit and hidden.

Explicit values are essential for conveying what the organisation stands for. It is believed that an integrated value system helps to reduce conflicts in moral decision-making (e.g. Hardingham, 2004). A value system incorporated by everyone in an organisation is probably not achievable. According to Springsted (1993), values are to a large extent historically and culturally contingent. Some philosophers believe that this recognition breeds moral relativism; however, mutual social values are incorporated in us, and values are shared within social groups. So by attesting for values as cultural products, we rather dismiss relativism. Springsted, (1993, pp. 167-168) in referring to Weil, argued that this stance is a force for moral evolution, since it prevents us from seeing our values as absolutes and thus being insensitive to the values of others. However, an essential character of the first half of the twentieth century

(Weil, 1955) as well as of today (Bauman, 2005) is the weakening or almost disappearance of the notion of value, or people's lack of rootedness in any values — or, as Fromm (1947/1975) stated, people's unconsciousness of their values. Nevertheless, at least in Western culture there seem to be general values, and a common language imbued with values, as and most evidently ethical principles and human rights (e.g. Beauchamp & Childress, 1989).

The results presented in paper III are reflected on from another means of outlook; a more general societal reflection about values, work, and our culture and its influence on burnout, which also to some extent touches on the results presented in the other three papers. The results are considered from the point of view of Weil's (1949/1995) argument that the need for roots is one of the most important and overlooked spiritual needs of humans, but also the most difficult to describe. The human soul is like a plant that thrives or dies, depending on the type of environment in which it grows. Like a plant that responds to good soil, it responds to a nurturing socio-cultural entity. People need roots to grow, and the deeper these roots go, the more the individual can withstand. Accordingly, roots are created in a natural collectivity, where the past, present and future are shielded. It is through this collectivity with, for instance, community, family and occupation that our originality is confirmed (pp. 7-9, 41f).

Weil stated several causes for uprootedness; one is the alienation of the workers from their work. People being caught up in a state of almost total uprootedness are perhaps even more obvious nowadays than in the 1940s when Weil wrote about the need for roots. In reflecting on sources of burnout, healthcare managers seemed to be describing an organisation permeated by a spiralling sense of pessimism and powerlessness, and a sense of inadequacy among the employees (*III*). This makes people feel resigned, which ultimately might lead to alienation. Muncer et al. (2001) suggested that the link they found between powerlessness and stress might be explained by care providers' inability to offer care of high standards. Olofsson et al. (2003) likewise maintained that care providers who were unable to take care of patients the way they saw fit experienced emotional powerlessness due to not being

able to influence the work situation. One of the main focuses in stress research is control of one's work situation; lack of control might result in alienation from work. Though the managers did not explicitly address the issue of troubled conscience when narrating about the sources of burnout, they did mention sources such as not being able to do one's work according to one's values.

Weil (1949/1995) referred to uprootedness as one of the most dangerous diseases of humans, partly since it is contagious. It is a malignant moral disease. Burnout has also been described as contagious. People are influenced by the attitudes and behaviour of their colleagues, and burnout is "communicated" from one person to another (Bakker, Le Blanc, & Schaufeli, 2005). Weil (1949/1995) stated that uprooted people behave in one of two ways; either they show spiritual lethargy, or they try to uproot others as well. "*Whoever is uprooted himself uproots others. Whoever is rooted himself doesn't uproot others*" (p. 45).

Weil (1949/1995) gave a very miserable picture of the uprooted French workers; however, she thought that the situation could be changed by her proposed reforms. Some of these reforms were very concrete and some were more general, for instance creating workplaces that bring about a sense of "being at home". The feeling of not belonging produces apathy and withdrawal from responsibilities. Another concern was spiritual development. Already, at the time of World War II, Weil was reflecting on the absence of spirituality in society, and the lack of balance created by technical development. She further concluded that spiritual development must be accomplished carefully, to avoid its becoming something dictated from above. This problem was also addressed by the healthcare managers interviewed in paper *III*. In today's healthcare organisations, there is a great deal of top-down control, with "nicely worded" organisational plans that are not easily implemented. Moreover, these plans are often regarded as stop-gap measures. Weil also proposed enhancements to communication, education, and collaboration. Then again, she also believed that a spiritual awakening must take place in each individual's conscience in order for people to really change. Change must come from inside people; it cannot be brought about by another. Instead,

the solution is to provide a nurturing and fertile milieu. As already stated, what the human soul needs above all is to be rooted in several natural milieus, such as for instance a country, culture, family, or profession through which it can communicate with the world.

Marcel (1950) described, in one of his plays, the modern world (of the 1930s) as a “broken world”; a world in conflict with itself, that “had a heart one time, but today you would say the heart had stopped beating” (p. 22). In a similar way to Weil (1949/1995), he reflected on the disparagement togetherness. People are losing themselves in work, productivity, and a rushing life, thus becoming fragmented and dispersed. This is the price we pay for the progress of our time, being driven from pillar to post, being labelled, and having our personality reduced to an official identity (Marcel, 1950, pp. 29-30). If we try to communicate our worth or who we are to others or even to ourselves, we describe ourselves as a collection of functions and roles. In this, we have lost our core, alienating us from ourselves, others, and God. In the broken world, everything is reduced to functions, and technology has become the answer to all problems. The weakness of this world is its inability to address existential questions, leaving people in despair. The notion of living in a broken world, and of our worth being connected to our functions and roles, is perhaps even more obvious today than when Marcel wrote his plays. The core of the sense of inadequacy may be in peoples’ notion that their value lies in the things they do (for example, their work) and not in who they are (cf. Malach-Pines, 2002).

According to Marcel, our world rests on words that have become slogans; and as such they have lost their meaning or authentic significance, for instance, liberty and democracy. In a way, these words are suffering from inflation (Marcel, 1950, p. 34). This may be what is happening in the healthcare system today; we may be communicating the organisation and ourselves to pieces, by continually using fine-sounding words and directives that can never actually be realised. However, communication is one of the reforms proposed by Weil in the battle against uprootedness. It could be that what we are doing is communicating on a more

superficial level, thus losing the deeper meaning. Udén et al. (1992) showed that superficial discussion about ethical problems in healthcare exposed conflicts, whereas Lindseth et al. (1994) showed that deeper discussion with the same care providers pointed to mutual problems and values. Perhaps we need to start communicating on a level of deep values, and giving each other confirmation on that level. What Weil seems to have been suggesting when she talked about being rooted in the feeling of being at home in work, culture or family is a rootedness in “meaningful” values, and a need to understand which values are important in our lives and societies.

Implications

This thesis makes a contribution to the development of knowledge about employee well-being. It highlights a number of factors that are important for management and healthcare practice, but also for education and research. Firstly, there is the importance of recognising the different perceptions of conscience that exist, and giving employees the opportunity to express what their conscience is saying. Even if consensus is not achievable, communicating one’s perspective can at least bring about a deeper understanding of or sensitivity to the values, wishes, and desires of others. Oberele and Hughes (2001) found that differing perceptions of ethical and moral problems among nurses and doctors led to conflicts and moral distress. This was a function of the professional role, and hierarchical structures were key elements in nurses’ distress.

Secondly, in the case of a too strict conscience, constructive dialogue perhaps modifies the burdens of conscience. Employees in healthcare with a sensitive conscience are desirable, but it is important that they be able to cope with their sensitivity. Thus, it is necessary to realise that the complexity of life sometimes makes it impossible to follow our conscience, and that this reality is something we have to accept. Kelly (1998) addresses the importance of learning how to forgive oneself when circumstances make it impossible to live up to one’s values.

Conscience can err; therefore we have to constantly enlighten it. This process can, for instance, be as simple as learning about facts, since lack of knowledge can be the source of a troubled conscience. Fromm (1947/1975, p. 161) states that since the voice of conscience is feeble, and thus indistinct, people have to learn “how to listen and to understand its communications”. In order to be able to listen to the voice of conscience, one must be able to listen to oneself. However, this is difficult in our culture, where we are used to listening to the opinions and ideas of anyone but ourselves.

Thirdly, on the other hand, employees also need help to refine their arguments for situations when they are prevented from following their conscience; for instance, when conflicting demands or loyalties prevent them from providing “good care”. Adding to the burden is healthcare employees’ seemingly great need to feel that they are doing something good and right, this is undoubtedly also the case for other workers, but it is perhaps particularly marked among those working in caregiving or service occupations.

In the rapidly changing healthcare setting, with a work environment that is perceived as pessimistic, a positive social climate that decreases pessimism and powerlessness is of great importance, since pessimism and powerlessness seem to breed pessimism and powerlessness. Beck et al. (1974) defined pessimism as negative expectations about the future, coupled with the loss of both motivation and future expectations.

Accordingly, in order to foster employees’ trust in management, and to build a climate of mutual trust and respect, open communication and feedback are essential. The employees need information about the future of the organisation, about what is going on, and about what is expected of them. If information is withheld, trust is eliminated. Paley (2004) comments on the naïve attribution of power in healthcare, arguing that it is a very simplistic view and that the constant referral to powerlessness and moral suffering means that we can never come to understand how organisations, relations, and power really work. He has a point, but it is not easy for employees to become aware of their potential power when even the managers seem to be unaware of their

own. Kivimäki et al. (2001) concluded that more attention needs to be paid to how individuals are treated within organisations. Employees seem to lack encouragement, appreciation, and acknowledgement for the things they do, which makes them experience lack of worth and a sense of inadequacy. Revealing one's inadequacy or weakness is very difficult in times when strength and independence are respected (Strandberg & Jansson, 2003), and when the reigning ideal, both in one's own mind and in that of others, is that of the good and competent healthcare professional.

In order to prevent and reduce burnout, many researchers have suggested various intervention programs (cf. Bakker, Killmer, Siegrist, & Schaufeli, 2000). However, in an organisation characterised by pessimism and powerlessness, there might be resistance against engaging in programs and actions, or the situation might even be compounded. Taormina and Law (2000) have indicated that conventional approaches such as stress management programs have little effect on burnout. In any case, actions should be taken in cooperation, and should preferably be initiated by employees. In summary, intervention programs might be very successful, but they will probably not succeed without the cooperation of the individuals involved.

Future research is needed in particular regarding troubled conscience in other cultures. In Sweden and the other Nordic countries, the notion of a troubled conscience is part of common parlance, and is spoken of almost casually. However, this raises the question of what people really mean when they talk about, and attest to having, a troubled conscience.

In conclusion, conscience can be seen as an agent for growth which helps people achieve a balance between social demands and their own sense of self, but it can also become a burden (cf. Allport, 1955; Maslow, 1968). Hanna (2004) concluded that most studies on moral distress regard it as something negative that should be avoided. However, she argues that it could be seen as “a life challenge that develops moral character for those who manage it well” (p. 77). Dahlqvist et al. (2007) found that conscience can be viewed as either an asset or a burden. However, if the tolerance of

moral diversity diminishes in healthcare it seems reasonable that the burden aspect will take over, and stress of conscience will become an increasing problem.

It seems as if settling on a “golden mean” of stress of conscience is the optimal solution; just enough to make us attentive or to warn us against doing something wrong. Stress of conscience is an asset if we can do something about the situation in a constructive way. It is when we cannot cope with it, or constructively take care of the situation, that it becomes a burden. However, since conscience can err, it is necessary to work with it, to enlighten and discuss it, and thus to develop strategies to cope with our conscience, especially in situations when we cannot follow the dictates of our conscience. As contexts and people are complicated, we are bound to get into situations of conflicting demands, meaning that no matter how we turn we end up with a troubled conscience; we all must learn to handle this, or rather as Goldberg (2004) concluded;

“Conscience, in its more inspirational sense, involves courageous reflection about oneself and others. It requires us to know our limitations, to accept ourselves as less than perfect, to live to the best of our abilities, and to come caringly together with others to heal the wounds” (p. 338).

SVENSK SAMMANFATTNING (SUMMARY IN SWEDISH)

Etiskt svåra situationer tycks vara vanliga inom dagens sjukvård. Flera studier visar att sjukvårdspersonal beskriver att de upplever dåligt samvete i det vardagliga arbetet. Personalen har dåligt samvete för att de inte ger den vård de skulle vilja och anser sig vara förpliktigade att ge. Upplevelsen av dåligt samvete torde påverka personalen och indirekt vården negativt. Vid institutionen för omvårdnad, Umeå Universitet, pågår ett tvärvetenskapligt och internationellt projekt "Samvetsstress i vården" med inriktning mot samvete i relation till "utbrändhet" under ledning av professor Astrid Norberg. Ett antagande som utvecklats är att dåligt samvete har samband med utbrändhet. Det finns många uppfattningar inom filosofi, teologi och psykologi om vad samvete (och dåligt samvete) är, hur det uppstår och vilken funktion det har. Litteraturgranskning och preliminära resultat av vår forskning visar att dåligt samvete generellt är ett svårfångat fenomen, men det är ändå ett uttryck som används av svensk vårdpersonal. Många uppfattningar om samvete som redovisas i litteraturen går ut på att samvetet signalerar när en individs djupast integrerade värden hotas. Det innebär att brott mot samvetet är ett hot mot individens personliga integritet.

Utbrändhet och stressrelaterade tillstånd har de senaste 10-15 åren fått närmast epidemiska proportioner. Särskilt bland kvinnor i den offentliga sektorn har sjukskrivningar på grund av "utbrändhetssymptom" ökat markant, även om viss avmattning ses just nu. Vi har valt att använda begreppet utbrändhet, eftersom det är det begrepp som främst används idag både inom forskning och i alldagligt tal. Utbrändhet (burnout) började användas som ett vetenskapligt begrepp i början av 1970-talet. Begreppet förknippas kanske främst med Maslach och medarbetare som beskriver utbrändhet som bestående av tre dimensioner; emotionell utmattning, distansering/cynism och nedsatt prestation. Uppfattningen om utbrändhet går isär vad gäller orsaker, yttringar och konsekvenser. Detta medför att begreppet både kan missbrukas och misstolkas. Utbrändhet har relaterats till faktorer som hög arbetsbelastning eller höga krav, rollkonflikter, arbetsplatskonflikter, låg grad av kontroll eller möjlighet att påverka sin arbetssituation samt moralisk stress. Orsakerna

till utbrändhet är komplexa. Det finns mycket forskning om utbrändhet och många förklaringsmodeller men vi har inte funnit någon studie som fokuserar dåligt samvete.

Det övergripande syftet för avhandlingsarbetet är att pröva om det finns ett samband mellan "samvetesstress" (dvs. stress relaterat till dåligt samvete) och utbrändhet, samt att få en ökad förståelse för faktorer relaterade till samvetsstress och utbrändhet. Andra specifika frågeställningar är: Finns det ett samband mellan upplevelse av samvetsstress och uppfattningar om samvete, dvs. vad samvete är, hur det uppstår och vilken funktion eller betydelse det har? Finns det ett samband mellan upplevelse av samvetsstress och moralisk känslighet? Har personer med hög grad av resiliens (inre styrka) och de som upplever adekvat socialt stöd lägre grad av samvetsstress och utbrändhet? I tre av fyra manuscript (I, II, och IV) som avhandlingen bygger på används kvantitativa analyser och i ett kvalitativ analys (III). Dessa bidrar på olika sätt till att öka kunskapen om samvetsstress och utbrändhet i vården. Datamaterialet bygger på tvärsnittsstudier där frågeformulär och intervjuer används.

Då inget passande instrument för att skatta dåligt samvete i vården fanns att tillgå konstruerades frågeformuläret "Samvetsstress" (SCQ) (I). Det består av nio frågor som mäter dels frekvensen av stressituationer dvs. hur ofta olika stressande situationer förekommer på personens arbetsplats och dels belastningen dvs. i vad mån dessa situationer leder till dåligt samvete (I). Pilotstudien omfattade 164 deltagare, huvudanalysen omfattade 444 deltagare och i test-retest ingick 55. Deltagarna kom från olika platser i Sverige och deras yrken inom vården varierade.

Innehållsvalidering, variabel analys, t.ex. variansanalyser, samt faktoranalys användes för att testa instrumentet. Resultatet visar att "Samvetesstress" är ett valit och reliabelt instrument för användning inom olika områden inom vård. Cronbach's α för hela skalan var 0.83, vilket tyder på inre konsistens. Explorativ principalkomponents analys identifierade två faktorer som benämndes: 'inre krav' samt 'yttre krav och restriktioner'.

För att undersöka vilka faktorer som relaterar till burnout och samvetsstress (II, IV) fick 423 personer som arbetar inom vård, inom olika yrken och specialiteter i ett

sjukvårdsdistrikt i norra Sverige besvara frågeformulären Samvetsstress (SCQ), Syn på Samvete (PCQ), Maslach's utbrändhetsinventorium (MBI), Moralisk Känslighet, Socialt Stöd, och Resiliens (inre styrka) (RS). "Syn på samvete" handlar om olika sätt att se på samvete, dess ursprung, och funktion. "Moralisk känslighet" handlar om hur känslig en person är för etiska utmaningar i vårdsituationer. Faktorer som relaterade till samvetsstress (II) var; uppfattningen att samvetet varnar oss för att skada andra, att inte kunna följa samvetet i sitt arbete, att vara tvungen att döva samvetet för att kunna stanna kvar i vården; samt frågor om moralisk känslighet tillhörande faktorn "upplevelse av moralen som en börda". Dessutom var upplevelsen av bristande stöd från närmaste chefen, låg grad av resiliens, samt att arbeta på medicinska vårdavdelningar associerade med samvetsstress. Den totala modellen förklarade 40 % av variansen i SCQ.

Syftet med delstudie III var att beskriva sjukvårdschefers förklaringsmodeller för faktorer som bidrar till utbrändhet. Intervjuer genomfördes med 30 chefer, varav de flesta var verksamhetschefer, och intervjuerna analyserades med kvalitativ innehållsanalys. Resultatet visar att cheferna ansåg att ständiga omorganisationer och neddragningar av vård innebär minskade resurser, avsaknad av arbetsro, och otydlighet inom organisationen samtidigt som krav och ansvar har ökat. Detta tillsammans med höga ideal och förväntningar gör att personalen ifrågasätter sin egen förmåga och sitt värde. Personalen reflekterar mer medvetet över vad de gör och vad som är rätt och fel. Det finns en idealbild av vad god vård är som är svår att leva upp till. Cheferna beskriver även bristande ledarskap, misstro och minskad respekt inom organisationen. Personalen känner sig utbytbara och inte sedda som unika personer. Bilden av sjukvården i media, som den "tärande sektorn" har dessutom bidragit till att personalen ifrågasätter sitt eget värde. Allt bidrar till att vårdpersonalen hamnar i en nedåtgående spiral vad gäller upplevelse av otillräcklighet, pessimism och maktlöshet.

Resultaten av studien som presenteras i artikel IV visade, att faktorer som relaterade till emotionell utmattning var; "att tvingas döva sitt samvete för att kunna arbeta kvar i vården" (PCQ); "samvetsstress" (SCQ) pga att man saknar tid för att ge den vård

patienten behöver, att arbetet är så krävande att det påverkar privatlivet eller att man upplever att man inte kan leva upp till andras förväntningar; upplever bristande socialt stöd från medarbetare och låg grad av resiliens. Därtill inverkar även faktorerna: att vara kvinna, att vara läkare eller tillhöra gruppen övrig vårdpersonal (tex sjukgymnast, arbetsterapeut) och att arbeta inom geriatrik eller primär vård/sjukstugor. Dessa faktorer förklarade 59% av variansen i emotionell utmattning. De faktorer som bidrog till variansen i distansering/cynism var; återigen ”att tvingas döva sitt samvete” (PCQ), ”samvetsstress” (SCQ) pga att inte kunna leva upp till andras förväntningar och att sänka sin ambition att ge god vård tillsammans med upplevelsen av bristande stöd från arbetskamraterna (SS) och att vara läkare. Men den procentuella förklaringen av variansen var lägre (30%).

Denna avhandling bidrar med ett ”nytt” och annorlunda perspektiv på stress och utbrändhet inom vården bl.a. genom att visa på att belastning av samvetet tycks ha samband med utbrändhet. Resultaten tyder på, att burnout relaterar till personalens oförmågan att leva upp till sin moraliska övertygelse; därför att vårdpersonalen inte kan handla utifrån sina värderingar och patienternas välbefinnande. Många gånger kanske det räcker för personalen med att få diskutera eller uttrycka vad deras samvete påbjuder. Andra gånger kan det vara så att hur man än gör så upplever man dåligt samvete vilket innebär att man kan behöva stöd för att kunna hantera eller förhålla sig till sitt dåliga samvete. Att konkret kunna diskutera hur mycket som kan göras och fodras av oss som individer. Ibland kan samvetet behöva korrigeras t ex utifrån faktakunskap, eftersom samvetet kan vara felbart. Genom att reflektera över och diskutera med andra om samvetets krav kan man få en större insikt om hur man skall handla. Jag tror dock att det kräver en djupare dialog där går på djupet med värderingar. Man kan påverka andra genom bra argument eller acceptera att andra har en annan syn och komma överens om hur man ska hantera liknande situationer. Problem eller hinder att kommunicera sitt dåliga samvete med andra, kan leda till en minskad insikt om hur vardagliga etiska situationer kan lösas.

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REFERENCES

- Ahern, K., & McDonald, S. (2002). The beliefs of nurses who were involved in a whistleblowing event. *Journal of Advanced Nursing*, 38(3), 303-309.
- Ahola, K., Honkonen, T., Isometsä, E., Kalimo, R., Nykyri, E., Koskinen, S., et al. (2006). Burnout in the general population: Results from the Finnish Health 2000 Study. *Social Psychiatry and Psychiatric Epidemiology*, 41(1), 11-17.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association*, 288(16), 1987-1993.
- Aldén, M. (2001). *Samvete och samvetsfrihet* [Conscience and freedom of conscience]. Lund: Lund University Dissertation.
- Allport, G. W. (1955). *Becoming: basic considerations for a psychology of personality*. New Haven & London: Yale University Press.
- Almer, T. (1939). *Studier i Shaftesburys filosofi*. [Studies in Shaftesburys philosophy] Lund: Lund University Dissertation .
- Altun, I. (2002). Burnout and nurses' personal and professional values. *Nursing Ethics*, 9(3), 269-278.
- Anderson, W. J. R., Cooper, C. L., & Willmott, M. (1996). Research note. Sources of stress in the national health service: a comparison of seven occupational groups. *Work and Stress*, 10(1), 88-95.
- Arendt, H. (1963/1994). *Eichmann in Jerusalem*. New York: Penguin Books.
- Arendt, H. (1971). Thinking and moral considerations: a lecture. *Social Research*, 38 (3), 417-446.
- Arnetz, B.-B. (2001). Psychosocial challenges facing physicians of today. *Social Science and Medicine*, 52(2), 203-213.
- Austin, W., Bergum, V., & Goldberg, L. (2003). Unable to answer the call of our patients: mental health nurses' experience of moral distress. *Nursing Inquiry*, 10(3), 177-183.
- Bakker, A. B., Killmer, C. H., Siegrist, J., & Schaufeli, W. B. (2000). Effort-reward imbalance and burnout among nurses. *Journal of Advanced Nursing*, 31(4), 884-891.
- Bakker, A. B., Le Blanc, P. M., & Schaufeli, W. B. (2005). Burnout contagion among intensive care nurses. *Journal of Advanced Nursing*, 51(3), 276-287.
- Bauman, Z. (2005). *Liquid life*. Cambridge: Polity Press.

- Beauchamp T.L., & Childress J.F. (1989) *Principles of biomedical ethics* (3.ed., 1.ed. 1979). Oxford: Oxford University Press.
- Beck, A.-T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology*, 42(6), 861-865.
- Bernal, E. W., Hoover, P. S., & Aroskar, M. A. (1987). The nurse's appeal to conscience. *Hastings Center Report*, 17(2), 25-26.
- Bishop, A., & Scudder, J. (1990). *The practical, moral and personal sense of nursing: a phenomenological philosophy of practice*. Albany, N.Y.: State University of New York Press.
- Bradley, J.-R., & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management*, 9(3), 163-182.
- Brown, C. (1994). From spectator to agent: Hume's theory of obligation. *Hume Studies*, 20(1), 19-35.
- Brown, C., Arnetz, B., & Petersson, O. (2003). Downsizing within a hospital: cutting care or just costs? *Social Science and Medicine*, 57(9), 1539-1546.
- Brown, J. M. (1996). Conscience: the professional and the personal. *Journal of Nursing Management*, 4(3), 171-177.
- Bryant, C., Fairbrother, G., & Fenton, P. (2000). Professional issues. The relative influence of personal and workplace descriptors on stress. *British Journal of Nursing*, 9(13), 876.
- Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychology and Health*, 16(5), 583-594.
- Calarco, M. (2004). Reading Derrida's own conscience: From the question to the call. *Philosophy and Social Criticism*, 30(3), 283-301.
- Carmel, S., & Glick, S.-M. (1996). Compassionate-empathic physicians: personality traits and social-organizational factors that enhance or inhibit this behavior pattern. *Social Science and Medicine*, 43(8), 1253-1262.
- Childress, J. (1979). Appeals to conscience. *Ethics* 89(4), 315-335.
- Childress, J. F. (1997). Conscience and conscientious actions in the context of MCOs. *Kennedy Institute of Ethics Journal*, 7(4), 403-411.
- Conn, W. E. (1981). *Conscience: Development and self-transcendence*. Birmingham: Religious Education Press.
- Cooper, C., & Dewe, P. (2004). *Stress a brief history*. Oxford: Blackwell Publishing Ltd.

- Cordes, C.-L., & Dougherty, T.-W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18(4), 621-656.
- Corley, M. C. (2002). Nurse moral distress: a proposed theory and research agenda. *Nursing Ethics*, 9(6), 636-650.
- Corley, M. C., Elswick, R. K., Gorman, M., & Clor, T. (2001). Development and evaluation of a moral distress scale. *Journal of Advanced Nursing*, 33(2), 250-256.
- Corley, M. C., Minick, P., Elswick, R. K., & Jacobs, M. (2005). Nurse moral distress and ethical work environment. *Nursing Ethics*, 12(4), 381-390.
- Cottrell, S. (2001). Occupational stress and job satisfaction in mental health nursing: focused interventions through evidence-based assessment. *Journal of Psychiatric and Mental Health Nursing*, 8(2), 157-164.
- Cronqvist, A., Theorell, T., Burns, T., & Lütznén, K. (2001). Dissonant imperatives in nursing: a conceptualization of stress in intensive care in Sweden. *Intensive and Critical Care Nursing*, 17(4), 228-236.
- Cushway, D., Tyler, P. A., & Nolan, P. (1996). Development of a stress scale for mental health professionals. *British Journal of Clinical Psychology*, 35(2), 279-295.
- Dahlqvist, V., Eriksson, S., Glasberg, A. L., Lindahl, E., Lütznén, K., Strandberg, G., et al. (2007). Development of a questionnaire to identify Perceptions of Conscience. *Nursing Ethics*, 14(2), 181-193.
- Davis, W. H. (1979). The authority of the moral sense. *Journal of Value Inquiry*, 13(2), 115-126.
- de Jonge, J., Mulder, M., & Nijhuis, F. (1999). The incorporation of different demand concepts in the job demand-control model: Effects on health care professionals. *Social Science and Medicine*, 48(9), 1149-1160.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, 32(2), 454-464.
- Demir, A., Ulusoy, M., & Ulusoy, M. F. (2003). Investigation of factors influencing burnout levels in the professional and private lives of nurses. *International Journal of Nursing Studies*, 40(8), 807-827.
- Deth, J., & Scarbrough, E. (1998). *The impact of values (eBook)*. Retrieved 2007-04-29, from <http://www.oxfordscholarship.com>.
- Dickens, B. M., & Cook, R. J. (2000). The scope and limits of conscientious objection. *International Journal of Gynaecology and Obstetrics* 71(1), 71-77.

- Duquette, A., Kerouac, S., Sandhu, B.-K., & Beaudet, L. (1994). Factors relating to nursing burnout: a review of empirical knowledge. *Issues in Mental Health Nursing, 15*(4), 337-358.
- Duquette, A., Kerouac, S., Sandhu, B.-K., Ducharme, F., & Saulnier, P. (1995). Psychosocial determinants of burnout in geriatric nursing. *International Journal of Nursing Studies, 32*(5), 443-456.
- Dwyer, J. (1994). Primum non tacere. An ethics of speaking up. *The Hastings Center Report, 24*(1), 13-18.
- Dyer, J.-G., & McGuinness, T.-M. (1996). Resilience: Analysis of the concept. *Archives of Psychiatric Nursing, 10*(5), 276-282.
- Edwards, D., Burnard, P., Coyle, D., Fothergill, A., & Hannigan, B. (2000). Stress and burnout in community mental health nursing: a review of the literature. *Journal of Psychiatric and Mental Health Nursing, 7*(1), 7-14.
- Ekstedt, M., & Fagerberg, I. (2005). Lived experiences of the time preceding burnout. *Journal of Advanced Nursing, 49*(1), 59-67.
- Ericson-Lidman E, Norberg A, & Strandberg, G. (2007). Meanings of being a female co-worker to a person developing burnout. *Scandinavian Journal of Caring Sciences, accepted for publication.*
- Erlen, J. A., & Sereika, S. M. (1997). Critical care nurses, ethical decision-making and stress. *Journal of Advanced Nursing, 26*(5), 953-961.
- Fagerström, L. (2006). The dialectic tension between 'being' and 'not being' a good nurse. *Nursing Ethics, 13*(6), 622-632.
- Faragher, E. B., Cass, M., & Cooper, C. L. (2005). The relationship between job satisfaction and health: a meta-analysis. *Occupational and Environmental Medicine, 62*(2), 105-112.
- Faunce, T., Bolsin, S., & Chan, W. P. (2004). Supporting whistleblowers in academic medicine: training and respecting the courage of professional conscience. *Journal of Medical Ethics, 30*(1), 40-43.
- Federation of Swedish County Councils. (2002). *Svensk hälso- och sjukvård under 1990-talet* [Swedish health care in the 1990s: Trends 1992-2000]. Retrieved, from <http://www.skl.se>.
- Ferguson, S., Wright, D., & Packer, J. (1988). *New dictionary of theology*. Leicester: Inter-Varsity Press.

- Frankl, V. E. (1959/2000). *Gud och det omedvetna* [God and the unconscious] (M. Edgardh, Trans.). Stockholm: Natur och Kultur. [Original work in German published 1959]
- Freud, S. (1930/1989). Civilization and its discontents (J. Strachey, Trans.). In J. Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (pp. 5-112). New York: Norton [Original work in German published 1930].
- Fromm, E. (1947/1975). *Man for himself: An inquiry into the psychology of ethics*. London: Routledge & Kegan. [Original work published 1947]
- Georges, J., & Grypdonck, M. (2002). Moral problems experienced by nurses when caring for terminally ill people: a literature review. *Nursing Ethics, 9*(2), 155-178.
- Geurts, S. A., Schaufeli, W. B., & Rutte, C. G. (1999). Absenteeism, turnover intention and inequity in the employment relationship. *Work and Stress, 13*(3), 253-267.
- Gibbs, J.-C., Arnold, K.-D., & Burkhart, J.-E. (1984). Sex differences in the expression of moral judgment. *Child Development, 55*(3), 1040-1043.
- Gilligan, C., & Attanucci, J. (1988). Two moral orientations: gender differences and similarities. *Merrill Palmer Quarterly, 34*(3), 223-237.
- Goldberg, C. (2004) Curiosity as an agent of conscience. *Pastoral Psychology, 52*(4), 329-338.
- Gore, E. J., & Harvey, O. J. (1995). A factor analysis of a scale of shame and guilt: dimensions of conscience questionnaire. *Personality and Individual Differences, 19*(5), 769-771.
- Grace, P. J. (2001). Professional advocacy: widening the scope of accountability. *Nursing Philosophy, 2*(2), 151-162.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*(2), 105-112.
- Greer, S. (2002). Freud's "bad conscience": the case of Nietzsche's genealogy. *Journal of History of the Behavioral Sciences, 38*(3), 303-315.
- Gyllensten, K., & Palmer, S. (2005). The role of gender in workplace stress: a critical literature review. *Health Education Journal, 64*(3), 271-288.
- Halbesleben, J.-R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30*(6), 859-879.
- Hallsten, L. (1985). *Utbränd i jobbet* [Burnout at work]. Stockholm: Arbetsmarknadsinstitutet, Länsarbetsnämnden.

- Hallsten, L., Bellaagh, K., & Gustafsson, K. (2002). *Utbränning i Sverige - en populationsstudie* [Burnout in Sweden - a population study] *Arbete och Hälsa*, 6. Stockholm: Arbetslivsinstitutet.
- Hallsten, L., Josephson, M., & Torgén, M. (2005). *Performance-based self-esteem*. Stockholm: Arbetslivsinstitutet [National Institute for Working Life].
- Hanna, D. R. (2004). Moral distress: the state of the science. *Research and Theory for Nursing Practice*, 18(1), 73-93.
- Happ, H. B., Dabbs, A. D., Tate, J., Hricik, A., & Erlen, J. (2006). Exemplars of mixed methods data combination and analysis. *Nursing Research*, 55(2), S43-49.
- Harder, H., Svärd, E., Wigforss, A., & Hedén, K. (2000). *Stress och belastning i vård och omsorg* [Stress and strain in healthcare and care]. Stockholm: Arbetarskyddsstyrelsen.
- Hardingham, L. B. (2004). Integrity and moral residue: nurses as participants in a moral community. *Nursing Philosophy*, 5(2), 127-134.
- Harrison, M., Loiselle, C. G., Duquette, A., & Semenic, S. E. (2002). Hardiness, work support and psychological distress among nursing assistants and registered nurses in Quebec. *Journal of Advanced Nursing*, 38(6), 584-591.
- Healy, C., & McKay, M. (1999). Identifying sources of stress and job satisfaction in the nursing environment. *Australian Journal of Advanced Nursing*, 17(2), 30-35.
- Heidegger, M. (1927/1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.). Oxford: Blackwell [Original work in German published 1927].
- Hertting, A., Nilsson, K., Theorell, T., & Larsson, U. S. (2004). Downsizing and reorganization: demands, challenges and ambiguity for registered nurses. *Journal of Advanced Nursing*, 45(2), 145-154.
- Hogstedt, C., Bjurvald, M., Marklund, S., Palmer, E., & Theorell, T. (2004). *Den höga sjukfrånvaron - sanning och konsekvens* [The high sickness absence - truths and consequences]. Sandviken: Statens Folkhälsoinstitut.
- Hoose, J. (Ed.). (1999). *Conscience in world religions*. Leominster, England: Gracewing.
- Hopkinson, P. J., Carson, J., Brown, D., Fagin, L., Bartlett, H., & Leary, J. (1998). Occupational stress and community mental health nursing: what CPNs really said. *Journal of Advanced Nursing*, 27(4), 707-712.
- Hume, D. (1740/2005). *Avhandling om den mänskliga naturen bok 3: Om moralen* [A treatise of human nature. Book 3. Of morals] (J. Jakobsson, Trans.). Stockholm: Thales [Original work published 1740].

- Hupcey, J. E. (1998). Clarifying the social support theory-research linkage. *Journal of Advanced Nursing*, 27(6), 1231-1241.
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, 25(1), 123-129.
- Jameton, A. (1993). Dilemmas of moral distress: moral responsibility and nursing practice. *AWHONN's Clinical Issues in Perinatal and Women's Health Nursing*, 4(4), 542-551.
- Jansson, L., & Norberg, A. (1989). Ethical reasoning concerning the feeding of terminally ill cancer patients. Interviews with registered nurses experienced in the care of cancer patients. *Cancer Nursing*, 12(6), 352-358.
- Jeanneau, M., & Armelius, K. (2000). Self-image and burnout in psychiatric staff. *Journal of Psychiatric and Mental Health Nursing*, 7(5), 399-406.
- Jenkins, I. (1955). The significance of conscience. *Ethics*, 65(4), 261-270.
- Johnson, J., & Hall, E. (1988). Job strain, work place social support, and cardiovascular disease: a cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, 78, 1336-1342.
- Jones, D. (1966). Freud's theory of moral conscience. *Philosophy* 66(41), 34-57.
- Juthberg, C., Eriksson, S., Norberg, A., & Sundin, K. (2007a). Perceptions of conscience in relation to stress of conscience. *Nursing Ethics*, 14(3).
- Juthberg, C., Eriksson, S., Norberg, A., & Sundin, K. (2007b). Stress of conscience and perceptions of conscience in relation to burnout among care providers in elderly care. *submitted*.
- Kalimo, R., Pahkin, K., Mutanen, P., & Toppinen-Tanner, S. (2003). Staying well or burning out at work: work characteristics and personal resources as long-term predictors. *Work and Stress*, 17(2), 109-122.
- Kalimo, R., Taris, T.-W., & Schaufeli, W.-B. (2003). The effects of past and anticipated future downsizing on survivor well-being: an equity perspective. *Journal of Occupational Health Psychology*, 8(2), 91-109.
- Kant, I. (1780). *The metaphysical elements of ethics (eBook)* (N. C. Raleigh, Trans.). Boulder, CO: Alex Catalogue. Retrieved 2004-10-25, from <http://www.netLibrary.com/urlap>. [Original work in German published 1780].
- Karasek, R. A., & Theorell, T. (1990). *Health work: stress, productivity, and the reconstruction of working life*. New York: Basic Books.

- Kasl, S. V. (1998). Measuring job stressors and studying the health impact of the work environment: an epidemiologic commentary. *Journal of Occupational Health Psychology, 3*(4), 390-401.
- Kelly, B. (1998). Preserving moral integrity: a follow-up study with new graduate nurses. *Journal of Advanced Nursing, 28*(5), 1134-1145.
- Kierkegaard, S. (1994). Frygt og baevan [Fear and trembling]. In *Samlede vaerker. Bind 5 & 6*. Copenhagen: Gyldendal [Original work published 1843].
- Kirkcaldy, B. D., & Martin, T. (2000). Job stress and satisfaction among nurses: individual differences. *Stress Medicine, 16*(2), 77-89.
- Kivimäki, M., Elovainio, M., Vahtera, J., & Ferrie, J. E. (2003). Organisational justice and health of employees: prospective cohort study. *Occupational and Environmental Medicine, 60*(1), 27-34.
- Kivimäki, M., Sutinen, R., Elovainio, M., Vahtera, J., Räsänen, K., Töyry, S., et al. (2001). Sickness absence in hospital physicians: 2 year follow up study on determinants. *Occupational and Environmental Medicine, 58*(6), 361-366.
- Kochanska, G., & Aksan, N. (2004). Conscience in childhood: past, present, and future. *Merrill Palmer Quarterly, 50*(3), 299-310.
- Kohlberg, L. (1981). Essays on moral development. In *Vol. 1. The philosophy of moral development*. San Francisco: Harper & Row.
- Kukla, R. (2002). The ontology and temporality of conscience. *Continental Philosophy Review, 35*(1), 1-34.
- Källemark, S., Höglund, A. T., Hansson, M. G., Westerholm, P., & Arnetz, B. (2004). Living with conflicts-ethical dilemmas and moral distress in the health care system. *Social Science and Medicine, 58*(6), 1075-1084.
- Lambert, V. A., & Lambert, C. E. (2001). Literature review of role stress/strain on nurses: an international perspective. *Nursing and Health Sciences, 3*(3), 161-172.
- Langelaan, S., Bakker, A.-B., van-Doornen, L.-J. P., & Schaufeli, W.-B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences, 40*(3), 521-532.
- Langston, D. (2001). *Conscience and other virtues*. Pennsylvania: Penn State University Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.

- Leavy, R.-L. (1983). Social support and psychological disorder: a review. *Journal of Community Psychology, 11*(1), 3-21.
- Lee, R.-T., & Ashforth, B.-E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*(2), 123-133.
- Leiter, M. P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine, 47*(10), 1611-1617.
- Lifton, P.-D. (1985). Individual differences in moral development: the relation of sex, gender, and personality to morality. *Journal of Personality, 53*(2), 306-334.
- Lindahl, E., Gilje, F., & Norberg, A. (2004). Striving for purity: shared understandings in retired Swedish care providers' narratives on nursing care around 1950. *Journal of Holistic Nursing, 22*(4), 333-350.
- Lindblom, K.-M., Linton, S.-J., Fedeli, C., & Bryngelsson, I.-L. (2006). Burnout in the working population: relations to psychosocial work factors. *International Journal of Behavioral Medicine, 13*(1), 51-59.
- Lindseth, A., Marhaug, V., Norberg, A., & Udén, G. (1994). Registered nurses' and physicians' reflections on their narratives about ethically difficult care episodes. *Journal of Advanced Nursing, 20*(2), 245-250.
- Lindseth, A., & Norberg, A. (2004). A phenomenological hermeneutical method for researching lived experience. *Scandinavian Journal of Caring Sciences, 18*(2), 145-153.
- Lindstedt, D. (1997). The progression and regression of slave morality in Nietzsche's genealogy: the moralization of bad conscience and indebtedness. *Man and World, 30*(1), 83-105.
- Lindström, K., Elo, A., Skogstad, A., Dallner, M., Gamberale, F., Hottinen, V., et al. (2000). *User's guide for the QPS Nordic - General Nordic Questionnaire for Psychological and Social Factors at Work*. Copenhagen: Nordic Council of Ministers, Copenhagen.
- Luther, M. (1521/1966). *Luther's works, vol. 44: The Christian Society*. Philadelphia: Fortress.
- Lützén, K., Cronqvist, A., Magnusson, A., & Andersson, L. (2003). Moral stress: synthesis of a concept. *Nursing Ethics, 10*(3), 312-322.
- Lützén, K., Dahlqvist, V., Eriksson, S., & Norberg, A. (2006). Developing the concept of moral sensitivity in health care practice. *Nursing Ethics, 13*(2), 187-196.
- Lützén, K., Evertzon, M., & Nordin, C. (1997). Moral sensitivity in psychiatric practice. *Nursing Ethics, 4*(6), 472-482.

- Lützn, K., Johansson, A., & Nordström, G. (2000). Moral sensitivity: some differences between nurses and physicians. *Nursing Ethics*, 7(6), 520-530.
- Lützn, K., Nordin, C., & Brolin, G. (1994). Conceptualization and instrumentation of nurses' moral sensitivity in psychiatric practice. *International Journal of Methods in Psychiatric Research*, 4(4), 241-248.
- MacDonald, L. A., Karasek, R. A., Punnett, L., & Scharf, T. (2001). Covariation between workplace physical and psychosocial stressors: evidence and implications for occupational health research and prevention. *Ergonomics*, 44(7), 696-718.
- Majomi, P., Brown, B., & Crawford, P. (2003). Sacrificing the personal to the professional: community mental health nurses. *Journal of Advanced Nursing*, 42(5), 527-538.
- Malach-Pines, A. (2002). A psychoanalytic-existential approach to burnout: Demonstrated in the cases of a nurse, a teacher, and a manager. *Psychotherapy: Theory, Research, Practice, Training*, 39(1), 103-113.
- Marcel, G. (1950). *The mystery of being: I. Reflection & mystery* (G.S. Fraser, Trans.). London: The Harvill Press Ltd. [Original Gifford lectures in French 1949 and 1950].
- Maslach, C., Jackson, S.-E., & Leiter, M.-P. (1996). *Maslach Burnout Inventory* (3. ed., 1.ed. 1981) Palo Alto: Consulting Psychologists Press.
- Maslach, C., & Leiter, M.-P. (1997). *The truth about burnout: how organizations cause personal stress and what to do about it*. San Francisco: Jossey-Bass.
- Maslach, C., Schaufeli, W.-B., & Leiter, M.-P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- Maslow, A. H. (1968). *Toward a psychology of being* (2. ed., 1.ed. 1962). New York: Van Nostrand.
- May, T. (2001). Rights of conscience in health care. *Social Theory and Practice*, 27(1), 111-128.
- McCullough, L. B. (2004). The nature and limits of the physician's professional responsibilities: surgical ethics, matters of conscience, and managed care. *Journal of Medicine and Philosophy*, 29(1), 3-9.
- McGowan, B. (2001). Self-reported stress and its effects on nurses. *Nursing Standard*, 15(42), 33-38.
- McGrath, A., Reid, N., & Boore, J. (2003). Occupational stress in nursing. *International Journal of Nursing Studies*, 40(5), 555-565.
- McVicar, A. (2003). Workplace stress in nursing: a literature review. *Journal of Advanced Nursing*, 44(6), 633-642.

- Miceli, M., & Castelfranchi, C. (1998). How to silence one's conscience: cognitive defences against the feeling of guilt. *Journal for the Theory of Social Behaviour*, 28(3), 287-318.
- Morse, J. M., Barrett, M., Mayana, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2). Retrieved from <http://www.ualberta.ca/~ijqm/>.
- Muncer, S., Taylor, S., Green, D. W., & McManus, I. C. (2001). Nurses' representations of the perceived causes of work-related stress: a network drawing approach. *Work and Stress*, 15(1), 40-52.
- Munro, B. (2001). *Statistical methods for health care research*. Philadelphia: Lippincott.
- Murphy, M. C. (1997). The conscience principle. *Journal of Philosophical Research*, 22, 387-407.
- Muscroft, J., & Hicks, C. (1998). A comparison of psychiatric nurses' and general nurses' reported stress and counselling needs: a case study approach. *Journal of Advanced Nursing* 27(6), 1317-1325.
- Myyry, L., & Helkama, K. (2002). Moral reasoning and the use of procedural justice rules in hypothetical and real-life dilemmas. *Social Justice Research*, 15(4), 373-391.
- Mäkinen, A., Kivimäki, M., Elovainio, M., & Virtanen, M. (2003). Organization of nursing care and stressful work characteristics. *Journal of Advanced Nursing*, 43(2), 197-205.
- National Board of Health and Welfare. (2003). *'Utmattningssyndrom - Stressrelaterad psykisk ohälsa'* [Exhaustionsyndrome - stressrelated psychological illness] (No. 2003-123-18). Stockholm: National Board of Health and Welfare.
- National Board of Health and Welfare. (2005). *Ändringar i och tillägg till klassifikation av sjukdomar och hälsoproblem 1997 (KSH 97) – systematisk förteckning* [Alteration in and addition to classification of diseases and health problems 1997 (KSH 97)]. Stockholm: The Centre for epidemiology at the National Board of Health and Welfare.
- Nietzsche, F. (1887/1989). *On the genealogy of morals* (W. Kaufman & R. Hollingdale, Trans.). New York: Vintage Books [Original work in German published 1887].
- Nilstun, T. (1994). *Forskningsetik i vård och medicin* [Researchethics in care and medicine]. Lund: Studentlitteratur.
- Norberg, A. (2004). Stress of conscience in relation to burnout among health care professionals: The Swedish Research Council, grant No. K2006-27X-20068-01-3.

- Norberg, A., & Udén, G. (1995). Gender differences in moral reasoning among physicians, registered nurses and enrolled nurses engaged in geriatric and surgical care. *Nursing Ethics*, 2(3), 233-242.
- Nordam, A., Sørli, V., & Forde, R. (2003). Integrity in the care of elderly people, as narrated by female physicians. *Nursing Ethics*, 10(4), 388-403.
- Nordam, A., Torjuul, K., & Sørli, V. (2005). Ethical challenges in the care of older people and risk of being burned out among male nurses. *Journal of Clinical Nursing*, 14(10), 1248-1256.
- Nygren, B. (2006). *Inner strength among the oldest old -a good aging*. Umeå: Umeå University Medical Dissertations, New Series No 1065.
- Nygren, B., Aléx, L., Jonsén, E., Gustafson, Y., Norberg, A., & Lundman, B. (2005). Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. *Aging and Mental Health*, 9(4), 354-362.
- Nygren, B., Randström, K. B., Lejonklou, A. K., & Lundman, B. (2004). Reliability and validity of a Swedish language version of the Resilience Scale. *Journal of Nursing Measurement*, 12(3), 169-178.
- Oberle, K., & Hughes, D. (2001). Doctors' and nurses' perceptions of ethical problems in end-of-life decisions. *Journal of Advanced Nursing*, 33(6), 707-715.
- Olofsson, B., Bengtsson, C., & Brink, E. (2003). Absence of response: a study of nurses' experience of stress in the workplace. *Journal of Nursing Management*, 11(5), 351-358.
- Omdahl, B. L., & O'Donnell, C. (1999). Emotional contagion, empathic concern and communicative responsiveness as variables affecting nurses' stress and occupational commitment. *Journal of Advanced Nursing*, 29(6), 1351-1359.
- Paley, J. (2004). Commentary: the discourse of moral suffering. *Journal of Advanced Nursing*, 47(4), 364-365.
- Payne, N. (2001). Occupational stressors and coping as determinants of burnout in female hospice nurses. *Journal of Advanced Nursing*, 33(3), 396-405.
- Peeters, M.-C. W., Montgomery, A.-J., Bakker, A.-B., & Schaufeli, W.-B. (2005). Balancing work and home: how job and home demands are related to burnout. *International Journal of Stress Management*, 12(1), 43-61.
- Perkel, L. K. (2002). Nurse executives' values and leadership behaviors: conflict or coexistence? *Nursing Leadership Forum*, 6(4), 100-107.

- Perski, A., & Grossi, G. (2004). Behandling av långtidssjukskrivna patienter med stressdiagnoser. Resultat från en interventionsstudie [Treatment of long-term sick-leave absence patients with stress diagnoses. Results from an intervention study]. *Läkartidningen*, *101*(14), 1295-1298.
- Peter, E., & Liaschenko, J. (2004). Perils of proximity: a spatiotemporal analysis of moral distress and moral ambiguity. *Nursing Inquiry*, *11*(4), 218-225.
- Petterson, I.-L., Hertting, A., Hagberg, L., & Theorell, T. (2005). Are trends in work and health conditions interrelated? A study of Swedish hospital employees in the 1990s. *Journal of Occupational Health Psychology*, *10*(2), 110-120.
- Pines, A.-M., & Keinan, G. (2005). Stress and burnout: the significant difference. *Personality and Individual Differences*, *39*(3), 625-635.
- Raines, M. L. (2000). Ethical decision making in nurses: relationships among moral reasoning, coping style, and ethics stress. *JONA's Healthcare Law, Ethics and Regulation*, *2*(1), 29-41.
- Ramsay, H. (2001). Conscience: Aquinas - with a hint of Aristotle. *Sophia*, *40*(2), 15-29.
- Reid, Y., Johnson, S., Morant, N., Kuipers, E., Szmukler, G., Bebbington, P., et al. (1999). Improving support for mental health staff: a qualitative study. *Social Psychiatry and Psychiatric Epidemiology*, *34*(6), 309-315.
- Rest, J.-R (1994). Background: theory and research. In J.-R. Rest & D. Narvaez (Eds.), *Moral development in the professions: psychology and applied ethics* (pp. 1-26). Hillsdale: Lawrence Erlbaum Associates.
- Rest, J.-R., Narvaez, D., Thoma, S.-J., & Bebeau, M.-J. (2000). A Neo-Kohlbergian approach to morality research. *Journal of Moral Education*, *29*(4), 381-395.
- Ricoeur, P. (1992). *Oneself as another* (K. Blamey, Trans.). Chicago: The University of Chicago Press [Original work in French published 1990].
- Risse, M. (2001). The second treatise in on the genealogy of morality: Nietzsche on the origin of the bad conscience. *European Journal of Philosophy*, *9*(1), 55-81.
- Rolfe, G. (1993). The patient-centeredness multi-choice questionnaire: developing an instrument for the measurement of patient-centeredness in student nurses. *Journal of Advanced Nursing*, *18*(1), 120-126.
- Rose, S. R. (1999). Towards the development of an internalized conscience: theoretical perspectives on socialization. *Journal of Human Behaviour in the Social Environment*, *2*(3), 15-28.

- Ryan, M.-K., David, B., & Reynolds, K.-J. (2004). Who cares? The effect of gender and context on the self and moral reasoning. *Psychology of Women Quarterly*, 28(3), 246-255.
- SALAR. (2007). The Swedish Association of Local Authorities and Regions. *Antal anställda i landstingssektorn november 2006* [All employees in the county councils in Nov. 2006]. Retrieved 2007-03-29, from <http://www.skl.se>.
- SAOB. (2007). *Svenska Akademiens ordbok* [The Swedish Academy dictionary]. Retrieved 2007-03-29, from <http://www.saob.se>.
- Sarvimäki, A., & Benkö, S. S. (2001). Values and evaluation in health care. *Journal of Nursing Management*, 9(3), 129-137.
- Schaufeli, W., & Enzman, D. (1998). *The burnout companion to study & practice; a critical analysis*. London: Taylor & Francis Ltd.
- Schmitz, N., Neumann, W., & Oppermann, R. (2000). Stress, burnout and locus of control in German nurses. *International Journal of Nursing Studies*, 37(2), 95-99.
- Schopenhauer, A. (1995). *On the basis of morality* (E. F. J. Payne, Trans.). Oxford: Berghahn Books [Original work in German published 1839].
- Severinsson, E. (2003). Moral stress and burnout: qualitative content analysis. *Nursing and Health Sciences*, 5(1), 59-66.
- Shirom, A. (2003). Job-related burnout: A review. In Quick, J. C. (Ed) & Tetrick, L. E. (Ed), *Handbook of occupational health psychology* (pp. 245-264). Washington: American Psychological Association.
- Siegall, M., & McDonald, T. (2004). Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3), 291-301.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1(1), 27-41.
- Silfverberg, G. (1996). *Att vara god eller att göra rätt* [Being good or doing right]. Uppsala Universitet dissertations, Uppsala.
- Smith, K. V., & Godfrey, N. S. (2002). Being a good nurse and doing the right thing: a qualitative study. *Nursing Ethics*, 9(3), 301-312.
- Smith, R. H., Webster, J. M., Parrott, W. G., & Eyre, H. L. (2002). The role of public exposure in moral and nonmoral shame and guilt. *Journal of Personality and Social Psychology*, 83(1), 138-159.

- Spector, P.-E., Zapf, D., Chen, P.-Y., & Frese, M. (2000). Why negative affectivity should not be controlled in job stress research: don't throw out the baby with the bath water. *Journal of Organizational Behavior, 21*(1), 79-95.
- Spencer, E. M. (1998). Physician's conscience and HECs: friends or foes? *Kluwer Academic Publishers. HEC Forum, 10*(1), 34-42.
- Springsted, E. O. (1993). Rootedness: culture and value. In R. H. Bell (Ed.), *Simone Weil's philosophy of culture* (pp. 161-188). Cambridge: Cambridge University Press.
- Stilwell, B. M., Galvin, M., Kopta, S. M., & Norton, J. A., Jr. (1994). Moral-emotional responsiveness: a two-factor domain of conscience functioning. *Journal of the American Academy of Child and Adolescent Psychiatry, 33*(1), 130-139.
- Strandberg, G., & Jansson, L. (2003). Meaning of dependency on care as narrated by nurses. *Scandinavian Journal of Caring Sciences, 17*(1), 84-91.
- Sundin-Huard, D., & Fahy, K. (1999). Moral distress, advocacy and burnout: theorizing the relationships. *International Journal of Nursing Practice, 5*(1), 8-13.
- Söderberg, A. (1999). *The practical wisdom of enrolled nurses, registered nurses and physicians in situations of ethical difficulty in intensive care*. Umeå: Umeå University Medical Dissertations, New Series No 603.
- Söderfeldt, B., Söderfeldt, M., Jones, K., O'Campo, P., Muntaner, C., Ohlson, C.-G., et al. (1997). Does organization matter? A multilevel analysis of the demand-control model applied to human services. *Social Science and Medicine, 44*(4), 527-534.
- Söderfeldt, M., Söderfeldt, B., Ohlson, C.-G., Theorell, T., & Jones, I. (2000). The impact of sense of coherence and high-demand/low-control job environment on self-reported health, burnout and psychophysiological stress indicators. *Work and Stress, 14*(1), 1-15.
- Sørli, V. (2001). *Being in ethically difficult care situations: Narrative interviews with registered nurses and physicians within internal medicine, oncology and paediatrics*. Umeå: Umeå University Medical Dissertations, New Series No 727.
- Sørli, V., Kihlgren, A., & Kihlgren, M. (2005). Meeting ethical challenges in acute nursing care as narrated by registered nurses. *Nursing Ethics, 12*(2), 133-142.
- Taormina, R., & Law, C.-M. (2000). Approaches to preventing burnout: the effects of personal stress management and organizational socialization. *Journal of Nursing Management, 8*(2), 89-99.
- Tiedje, L. B. (2000). Moral distress in perinatal nursing. *Journal of Perinatal and Neonatal Nursing, 14*(2), 36-43.

- Troup, C., & Dewe, P. (2002). Exploring the nature of control and its role in the appraisal of workplace stress. *Work and Stress, 16*(4), 335-355.
- Tummers, G. E. R., van Merode, G. G., & Landeweerd, J. A. (2002). The diversity of work: differences, similarities and relationships concerning characteristics of the organisation, the work and psychological work reactions in intensive care and non-intensive care nursing. *International Journal of Nursing Studies, 39*(8), 841-855.
- Tyler, P., & Cushway, D. (1995). Stress in nurses: the effects of coping and social support. *Stress Medicine, 11*(4), 243-251.
- Tymieniecka, A. (1984). Morality and the life-world or the moral sense within the world of life. In A. Tymieniecka (Ed.), *The existential coordinates of the human condition: poetic-epic-tragic: the literary genre*. Dordrecht: Reidel.
- Udén, G., Norberg, A., Lindseth, A., & Marhaug, V. (1992). Ethical reasoning in nurses' and physicians' stories about care episodes. *Journal of Advanced Nursing, 17*(9), 1028-1034.
- Wagnild, G. (2003). Resilience and successful aging: comparison among low and high income older adults. *Journal of Gerontological Nursing, 29*(12), 42-49.
- Wagnild, G., & Young, H. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement, 1*(2), 165-178.
- Vahtera, J., Kivimäki, M., Pentti, J., & Theorell, T. (2000). Effect of change on the psychosocial work environment on sickness absence: a seven year follow up of initially healthy employees. *Journal of Epidemiology and Community Health, 54*(7), 484-493.
- van der Arend, A. J. G., & Remmers-van den Hurk, C. H. M. (1999). Moral problems among Dutch nurses: a survey. *Nursing Ethics, 6*(6), 468-482.
- Weil, S. (1995). *The need for roots* (T.S. Elliot, Trans.). London: Routledge [Original work in French published 1949].
- Weinberg, A., & Creed, F. (2000). Stress and psychiatric disorder in healthcare professionals and hospital staff. *Lancet, 355*(9203), 533-537.
- Vetlesen, A. J. (2001). Hannah Arendt on conscience and evil. *Philosophy and Social Criticism, 27*(5), 1-33.
- Wheeler, H. H. (1998). Nurse occupational stress. Nurse occupational stress research 5: sources and determinants of stress. *British Journal of Nursing, 7*(1), 40-43.
- White, K. A. (1999). Crisis of conscience: reconciling religious health care providers' beliefs and patients' rights. *Stanford Law Review, 51*(6), 1703-1749.

- Wicclair, M. R. (2000). Conscientious objection in medicine. *Bioethics*, 14(3), 205-227.
- Wilkinson, J. M. (1987). Moral distress in nursing practice: experience and effect. *Nursing Forum*, 23(1), 16-29.
- Williamson, G. R. (2005). Illustrating triangulation in mixed-methods nursing research. *Nurse Researcher*, 12(4), 7-18.
- Virt, G. (1987). Conscience in conflict. In G. Zecha & P. Weingartner (Eds.), *Conscience: an interdisciplinary view* (pp. 165-191). Dordrecht: Reidel Publishing Company.
- Viswesvaran, C., Sanchez, J.-I., & Fisher, J. (1999). The role of social support in the process of work stress: a meta-analysis. *Journal of Vocational Behavior*, 54(2), 314-334.
- von Post, I. (1998). Perioperative nurses' encounter with value conflicts: a descriptive study. *Scandinavian Journal of Caring Sciences*, 12(2), 81-88.
- Zachman, R. C. (1993). *The assurance of faith. Conscience in the theology of Martin Luther and John Calvin*. Minneapolis: Fortress Press.
- Zellars, K.-L., Hochwarter, W.-A., Perrewé, P.-L., Hoffman, N., & Ford, E.-W. (2004). Experiencing job burnout: The roles of positive and negative traits and states. *Journal of Applied Social Psychology*, 34(5), 887-911.
- Åström, G., Norberg, A., Jansson, L., & Hallberg, I. (1994). Nurses' narratives about difficult care situations. Interpretation by means of Løgstrup's ethics. *Psycho-Oncology*, 3, 27-34.
- Åström, S. (1990). *Attitudes, empathy and burn-out among staff in geriatric and psychogeriatric care*. Umeå: Umeå University Medical Dissertations, New Series No 267.