Violence in Caring

Risk factors, outcomes and support

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To my son Jukka Johannes,
and the caring personnel
in municipal health and
care services

List of publications

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

I   Menckel. E., Carter, N., & Viitasara, E. (2000). Violence towards care-givers of persons with developmental disabilities. Developing a system for recording challenging behavior. *WORK. A Journal of Prevention, Assessment and Rehabilitation,* Vol. 15, pp. 3-8.

II   Viitasara E., & Menckel E. (2002). Developing a framework for identi-fying individual and organizational risk factors for the prevention of violence in the health-care sector. *WORK. A Journal of Prevention, Assessment and Rehabilitation,* Vol. 19, pp. 117-123.

III   Menckel, E., & Viitasara , E. (2002). Threats and violence in Swedish care and welfare – magnitude of the problem and impact on municipal personnel. *Scandinavian Journal of Caring Sciences*, Vol. 16, pp. 376-385.

IV   Viitasara, E., Sverke, M., & Menckel, E. (2003). Multiple risk factors for violence to seven occupational groups in the Swedish caring sector. *Relations industrielles/Industrial Relations*, Vol. 58, pp. 202-231.

V   Viitasara, E., Sverke, M., & Menckel, E. (2003). Consequences of violence in Swedish municipal health-and-care work – the importance of social support and prevention (*Submitted*).

Acknowledgements

Content

Introduction

Violence as a work-environment problem

Violence in society is a problem that has received ever increasing attention (Krug, Dahlberg, Mercy, Zwi & Lozano, 2002). Violence arises in many forms and settings, and can also affect many people in their work (Menckel, 2000). Violence against personnel at work appears to be an increasing problem in both the Nordic countries (Knudsen, 1999; Nordin, 2000; Salminen, 1997) and elsewhere (Bowers, Whittington, Almvik, Bergman, Oud & Savio, 1999; Chapell & Di Martino, 1998). Violence can give rise to physical injury, psychological ill-health, (e.g. worry, strain, stress) and/or to financial loss. Violence and threats of violence can also impact on conditions in the workplace and in the employing organization. In turn, unsatisfactory work conditions can increase the risk of violence against employees (Gages & Kingdom, 1995; Gates, Fitzwater & Meyer, 1999).

Occupational groups exposed to threats and violence are to be found primarily in branches of activities involving customer, client or patient contacts. These include retail, security and transport personnel, and also people working in the nursing and caring sector. In Sweden in 1998 six out of ten reports of injuries due to violence or threats of violence came from people in caring occupations (Nordin, 2000). After 1993 there was a clear increase in reports of violence-related injuries to the Information System for Occupational Accidents and Work-Related Diseases (ISA) at the Swedish Work Environment Authority (SWEA), the register to which all occupational injuries giving rise to more than one day's absence are reported by employers. Assistant nurses, registered nurses and home carers – largely female-dominated occupations – accounted for the greatest increase. By 2001 the increase had continued among men, but the rate had levelled out for women (SWEA, 2003).

During the years 1999–2001 there were a total of 9,049 reports concerning injuries as a consequence of violence or threat of violence (SWEA, 2003). Table 1 shows the percentage distribution of reported work injuries due to violence or threat of violence by branch of activity. The principal municipal branches of activity – which comprise health care, social work and compulsory school – account for 44 percent of reported cases, of which care for the elderly and/or disabled and for persons with development disabilities amount to 23 percent. Health care accounts for 17 percent. Just over half of reported cases led to the taking of sick leave. The proportion of people taking sick leave is high in several sectors, including compulsory schooling, the catering industry (hotels, restaurants and bars), transport, the fuel-retail trade, child care, and care for the elderly and disabled (SWEA, 2003).

As well as running the ISA-register, the Swedish Work Environment Authority (SWEA), in conjunction with Statistics Sweden (SCB), conducts sample-based interview investigations every two years. Questions concerning violence and threats of violence are included. In the latest investigation just over 17 percent of employed women and close to 10% of men reported that they had been exposed to

threat or violence during the preceding twelve months (SWEA, 2003). Despite violence and threats in the caring sector appearing to be a substantial, sometimes even a daily problem, knowledge concerning the problem remains limited. One of the reasons for this is that events involving violence and/or threats of violence are not always reported and documented via questionnaires or interviews. Another is that research in this area is still in its infancy (Menckel, 2000).

Table 1. Reported occupational injuries due to violence or threat of violence by branch of activity in Sweden (1999-2001).

BRANCH OF ACTIVITY	CASES	%
Health care	1,542	17
Care for the elderly or disabled	1,218	13
Care for the developmentally disabled	929	10
Social services	870	10
Police, security, judicial system	802	9
Compulsory school	706	8
Post, bank	685	8
Surface transport	513	6
Retail trade	426	5
Child care	231	3
Filling stations (fuel retail)	103	1
Other branches of activity	1,024	11
Total	**9,049**	**100**

Source: Swedish Work Environment Authority (SWEA).

Municipally provided caring in Sweden

Sweden is divided into 290 municipalities. The municipalities have considerable rights of self-determination, and can also be organized in different ways. The largest category of personnel involved in municipal operations consists of persons in occupations in the health-and-care sector. They account for just over 35 percent of all municipal employees (Swedish Association of Local Authorities, 2000). Today, municipality-provided care embraces several different types of operations. These include: support for people in their own homes through the home-help and home-nursing services and persons dwelling in sheltered residences (i.e. service homes and care homes for the elderly and developmentally disabled); day care (i.e. treatment and rehabilitation for people with physical or mental functional impairments, and activities for dementia patients and others); short-stay care (i.e. sheltered residences linked to treatment, rehabilitation and nursing care); and, the employment of relatives/close kin by the municipalities for the provision of home services (National Board of Health and Welfare, 2000).

The modern Swedish care and nursing system was built up during the early 1950s, first as a voluntary activity before becoming the responsibility of the municipalities in 1956 (Nordström, 2000; Swedish Association of Local Authorities, 1999). The opportunity to obtain care and nursing in one's own home rather than an institution was developed. Prior to the extension of home services, old people were simply transferred to homes for the elderly or long-stay hospitals when they could no longer manage at home. Resources for municipal caring were

strongest towards the end of the 1970s and at the beginning of the 1980s. During the 1990s, however, there was a major restructuring of the organization of caring activities. Through the so-called "Ädel" reform of 1992, the municipalities took over responsibilities previously held by the Swedish county councils (the upper tier of Swedish local government), largely with regard to sheltered (serviced) forms of accommodation, but also to some extent concerning home services. In the mid-1990s, through reforms to the provision of psychiatric care and care for the disabled, the municipalities also assumed responsibility for county-council operations in these areas (Swedish Association of Local Authorities, 1999; Ministry of Health and Social Affairs, 2000). The reforms led to the merger of two quite different workplace cultures. There is a big difference between working with inpatient care (county council), with close access to specialists, and working alone in ordinary homes, where both social and medical needs have to be satisfied (Swedish Association of Local Authorities, 1999; Barron, Michailakis & Söder, 2000; Szebehely, 2000).

Today, care for the elderly and disabled (physically or psychologically) in Sweden takes place to a proportion of around 95 percent under the auspices of the municipalities. It has, however, become more common for parts of care for the elderly to be transferred to private caring organizations, including companies, foundations and various forms of cooperatives (Swedish Association of Local Authorities, 2002). The municipalities, however, retain overall responsibility, and specify goals and quality benchmarks for operations even if they are privately run. Further, pursuant to the Work Environment Act, the municipalities have a duty to offer a healthy and safe work environment, where personnel are not exposed to risks, such as violence or threats of violence that might lead to injury or disease.

At the same time as these reforms and other changes in the municipal-care sector took place, there was also a change in work organization (Swedish Association of Local Authorities, 1999; Bejerot & Hasselbladh, 2002). There has been a tendency towards a flatter organization through the development of teamwork. But the old hierarchical structures have remained in place, and restrict personnel's scope for action through old routines, rules and working habits (Swedish Association of Local Authorities, 1999).

The municipal caring sector encompasses a variety of occupational groups, such as administrators, managers/supervisors, caring personnel (e.g. assistant nurses, nursing auxiliaries, carers, personal assistants, and direct carers), and specialists (e.g. registered nurses, district nurses, physiotherapists, and occupational therapists), and also some smaller occupational groups (e.g. laboratory assistants and home carers). In November 1998 (at the time of the nationwide survey conducted for this dissertation) the municipal caring sector employed around 184,000 people, full-time or part-time, on a monthly salary, and a further 53,000 people on an hourly basis. Of the salaried employees, 171,225 were women (around 94%) and 12,416 men (around 6%).

Work tasks within municipal caring have gradually changed from simply providing help in the home to the more extensive and skilled caring that takes place alongside conventional assignments. This development has also led to new

tasks been assigned to job supervisors/managers, whose duties are no longer only for personnel and resources but also for the proper exercise of public authority. Accordingly, they have a special relationship with the recipients of care and their close kin (Swedish Association of Local Authorities, 1999). Providing care of high quality imposes requirements for many types of expertise in different areas (Astvik, 2003). Further, the caring of today places major psychological demands on personnel, in that they find themselves in and need to handle personal relationships in their occupational practice.

Theoretical points of departure

Definition of violence

In recent years, increasing attention has been paid to the definition of violence, in particular workplace violence, both in a research context and with regard to national rules and ordinances (Bowie, 2000). The experience of aggression and violence is subjective, in that individuals perceive acts of violence uniquely in the light of their own experience, skills and personality. This means that the same kind of violent incident may have quite different impacts according to the individual involved. Thus, for example, the definition used by the World Health Organization (Krug et al., 2002) treats intentionality as a necessary condition for the committing of an act of violence, irrespective of the injury and the other impacts that any such act might have. WHO's definition excludes unintentional incidents (such as road traffic injuries and burns) by explicitly referring to:

> the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation. (p. 5)

However, in a working-life context the definition of violence varies considerably according to which type of work activity is concerned (Menckel, 2000). Chappell and Di Martino (1998) discuss this issue in a report from the International Labor Office (ILO). According to the report, violence in the workplace may include a wide range of behaviours, often continuing or overlapping. Traditionally, attention has focused on physical violence towards personnel, but more recently greater emphasis has been placed to the consequences of non-physical violence, often referred to as psychological violence. A good example is verbal aggression against employees. Attention has also been paid to violence occasioned by repeated behaviors, such as sexual harassment and bullying.

In a report undertaken on behalf of the European Commission (Wynne, Clarkin, Cox & Griffiths, 1997) a work-related violent incident is defined as:

> an incident where persons are abused, threatened or assaulted in circumstances related to their work, involving an explicit or implicit challenge to their safety. (p. 1)

The definition covers both physical and verbal abuse and encompasses both direct violence (where workers themselves are threatened or assaulted) and indirect violence (where members of the worker's family and/or friends are threatened or assaulted).

Swedish work-environment legislation does not stipulate a definition of violence, but in the general recommendations of Sweden's National Board of Occupational Safety and Health concerning the implementation of provisions on the prevention of violence and menaces in the work environment (AFS 1993:2), acts of violence are defined as follows:

Violence ranges from murder to harassment in the form of threatening letters or phone calls. Violence can be used methodically in pursuit of certain objectives. It can also occur when the environment invites criminal acts, as well as various caring situations. (p. 8)

In a Swedish dissertation designed to investigate violence in the health-care environment, violence was given a broad definition, including threatening behaviour and verbal aggression as well as acts of physical assault (Arnetz, 1998). Threatening behaviour could be either verbal or a bodily expression. But in research into violence in the care sector several different definitions have been employed. These are presented in Table 2. Note that care for the elderly and disabled can be arranged in different ways, and may vary between countries. The workplaces involved include long-term care facilities, nursing homes, and ordinary residences (i.e. the care recipient lives at home, and this is where the care is delivered).

The definitions in Table 2 vary from threat to personal safety, across verbal and physical abuse, through to physical assault. The term "threatening behaviour" appears in several of these definitions. There are some operational definitions, which specify more precisely the actions to be included in any one definition.

In the literature there are two approaches to structuring the idea of violence in working life. There are descriptions of the concept of violence, and presentations of typologies of violence (e.g. Gill, Fisher & Bowie, 2002). The conceptual approach to workplace violence is aimed at determining the elements included in the concept of violence, e.g. the target (at whom the violence is aimed), the source (from where the violence comes), perception of the act (how a violent act is perceived), impact (the effect on the target of the act), and workplace (the extent to which violence is linked to work). By contrast, the typological approach is aimed at determining or categorizing the types of contexts in which violence arises. The typology, in Gill et al., takes up four such contexts: intrusive violence (e.g. criminal intent by strangers), consumer-related violence (e.g. consumer/client/patient violence against staff), relationship violence (e.g. staff-on-staff violence and bullying), and organizational violence (e.g. the ways organizations are structured and managed). The complexity involved in defining the concept of violence in a work setting has been widely discussed in the literature (VandenBos & Bulatao, 1996; Chappell & Di Martino, 1998; Wynne et al., 1997).

Table 2. Examples of definitions of violence towards caring personnel in the scientific literature.

SOURCE	Workplace/site Setting	Definition of violence	Operational definition
Chou et al. (1996)	Literature review	Assaultive behaviour	Verbal or physical force that may harm other people
Colenda & Hamer (1991)	Geropsychiatric state hospital for long-term care	Physically aggressive behaviour, threatening behaviour, physical and vocal behaviour	Hitting, pushing, biting, yelling, verbal threats, physical and vocal aggression
Daugerty et al. (1992)	State geriatric long-term care hospital	Aggressive behaviour including physical, verbal, or general disruptive behaviour	Hitting, shoving, slap, cursing, swearing, yelling, wandering, demanding attention, following staff
Fazzone et al. (2000)	Home health care	Risk to personal safety	Any perceived or actual threat of loss or injury to person's physical and/or emotional well-being, or possessions
Feldt & Ryden (1992)	Nursing home for long-term care	Aggressive behaviour	-
Gage & Kingdom (1995)	Long-term care facility	Aggressive behaviour	Striking, grabbing, pinching, scratching, biting, negative comments from the family of a resident or supervisor
Gates et al. (1999)	Nursing homes for long-term care	Physical assault, threatening behaviour, or verbal abuse	-
Gates et al. (2003)	Nursing homes	Physical assault	Hitting, punching, grabbing, pinching, pulling hair, kicking, scratching, biting, spitting, throwing or hitting with objects
Hayes et al. (1996)	Community-based urban setting	Threat to safety, threat of crime and violence	-
Kendra et al. (1996)	Home health care	Risk for personal safety	Threat
Kiely & Pankhurst (1998)	Local community homes for learning disability service	Any personal contact from a patient, resident or client that results in feelings of personal threat	-
Levin et al. (2003)	Long-term care facilities	Verbal and physical assault	-
Lusk (1992)	Long-term care institution/nursing home	Physical and verbal abuse	-
Winger et al. (1987)	Long-term care units	Disturbing behaviour, endangering to others and self	Shouting, sarcasm, anger, irritation, impatience, hitting, biting, breaking objects
Ästöm et al. (2002)	Residential settings and ordinary homes	Actions of psychological, sexual or economic nature leading to actual harm or to an increased risk of harm towards staff	Rely on staff's own ability to interpret and register

Research into violence in the care sector

Violence and threats of violence in the care sector have been investigated in both Swedish and international research, with the main emphasis being on psychiatric and emergency care. Bengt Ekblom (1970) was the first researcher in Sweden to investigate the problem of violence in the psychiatric arena (in his dissertation entitled "Acts of violence in mental hospitals"). *The care sector*, i.e. care of the elderly and disabled, has now come to receive considerable research attention, and there are now a fair number of studies examining violence against personnel in this sector (including Colenda and Hamer 1991; Dougerty, Bolger, Preston, Jones & Payne, 1992; Fazzone, Barloon, McConnell & Chitty, 2000; Gage and Kingdom, 1995; Gates et al., 1999; Gates, Fitzwater & Succop, 2003; Hayes, Carter, Carroll & Morin, 1996; Kendra, 1996; Kendra, Weiker, Simon, Grant & Shullick, 1996; Kiely & Pankhurst, 1998; Levin, Hewitt, Misner & Reynolds, 2003; Lusk 1992; Winger, Schirm & Stewart, 1987; Åström, Bucht, Eisemann, Norberg & Saveman, 2002). Also, one dissertation on elder abuse gives prominence to violence aimed at patients or clients (Saveman, 1994).

The *prevalence* and *extent* of violence against personnel have been considered by, inter alia, Arnetz (1998). The studies of Soares, Lawoko and Nolan (2000) and Arnetz and Arnetz (2000) showed that over 50 percent of personnel were exposed over a 12-month period, but Kiely and Pankhurst (1998) indicated a figure as high as 81 percent. Åström et al. (2002) found that 40 percent of their respondents had been exposed during the previous year. By contrast, Budd, Arvey and Lawless (1996) found that only 2.5 percent of full-time workers (in all types of occupations) reported having been physically attacked at work over a 12-month period.

The question of *how often* people are exposed and what this entails is not so well covered in the research literature. However, Nolan, Soares, Dallender, Thomsen and Arnetz (2001) treated this issue in a comparative study of Swedish and British caring personnel. The results showed that 10 percent of nursing staff in a Swedish group and 27 percent in a British group reported daily exposure. Further, a study by Åström et al. (2002) reported that 18% of their respondents were exposed on a daily basis. There are only a few studies, however, concerned with the nature of violence in a nursing and caring setting (Gates et al., 1999).

It appears that *occupational affiliation* may be of significance with regard to exposure. Investigations in the health-care sector (in emergency departments, and on geriatric, psychiatric and home health-care sites) suggest that it is direct patient-care providers who are the most exposed (Arnetz, Arnetz & Petterson, 1996; Arnetz, Arnetz, Söderman, 1998; Arnetz & Arnetz, 2000; Lanza, Kayne, Hicks & Milner, 1991; Nolan, Dallender, Soares, Thomsen & Arnetz, 1999, 2001; Soares et. al., 2000; Whittington, Shuttleworth & Hill, 1996). Other studies have shown that one exposed group consists of home-care personnel, who provide both health services and other forms of assistance (Fazzone et al., 2000; Kendra, 1996; Kendra et al., 1996; Riopelle, Bourque, Robbins, Shoaf & Kraus, 2000). However, Arnetz et al. (1998) found that the risk of experiencing violence at some time during the career course was greatest for practical (assistant) nurses.

Demographic characteristics of care providers, such as *age, gender or occupational and organizational experience,* have also been investigated in relation to workplace violence aimed at personnel (including Arnetz et al., 1996; Cole, Grubb, Sauter, Swanson & Lawless, 1997; Gates et al., 1999; Nolan et al., 1999; Riopelle et al., 2000; Soares et al., 2000). Low age may constitute an exposure risk (Duncan, Hyndman, Estabrooks, Hesketh, Humphrey et al., 2001; Lee, Gerberich, Waller, Anderson, McGovern, 1999; Åström et al., 2002), but Lanza et al., (1991) were not able to establish any age difference with regard to exposure. Results are partly conflicting in relation to gender, in that both men (Love & Hunter, 1996; Åström et al., 2002) and women (Kiely & Pankhurst, 1998) have been shown to more exposed, while other studies report no significant difference between the genders (Whittington & Wykes, 1994). Short occupational tenure (reflecting inexperienced personnel) is associated with greater exposure (Fazzone et al., 2000; Kiely & Pankhurst, 1998), but short organizational tenure (reflecting time in the particular workplace) has not been demonstrated to be a risk factor (Whittington et al., 1996).

Work-related characteristics, such as *type of caring setting* (care home or in the home, etc.)*, form of employment* (full-time or part-time working)*, working hours* (day or night)*, work conditions* (e.g. frequency of contact with care recipients, working in the homes of clients, working alone), *work activities/tasks*, *organizational change* (e.g. downsizing), and *workload* are factors that may decrease or increase exposure and risk. One or several of these factors have been investigated, inter alia, by Arnetz et al. (1998), Cole et al. (1997), Colenda & Hamer (1991), Nolan et al. (1999, 2001), Arnetz and Arnetz (2000, 2001), Soares et al. (2000), and Åström et al. (2002). These studies provide a certain amount of guidance to establishing what the risk factors actually are.

Traditionally, psychiatric care has been shown to be associated with acts of violence, but work sites in geriatric care, like nursing homes, have also been demonstrated to constitute a risk (Arnetz et al., 1998; Saveman, Åstöm, Bucht & Norberg, 1999; Åström et al., 2002). Further, working during evenings and nights has been found to be related to risk of exposure to violence in several studies (Arnetz et al., 1996; Kendra, 1996; Kendra et al., 1996; Gates et al., 1999; Lee et al., 1999).

Other studies suggest that a high level of contact with clients (Lee et al., 1999) and solitary working (Nolan et al., 2001) tend to increase the risk of being exposed. Studies have also shown that acts of violence occur largely when staff *provide assistance* in matters of daily living (Colenda & Hamer, 1991; Croker & Cummings, 1995; Gates et al., 2003; Lanza, 1988; Lanza et al., 1991, 1994; Negly & Manley, 1990). And it appears that organizational downsizing is also capable of increasing exposure (Duncan et al., 2001; Flannery, Hanson, Penk, Pastva, Navon & Flannery, 1997; Snyder, 1994). Several studies have demonstrated that high workload is a risk factor (Gages & Kingdom 1995; Gates 1995; Gates et al., 1999).

With regard to the *consequences* of violence, physical, psychological and behaviour-related impacts have all been identified (Chou, Kaas & Richie, 1996),

but so too have social (extra-work) impacts (Chappell & Di Martino, 1998; Omérov, Edman & Wistedt, 2002). Consequences can be either short-term or long-term for the individual, the workplace, or the entire organization. Internationally speaking, Lanza (1983) was among the first to investigate personnel's reactions following an incident. The studies showed that violence could have both short-term and long-term emotional, social, biophysiological and cognitive impacts. Short-term emotional reactions take the forms of rage, anxiety, a sense of helplessness, irritation, fear of returning to the location of the incident, empathy with the assailant, and feelings and thoughts that something should have been done to prevent what had occurred. The three last-mentioned reactions were reported to have been long-lasting. However, the social reactions were short-term, largely concerning relationships with co-workers and difficulties in returning to work. Short-term biophysiological impacts included sleep disturbances, headaches, and bodily shakes and tenderness. The latter was a long-term effect, as too were tensions in the body. Ryan and Poster (1989) attempted to measure short-term and long-term effects of acts of violence to which registered nurses had been exposed. After the first week 67 percent reported that they felt some form of discomfort; after six weeks, 18 percent reported some kind of reaction; and, after one year, 16 percent reported continuing reactions.

Some studies were found with regard to the issue of whether violence leads to increased *work absence* (Boyd, 1995; Fernandes, Bouthillette, Raboud et al., 1999; Hillbrand, Foster & Spitz, 1996) or gives rise to *financial loss* for personnel and/or the organization (Hunter & Carmel, 1992; Miller, 1997). On the other hand, there are many studies that have focused on the *health impacts* of violence (Leather, Lawrence, Beale, Cox & Dickson, 1998; LeBlanc & Kelloway, 2002; Schat & Kelloway, 2000, 2003; Thomsen, Dallender, Soares, Nolan & Arnetz, 1998). For example, *physical injuries,* of varying degrees of severity have been reported in several studies following a violent event (among others by Carr, 2000; Flannery, 2003; Ghaziuddin & Ghaziuddin, 1992; LaMer, Gerberich, Lohman & Zaidman, 1998; Love & Hunter, 1996; Nolan et al., 1999; Ryan & Poster, 1989).

Emotional reactions following an incident of violence vary between individuals (Gates et al., 1999). Reactions such as anger, disappointment, senses of powerlessness and insult, shock and ambivalence have all been reported. Emotions have also been presented in expressions like being "poorly appreciated" or "deprived of one's human rights"; further, personnel "wonder over whether it was all worth it". Emotional reactions have also been investigated in other studies (Arnetz & Arnetz, 2001; Carr, 2000; Chambers, 1998; Eriksson & Saveman, 2002; Hellzen, Asplund, Sandman & Norberg, 1999; Miller, 1997; Omérov, et al., 2002; Schat & Kelloway, 2000, 2003; Wykes & Whittington, 1991; Åström et al., 2002). Further, there is a topical discussion over whether violence can increase the risk of post-traumatic stress disorder (PTSD) (Caldwell, 1992; Ryan & Poster, 1989), or lead to burnout (Colenda & Hamer, 1991) or other stress reactions (Lusk, 1992; Arnetz & Arnetz, 2001). It has not been possible to identify studies of the impacts of being exposed to repeated incidents over a lengthy period of time.

Violent events and reactions to them can also affect *work* with patients or clients (Arnetz & Arnetz, 2001; Chou et al., 1996; Duncan et al., 2001; Fernandes et al., 1999; Kiely & Pankhurst, 1998). And, violence may also have consequences *outside work,* in that personnel bring their work problems home with them, and find it hard to obtain distance from or forget what has happened. Then, the whole family may be affected (Omérov et al., 2002). Marital breakdowns and inability to become involved in social activity have also been reported (Chappell & Di Martino, 1998).

What happens before and after an incident seems to be important in attempts to prevent incidents and ameliorate their consequences. *Social support* may be of significance (Carr, 2000; Cutcliffe, 1999; Farrell, 1997; Flannery, 2003; Leather et al., 1998; Nolan et al., 1999; Schat & Kelloway, 2003; Whittington & Wykes, 1992). The source of social support may be either work-based, e.g. from supervisor or co-workers, or non-work-based, e.g. from spouse, family, relatives or friends (LaRocco, House & French, 1980). Support may have different contents – emotional, informational, appraisal-related and instrumental (House, 1981; Westlander, 1999). Emotional support may consist, for example, in showing appreciation and attention, while instrumental support involves the provision of finance, time and resources or effecting change to the environment. Informational support takes the form of advice, support, enlightenment and directions, while appraisal involves confirmation, feedback and realistic assessment. In the literature the significance of support in a work setting has been treated as having both a direct health-promoting function and as having a buffering effect (Westlander, 1999). Cutcliffe (1999) and Schat and Kelloway (2003) have shown that social support may moderate the impacts of workplace violence on emotional well-being, somatic health, and job-related affect. Further, studies have indicated the exposed do not only seek support but also understanding of their need for support (Teasdale, Brocklehurst & Thom, 2001).

Preventive measures or interventions may be of an organizational nature (organizational support); that is, the employer arranges for various preventive measures to be taken, such as training and information, technical aids, and the reorganization of work. In the literature there are a large number of recommendations with regard to preventive action (Di Martino, Hoel & Cooper, 2003; Leather, Brady, Lawrence, Beale & Cox, 1999; Wykes, 1994). For example, the following measures are proposed by ILO/ICN/WHO/PSI (2002): develop a humane workplace culture based on the concept of safety; produce policy documents; and, make organizational interventions with regard to staffing and management style. Communication and information, and also changes to ways of working, work organization and working hours are referred to as possible preventive measures in this report. The organization's handling of violence-related problems has been studied by Grainger (1993), who takes up the issue of the responsibility of the workplace to eliminate or minimize risks. The proposed measures are targeted, inter alia, at the environment and the taking of administrative responsibility, and also responsibility for personnel training. In turn, studies by Gates et al. (1999) showed that care homes lacked policy documents concerning incidents of

violence and that personnel sought education and training addressing how to take care of violent patients.

Documentation of violent incidents in the workplace is another from of preventive action. Through *recording* the workplace can reveal the extent and nature of the problem. However, each system needs to be tailored to fit both the organizational structure and the type of work undertaken (Beale, Cox & Leather, 1996). This point has been made, inter alia, by Palmstierna and Wistedt (1987) and Arnetz (1998*), who have researched into and developed registration techniques to complement formal work-injury reporting.

One way of raising awareness about and understanding workplace violence, and identifying and preventing violent incidents, is to construct a *model*. One such model has been developed by Chou et al. (1996). This is an intervention model based on understanding of the dynamics of violence. The model operates at three levels: a baseline, a pre-assaultive stage, and an assaultive stage. At baseline, personnel observe factors concerned with the patient, environment, and caregiver. These are possible predictors of violent behaviour. The pre-assaultive stage encompasses three interventions, all aimed at the patient: 1) prevent fear, insecurity, and anxiety; 2) reduce the outburst of anger; and, 3) decrease agitation. The assaultive stage requires attention to be paid to patients at psychological, physical, and pharmacological levels.

Gellner, Landers, O'Rourke and Schlegel (1994) used the "Neuman Systems Model" as a theoretical framework in a study of safety risks in the work of community-health nurses. The model, which encompasses an individual, family unit, health-care agency and society, has been used as an assessment tool in nursing and other health disciplines. In turn, Poyner and Warne (in Wynne et al., 1997) have developed a framework that contains five basic violence-related elements. The elements are characteristics of assailant and employee, violence interaction, specific work situation, and outcome of incident. This model has been further developed, and now focuses on both physical and psychological violence (Di Martino et al., 2003). Arnetz and Arnetz (2000) have constructed a model that focuses on the care environment where an incident of violence takes place and the demographic characteristics of the people involved, and also places stress on the quality of care as a relevant aspect in this context. Saarela & Isotalus (1999), on the other hand, describe a model that encompasses the entire organization, which is intended to prevent violence through the training of personnel and through systematic risk analyses and preventive measures aimed at the workplace environment, security systems, and work procedures.

Main aim and objectives

Main aim of the dissertation

The main aim of the dissertation is to increase knowledge of violence against personnel in the municipal caring sector in Sweden. The magnitude, risk factors and consequences of violence are assessed, and methods of investigation and analysis are developed and described. The approach to work on the dissertation was such that it would have direct relevance to work-life.

Subsidiary objectives

- To investigate the occurrence of violence within the caring sector, and how violence can be identified and surveyed.
- To develop a theoretical frame of reference/model for the surveying, analysis and prevention of violence.
- To map the extent and types of violence within the municipal caring sector.
- To study individual (specific) and work-related (situational) risk factors for violence in municipality-provided caring.
- To describe and analyze the consequences of care-related violence, and assess the importance of support/help and the organization's handling of problems of violence.

Objectives by paper (I–V)

I. To ascertain incidence, severity, risk factors and physical and psychological outcomes in relation to violence aimed at county-employed carers of developmentally disabled adults; a further objective was to develop and test methods of recording challenging behaviour.

II. To obtain a conception of the factors focused upon in the scientific literature with regard to violence within the health-and-care sector and to present a framework/model for studies of workplace violence, and its application to the analysis of violence in health-care settings.

III. To increase knowledge of violence and threats of violence aimed at personnel in health-and-care work; an additional objective was to highlight questions for further research and analysis.

IV. To examine the extent of violence aimed at various professional (i.e. occupational) groups in the municipal health-and-care sector, and to analyze individual and work-related factors with regard to risk.

V. To outline, describe and analyze consequences of violence in municipal health-and-care work in relation to different types of social support and prevention.

Methods

The five papers in this thesis are based on three separate studies using three different sets of materials:

- Study/Project 1: Incident investigation as an element in the internal control of the work environment in health care. Substudy: Meeting threats and violence in the health-and-care sector– a development project, 1996–1997.
- Study/Project 2: A survey and analysis of the literature on the risks of violence and risk situations in the health-care sector as a basis for research, educational and preventive interventions, 1998–1999.
- Study/Project 3: Violence and threats of violence in the health-and-care sector – a research and development project (in co-operation between Sweden's National Institute for Working Life and the Swedish Local Authorities and County Councils' Council for the Working Environment, which includes representatives of employers and trade unions), 1999–2001.

Paper I was based on data from Study 1; Paper II was based on data from Study 2, and papers III–V were based on Study 3. The methods applied in the studies are described in detail below. The studies/projects on which the five papers are based are presented schematically in Table 5.

Study designs

Study 1 (*Paper I*) was a pilot study of violence in the caring sector. It had a participatory design, and involved two phases of data collection: 1) incident recording, using a checklist, complementary critical-incident interviews and feedback discussions; 2) registration of incidents during a month, and feedback discussions (see Figure 1).
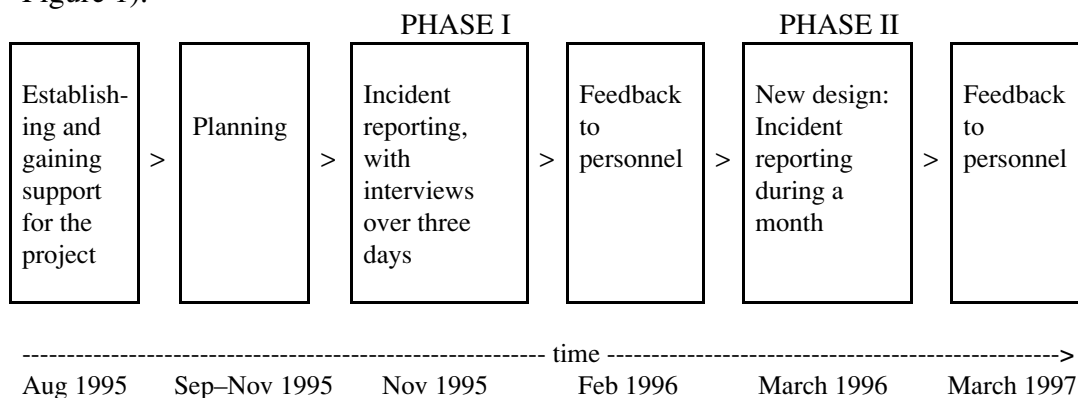
Figure 1. The various phases of Study 1.

Study 2 (*Paper II*) consisted of a literature search in Swedish and international databases and other sources as a basis for continued development in identifying

and analyzing individual and organizational risk factors for the prevention of violence.

Study 3 (*papers III–V*) was a nationwide survey with a cross-sectional design. The information surveyed was retrospective. Mailed self-administered questionnaires with follow-up mailings and additional telephone follow-up were employed.

Study groups

The subjects for Study 1 (*Paper I*) comprised personnel working at a residential institution providing full-time care to the developmentally disabled. The institution encompassed seven living units and facilities for daytime training activities. All employees at two of the living units, with accompanying daytime-training centers, took part in the study. At the first phase of the study the number of personnel came to 26, and at the second to 24 (see Figure 1). The personnel making the reports were also regular employees, and had been employed at the institution for periods ranging from two months up to around 20 years.

Study 2 (*Paper II*) was a literature review. Accordingly, no subjects were involved.

Subjects in Study 3 (*papers III-V*) were all members of the seven largest occupational groups in the Swedish municipal health-care sector, working mainly with the elderly or persons with developmental disabilities. The study population comprised 95 percent of all employees involved in this kind of caring in Sweden. In total, the study population consisted of 172,881 individuals, distributed across all municipalities and all kinds of local health-and-care activities. The occupational groups were administrators, specialists, job supervisors, direct carers, nursing auxiliaries, assistant nurses, and personal assistants. 400 individuals were randomly selected from each group, entailing that the final sample consisted of 2,800 subjects. The group of personal assistants was also stratified by gender, so that 200 men and 200 women were included in the sample. The individuals, in the final sample, were all receiving a monthly salary in November 1998 and had been entered into the register of the Swedish Association of Local Authorities at that time. Individuals employed on an hourly basis and persons on leave of any kind were not included. The number of employees in the population, as well as the sample size, the number of respondents and the response rate for each occupational group are presented in Table 3.

Table 3. Populations, samples, responses, and weights.

Group	No. in population			No. in sample			Responses received					Resp. received		Weighting	
	Women	Men	Total	Women	Men	Total	Women	Men	Total	Unsp. (U)	Total	Excl U	Incl U	Weight	N
Administrators	2,189	158	2,347	377	23	400	277	19	296	42	338	74	84	6.94	2,347
Nurs. specialists	12,463	955	13,418	377	23	400	310	18	328	19	347	82	87	38.67	13,418
Supervisors	4,399	684	5,083	351	49	400	279	36	315	30	345	79	86	14.73	5,083
Direct carers	20,793	3,405	24,198	356	44	400	301	32	333	17	350	83	88	69.14	24,198
Nurs. auxiliaries	72,995	2,780	75,775	382	18	400	319	14	333	18	351	83	88	215.88	75,775
Assistant nurses	43,306	1,803	45,109	389	11	400	314	7	321	23	344	80	86	131.13	45,109
Pers. ass. (women)	5,702	0	5,702	200	0	200	152	0	152	17	169	76	84	33.74	5,702
Pers. ass. (men)	0	1,249	1,249	0	200	200	0	136	136	11	147	68	74	8.50	1,249
Total	161,847	11,034	17,2881	2,432	368	2,800	1,952	262	2,214	177	2,391	79	85	--	172,881

O = Others, specifically referring, in this context, to subjects who stated that they had *not* worked during the previous year (Item 1 in the questionnaire).

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Material and measurement

Information for Study 1 (*Paper I*) was gathered with the aid of a checklist for recording the occurrence of incidents of challenging behaviour. These data were supplemented by information from semi-structured interviews. Study 2 (*Paper 2*) was based on a search of the literature in several databases and on available sources. For Study 3 (*papers III–V*) a self-administered questionnaire was used.

The checklist and the semi-structured interviews (Study 1)

The checklist for recording violent incidents covered activities/work tasks and various types of challenging behaviour (as shown in Table 4). Incident reporting took place in the form of interviews linked to a registration list. These semi-standardized interviews were based on the critical incident reporting model (Carter & Menckel, 1985), and requested information about time and place of the incident, type of activity, possible causes, description of the violent act, similarity to other incidents, possible preventive measures, and other contributing factors.

Keywords for searching the literature (Study 2)

For the literature review in Study 2 (*Paper II*), keywords were chosen on the basis of knowledge gained from the pilot study (Study 1), and from the guidelines for national and international databases. The keywords employed were "workplace", "work-related", "threat", "violence", "aggression", and "health", "welfare", "personnel", "care" or "nurse" in various combinations.

The questionnaire (Study 3)

The questionnaire for Study 3 (*papers III–V*) was based on earlier studies employed in a large investigation of violence in Swedish hospitals (Arnetz et al., 1998). The questions, which were modified to reflect the provision of care and care services in a municipal setting, referred to the year before data collection. The final form consisted of four question areas (see Paper III for details): (1) exposure to violence and threats of violence, (2) individual-related characteristics (occupational and organizational tenure), (3) work-related conditions (e.g. work-place characteristics, nature of employment contract, working hours, job characteristics), and (4) types of consequences of violence and support (i.e. social support and preventive action). There was a total of 29 items, all with forced-response alternatives. For some questions more than one response was possible. The questionnaire was supplemented by information on age and gender taken from the employment register of the Swedish Association of Local Authorities.

Table 4. The checklist

Situation	Self-stimulating behavior	Lying on the floor	Staring	Blows and pinches Numbers attempted and actual	Hair pulling	Threat	Screaming How long?	Hit indoor object	Throw object	Spit Bite Pinch	Head-butt	Kick
Getting-up Morning wash												
Dressing in the morning												
Breakfast												
Waiting for day-activities/center												
Dressing to go out												
Activites, etc.												
Mid-morning snack												
Returning from day-activities/ center												
Lunch												
Activities, etc.												
Afternoon snack												
Activities, etc.												
Returning from day-activities center												
Evening meal												
Activities, etc.												
Evening snack												
Getting ready for bed, incl. shower, etc.												

Self-destructive behavior: (hitting, scratching oneself, etc.)
Special situation: (e.g. a blow aimed at another resident, etc.)
Positive comments:

Nb. Feel free to write on the back of this form.

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Procedures

Contact was made with a caring institution in Stockholm County in August 1995 in order to conduct a pilot study (Study 1). During two periods (November 1995 and March 1996) two different forms of recording and analyzing incidents of violence aimed at personnel or residents were implemented (see Figure 1). As a basis for discussion at the planning stage a registration form, with a list of items designed within the health-and-care sector in Uppsala County, was employed (see Carter & Menckel, 1985). Personnel took part actively during this phase, giving their opinions on how the form should be designed, and what incidents should be included on the reporting list. The first phase of registration (Phase 1) took the form of so-called incident reporting over three days (i.e. 3 days across each unit), using the forms that been developed jointly with personnel. The written data were then linked to information from interviews with all personnel. The study's second phase entailed one month of registration (i.e. 30 days across each unit), with – at least to some extent – some new and some more extensive recording (as desired by personnel). All findings were fed back, on one occasion or another, to the participating personnel. Such feedback and discussion regarding preventive interventions took place during the autumn of 1996 and the spring of 1997. A written report was prepared, and distributed to all personnel (Arbetslivsrapport 1997:7).

Study 2 (*Paper II*) was based on literature searches. These were performed in the Arbline and Spriline databases for Swedish reports, and in Medline/Pubmed, PsychINFO and Nioshtic for international publications. Further relevant information was gathered from references in the articles found in the databases.

Study 3 (*papers III-V*) was based on a postal questionnaire, administered by Statistics Sweden (SCB). Questionnaires were mailed to subjects' home addresses, accompanied by a reply postage-paid return envelope. The general purpose of the study was outlined in a cover letter, where it was also explained that responses were confidential and participation voluntary. Two follow-up mailings were made to non-respondents, and an additional telephone follow-up was made on the two occupational groups (nursing auxiliaries and personal assistants) who showed the lowest response rates after the reminder letters. The final response rate was 85 percent for the total sample, ranging from 79 percent (for personal assistants) to 88 percent (for nursing auxiliaries and direct carers).

Definitions

The dissertation covers five main themes: 1) violence, 2) the exposed, 3) risk factors, 4) consequences, and 5) support (i.e. social support and prevention).

Violence and the exposed

For Study 1 (*Paper I*), violence was defined as challenging behaviours including spitting, biting, verbal threats (including swearing), kicking, pinching, hitting, passive resistance and self-destructive behaviour. The target of violence could be

a carer/other personnel, co-patient, patient/resident her/himself, and/or the caring environment.

For Study 2 (*Paper II*), which consisted in a search of the literature and sources derived from it, keywords such as threat, violence, and aggression were employed and used in various combinations with health/welfare, personnel/care and nurse.

For Study 3 (*papers III–V*), work-related violence was defined as both verbal and physical aggression towards personnel. The operational definition of violence included the following items: verbal threat/screaming/aggression, telephone threat, scratch/pinch, kick, slap, punch, use of implement/weapon, bite, spit, shove/push, physical restraint and discomforting experience. A victim of violence was regarded as a member of health-and-care personnel who had encountered one, several, or all of these abuses. Violent acts were found to have been committed by patients and/or by the relatives and/or acquaintances of patients, or by colleagues.

Risk factors

By risk factors in this dissertation are meant characteristics and/or conditions that may be of significance in relation to violence when working with care recipients. Risk factors can be identified at several levels – societal, organizational, group, and individual. In Study 1 (*Paper I*) information was gathered on time and place of the incident and type of activity. Also considered were possible causes of an act of violence and other contributory aspects that might be regarded as risk factors. In Study 2 (*Paper II*) risk factors were not defined, but the literature search was open to all kind of aspects of workplace violence. In Study 3 (*papers III-IV*), the risk factors considered were of two types – individual characteristics and work-related conditions.

Consequences

By consequences in this dissertation (*papers I, III and V*) are meant all types of outcomes of and reactions to violence suffered by personnel in the municipal health-and-care sector, and also other impacts on individuals, their immediate environment, their work, and/or the organizations to which the individuals belong. Consequences may be financial, health-related, emotional and social and/or work-related, and may operate in either the short or the long term. In this dissertation, consideration of consequences is restricted to the direct impacts of violence.

Support – social support and prevention

Support in this dissertation (*papers II and V*) refers to both social support and preventive action. By social support is meant the support and help that an exposed person receives after an incident of violence. Support may come from the person's job supervisor, colleagues or trade-union representatives at work, or from family, friends or others outside it. The preventive interventions that employers may have made include training, the provision of technical aids, work-organization changes (e.g. twin-staffing) or other specific measures to stop incidents of violence from occurring.

Analysis

Various qualitative and quantitative techniques were employed for the collection and analysis of the data material from the three studies/projects on which the five papers in the dissertation are based (see Table 5 for a summary of the analytic methods employed).

Information from the check lists (*Paper I*) were analyzed to determine how many incidents occurred (during both the first phase and the second phase, see above). Further analyzed were the types of incidents and the situations in which they occurred. Incident rates were summarized through cross-tabulation. The semi-structured interviews were analyzed on the basis of the six main question areas covered by the instrument: time and place of the incident, type of activity in which the incident occurred, possible causes, similarity to other incidents, possible preventive measures, and other contributing factors. The information was coded and summarized by question area. Both the checklist and interview analyses were performed at group level.

The reviewed articles on which *Paper II* is based were analyzed in a variety of aspects: their definitions of violence, aims and issues raised, methods, subjects of study, types of care environments, results, and the focuses and orientations of study. Specific (e.g. individual), situational (e.g. workplace), and structural (e.g. organizational) factors were summarized i a table for each article.

The questionnaire data (*papers III-V*) were analyzed statistically. Differences between categories were tested using chi-square for papers III and V. For all analyses the processed data were weighted.

For the analyses in *Paper IV*, both chi-square significance tests and multiple-regression analyses (linear and logistic) were employed. Chi-square tests were used to test differences between groups with regard to exposure to violence and frequency of exposure. Chi-square testing was also employed to establish whether individual and/or work-related characteristics of the exposed differed between groups. Logistic regression was used to identify risk factors for exposure to violence, with separate analyses conducted for the seven occupational groups covered. In each case, the dependent variable was exposure to violence, and the independent variables consisted of the sets of individual and work-related characteristics. Linear multiple regression analysis was employed to identify the factors associated with a higher rate of exposure to violence. The dependent variable was frequency of exposure, and the independent variables were the sets of individual and work-related characteristics. Each analysis was run independently for each occupational group.

Table 5. A schematic view of the studies encompassed by the thesis.

	Study 1 Pilot study	Study 2 Literature review	Study 3 Nation-wide survey		
	Paper I	Paper II	Paper III	Paper IV	Paper V
Title	Violence towards caregivers of persons with developmental disabilities. Developing a system for recording challenging behavior.	Developing a framework for identifying individual and organizational risk factors for the prevention of violence in the health-care sector.	Threats and violence in Swedish care and welfare – magnitude of the problem and impact on municipal personnel.	Multiple risk factors for violence to seven occupational groups in the Swedish caring sector.	Consequences of violence in Swedish municipal health-and-care work – the importance of social support and prevention.
Publishing	WORK 2000, Vol. 15, 3-8.	WORK 2002, Vol. 19, 117-123.	Sc J Car Sc 2002, Vol. 16, 376-385.	RI/IR 2003, Vol. 58, 202-231.	Submitted
Aims	To examine the prevalence of violence and to develop and test recording methods	To survey factors regarding violence in the literature, and to develop a theoretical framework/ model	To investigate the extent and type of violence	To examine individual and work-related risk factors	To describe and analyze consequences of violence
Study period	1995 – 96	1980 – 99 literature	1998 Nov – 99 Nov	1998 Nov – 99 Nov	1998 Nov – 99 Nov
Study size (N) **(n)**	N = - n = 26		N = 172 881 n = 2 800	N = 172 881 n = 2 800	N = 172 881 n = 2 800
Study groups	Direct carers	Health/welfare, personnel, care, nurse	Seven occupations in municipal health-care	Seven occupations in municipal health-care	Seven occupations in municipal health-care
Study workplace	One institution incl. living units and activity centre	Health-care sector	Regular home and specialized residences, day-activities centers, facilities for short-term stay	Regular home and specialized residences, day-activities centers, facilities for short-term stay	Regular home and specialized residences, day-activities centers, facilities for short-term stay
Definition of violence	Challenging behavior	Threat, violence, aggression	Both verbal and physical aggression	Both verbal and physical aggression	Both verbal and physical aggression

Table 5. A schematic view of the studies encompassed by the thesis (continue).

	Paper I	Paper II	Paper III	Paper IV	Paper V
Methods	Recording, interview, participative discussion	Literature search	A nationwide questionnaire	A nationwide questionnaire	A nation-wide questionnaire
Variables/risk factors	Time and place of the incident, type of activity, possible causes	Attributes of perpetrator and victim, work-related conditions, org. management	Individual-related characteristics, work-related conditions	Individual-related characteristics, work-related conditions	Individual and work-related consequences, social support, prevention
Analyses	Rates	Simple content analyses	Chi-square tests Weighted data	Chi-square tests Logistic regression test Multiple regression test Weighted data	Chi-square tests Weighted data
Results	Acts of violence are common, especially in conjunction with meals and personal hygiene. Results used as a basis for in-house discussions of work environment. Personnel positive to using recording lists.	Five orientations/focuses revealed: perpetrator, victim, work-environment, consequences, and organization. A model including structural, situational and specific factors developed for identification and analysis of violent acts.	51% of respondents were the target of an act of violence (verbal or physical) over the previous year; on a daily basis over 9% of subjects, and several times a month 67%. Aggression aimed at personnel usually came from patients (96%). Verbal threats more common (79%), but even physical assaults, e.g. scratch/pinch and slap were common.	All occupational groups exposed to violence; direct carers and assistant nurses exposed most; both individual- and work-related factors associated with risk; low age and short occupational tenure associated with higher risk, as too type of workplace, working full-time with clients, organizational cutbacks and high workload; overall, a complex picture.	Four main types of consequences: financial, health-related, emotional, work-related. Financial consequences not common; one in five incidents led to physical injury; emotional reactions common; work also affected; under half received support after an event; preventive interventions (education, technical aids, twin staffing) received by 64%; social support and preventive measures influenced incident reporting positively.
Conclusions	Acts of violence common.	Five orientations/ focuses revealed.	Acts of violence were prevalent.	All seven occupational groups were exposed.	Different consequences, social support needed.

Ethical considerations

Study 1 (*Paper I*) was a pilot study commissioned internally within the National Institute for Working Life. Study 2 (*Paper II*) consisted of a literature search of various library data sources/bases without any individuals/subjects being involved. Study 3 (*papers III-V*) required the approval of Stockholm's Regional Ethical Committee, on the grounds that it was treated as a work-environment study and had a cross-sectional design (Karolinska Institutet, Ref. 01-201).

Results

The five papers included in this thesis are based on the three studies/projects outlined above. There follows a presentation of the main results presented in the five papers based on these studies.

Paper I: Violence towards caregivers of persons with developmental disabilities. Developing a system for recording challenging behaviour

Study I had the purposes of investigating whether violence is a problem in caring work and testing methods for the internal surveying of incidents of violence. A total of 2,898 incidents, usually of minor severity and not entailing absence from work, were recorded during the two phases of the study. Acts of violence were associated with a small minority of individuals. They occurred in all types of situations, but a large proportion occurred during meal times and in the course of assisting with personal hygiene involving intimate contact (e.g. taking a morning shower or dressing). Violent and disruptive acts occurred most often when individuals were requested to do something they did not want to do, when they were denied the opportunity to do something they did want to do, and when they were waiting or under-stimulated. Although these incidents did not give rise to serious physical injury, they had an impact on personnel even during leisure time. Reactions, such as becoming more sensitive to sound and/or easily irritated, worry, insomnia, fatigue and apathy, were found to be associated with incidents of violence. The data were employed by personnel in discussing counter-measures that might be compatible with care and treatment of the individual. Personnel were also positive to developing and utilizing the recording lists that had been created in the course of the study.

Paper II: Developing a framework for identifying individual and organizational risk factors for the prevention of violence in the health-care sector

The purpose of this paper was to obtain a conception of the factors related to violence within the health-and-care sector and to develop a framework/model for studies of workplace violence. A review of the Swedish and international literature highlighted five main separate research perspectives, focusing on: attributes of the perpetrator of violence, attributes of victims, violence as a work-environment problem, consequences of violence, and the handling of violence at organizational level. A model for the identification and analysis of acts of violence was developed in parallel with the literature study. The model can be employed for the identification and analysis of acts of violence in a caring workplace, and can be applied at structural, situational or individual level within an organization. *Structural* factors – focusing on the organization per se – include how the organization treats the set of problems associated with violence, what policy documents and action plans have been prepared, and what financial resources are available for prevention and training in relation to issues of violence. *Situational* factors – focusing on the workplace – include type of caring setting, the compositions of

employee groups, forms of employment, working hours, and work conditions (such as activities, work tasks, organizational changes and workload). *Specific* factors – focusing on the individual – are concerned with the demographic characteristics of care providers, such as age, gender, and occupational experience. The model highlights violence as a process comprising several stages. Understanding the diversity in this process offers a basis for the analysis of connections between interacting factors. Risk management – hazard identification, risk analysis, and preventive counter-measures – should be integrated into the work situation and operations of the organization.

Paper III: Threats and violence in Swedish care and welfare – magnitude of the problem and impact on municipal personnel

The specific aim of Paper III was to examine the issue of how many employees in the Swedish municipal-caring sector are exposed to violence, how often, and in which ways. It was found that as many as 51 percent of the sample had been affected by violence and/or threats of violence, either verbally or physically, over the previous year. Moreover, the results suggest that over 9 percent of the employees experienced acts of violence frequently (on virtually a daily basis), 30 percent several times a month (once a month and/or once a week), and 61 percent very seldom (once or only now and again). The aggression usually came from patients/clients (96%), but there were also cases of violence and/or threats of violence from relatives, friends (8%) and co-workers (5%). Violence or threats of violence from care recipients were most often reported by employees who were frequently exposed, whereas violence/threats of violence from relatives and/or acquaintances, or other personnel appears to be over-represented among those only "very seldom" exposed. Most had been exposed to verbal threats, screaming and/or aggression (79%), followed by scratching/pinching (65%) and blows (49%). Also, incidents of being spat upon (36%), shoved (30%) or kicked (29%) were reported. All forms of violence and/or threats of violence, except one, tended to be more common among persons "frequently" exposed. The exception lies in telephone threats, which appear to be more frequent among people "very seldom" exposed.

Paper IV: Multiple risk factors for violence to seven occupational groups in the Swedish caring sector

Paper IV was designed to investigate which occupational groups within the Swedish municipal-caring sector were affected by violence at work, and also to analyze distinct individual and work-related risk factors. All the occupational groups considered – administrators, nursing specialists, job supervisors, direct carers, nursing auxiliaries, assistant nurses, and personal assistants – were found to be exposed to acts or threats of violence, but some to a greater extent than others. The most vulnerable groups were assistant nurses and direct carers (usually of the developmentally disabled). Both individual and work-related factors were associated with increased risk of being exposed to violence. Gene-

rally, among the individual factors, low age was related to an increased risk of exposure, as too was brief tenure within the organization (which was of primary significance for how often a person was exposed). Work-related characteristics, such as type of workplace, working full-time with clients, organizational downsizing, and high workload, were also associated with risk. The analyses revealed a complex picture of individual and work-related risk factors, but there was no unequivocal pattern. That is, a particular factor that proved to be a risk for a specific occupational group did not manifest itself as a general risk factor for all occupational groups. Apparently, each separate group – at least to some extent – appears to have its own set of risk factors. The analyses also showed that the impacts of individual and work-related risk factors varied according to frequency of exposure to violence.

Paper V: Consequences of violence in Swedish municipal health-and-care work – the importance of social support and prevention

The purpose of this paper was to outline, describe and analyze consequences of violence in municipal health-and-care work in relation to different types of social support and prevention. The exposed health-and-care personnel reported financial, health-related, emotional and work-related outcomes due to an act or acts of violence. Financial impacts were not commonly reported. Just three percent were absent from work up to one week, and two percent suffered some kind of personal financial loss due to work-related violence. Health-related consequences, such as physical injuries, were reported by one in five. Emotional reactions due to violence were common. The most frequently reported reactions were anger (41%), irritation (38%), and sadness (36%). The experience of violence also influenced employees in their work with care recipients. Over half of the exposed reported that they were more cautious or felt unsafe, and a quarter felt less job satisfaction following an incident. Less than 40 percent had received social support (work based or non-work based) following the event, but 64 percent of the exposed had been subject to some kind of preventive intervention. The subjects who had not received support were more inclined to report financial and health-related consequences than those who had. Recipients of support following an incident were more likely to display emotional reactions than those who did not receive support. Persons who were subject to preventive interventions reported financial consequences, emotional reactions and an impact of some kind on their work more frequently than those who did not receive any kind of preventive support. Physical injuries were most common among those who had not been the recipients of preventive actions. It should be noted that work-injury reports were more often presented by people who had received support or assistance following an incident of violence, and also by those who had experienced preventive interventions in the workplace.

Discussion

The main aim of the dissertation is to increase knowledge of violence against personnel in the municipal caring sector in Sweden. The intention was to achieve this aim through meeting five subsidiary objectives: 1) to investigate the occurrence of violence within the health-and-care sector; 2) to develop a model for the identification and analysis of workplace violence; 3) to map the magnitude and types of violence; 4) to study individual and work-related risk factors for violence; and, 5) to describe and analyze the consequences of care-related violence, and assess the importance of social support and prevention.

This Discussion is divided into three sections: "main findings"; "methodological considerations and limitations", and; "implications for prevention". The main findings are based on the five papers, which in turn are founded in three separate studies with three different sets of material. Discussion of the main findings follows the dissertation's subsidiary objectives. The reasoning under "methodological considerations and limitations" follows the same order, and the section is concluded with a general discussion of methodological aspects relevant to the dissertation as a whole. The "implications for prevention" section provides a brief account of how the results presented can make a contribution to preventive efforts.

Main findings

Violence as a work-environment problem

Workplace violence in the health-and-care sector has traditionally been investigated within the arenas of psychiatric and emergency care (see Arnetz, 1998, for an overview). Other areas in the caring sector, such as care for the elderly or the disabled, have been examined to only a limited extent (Åström et al., 2002; Kiely & Pankhurst, 1998). In Sweden such forms of care are largely municipally administered.

The aim of the pilot study (Paper I) was to examine the incidence of acts of violence against personnel in the municipal health-care sector. The study consisted in mapping violence in a care home, i.e. in an institutional setting. The recording demonstrated that acts of violence were common, and could occur in all the types of activities in which carers were involved. However, the pilot study also highlighted three principal situations where violence was most frequent. These related to: 1) "desires", where the care recipient did not do something that he or she was requested to do; 2) "demands", where the care recipient was prevented (by personnel) from doing something she or he wanted to do; and, 3) "waiting/under-stimulation", where the care recipient had to wait for another activity to start, or did not have anything to do. Similar observations have been made by Omérov et al. (2002).

The number of incidents recorded was larger than those reported in other studies using observation protocols in various areas of health care, such as psychiatry or general health (Arnetz, 1998; Omérov, Wistedt & Elgen, 1995;

Omérov & Wistedt, 1997; Whittington & Wykes, 1994). The large number of incidents documented during the implementation of Study 1 showed that violence was a work-environment problem for personnel.

The results presented in papers II, III and IV point in the same direction as those of the pilot study, namely that violence can be regarded as a substantial work-environment problem. From the literature review (Paper II) it emerged that violence is seen as a problem in the care sector (Arnetz, 1998; Gates et al., 1999; Lanza et al., 1991, 1994; Palmstierna, 1992; Whittington & Wykes, 1994). The findings of the questionnaire study (papers III and IV) showed that half of care personnel were exposed, and that all the study's professional groups were affected. Other studies also suggest that personnel (especially direct care providers) are exposed (Arnetz et al., 1996; Lanza et al., 1991; Nolan et al., 1999, 2001; Soares et al., 2000; Whittington et al., 1996).

An additional purpose of Study 1 was to test a recording technique for the in-house surveillance of violence in the workplace. In the literature, several instruments for the measurement of violence in health-care environments have been described (Arnetz, 1998; Palmstierna & Wistedt, 1987; Whittington & Wykes, 1994), all with the purpose of serving as an effective violence-management tool. The incident-recording method used in this study seemed to be of good help in identifying and mapping incidents of violence. The recording list (form) was developed in conjunction with personnel, and was adapted to the activities of the institution in question. The participative approach adopted to method development may have increased personnel's awareness of violence as a work-environment issue. The instrument represented a first version of an internal observation tool, and should be developed and evaluated for further use.

Model for identifying and analyzing workplace violence

The second objective of this dissertation was to present a framework for identifying and analyzing risk factors for workplace violence (see Appendix). The model, which is based inter alia on a literature survey, involves the identification of risk factors at three levels – specific factors (i.e. individual level), situational factors (i.e. workplace level), and structural factors (i.e. organization level). By contrast with interactionist models, which investigate the interaction between carer and client (Arnetz & Arnetz, 2000; Di Martino et al., 2003), and also with dynamic models, which investigate the underlying process of aggressive behaviour (Chou et al., 1996), the present model takes account of the organization as a whole.

Violence occurs in a specific situation, but broader situational and structural factors shape a context/setting for what takes place, and also influence the nature of circumstances prior to and following an incident. In development of the model, knowledge from accident research (Menckel & Kullinger, 1996) and from organizational psychology (Westlander, 1999) was utilized. The five perspectives/focuses that emerged from the literature further contributed to reinforcing the idea underlying the significance of having three levels in a model for the analysis of

workplace violence. Such a line of reasoning is affirmed, among others, by Saarela & Isotalus (1999), who in turn describe a comprehensive model that takes up both policy and organizational factors, processes, incident reporting at individual level, and also support for victims (i.e. what happens afterwards).

In Study 3 (papers III–IV) an attempt was made to extend the analysis by investigating certain specific and situational risk factors. Structural factors, however, were not considered, but they should be included among the risk factors to be addressed in future research. Thus, a model such as that presented in Paper II can provide a good basis for the discussion of risk factors at different levels.

Magnitude of violence in the workplace

The prevalence and extent of violence, i.e. its magnitude, were studied by means of the nationwide questionnaire survey in Study 3 (papers III-V). The results reported in Paper III show that incidents of violence were common. Of the total number of respondents, 51 percent stated that they had been exposed to violence or threat of violence during the preceding year. Study 1, which was a pilot study, also indicated a high number of incidents. However, reported injuries due to violence from the ISA work-injury system (SWEA, 2003) show considerably lower figures, which may mean that – for one reason or another – not all incidents are reported. In light of this, the present results suggest that violence is more widespread than has been previously indicated. Results from other studies also indicate high levels of incidents in health-care and psychiatric settings (Arnetz & Arnetz, 2000; Kiely & Pankhurst, 1998; Nolan et al., 2001; Soars et al., 2000; Whittington et al., 1996). When it comes to frequency of exposure, the present results show that over nine percent of the total sample were a target of violence on a daily basis, which is comparable with the proportion obtained in the study by Nolan et al. (2001). Within the field of workplace violence, there is a lack of research into what being "often" exposed might involve.

Violence aimed at personnel may come from both care recipients, their relatives and/or friends, but also from other personnel and/or colleagues (Hegney, Plank & Parker, 2003). In this study, aggression was found most frequently to come from care recipients to personnel, but there were also cases of violence or threats of violence from relatives to care recipients, and also from co-workers. The incidents that were "often" reported were from care recipients, while those that were "very seldom" reported were from relatives and friends, and also from co-workers. These observations prompt the question whether future research should draw a sharper distinction between violence from care recipients and their relatives on the one hand and between co-workers on the other. In terms of counter-measures, it may be important to take account of this aspect, since the former can be seen as a work-environment problem, whereas the latter is more personnel/social matter. In both cases action is needed, but such action would focus on different locations in the workplace and within the organization.

One problem with regard to the magnitude of violence concerns the definition of violence itself. A definition that lacks clarity can lead to either under-reporting

or over-reporting. In the context of caring, the research literature shows that there is no uniform definition of what constitutes violence in the workplace (Arnetz, 1998). And the lack of an agreed definition makes it difficult to compare the findings of different studies (Hegney et al., 2003). Both in Study 1 and Study 3 (papers I, III–V) violence was defined broadly, so as to include both verbal and physical aggression aimed at personnel. The results indicate that the most common kind of violence in caring work is verbal, taking the forms of threats/ aggression/shouting and screaming. This can impose other demands on preventive measures than those required to cope with physical violence. The distinction should be elaborated upon in future research.

Individual and work-related risk factors for violence

A further subsidiary objective of the dissertation was to investigate which individual and work-related characteristics can constitute risk factors for violence against different occupational groups in the care sector (Paper IV). In the case of the questions raised in Paper IV a distinction was made between being exposed, on the one hand, and how often one was exposed, on the other. The results of the analysis showed that all occupational groups were exposed, but that degree of exposure varied. Assistant nurses and direct carers formed the most exposed groups. These findings are in line with other studies of violence within the care sector (Arnetz et al., 1996; Arnetz et al., 1998; Nolan et al., 1999, 2001; Whittington et al., 1996).

Individual attributes, such as age, gender and occupational experience have been shown to serve as risk factors with regard to exposure (Arnetz et al., 1996; Kiely & Pankhurst, 1998; Åström et al., 2002). The results of Paper IV suggest that low age and short occupational tenure in the organization entail increased risk of exposure for all professional groups.

Further, the results of Paper IV suggest that work-related characteristics, such as type of workplace, working full-time with clients, organizational downsizing, and high workload also entail increased risk for all the occupational groups that are exposed to violence. In this context, type of workplace refers to a municipality-based site – either a regular home or sheltered residence, a day center or a location for short-term stay. There is a lack of studies that explicitly relate type of workplace to risk of exposure to violence. Nevertheless, the findings of a study by Saveman et al. (1999) indicate that working in a care home gives rise to increased risk.

"Working full-time with care recipients" was another work-related factor that increased the risk of exposure for most of the occupational groups encompassed by the study. One explanation for this might be that, in such a situation, there are several occasions during the working day when personnel can be subjected to verbal and/or physical aggression from patients (Lee et al., 1999). Few studies were found concerning whether length of contact/relationship with client was related to risk. It may well be the case that the risk of exposure increases if a person works only a small proportion of his or her time with a particular care

recipient, as a result of lack of acquaintance with the client in question (Lanza, 1988). Job content and work scheduling are important future issues to investigate with regard to violence in the care sector.

The analyses showed that organizational change, in particular personnel cut-backs and an increased number of care recipients, was a risk factor for most occupational groups, but that the risk of often being exposed did not increase for all groups. There are a handful of studies suggesting that organizational changes can increase the risk of exposure (Arnetz & Arnetz, 2001; Snyder, 1994; Flannery et al., 1997; Duncan et al., 2001). High workload also proved to increase the risk of all occupational groups with regard to being either exposed or often exposed. This finding is in line with the results of previous research (Gages & Kingdom, 1995; Gates, 1995; Gates et al., 1999). However, further investigation is required to establish the impacts of changes in work conditions and/or workload on the occurrence of acts of violence.

Many of the investigated individual- and work-related factors were of relevance with regard to being exposed and/or often being exposed. However, only six risk factors out of the 13 studied proved to constitute a risk condition for all professional groups. One explanation for this may be that the groups differ in terms of work tasks and recipients' care needs, and that such differences also entails differences with regard to the risk of being exposed to violence.

Consequences and the importance of social support and prevention

The final subsidiary objective of the dissertation was to investigate what consequences violence has, and what significance support, help and preventive actions may have (Paper V). The consequences of workplace violence are many and varied. Previous research has shown that violence can have personal-financial (Hunter & Carmel, 1992; Miller, 1997), health-related (e.g. Carr, 2000; Lusk, 1992; Ryan & Poster, 1989; Schat & Kelloway, 2000, 2003), emotional (e.g. Gates et al., 2003; Hellzen et al., 1999; Åström et al., 2002), and work-related (Arnetz & Arnetz, 2001; Fernandes et al., 1999; Kiely & Pankhurst, 1998) consequences. In line with previous research, the results presented in Paper V show that exposure to violence is associated with consequences of this kind. Specific emotional reactions were common following an act of violence. Also, acts of violence can have further consequences for leisure time (Omérov et al., 2002). In particular, Study 1 shows that violence may give rise to problems outside work, especially with regard to symptoms such as irritation, fatigue, sleep disturbance, anxiety, and apathy. One question that remains to investigate is whether the consequences are short-term, or whether they have long-term implications, with all this might entail for the individual, the work group and the organization (cf. Zapf, Dormann & Frese, 1996).

Previous research suggests that the impacts of violence can be ameliorated by means of social support and personal assistance (Flannery, 2003; Schat & Kelloway, 2003). A lack of support may mean that consequences will be more long-lasting. Paper V showed, however, that support and help from either co-

workers or family and friends were not so frequently available. Those who did not receive support or help following an incident were more frequently inclined to report financial and health-related consequences than those who did. Unfortunately, the questionnaire employed gave us no opportunity to establish why some of the exposed, but not others, obtained support and help. One explanation may be that the ones who reported emotional reactions were more visible (in that they talked about what had happened) than those who had sustained another kind of injury. Further research is required in order to clarify how, in detail, violence and the receipt of support are related to each other.

One observation, derived from this analysis, was that work-injury reports were more often produced by individuals who received support/aid and/or had been subject to a preventive intervention than by those who had experience of neither of these. Reports from various sources suggest that incidents of violence are not always reported to the employer (Chappell & Di Martino, 1998; Hesketh, Duncan, Estabrooks et al., 2003), which may lead to the problem of violence not being recognized or relevant measures not being taken.

Many forms of preventive interventions with regard to workplace violence are described in the literature (Casteel & Peek-Asa, 2000; Di Martino et al., 2003), but reports are lacking on the impacts of preventive actions with regard to the consequences of violence (Runyan, Zakocs & Zwerling, 2000; Whittington & Wykes, 1996). In Paper V it was shown that 64% had received some form of intervention (e.g. training, a technical aid, twin staffing, etc.), and that physical injuries were more common among those who had not been subject to any preventive intervention at all. A possible explanation is that personnel who obtained training or some other form of preventive assistance were more attentive to and aware of the violence-related hazards in their own workplace than those who had not. The difference may also depend either on the victims of physical injuries having worked to a greater extent with clients inclined to acting-out, or that little attention had been shown or action taken in the workplace. Further research should focus on issues concerning which preventive measures actually work, and under what circumstances.

Methodological considerations and limitations

Several methodological techniques were employed for the studies in this dissertation. In Study 1, the methods varied from group discussions to the use of checklists, and from interviews to feedback discussions. In Study 2, literature searches in databases were made, and reference lists examined. These two activities were followed by the questionnaire survey that made up Study 3. During the research journey, various issues arose that might have influenced the results finally obtained. Accordingly, they merit discussion.

Study 1 (Paper I)

Study 1 had two phases. Data collection during Phase 1 was effected by means of a checklist and a semi-structured interview. One weakness attached to the inter-

view lies in the possibility that the nature of the violence and the violent event were incorrectly described. Personnel found it difficult accurately to describe individual incidents. Any one specific incident might include aggressive behaviour with a variable topography, e.g. pushing, hair-pulling and kicking. Another problem during the interview lay in the difficulty for personnel to remember exactly what happened and the duration of any incident. Such recall problems may have influenced the results (see Magnusson & Bergman, 1990), thus rendering the situational descriptions uncertain. In order, as far as possible, to counteract tendencies of this kind, the checklist was developed right at the start of the study, which enabled it to act as recall support (an aid to memory) during the interview.

Another potential limitation of this study lay in difficulties in using the checklist (primarily during Phase 2.) The list was developed in conjunction with personnel so they knew what it was for and how to use it, but there may still have been some problems. For example, a specific incident could include several behaviours. Personnel may have decided not to make any report at all, since they could not easily identify the actual violent event. And the opposite problem may have arisen, namely that personnel reported too many violent behaviours related to one event/incident (cf. Magnusson & Bergman, 1990). Thus, the number of documented incidents may have been either greater or smaller than the number that actually occurred. There may also have been other reasons for a failure to report, e.g. that the violence was perceived as just a part of the work and something simply to be disregarded (Arnetz, 1998; Knudsen, 1999). Or, there may have been a fear among personnel that reporting of violence would prompt co-workers to regard the complainant as incompetent. Further, there may have been concern over being blamed oneself for having provoked the event. During data collection, personnel discussed these problems of recording and attempted, to the greatest extent possible, to follow the instructions available. While the possibility that these factors may have affected the results and the conclusions drawn cannot be excluded, it does not seem that the system gave rise to large or systematic reporting bias. Nevertheless, there is a need for further research concerning the development and evaluation of the systematic recording technique employed.

A further aspect to consider is the generalizability of the results. The investigation consisted in a pilot study performed in four departments of a care home (covering all personnel). The findings were from a specific workplace, and therefore cannot be regarded as applying to all workplaces in the health-and-care sector. The specificity of the study, however, is compensated for by the depth and breadth of the information gathered, which contributes to increased understanding of what violence can entail.

Study 2 (Paper II)

The literature review in Study 2 was based on electronic searches in a number of databases (e.g. Arbline, Spriline, Medline/Pubmed, PsychInfo, Nioshtic) on the basis of pre-defined key words (e.g. workplace/work-related, threat, violence, aggression, health/welfare, personnel/care, nurse). One limitation of Paper II lies

in a lack of total coverage of all relevant scientific reports and articles, which might result from an inadequate range of search words. A further problem is that all appropriate databases for the literature review could not be identified. The searches, however, were supplemented by the manual scrutiny of the reference lists of the papers found, which may have compensated for the weaknesses entailed by deficiencies in either keywords or databases. However, for the subsidiary objective of Study 2, the results of the literature search provide support for the framework adopted, namely that any model of workplace violence should focus on individual, workplace and organizational aspects.

A further problem related to this study was that it was explorative. All types of publications were of interest, i.e. both qualitative and quantitative studies, and research reports. Literature studies entail the risk of so-called "publications bias" (Sverke, Hellgren & Näswall, 2002). It is supposed that studies reporting significant results are more easily publishable, which colors the results of a review and apportions greater weight to certain conclusions. This potential problem, however, does not apply to all literature reviews, but there is the general requirement that manuscripts are quality-controlled, and therefore reliable.

Further, the literature searches were made during the latter half of the 1990s. Since then, the number of scientific papers concerning workplace violence has doubled. A new review focusing on more recent orientations should be performed to update the findings. Keywords will need to be re-evaluated for any new literature search.

One additional aspect to be mentioned here concerns the construction of the framework that was developed in conjunction with the literature review. A possible limitation lies in the fact that the model is a theoretical construction, which has not been tested empirically. It needs to be further developed and evaluated in future research.

Study 3 (papers III–V)

Study 3 (papers III–V) consisted in a questionnaire survey, founded in the results and experiences of studies 1 and 2. It was designed to investigate the magnitude of the phenomenon identified in Study 1, and to test parts of the model developed in Study 2. For the purpose of the dissertation, the method worked well – but there are still some methodological limitations worth considering.

One set of limitations or weaknesses has to do with the survey instrument itself. The questionnaire was short, consisting of 29 questions, all with forced responses, but covered four main areas. This means that the information gathered on specific aspects of workplace violence is limited. For example, the questionnaire did not contain items about the actual violent situation, i.e. activity and/or work task. Nor did it cover every episode of violence in which a person might have been involved; and, the impact of workplace violence on social life or leisure time was not investigated. Another limitation was that respondents were given no opportunity to provide background explanations or free-text descriptions. Personal explanations constitute a key element in understanding the depth of the problem

(see Study 1), but Study 3 focused on its breadth (or magnitude). However, Study 3 was based on a large sample, which increases the external validity of its findings (Cook & Campbell, 1979).

Another set of weaknesses arises from item construction. There is a possibility that some of the questions were unclearly formulated, which may have led to misunderstandings. This, in turn, would mean that all respondents did not have the same opportunity to adopt a stance upon what they had experienced and what they knew about the issue. The instrument contained no definitions or any other guidance on the phenomena to which it referred (apart from offering a definition of violence itself), which may have led to divergent interpretations. On the other hand, the questionnaire was based on an instrument that had been previously employed in many studies of violence within caring (Arnetz et al., 1998; Arnetz & Arnetz, 2000), which meant that the questions had been tested in several settings. This entails that content validity can be regarded as satisfactory.

One further set of weaknesses in Study III should be discussed. First, the information gathered was retrospective, which can involve a risk that respondents forgot some relevant event. However, the retrospective time frame was only 12 months, which should eliminate a large proportion of the recall problem. Second, the study design was cross-sectional, which means that it is impossible to draw causal inferences (Cook & Campbell, 1979). It may be the case, for example, that violence gives rise to health difficulties, but equally so it might be that employees in poor health are more susceptible to acts of violence. Longitudinal studies are required to examine such temporal aspects. Further, the accuracy of the data is dependent on subjects' self-reporting and cannot be corroborated by objective assessment.

A further weakness of Study 3 is the risk of mono-method bias, that is, just one type of data collection was employed (cf. Campbell & Fiske, 1957). This may mean that the association between, for example, risk factors and exposure to violence, and also between exposure and outcomes, may have been slightly overestimated. On the other hand, there were specific response alternatives/scales for the various items in the questionnaire. Even though this does not counteract mono-method bias, it does mean that overestimation of associations due to response-set bias was a minimal risk. Further, in the dissertation as a whole, a wider range of methods was employed to study the same phenomenon, i.e. violence in the care sector.

In general

The various methods give rise to different methodological considerations and difficulties. The qualitative methods have problems of their own, and the quantitative have other weaknesses. For the studies in this dissertation, several different techniques were employed, namely incident recording using checklists, interviews, feedback discussions, a search of the literature, and a questionnaire-based survey. This means that, overall, mono-method bias was avoided. The results of studies 1, 2 and 3, founded as they are on different methods, all point in the same

direction – namely that violence in caring is a substantial work-environment problem.

Since studies 1, 2 and 3 were performed in sequence and built upon one another, the potential weaknesses of the dissertation design may have been compensated for. In future studies, however, there is a need for more qualitative information concerning exposure to violence, and also for consideration of its long-term consequences. More investigations are also needed into which preventive methods actually work; that is, the methods currently available and utilized require evaluation.

The definition of workplace or work-related violence has also to be discussed. The concept of workplace or work-related violence varies not only according to which type of activity is concerned, but also between countries (VandenBos & Bulatao, 1996; Chappell & Di Martino, 1998). There is a lack of consensus on the definition of workplace violence (Arnetz, 1998; Barling, 1996; Wynne et al., 1997; Chapell & Di Martino, 1998), which renders comparability between studies problematic. For example, some studies show similar results, suggesting an approximately equal and high proportion of people exposed, whereas others indicate that exposure is less common. The discrepancies in findings may well depend on variation in the definition of workplace violence between studies. It is obvious that this problem needs to receive further attention.

For this dissertation, violence was defined very broadly so as to include both verbal and physical aggression. Such a definition was employed in all three studies, and was operationalized in studies 1 and 3. The definition has also been used in other Swedish studies of workplace violence in the health-care sector (Arnetz et al., 1996, Nolan et al., 1999). If it was too broad, and thereby picked up a lot of trivial incidents, it would not be surprising that associations with serious financial, health-related and emotional impacts were rather weak. On the other hand, if it was too narrow, then it might have given rise to an underestimation of the consequences of violence. For example, personnel who are recipients of shouts and threats are unlikely to be as afraid or liable to take sick-leave as those who have been punched or kicked. If "violence" includes less serious incidents, it is unreasonable to suppose that personnel would react as strongly as those subject to serious assault. However, for this dissertation, the definition was adapted to the type of caring activities under study; that is, an environmental approach was adopted. It is clear, however, that more research is required into how violence should be defined, into whether the same definition can apply in all settings, and how any particular definition affects results.

The problem of lack of clarity in the definition of violence can also lead to under-reporting, both in a research context and with regard to official work-injury statistics. The problem has been discussed in the research literature by many authors (Arnetz, 1998; Chappell & Di Martino, 1998; Hesketh et al., 2003; Knudsen, 1999), and is regarded as a major barrier to an appropriate measure of the level of violence. The results of Study 3 also demonstrated this tendency; that is, less than 60% of the exposed had made a report to management. Despite the large number of reported incidents of violence in studies 1 and 3, there may be a

certain degree of under-reporting. A number of possible explanations for this have been taken up in the literature, among others by Arnetz (1998):

- Violence is intrinsically a subjective concept, and what is referred to as violence largely depends on the victim's conceptions and interpretations;
- Within certain caring and nursing disciplines, e.g. municipally provided home and nursing-home care, violence is so common that it becomes just a part of the work, meaning that carers "forgive" their patients and absolve them from responsibility;
- Violent events can be associated with guilt and shame, self-reproach, or a sense of lack of personal professionalism, even failure;
- Fear of negative reactions from supervisors and/or co-workers may act as a barrier to the reporting of violence, since it can give rise to the perception that a person cannot take care of his or her patients;
- Some caring personnel can trivialize, or even deny, what has happened – as a means of coping;
- Incident reporting takes time and can involve a fair amount of paper work, which can give rise to frustration among personnel since it seldom leads to any concrete action or positive change.

Some or all of these problems may have influenced the findings presented in this dissertation. Nevertheless, personnel were involved in the development of the data-collection method (Study 1), and the questionnaire was responded to anonymously and with the assurance of confidence (Study 3). Further research is needed into the difficulties involved in the reporting of incidents of violence and into the utility of having an operations-specific recording method as an instrument for both personnel and management to increase awareness of the problem of violence.

Implications for prevention

An often cited definition of prevention in the medical-research tradition is "to promote health, to preserve health, to restore health when it is impaired, and to minimize suffering and distress" (see, for example, Menckel, 1990, p. 5). Prevention can be divided into primary, secondary and tertiary prevention, and can be implemented at individual, group, organization, and/or community/societal level (Andersson & Menckel, 1995). Primary preventive actions can be general or specific by nature, depending on the range of risk factors addressed. Secondary prevention is concerned with the early detection and diagnosis of a disease, and/or the immediate handling of an adverse situation. Tertiary prevention refers to the treatment of disease, limitation of its consequences, and rehabilitation.

This way of looking at prevention can also be applied to violence and threats of violence. Worksite violence management can focus on the first three levels mentioned above, and serve the three prevention purposes referred to (Menckel, 1990; Laflamme, Svanström & Schelp, 1999). Thus, in this specific context, primary prevention would mean reduction in the risk of violence or threat of violence. This can be achieved via countermeasures in the physical environment to make the

workplace safer, and/or "strengthening" personnel (so that they handle the risk more effectively) by providing information, education and training on how situations of violence or threats of violence can be managed or avoided. Effective secondary prevention entails that the extent and duration of any occasion of violence or threat of violence are reduced. During this phase, efforts are made to counteract outbreaks of anger and aggression, reduce access to threatening objects and other implements, and ensure that as few people as possible become involved in any incident that has arisen (see Chou et al., 1996). Tertiary-intervention efforts are made retrospectively, meaning that any involved person receives support and assistance following a traumatic experience.

The model described in Paper II incorporates such a concept of prevention, and demonstrates a way of working preventively with issues of violence. The model includes specific factors (focusing on the individual), situational factors (focusing on the workplace), and structural factors (focusing on the organization). Violence occurs under a specific circumstance in interaction between carer and client in a certain workplace within an organization. All levels within the organization are proximal in a situation of violence, and should be included in any analysis. Preventive measures should, however, focus on the particular prevention phase in question in order to enhance safety and security for the persons involved. Table 6 shows how the model's levels/focuses and the prevention phases may be related to each other (cf. Le Blanc & Peeters, 2003). In the table there is also a presentation of how the studies in the dissertation can contribute to preventive interventions.

Table 6. Presentation of the analytic levels from Study 2 in relation to the phases of prevention and focuses of studies 1 and 3.

LEVEL/ FOCUS	Primary prevention	Secondary prevention	Tertiary prevention
STRUCTURAL i.e. organization	*Study 3: preventive efforts*		
SITUATIONAL i.e. workplace	*Study 1: activity Study 3: work-related conditions (i.e. risks)*		*Studies 1 and 3: consequences, and social support and prevention*
SPECIFIC i.e. individual	*Study 3: individual-related characteristics*		*Study 3: consequences, and social support and prevention*

——————————————Time ————————————>

The findings reported in this dissertation, i.e. the large number of incidents found in Study 1 and the number of exposed (and daily exposed) found in Study 3, clearly demonstrate that there is a need for preventive action. That only just over half of the exposed made a work-injury report to their supervisor also points to the need for preventive interventions. It is possible that only the most serious incidents were reported to management, thereby rendering less serious events invisible. The foundation for successful preventive activities lies in knowledge of what hazards actually exist.

Surveys of risk situations in various work activities and tasks can be used as a basis for discussions in workplace meetings. The organization's own definition of violence, adapted to operational setting and current work content, can help personnel to both understand events of violence and bring the problem to the surface (Bibby, 1995). The goal should be to create a work situation and mode of working with as high a level of awareness and sensitivity as possible, so that risks are avoided or neutralized before any incident occurs. Various methods for the activity-proximal recording of violence within the caring sector have been presented in the research literature (Arnetz, 1998; Palmstierna & Wistedt, 1987), and also within the frame of this dissertation (Study 1). These methods are developed for the in-house surveying of violence-related hazards, and have the purpose of enhancing personnel's awareness of risk situations, and thereby support them and the workplace with regard to preventive action.

The results of Study 3 suggest that certain individual properties, such as low age and short employment tenure within the organization, increase the risk of being exposed. Other studies have shown that training and information can help personnel to control risk situations and prevent consequences (Rice, Harris, Varney & Quinsey, 1989). Providing education and information on risks of violence to employees, especially new employees, may act as a first step towards eliminating the hazards that short periods of employment can entail. Educational efforts should be adapted to the particular workplace in question and to its specific needs (Runyan et al., 2000).

Work-related risk factors, such as working full-time with clients, high workload and organizational change (downsizing, in this study setting) proved to increase risk of exposure. In work situations that demand more from carers, organization managers and first-line supervisors should prioritize measures that will provide a safe and secure environment for both clients and personnel. There are many types of recommendations in the literature for organizational activities at local (workplace) level, among others from ILO/ICN/WHO/PSI (2002). In their report, for example, it is proposed that the number of personnel in the workplace should be adequate, especially on occasions when violence might be expected to arise, and that solitary working should be avoided. The report also points out that organization, content and hours of work are relevant to prevention, as too is the physical environment.

The results of studies 1 and 3 revealed that violence has a variety of consequences. Emotional reactions, such as anger, irritation, sadness, etc., were found to be commonplace; and the same has also been demonstrated in other research (Arnetz & Arnetz, 2001; Eriksson & Saveman, 2002; Hellzen et al., 1999; Omérov et al., 2002; Åström et al., 2002). Further, it has been shown in research that help and support following an incident can help an individual get over what has occurred with less discomfort (Schat & Kelloway, 2003; Teasdale et al., 2001). How vulnerable a person actually is depends, in general, on the setting where the violence occurs, and on his or her personal perception of the event. One way of making a preventive intervention is to develop an action plan for crisis situations.

In sum, it can be stated that further research is required, primarily into the actual situations where violence arises and into which measures can give rise to increased safety. There is also a need for research into the effects of various kinds of interventions. With regard to social support, there is need for research assessment of which kinds of support (emotional, instrumental, informal, or appraisal) are appropriate in which contexts.

Conclusions

The results of the studies forming this dissertation suggest that violence against personnel is common in municipal caring. Many are exposed to verbal aggression on a daily basis, but there are also cases of aggravated physical violence. All occupational groups are exposed, but the ones that have close physical contact with care recipients, such as direct carers (e.g. of the developmentally disabled) and assistant nurses are most affected. Violence can have financial, health-related, emotional and work-related consequences, and also impact on leisure time. The studies indicate that help and support following an incident may ameliorate the consequences. The significance of preventive interventions, however, was found to be less clear. The results suggest that specific factors (at individual level), situational factors (at workplace level) and structural factors (at organizational level) are of importance for the occurrence of violence, and should be analyzed for preventive purposes. Continued research is needed into the utility of having an operations-specific recording method – as an instrument whereby personnel and management can increase awareness of the problem of violence in the workplace.

Health-and-care personnel are among the persons most exposed to violence and threats of violence at work in Sweden. The health-and-care sector accounts for over half of all reported work injuries caused by violence. The personnel affected react strongly in many cases. The problem is of particular importance, since work in the care sector is based on mutual trust and good relations between personnel and clients. Personnel in the health-and-care sector are themselves the instruments via which good work and care outcomes are achieved, which means that the questions surrounding workplace violence are important to investigate.

Summary

Violence in society is a problem to which ever greater attention is being paid. Violence takes on many forms, and can also impact upon many people in their work. Violence against personnel seems to be an increasing problem in both the Nordic countries and countries outside the Nordic region. Violence can give rise to physical injury, psychological ill-health (such as worry, strain or stress) and/or personal financial loss. Violence and threats of violence can also impact on conditions in the workplace and the work organization. In turn, unsatisfactory work conditions can lead to an increased risk of violence against employees.

The work groups exposed to violence and threats of violence are to be found primarily in occupational sectors involving customer, client or patient contacts, such as workers in the retail trade, security personnel, transport staff, and employees operating in the health-and-care sector. In Sweden, in 1998, six out of ten reports of injuries due to violence or threats of violence came from this sector. Since 1993 there has been a clear increase in reported violence-related injuries to the Information System for Occupational Accidents and Work-Related Diseases (ISA), run by the Swedish Work Environment Authority, i.e. to the register in which all occupational injuries giving rise to more than one day's absence have to be reported by the employer. Assistant nurses, registered nurses and home carers – largely female-dominated occupations – accounted for the greatest increase.

Despite the fact that violence and threats of violence in the health-and-care sector seem to be a substantial problem, and even an everyday occurrence, knowledge of the problem remains limited. One of the reasons for this is that events involving violence or threats of violence are not always reported or documented in questionnaires or interviews. Another is that research within this arena is in its infancy. For example, it has been possible to identify only a very restricted number of Swedish studies. Nevertheless, a handful of Swedish doctoral dissertations from the 1990s focused on violence in caring. Internationally, there are several studies of violence in health care, especially psychiatric care, but there are only a few concerned with violence in the context of care of the elderly and disabled.

All this formed the background to the dissertation's overall aim, which is to increase knowledge of violence against personnel in municipal caring. The dissertation consists of five substudies/papers, each of which has a specific purpose. Thus, for example, there are investigations into the extent and frequency of violence, in which situations and under what work circumstances it occurs, its consequences, and how it is managed by the individual and the organization. A fundamental point of departure was that work on the dissertation should have direct societal and work-life relevance.

Violence is defined broadly in the context of this dissertation. It encompasses everything from challenging behaviour (including self-destructive behaviour) to verbal and physical aggression against both individuals and physical objects. Operational definitions in the five substudies encompass, for example, the following kinds of actions: screaming, telephone threats, blows, pinching, kicking, shoving, being physically obstructive, and so on. The dissertation is primarily concerned with violence against personnel.

Paper I was a pilot study designed to ascertain where violence is a work-environment problem in the caring sector. A further objective was to develop and test methods of recording to enable the internal mapping of incidents of violence. Personnel from an institution for the intellectually disabled (n=26) recorded incidents on a daily basis over two trial periods. In total, during the six weeks the recording proceeded approximately 3,000 incidents occurred; most, however, were of minor severity and did nor entail absence from work. Acts of violence during situations of personal hygiene (involving close contact) and while "waiting" were also common. Despite these incidents not leading to serious physical injuries, they affected personnel even during leisure time, as manifested, for example, in irritation, worry, sleep disturbance, fatigue and apathy. Personnel utilized the results of the recording as an aid to/basis for internal discussion, and were positive to the idea of continuing to use the registration lists (forms) that had been developed during the study.

The specific objective of **Paper II** was to increase knowledge of the current state of research. A survey of the Swedish and international literature highlighted five perspectives/focuses: characteristics of the perpetrator, characteristics of the persons affected, work-environment problems, consequences, and the handling of violence by the organization. A model for the identification and analysis of violent events in caring developed in parallel with the literature review.

Papers III–V were based on a nationwide questionnaire survey within Sweden's municipal caring sector. The objective was to increase knowledge of violence and threats of violence. The seven largest occupational groups (administrators, nursing specialists, supervisors, direct carers, nursing auxiliaries, assistant nurses and personal assistants) were selected for the survey. A random sample of 400 persons was taken for each occupational group, except in the case of personal assistants where the sampling was stratified also by gender (200 men and 200 women). In total, the population comprised 173,000 employees, of which 2,800 were included in the study sample. All types of Swedish municipalities, urban and rural, large and small, were represented. The questionnaire consisted of 29 items, all with forced-response options, distributed across four question areas. The response rate was 85 percent.

The specific purpose of **Paper III** was to examine questions concerning the number of employees who had been exposed to violence, and how often and in what ways. Of the total number of respondents, 51 percent stated that they had been exposed during the preceding year. Of those who had been exposed, 67 percent reported the frequency of their exposure as "occasionally" or "on some occasion every month". Over 9% stated "more or less every day". Aggression

aimed at personnel largely came from patients/care recipients, but there were also cases of violence and threats of violence from relatives and acquaintances of the clients, and also co-workers. Most had been exposed to verbal threats, screaming/ shouting and/or aggression (79%). The next most common categories were scratching/pinching (65%) and various kinds of blows (66%). There were also reported incidents of personnel having been spat upon (36%) and shoved (30%). Violence and threats of violence seem to be more widespread and frequent than has previously been supposed, and can be regarded as a work-environment problem in the care sector.

Paper IV was designed to analyze how common it is for various occupational groups involved in municipally based caring to be subjected to violence or threats of violence. A further objective was to identify individual- and work-related risk factors. All occupational groups were exposed to violence, but some more so than others (direct carers and assistant nurses). Both individual- and work-related factors were found to be associated with risk of exposure to violence. Low age was an individual factor that increased the risk of exposure to violence, as too did short occupational tenure within the organization (which was primarily of importance for how often a person was exposed). Type of workplace, working full-time with clients, cutbacks in the organization and high workload were work-related factors that largely applied to all occupational groups. The analyses revealed a complex picture of individual- and work-related risk factors, there being no unequivocal pattern that generally applied to all occupational groups.

The specific purpose of **Paper V** was to outline, describe and analyze the consequences of violence in relation to help/support and preventive measures. Four principal types of consequences were in focus: financial, health-related, emotional, and work-related. Financial consequences were not so common. Only one in five incidents led to physical ill-health/injury. But emotional reactions to an incident were frequent. Violence also affected work with care recipients. Only 39 percent of the exposed received help or support after an incident, while 64 percent had received some prior preventive intervention. Those who did not receive support were more inclined to report financial and health-related consequences than those who did. Those who received support following an incident more often reported emotional reactions than those who did not. Those who had had experience of preventive measures reported financial consequences, emotional reactions and impacts on work more frequently than those who had not been subjected to any such intervention. Physical injuries were most common among those who had not received a preventive intervention of any kind. Work-injury reports were made most often by those who had received support/help following an incident and by those who had had experience of a preventive intervention in the workplace.

In sum, it can be stated that the studies in the dissertation suggest that violence is common in municipal nursing and caring. Many employees are exposed to violence on a daily basis. It is usually verbal, but more serious forms of violence can occur. Occupational groups with close physical contact with clients, such as direct carers (usually of the developmentally disabled) and assistant nurses, are

the most exposed. Certain individual- and work-related factors can increase the risk of being exposed. Violence can have financial, health-related, emotional and workplace-related consequences. Help and support following an incident can ameliorate negative consequences. Individual, situational and organizational factors are all significant to the occurrence of violence at work, and need to be recorded and analyzed for the purpose of prevention.

Sammanfattning (Summary in Swedish)

Våldet i samhället är ett alltmer uppmärksammat problem. Våld förekommer i många former och sammanhang och kan också drabba många i sitt arbete. Våld mot personal verkar vara ett ökande problem i nordiska länder liksom i andra länder utom Norden. Våld kan leda till fysisk skada, psykisk ohälsa (t ex oro, spänning, stress) och/eller till ekonomisk förlust. Våld och hot om våld kan också påverka förhållanden på arbetsplatsen och organisationen. Otillfredsställande arbetsförhållanden kan i sin tur leda till ökad risk för våld mot anställda.

Yrkesgrupper som utsätts för våld och hot om våld finns främst inom branschområden med kund-, klient- eller patientkontakter, t ex handelsanställda, bevakningspersonal, transport-anställda samt verksamma inom vård och socialt arbete. I Sverige kom år 1998 sex av tio anmälningar om skador av våld eller hot mot personal från vård- och omsorgssektorn. Efter 1993 kan också en klar ökning av rapporterade våldsskador ses i Informationssystemet för arbetsskador (ISA) vid Arbetsmiljöverket, dvs det register till vilket alla arbetsskador med mer än en dags frånvaro ska anmälas av arbetsgivaren. Sjukvårdsbiträden, sjuksköterskor och hemvårdare – till stor del kvinnodominerade yrken – har stått för den största ökningen.

Trots att våld och hot om våld inom omsorgsverksamheten förefaller att vara ett betydande och ibland dagligt förekommande problem är kunskapen begränsad. Ett av skälen är att händelser som innebär våld och/eller hot om våld inte alltid anmäls eller dokumenteras via enkäter och intervjuer. Ett annat är att forskningen inom området ännu är i sin linda. Endast ett begränsat antal svenska studier har kunnat identifieras. Några svenska avhandlingar under 1990-talet har dock fokuserat våld i vårdarbetet. Internationellt finns ett stort antal studier om våld inom hälso- och sjukvård, särskilt psykiatrisk vård, men det finns endast ett mindre antal studier som behandlar våld när det gäller vård av äldre och handikappade.

Detta var bakgrunden till avhandlingens övergripande syfte som är att öka kunskapen om våld mot personal i kommunalt omsorgsarbete. Avhandlingen består av fem delarbeten/papers och varje paper har ett specifikt syfte. Så t ex studeras våldets omfattning och frekvens, i vilka situationer och i vilka arbetsförhållanden våld uppträder, vad som kan ligga bakom, vilka konsekvenserna blir och hur våldshändelser handhas av individen och av organisationen. Utgångspunkten är att avhandlingsarbetet skall ha en god samhälls- och arbetslivsrelevans.

Våld definieras brett i avhandlingen. Definitionen rymmer allt från störande beteende (även självdestruktivt) till verbal och fysisk aggression mot både individer och föremål. Operationella definitioner i de fem delarbetena innehåller t ex följande handlingar: skrik, hot per telefon, slag, nyp, spark, knuff, fysiskt hindrande etc. I avhandlingen studeras i huvudsak våld mot personal.

Paper I var en pilotstudie för att undersöka huruvida våld är ett arbetsmiljöproblem i vård- och omsorgsarbetet. Syftet var också att utveckla och prova metoder för intern kartläggning av våldsincidenter. Personal från en institution för psykiskt utvecklingshandikappade (n=26) registrerade våldsincidenter dagligen under två perioder. Sammanlagt under de sex veckor som registreringen pågick inträffade närmare 3 000 incidenter; de flesta dock av mindre allvarlig karaktär och utan frånvaro från arbetet. Större delen av incidenterna inträffade vid måltider. Våldshändelser vid hygiensituationer (närkontakt) och ”väntan”-situationer var också vanliga. Trots att dessa våldsincidenter inte ledde till allvarliga fysiska skador påverkade det personalen även på fritiden, t ex med irritation, oro, sömlöshet, trötthet och apati. Personalen använde resultatet av registreringen som hjälp/ underlag i interna arbetsmiljödiskussioner och var positiv till att även fortsättningsvis använda de registreringslistor som utvecklats under studien.

Det specifika syftet för **Paper II** var att öka kunskapen om forskningssituationen. Inventeringen av svensk och internationell litteratur lyfte fram fem synsätt/ fokus: egenskaper hos förövaren, egenskaper hos den drabbade, arbetsmiljöproblem, konsekvenser och organisationens handhavande. En modell för identifiering och analys av våldshändelser i vårdarbete växte fram parallellt med litteraturinventeringen. Modellen tar fasta på strukturell, situationell och individuell nivå i en organisation.

Papers III-V baseras på data från en rikstäckande enkätundersökning om våld inom kommunal omsorgsverksamhet. Syftet var att öka kunskapen om våld och hot om våld. De sju största yrkesgrupperna (handläggare, specialister, föreståndare, vårdare, vårdbiträden, undersköterskor och personliga assistenter) inom kommunal vård- och omsorg valdes ut. För varje yrkesgrupp gjordes ett slumpmässigt urval av 400 personer, utom för personliga assistenter, där urvalet stratifierades även på kön (200 män och 200 kvinnor). Sammanlagt bestod populationen av 173 000 anställda, varav 2 800 personer ingick i det slumpmässigt dragna urvalet. Alla typer av kommuner från storstad till landsbygd och mindre kommuner var representerade. Enkätformuläret bestod av 29 frågor med fasta svarsalternativ fördelade på fyra frågeområden. Svarsfrekvensen var 85 procent.

Det specifika syftet i **Paper III** var att belysa frågor om antal anställda som utsätts för våld samt hur ofta och på vilket sätt de utsätts. Av det totala antalet svarande uppgav 51 procent att de blivit utsatta under det senaste året. Av dem som utsatts uppgav 67 procent att de hade drabbats av våld och/eller hot om våld ”någon gång då och då” eller ”någon gång per månad”. Över nio procent svarade att de utsatts ”i stort sett dagligen”. Aggressionen som riktas mot personalen kom oftast från patienter/vårdtagare, men även våld och/eller hot om våld från anhöriga och bekanta till vårdtagare samt från arbetskamrater förekom. De flesta hade blivit utsatta för verbalt hot, skrik och/eller aggression (79%), följt av riv/klös/nyp (65%) och olika typer av slag (66%). Även incidenter som att ha blivit spottad (36%) och knuffad (30%) rapporterades. Våld och hot om våld förefoll att vara mer utbrett och frekvent än vad som tidigare framkommit och kan ses som ett arbetsmiljöproblem inom vården.

Paper IV syftade till att analysera hur vanligt det är för olika yrkesgrupper inom kommunalt omsorgsarbete att drabbas av våld eller hot om våld. Ett syfte var också att identifiera individ- och arbetsrelaterade riskfaktorer. Alla yrkesgrupper utsattes för våld, men vissa var mer utsatta än andra (vårdare och undersköterskor). Både individ- och arbetsrelaterade faktorer förknippades med ökad risk att bli utsatt för våld. Bland individfaktorerna innebar låg ålder ökad risk för utsatthet, liksom kort anställningstid i organisationen (främst betydelse för hur ofta man blir utsatt). Typ av arbetsplats, att arbeta hela tiden med vårdtagarna, nedskärningar i organisationen och hög arbetsbelastning var arbetsrelaterade riskfaktorer för i stort sett samtliga yrkesgrupper. Analyserna visade en komplex bild av individ- och arbetsrelaterade riskfaktorer utan något entydigt mönster generellt giltigt för alla yrkesgrupper.

Det specifika syftet i **Paper V** var att visa på, beskriva och analysera följder av våld i relation till hjälp/stöd och förebyggande åtgärder. Fyra huvudtyper av konsekvenser stod i fokus: ekonomiska, hälsorelaterade, emotionella och arbetsrelaterade. Ekonomiska följder var inte vanligen förekommande. En av fem incidenter ledde till fysisk ohälsa/skada. Emotionella reaktioner efter en incident var frekventa. Våldet påverkade även arbetet med vårdtagarna. Endast 39 procent av de utsatta hade fått hjälp/stöd efter en våldsincident och 64 procent av de utsatta hade erhållit någon form av förebyggande insats. De som inte fick stöd rapporterade i större utsträckning ekonomiska och hälsorelaterade konsekvenser än de som fick stöd. De som hade fått stöd efter incidenten rapporterade oftare emotionella reaktioner som följd än de som inte fått stöd. De som hade erhållit förebyggande åtgärder rapporterade ekonomiska följder, emotionella reaktioner och påverkan på arbetet oftare än de som inte erhållit någon form av åtgärd. Fysiska skador var vanligast bland dem som inte erhållit förebyggande åtgärder. Arbetsskaderapporter skrevs oftast av personal som fått stöd och hjälp efter en våldsincident och av de som erhållit preventiva insatser på arbetsplatsen.

Sammanfattningsvis kan konstateras att studierna i avhandlingen pekar på att våld är vanligt förekommande i kommunalt vård- och omsorgsarbete. Många utsätts dagligen för våld som ofta är verbalt, men även grövre fysiskt våld förekommer. Yrkesgrupper som har nära fysisk kontakt med vårdtagarna, t ex vårdare och undersköterskor, är mest utsatta. Vissa individ- och arbetsrelaterade faktorer kan öka risken att bli utsatt. Våldet kan leda till ekonomiska, hälsorelaterade, emotionella och arbetsrelaterade konsekvenser. Hjälp och stöd efter en incident kan ha en mildrande effekt på hur allvarliga konsekvenserna blir. När det gäller förebyggande insatser behövs fördjupad kunskap. Såväl individuella, situationella som organisatoriska faktorer har betydelse för förekomsten av våld i arbetet och bör registreras och analyseras i förebyggande syfte.

References

AFS 1993:2. *Violence and menaces in the working environment.* Ordinance. Solna: Swedish National Board of Occupational Safety and Health.

Andersson, R. & Menckel, E. (1995). On the prevention of accidents and injuries. A comparative analysis of conceptual frameworks. *Accident Analysis and Prevention,* 27, 757-768.

Arnetz, J.E. (1998*). The violent incident form (VIF): a practical instrument for the registration of violent incidents in the health care workplace. *Work & Stess*, 12 (1), 17-28.

Arnetz, J. E. (1998). *Violence towards health care personnel: prevalence, risk factors, prevention and relation to quality of care*. Doctoral Thesis. Stockholm: Karolinska Institutet, Department of Public Health Sciences, Division of Psychosocial Factors and Health.

Arnetz, J.E. & Arnetz, B.B. (2000) Implementation and evaluation of a practical intervention programme for dealing with violence towards health care workers. *Journal of Advanced Nursing*, 3, 668-680.

Arnetz, J.E. & Arnetz, B.B. (2001). Violence towards health care staff and possible effects on the quality of patient care. *Social Science & Medicine,* 52 (3), 417-427.

Arnetz, J.E., Arnetz, B.B. & Petterson, I.L. (1996). Violence in the nursing profession: occupational and lifestyle risk factors in Swedish nurses. *Work & Stress*, 10 (2), 119-127.

Arnetz, J.E., Arnetz, B.B. & Söderman, E. (1998). Violence toward health care workers. Prevalence and incidence at a large, regional hospital in Sweden. *AAOHN Journal* 3, 107-113.

Astvik, W. (2003). *Relationer som arbete. Förutsättningar för omsorgsfulla möten i hemtjänsten* [Relating as a primary task. Prerequisites for sustainable caring relations in home-care service]. Dissertation. Arbete och Hälsa 2003:8. Stockholm: National Institute for Working Life.

Barling, J. (1996). The prediction, experience, and consequences of workplace violence. In G.B. VandenBos & E.Q. Bulatao (Eds.), *Violence on the job. Identifying risks and developing solutions* (pp. 29-49). Washington, DC: American Psychological Association.

Barron, K., Michailakis, D. & Söder, M. (2000). Funktionshindrade och den offentliga hjälpapparaten. [Disabled and the public help apparatus]. In *Välfärd, vård och omsorg*. SOU 2000:38. Stockholm: Fritzes.

Beale, D., Cox, T. & Leather, P. (1996). Work-related violence – is national reporting good enough? *Work & Stress*, 10 (2), 99-103.

Bejerot, E. & Hasselbladh, H. (eds.) (2002). *Kvalitet utan gränser. En kritisk belysning av kvalitetsstyrning*. Lund: Academia Adacta.

Bibby, P. (1995). *Personal safety for health care workers*. Hants: Arena Ashgate Publishing Ltd.

Bowers, L., Whittington, R., Almvik, B., Bergman, N., Oud, M. & Savio, M. (1999). A European perspective on psychiatric nursing and violent incidents: management, education and service organization. *International Journal of Nursing Studies*, 36, 217-222.

Bowie, V. (2000). Current trends and emerging issues in workplace violence. *Security Journal,* 13 (3), 7-23.

Boyd, N. (1995). Violence in the workplace in British Columbia: a preliminary investigation. *Canadian Journal of Criminology,* 37 (4), 491-519.

Budd, J.W., Arvey, R.D. & Lawless, P. (1996). Correlates and consequences of work-place violence. *Journal of Occupational Health Psychology*, 1 (2), 197-210.

Caldwell, M. (1992). Incidence of PTSD among staff victims of patient violence. *Hospital and Community Psychiatry,* 43 (8), 838-839.

Campbell, D.T. & Fiske, D.W. (1957). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.

Carr, B. (2000). Nurses' experiences of patient violence in a rehabilitation and extended care setting: OHS implications. *Journal of Occupational Health and Safety – Australia and New Zealand,* 16 (2), 155-162.

Carter, N. & Menckel, E. (1985). Near-accident reporting: a review of Swedish research. *Journal of Occupatinal Accidents,* 7, 41-64.

Casteel, C. & Peek-Asa, C. (2000). Effectiveness of crime prevention through environmental design (CPTED) in reducing robberies. *American Journal of Preventive Medicine,* 18 (4 S), 99-115.

Chambers, N. (1998). "We have to put with it — don't we?" The experience of being the registered nurse on duty, managing a violent incident involving an elderly patient: a phenomenological study. *Journal of Advanced Nursing,* 27, 429-436.

Chappell, D. & Di Martino, V. (1998). *Violence at work*. Geneva: International Labour Office (ILO).

Chou, K.R., Kaas, M.J. & Richie, M.F. (1996). Assaultive behavior in geriatric patients. *Journal of Gerontological Nursing,* 22 (11), 30-38.

Cole, L.L., Grubb, P.L., Sauter, S.L., Swanson, N.G. & Lawless, P. (1997). Psychosocial correlates of harassment, threats and fear of violence in the workplace. *Scandinavian Journal of Work, Environment, and Health*, 23 (6), 450-457.

Colenda, C.C. & Hamer, R.M. (1991). Antecedents and interventions for aggressive behavior of patients at a geropsychiatric state hospital. *Hospital and Community Psychiatry*, 3, 297-292.

Cook, T.D. & Campbell, D.T. (1979). *Quasi-experimentation: design & analysis issues for field settings*. Boston, MA: Houghton Mifflin.

Croke, K. & Cummings, A.L. (1995). Nurses' reactions to physical assault by their patients. *Canadian Journal of Nursing Research*, 2, 81-93.

Cutcliffe, J.R. (1999). Qualified nurses' lived experience of violence perpetrated by individuals sufflering from enduring psychological health problems: a hermeneutic study. *International Journal of Nursing Studies, 36*, 105-116.

Di Martino, V., Hoel, H. & Cooper, C. (2003). *Preventing violence and harassment in the workplace*. Dublin: European Foundation for the Improvement of Living and Working Conditions.

Dougherty, L.M., Bolger, J.P., Preston, D.G., Jones, S.S. & Payne, H.C. (1992). Effects of exposure to aggressive behavior on job satisfaction of health care staff. *The Journal of Applied Gerontology*, 11 (2), 160-172.

Duncan, S.M., Hyndman, K., Estabrooks, C.A., Hesketh, K., Humphrey, C.K., Wong, J.S., Acorn, S. & Giovannetti, P. (2001). Nurses' experience of violence in Alberta and British Columbia hospitals. *Canadian Journal of Nursing Research*, 32 (4), 57-78.

Ekblom, B. (1970). *Acts of violence by patients in mental hospitals*. Dissertation. Uppsala: Almqvist & Wiksell.

Eriksson, C. & Saveman, B.I. (2002). Nurses' experiences of abusive/non-abusive caring for demented patients in acute care settings. *Scandinavian Journal of Caring Sciences,* 16, 79-85.

Farrell, G.A. (1997). Aggression in clinical settings: nurses' views. *Journal of Advanced Nursing, 25* (3), 501-508.

Fazzone, P.A., Barloon, L.F., McConnell, S.J. & Chitty, J.A. (2000). Personal safety, violence, and home health. *Public Health Nursing,* 17 (1), 43-52.

Fernandes, C., Bouthillette, F., Raboud, J., Bullock, L., Moore, C., Christenson, J., Grafstein, E., Rae, S., Ouellet, L., Gillrie, C. & Way, M. (1999). Violence in the emergency department: a survey of health care workers. *CMAJ,* 161 (10), 1245-1248.

Flannery, R.B. Jr. (2003). Staff victims of elder patient abuse and the assaulted staff action program (ASAP): preliminary empirical inquiry. *American Journal of Alzheimers Diseases and Other Dementia,* 18 (2), 93-96.

Flannery, R.B., Hanson, M.A., Penk, W.E., Pastva, G.J., Navon, M.A. & Flannery, G.J. (1997). "Hospital downsizing and patients' assaults on staff." *Psychiatric Quarterly*, 68 (1), 67-76.

Gages, M. & Kingdom, D. (1995). Breaking the cycle of aggression, *Journal of Nursing Administration,* 12, 55-64.

Gates, D., Fitzwater, E. & Succop, P. (2003). Relationships of stressors, stain, and anger to caregiver assaults. *Issues in Mental Health Nursing*, 24, 775-793.

Gates, D.M. (1995). "Workplace Violence." *AAOHN Journal*, 43 (10), 536-544.

Gates, D.M., Fitzwater, E. & Meyer, U. (1999). Violence against caregivers in nursing homes: expected, tolerated, and accepted. *Journal of Gerontological Nursing*, 4, 12-22.

Gellner, P., Landers, S., O'Rourke, D. & Schlegel, M. (1994). Community health nursing in the 1990s – risky business? *Holistic Nurse Practice,* 8 (2), 15-21.

Ghaziuddin, M. & Ghaziuddin, N. (1992). Violence against staff by psychologically retarded inpatients. *Hospital and Community Psychiatry,* 43 (5), 503-504.

Gill, M., Fischer, B. & Bowie, V. (eds.) (2002). *Violence at work: causes, patterns and prevention*. Devon: Willan Publishing.

Grainger, C. (1993). Occuaptional violence: managing the risk of assault in the workplace. *Journal of Occupational Health and Safety*, 9 (1), 43-47.

Hayes, E.R., Carter, S.V., Carroll, M.C. & Morin, K.H. (1996). Managing fear associated with nursing in urban environments: first steps. *Public Health Nursing*, 13 (2), 90-96.

Hegney, D., Plank, A. & Parker, V. (2003). Workplace violence in nursing in Queensland, Australia: a self-reported study. *International Journal of Nursing Practice*, 9, 261-268.

Hellzen, O., Asplund, K., Sandman, P. O. & Norberg, A. (1999). Unwillingness to be violated: carers' experiences of caring for a person acting in a disturbing manner. An interview study. *Journal of Clinical Nursing,* 8 (6), 653-662.

Hesketh, K.L., Duncan, S.M., Estabrooks, C.A., Reimer, M.A., Giovannetti, P., Hyndman, K. & Acorn, S. (2003). Workplace violence in Alberta and British Columbia hospitals. *Health Policy,* 63, 311-321.

Hillbrand, M., Foster, H.G. & Spitz, R.T. (1996). Characteristics and costs of staff injuries in a forensic hospital. *Psychiatric Services*, 47 (10), 1123-1125.

House, J.S. (1981). *Work stress and social support*. Philippines: Addison-Wesley Publishing Co.

Hunter, M. & Carmel, H. (1992). The cost of staff injuries from inpatient violence. *Hospital & Community Psychiatry,* 43 (6), 586-588.

ILO/ICN/WHO/PSI (2002). *Framework guidelines for addressing workplace violence in the health sector*. Geneve: International Labour Office.

Kendra, M.A. (1996). "Perception of risk by home health care administrators and field workers." *Public Health Nursing*, 13 (6), 386-393.

Kendra, M.A., Weiker, A., Simon, S., Grant, A. & Shullick. D. (1996). "Safety concerns affecting delivery of home health care." *Public Health Nursing*, 13 (2), 83-89.

Kiely, J. & Pankhurst. H. (1998). Violence faced by staff in a learning disability service. *Disability and Rehabilitation,* 20 (3), 81-89.

Knudsen, H. (1999). Violence and threats against social and health care workers. In *Proceedings of the European Conference on Safety in the Modern Society: Work, Home, Leisure* (Rantanen J, Lehtinen S, Saarela KL. eds.), Finnish Institute of Occupational Health, People and Work, Research Reports 33. Helsinki, 149-152.

Krug, E.G., Dahlberg, L.L., Mercy, J.A., Zwi, A.B. & Lozano, R. (eds.) (2002). *World report on violence and health*. Geneve: World Health Organization (WHO).

Laflamme, L., Svanström, L. & Schelp, L. (eds.) (1999). *Safety promotion research. A public health approach to accident and injury prevention*. Stockholm: Karolinska Institutet, Department of Public Health Sciences, Division of Social Medicine.

LaMer, W., Gerberich, S.G., Lohman, W. & Zaidman, B. (1998). Work-related physical assault. *JOEM,* 40 (4), 317-325.

Lanza, M.L. (1983). The reactions of nursing staff to physical assault by a patient. *Hospital and Community Psychiatry*, 34, 44-47.

Lanza, M.L. (1988). Factors relevant to patient assault. *Mental Health Nursing*, 9, 239-257.

Lanza, M.L., Kayne, H.L., Hicks, C. & Milner, J. (1991). Nursing staff characteristics related to patient assault. *Issues in Mental Health Nursing*, 12, 253-265.

Lanza, M.L., Kayne, HL., Hicks, C. & Milner, J. (1994). Environmental characteristics related to patient assault. *Issues in Mental Health Nursing,* 15, 319-335.

LaRocco, J., House, J. & French, J.R.P. (1980). Social support, occupational stress, and health. *Journal of Health and Social Behavior,* 21, 202-218.

Le Blanc, P.M. & Peeters, M. (2003). Towards a group and organization oriented approach to stress management in health care. In J. Hellgren, K. Näswall, M. Sverke & M. Söderfeldt (eds.). New organizational challinges for human service work. *Organizational Psychology and Health Care*, Vol. 3. München und Mering: Rainer Hampp Verlag.

Leather, P., Brady, C., Lawrence, C., Beale, D. & Cox, T. (eds.) (1999). *Work-related violence. Assessment and intervention*. London: Routledge.

Leather, P., Lawrence, C., Beale, D., Cox, T. & Dickson, R. (1998). Exposure to occupational violence and the buffering effects of intra-organizational support. *Work & Stress,* 12 (2), 161-178.

LeBlanc, M.M. & Kelloway, E.K. (2002). Predictors and outcomes of workplace violence and aggression. *Journal of Applied Psychology,* 87 (3), 444-453.

Lee, S., Gerberich, S.G., Waller, L.A., Anderson, A. & McGovern, P. (1999). "Work-related assault injuries among nurses." *Epidemiology*, 10, (6), 685-691.

Levin, P.F., Hewitt, J.B., Misner, S.T. & Reynolds, S. (2003). Assault of long-term care personnel. *Journal of Gerontologycal Nursing,* 29 (3), 28-35.

Love, C.C. & Hunter, M.E. (1996). Violence in public sector psychiatric hospitals: benchmarking nursing staff injury rates. *Journal of Psychosocial Nursing and Mental Health Services,* 34 (5), 30-34.

Lusk, S.L. (1992). "Violence experienced by nurses' aids in nursing homes. An exploratory study." *AAOHN Journal*, 40 (5), 237-241.

Magnusson, D. & Bergman, L. (eds.) (1990). *Data quality in longitudinal research*. Cambridge: Cambridge University Press.

Menckel, E. & Kullinger, B. (eds.) (1996). *Fifteen years of occupational-accident research in Sweden*. Stockholm: Swedish Council for Work Life Research.

Menckel, E. (1990). *Intervention and cooperation: occupational health services and prevention of occupational injuries in Sweden*. Dissertation. Arbete och Hälsa 1990:31. Stockholm: National Institute of Occupational Health.

Menckel, E. (ed.) (2000). *Hot och våld i vård och omsorg. Fakta, forskning och förebyggande arbete*. [Threats and Violence in Health Care Work: Fact, Research and Prevention]. Stockholm: National Institute for Working Life.

Miller, M.F. (1997). Physically aggressive resident behavior during hygienic care. *Journal of Gerontological Nursing,* 23 (5), 24-39.

Ministry of Health and Social Affairs (2000). *Välfärd, vård och omsorg*. Antologi från Kommittén välfärdsbokslut. SOU 2000:38. Stockholm: Fritzes.

National Board of Health and Welfare (2000). *Vård och omsorg om älder 1999*. [Service and care to elderly persons 1999]. Stockholm: Socialstyrelsen.

Negley, E.N. & Manley, J. (1990). Environmental interventions in assaultive behavior. *Journal of Gerontological Nursing*, 16 (3), 23-33.

Nolan, P., Dallender, J., Soares, J., Thomsen, S. & Arnetz, B. (1999). Violence in psychological health care: the experiences of psychological health nurses and psychiatrists. *Journal of Advanced Nursing,* 30 (4), 934-941.

Nolan, P., Soares, J., Dallender, J., Thomsen, S. & Arnetz, B. (2001). "A comparative study of the experiences of violence of English and Swedish mental health nurses." *International Journal of Nursing Studies*, 38, 419-426.

Nordin H. (2000). Förekomst i olika arbetsmiljöer [Prevalence of threat and violence in different work environments]. In *Hot och våld i vård och omsorg: fakta, forskning och förebyggande arbete* [Threats and Violence in Health Care Work: Fact, Research and Prevention], E. Menckel (ed.), Stockholm: National Institute for Working Life, pp. 11-27.

Nordström, M. (2000). *Hemtjänsten. Organisering, myndighetsutövning, möten och arbete*. Lund: Studentlitteratur.

Omérov, M. & Wistedt, B. (1997). Manageable violence in a new ward for acutely admitted patients. *European Journal of Psychiatry*, 12, 311-315.

Omérov, M., Edman, G. & Wistedt, B. (2002). Incidents of violence in psychiatric inpatient care. *Nordic Journal of Psychiatry,* 56 (3), 207-213.

Omérov, M., Wistedt, B. & Elgen, K. (1995). Treatment of acutely disturbed psychotic patients: assessment of a new treatment strategy. *Nordic Journal of Psychiatry*, 49 (35S), 63-77.

Palmstierna, T. & Wistedt, B. (1987). Staff observation aggression scale, SOAS: presentation and evaluation. *Acta Psychiatrica Scandinavica,* 76, 657-663.

Palmstierna, T. (1992). *Aggressive behaviour from institutinalized psychiatric patiens. A metodological study with clinical applications.* Doctoral dissertation. Danderyd: Karolinska Institute at Danderyd Hospital, Department of Psychiatry.

Rice, M.E., Harris, G.T., Varney, G.W. & Quinsey, V.L. (1989). *Violence in institutions: understanding, prevention, and control.* Toronto: Hans Huber Publishers, Inc.

Riopelle, D.D., Bourque, L.B., Robbins, M., Shoaf, L.I. & Kraus, J. (2000). "Prevalence of assault and perception of risk of assault in urban public service employment settings." *International Journal of Occupational and Environmental Health*, 6 (1), 9-17.

Runyan, C.W., Zakocs, R.C. & Zwerling, C. (2000). Administrative and behavioral interventions for workplace violence prevention. *American Journal of Preventive Medicine,* 18 (4), 116-127.

Ryan, J.A. & Poster, E.C. (1989). The assaulted nurse: short-term and long-term responses. *Archives of Psychiatric Nursing,* 3 (6), 323-331.

Saarela, K.L. & Isotalus, N. (1999). Workplace violence in Finland: high-risk groups and preventive strategies. *American Journal of Industrial Medicine,* 1 (S), 80-81.

Salminen, S. (1997). Violence in the workplaces in Finland. *Journal of Safety Resarch*, 3, 123-131.

Saveman, B.I. (1994). *Formal carers in health care and the social services witnessing abuse of the elderly in their homes.* Medical Dissertation. Umeå: Umeå University, the Department of Advanced Nursing.

Saveman, B.I., Åstöm, S., Bucht. G. & Norberg, A. (1999). Elder abuse in residential settings in Sweden. *Journal of Elder Abuse and Neglect,* 1-2, 43-60.

Schat, A.C. & Kelloway, E.K. (2000). Effects of perceived control on the outcomes of workplace aggression and violence. *Journal of Occupational Health Psychology,* 5 (3), 386-402.

Schat, A.C. & Kelloway, E.K. (2003). Reducing the adverse consequences of workplace aggression and violence: the buffering effects of organizational support. *Journal of Occupational Health Psychology,* 8 (2), 110-122.

Snyder, W. (1994). "Hospital downsizing and increased frequency of assaults on staff." *Hospital and Community Psychiatry*, 45 (4), 378-380.

Soares, J.F., Lawoko, S. & Nolan, P. (2000). The nature, extent and determinants of violence against psychiatric personnel, *Work & Stress,* 14 (2), 105-120.

Sverke, M., Hellgren, J. & Näswall, K. (2002). No security: a meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7 (3), 242-264.

SWEA (2003). *Våld och hot i arbetet.* [Violence and threats at work]. Korta arbetsskadefakta, No. 2. Solna: Swedish Work Environment Authority.

Swedish Association of Local Authorities (1999). *Personal och kompetens i förändring*. [Personnel and competence in change]. Stockholm: Svenska Kommunförbundet.

Swedish Association of Local Authorities (2000). *Kommunal personal 1999*. Stockholm: Svenska Kommunförbundet.

Swedish Association of Local Authorities (2002). *Aktuellt om äldreomsorgen*. Stockholm: Svenska Kommunförbundet.

Szebehely, M. (2000). Äldreomsorg i förändring – knappare resurser och nya organisationsformer. [Elderly care in transition – scarce resources and new organizational forms]. In *Välfärd, vård och omsorg*. SOU 2000:38. Stockholm: Fritzes.

Teasdale, K., Brocklehurst, N. & Thom, N. (2001). Clinical supervision and support for nurses: an evaluation study. *Journal of Advanced Nursing,* 33 (2), 216-224.

Thomsen, S., Dallender, J., Soares, J., Nolan, P. & Arnetz, B. (1998). Predictors of a healthy workplace for Swedish and English psychiatrists. *British Journal of Psychiatry,* 173, 80-84.

VandenBos, G. & Bulatao, E. (eds.) (1996). *Violence on the job. Identifying risks and developing solutions*. Washington, DC: American Psychological Association.

Westlander, G. (1999). *People at work. Investigating social-psychological contexts*. Lund: Studentlitteratur.

Whittington R. & Wykes, T. (1996). An evaluation of staff training in psychological techniques for the management of patient aggression. *Journal of Clinical Nursing,* 5, 257-261.

Whittington, R. & Wykes, T. (1992). Staff strain and social support in a psychiatric hospital following assault by a patient. *Journal of Advanced Nursing,* 17, 480-486.

Whittington, R. & Wykes, T. (1994). Violence in psychiatric hospitals: are certain staff prone to being assaulted? *Journal of Advanced Nursing*, 19, 219-225.

Whittington, R., Shuttleworth, S. & Hill, L. (1996). "Violence to staff in a general hospital setting." *Journal of Advanced Nursing*, 24 (2), 326-333.

Winger, J., Schirm, V. & Stewart, D. (1987). Aggressive behavior in long-term care. *Journal of Psychosocial Nursing*, 25 (4), 28-33.

Wykes, T. & Whittington, R. (1991). Coping strategies used by staff following assault by a patient: an exploratory study. *Work & Stress,* 5 (1), 37-48.

Wykes, T. (ed.) (1994). *Violence and health care professionals*. London: Chapman & Hall.

Wynne, R., Clarkin, N., Cox T. & Griffiths, A. (1997). *Guidance on the prevention of violence at work. Health and safety at work*. Brussels: European Commission, DG V.

Zapf, D., Dormann, C. & Frese, M. (1996). Longitudinal studies in organizational stress research: a review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 2, 145-169.

Åström, S., Bucht, G., Eisemann, M., Norberg, A. & Saveman, B.I. (2002). Incidence of violence towards staff caring for the elderly. *Scandinavian Journal of Caring Sciences,* 16, 66-72.
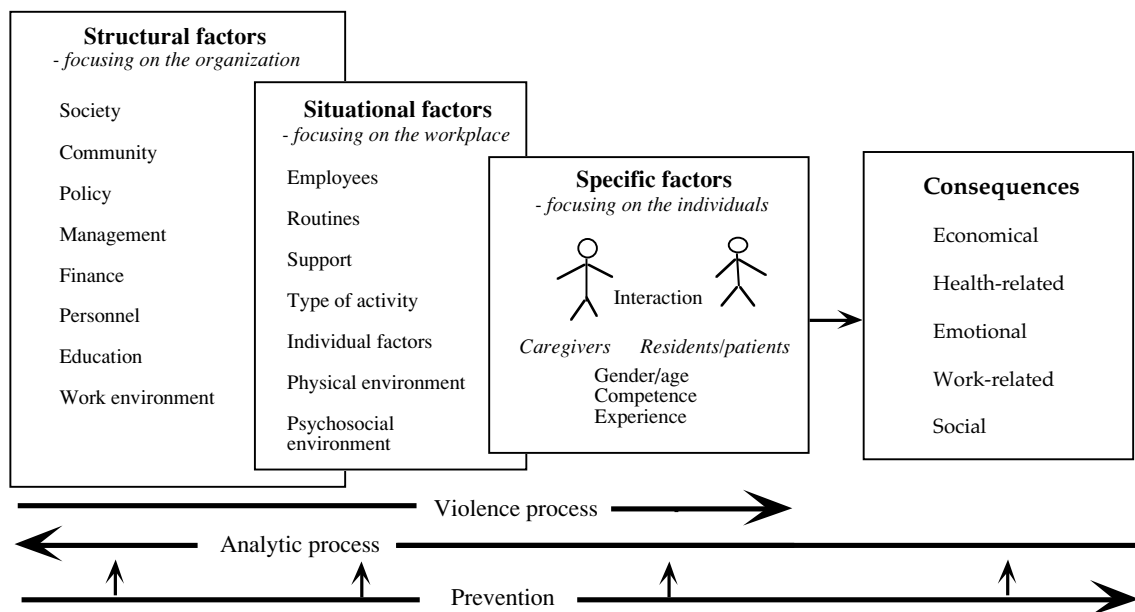
A frame/model of reference for analysis of violence or threats of violence in the health-and-welfare sector (modified after Viitasara & Menckel, 2002).