“Making it work in the frontline” explains female home care workers’ defining, recognizing, communicating and reporting of occupational disorders

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Abstract

Epidemiological research has so far failed to explain the high incidence of occupational disorders among home care workers (HCWs) and the great differences in organizational incidence rate. A qualitative approach may contribute to a deeper understanding of work group reasoning and handling in a more contextual manner. The aim of this grounded theory study was to gain a deeper understanding of the main concern in the processes of recognizing, communicating and reporting occupational disorders among HCWs. Focus group interviews were conducted with 40 HCWs in 9 focus groups. The selected municipalities represented variations in municipality type and incidence rate of occupational disorders. Making it work in the frontline was identified as the core category explaining that the perceived work situation in home care work was the main concern but interacted with work-group socialising processes as well as with the communicability and derivability of the occupational disorder when defining and reporting occupational disorders. Complex problems could be reformulated and agreed within the workgroup to increase communicability. Described significances for reporting/non-reporting were related to financial compensation, to a part of organizational political game or to an existential uncertainty, i.e. questioning if it belonged to their chosen work and life. Our conclusion is that working situation and work group attitudes have importance for reporting of occupational disorders. To support work-related health for HCWs, integrating communication should be developed about work-related challenges in work situation, as well as about attitudes, culture and efficiency within work-group.

Key words: Work injury, social environment, home care, social support, collective coping, focus group, grounded theory

Introduction

Occupational disorders among home care workers

Occupational disorders, i.e. reported occupational injuries and reported work-related diseases and symptoms, are common among home care workers (HCWs), compared to other female human service occupations (Ono, Lagerström, Hagberg, Lindén & Malker, 1995). Musculoskeletal disorders are the most common registered occupational disorder among nursing personnel and HCWs (Ono et al., 1995; Meyer & Muntaner, 1999). Various organizational conditions in work, especially related to emotional and physical demands, contributes to work-related disorders and work injuries among HCWs (Johansson, 1995; Aronsson, Astvik & Thulin, 1998; Brulin et al., 1998; Engkvist, Hjelm, Hagberg, Menckel & Ekenvall, 2000; Dellve, Lagerström & Hagberg, 2003). These factors may be interrelated and indirectly linked to perceived work-related stress and working conditions (Brulin, Winkvist & Langendoen, 2000; Muncer, Taylor, Green & McManus, 2001).

Earlier studies showed great variations in organizational incidence of occupational disorders, as well as for long-term sick leave and disability pension among HCW in Sweden (Dellve, Allebeck et al., 2003; Dellve, Karlberg, Allebeck, Herloff & Hagberg, 2006). Nevertheless, factors that usually confound comparisons, like rights and obligations related to employment and workers’ compensation, are nationally regulated. Explanations to these
Reporting occupational disorders

The distribution of occupational disorders is predominantly studied through record files, and based on self-reports. The level of underreporting in self-reported statistics is unclear but considered as high (Quinlan & Mayhew, 1999). Likewise, there is little knowledge of the willingness to report occupational disorders. Willingness to report may be influenced by individual factors or interacting factors in society, the organization and the work group. At the societal level, the impact of generous financial compensation, short-time administration and availability of information about the compensation system are positively correlated to reporting (Hirsch, 1997), as are changes in insurance systems and workers' compensation (Menckel & Kullinger, 1996). Reporting also varies between counties and groups of workers, e.g. workers in sparsely populated areas, women, young people, and those who are self-employed and precariously employed (Parker, Carl, French & Martin, 1994; Quinlan & Mayhew, 1999). However, a study of hospital environmental service workers found underreporting more likely among older workers and those having worked longer time at the same job (Weddle, 1996). There is little previous knowledge of factors influencing willingness to report at work-group level.

Social environment perspective

Differences in variation of reported occupational disorders, as well as other kinds of safe working behaviour, may be related to motives and cultures in the organization or the work group. Organizational culture, such as workforce empowerment and long-term commitments, are found to be related to lower injury rates (Shannon et al., 1997). Safety culture reflects values and norms, which reside in societal culture, and it is seen in managing safety practices at the workplace (Mearns & Flin, 2001; Mearns, Flin, Gordon & Fleming, 2001). However, these earlier described studies consider other occupational groups and there is still little knowledge of safety culture and underlying environmental mechanisms for health-related behaviour among HCWs.

The socio-ecological approach investigates how culture, collective beliefs and behaviours influence health and behaviours among populations (Krieger, 2001a). This approach was used as point of departure in studying how the work-group attitudes and beliefs related to occupational disorders, influenced reporting and communicating of occupational disorders among HCWs. Socio-ecological perspectives points at the importance of the material, psychosocial and cultural environment for collective health-related behaviour and, distribution of health disorders (Yen & Syme 1999; Krieger, 2001a,b). It is based on the fact that there are properties in areas that either strengthen or weaken social support and social conditions, which influence health among the inhabitants. Further, these properties may not only be a result of geography and site but also of socioeconomic conditions and such factors that influence interaction between people, e.g. social service, work organization, collective behaviour and cultures (Yen & Syme, 1999). One justification of the perspective is that social and physical environments do not exist independently of each other, but as a result of their interaction, by social processes and relations between individuals and groups (Yen & Syme, 1999; Krieger, 2001b).

Earlier results have contributed to the development of knowledge of the relation between socioeconomic factors and health (Pickett & Pearl, 2001; Lynch et al., 2001; Ellison, 1999). However, epidemiological research, so far, has failed to explain the difference in distribution of occupational disorders. Qualitative methods make it possible to explore and illustrate complex relations in a more contextual manner than epidemiologic research. To understand processes related to the distributions of occupational injuries and diseases in female health care occupations better, we adopted a qualitative approach to explore processes related to work group reasoning and strategies. The aim of this study was to gain a deeper understanding of the main problem related to recognizing, communicating and reporting occupational disorders among female HCWs.
Method

A qualitative approach—the grounded theory method

The grounded theory approach was used, since the research question concerns social psychological processes (Glaser & Strauss, 1967; Charmaz, 2006). It allows investigation of macro-, meso- and micro-level issues, e.g. central processes concerning individuals, groups and/or social processes in the social structural environment. Basic fundamentals of the method are constant comparisons of raw data with theoretical constructs, theoretical sampling, simultaneous sampling, data-collection and analysis, theoretical memo-writing and analytical techniques that progressively lead to more abstract analytical levels (Eaves, 2001).

Study group, setting and sampling procedure

The study group consists of nursing aides and assistants working in home care work, e.g. in service provided by the municipality to elderly and handicapped people. The majority (95%) of the 154,773 home care workers in Sweden are female (Dellve et al., 2003b). The setting for this study is Sweden, a country with good opportunities for using official statistics and national records to follow occupational disorders. The municipalities (289 in all) were responsible for home care service, but the work organization and safety management may differ between the municipalities. From earlier studies, types of municipality were found related to occupational disorders in different directions, especially metropolitan areas, sparsely populated areas and industrial municipalities. The metropolitan areas include the city and municipalities that belong to the local labour markets of metropolitan regions. In the industrial areas, more than 40% of the population is employed in industry. The sparsely populated areas have a population of less than 20,000 and a population density less than 5/km².

A strategic sampling of municipalities and participants was used to reflect various conditions related to willingness to report and safety cultures. Municipalities were selected that covered variations of the five-year mean municipal incidence of occupational injuries and diseases, long-term sick leave and disability pension (Dellve et al., 2003b; Dellve et al., 2006) and a variation due to municipality type (Table I). The top-managers of the social service were contacted for information and permission, and no one refused to participate. The supervisor and the trade unions’ safety representative assisted in the selection of study participants. HCWs with experience of home care work, of various occupational disorders and of reporting or not reporting occupational disorders, were selected. The data collection, e.g. the inclusion of more municipalities, was finished when we believed there was a theoretical saturation of the described concepts, i.e. when new data did not give further information to the developed substantive theory.

Focus-group interviews

Qualitative focus-group interviews were used to achieve deeper insight into shared beliefs, concerns and attitudes. A focus-group interview is, and also reflects, a collective activity while it taps into human tendencies, developed in part by interaction with other people (Webb & Kevern, 2001). Forty female HCWs, aged 24–64, participated in one focus group interview each. The moderator introduced the focused themes and encouraged a discussion between the participants. The themes comprised individual and cultural attitudes, beliefs and conditions related to reporting occupational disorders, e.g.

| Focus group | Type of municipality | Occupational disorders* | Long-term sick leave* | Disability pension* | n |
|-------------|----------------------|-------------------------|----------------------|---------------------|---|
| 1           | Industrial           | High                    | Low                  | Low                 | 5 |
| 2           | Industrial           | High                    | Low                  | Low                 | 5 |
| 3           | Sparsely populated   | Low                     | High                 | High                | 3 |
| 4           | Metropolitan         | Medium                  | Medium               | Medium              | 4 |
| 5           | Metropolitan         | Medium                  | Medium               | Medium              | 3 |
| 6           | Metropolitan suburb  | High                    | High                 | High                | 7 |
| 7           | Metropolitan suburb  | High                    | High                 | High                | 4 |
| 8           | Sparsely populated   | Low                     | Low                  | Low                 | 5 |
| 9           | Sparsely populated   | Low                     | Low                  | Low                 | 4 |

Total: 9

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*Belongs to the group of low (<25%), medium (26–74%) or high incidence municipalities (>75%) in Sweden.
• What do you count/what is counted as an occupational injury and disease? Attitudes to different kinds of occupational disorders.
• How do you feel, think and act when you have “developed/got” an occupational disorder? When, what, to whom and why do you report/are reports made?
• Supportive conditions and obstacles related to reporting and communicating perceived occupational disorders.

During the research process, the questions were refined around these themes by the emerging preliminary categories in order to further exhaust and explain the concepts and their relations. The interviews were taped and transcribed verbatim.

**Analysis of data**

This study mainly relies on the guidelines presented by Glaser and Strauss (1967), the so-called classic grounded theory tradition. Charmaz (2006) writing on the constructivist grounded theory has also been a source of inspiration. The analysis comprised a systematic process of coding and comparison of raw data, as well as the parallel use of theoretical memos and ideas. Raw data were coded as they were collected step-by-step. The first step in coding aimed at transforming and conceptualising raw data into theoretical constructs, i.e. the researchers labelled the substance in the raw data; compared data and codes constantly to identify differences and similarities and, sorted codes with the same content into categories. Each category was then further developed and related to its subcategories, dimensions or properties. A core category was identified and it described a basic social process that was centrally related to all other categories. The last coding step aimed at integrating and refining the categories to form a dense and saturated theory. The most central properties in the group interactions were described in the categories. Theoretical memos were systematically used to link, and verify, analytical interpretations with the empirical data. The result is a theoretical model (a substantive theory) of individuals’ perspectives in a bounded context. It belongs to the “context of discovery” in theory development, which is different from ”the context of verification” (Miller & Fredricks, 1999).

**Results**

The HCWs daily work was described as making it work in the frontline (core category) despite organizational-, workgroup-, client-, and task-related challenges. Their perceived working situation directed definition, recognizing, communicating and reporting occupational disorders. Disorders derived from concrete task-specific elements, (i.e. meeting-lifting-moving-hurrying) were easily communicated and reported. The following other work environment elements were: having emotional and practical contracts with clients, being each others work environment and, being tools for competing interests and deficient resources. The caring traditions comprised a mixture of these challenges, and therefore perceived as difficult to talk about and handle. The complex problems could be reformulated and agreed within the workgroup in order to increase communicability, described in the category constructing and reformulating complex problems within work group. The perceived challenges in the work situation interacted with the communicability and derivability of the occupational disorder as well as with work-group socialising processes when defining and reporting occupational disorders. Properties for communicability were definability, a culture concerned with improving the work environment, and work group reflection and efficacy. The likelihood of reporting also seemed related to the level of derivability: Incidents defined by time and place; stress and fatigue-related disorders; and complex circumstances and problems. Described significances for reporting occupational disorders were related to financial compensation, as part of organizational political game or to an existential uncertainty, i.e. questioning if it belonged to their chosen work and life. In sum, a substantive theory “Making it work in the frontline” was grounded in the data, explaining how occupational disorders are defined, recognized, communicated and reported among female HCWs (see Figure 1).

**Perceived working situation**

**Making it work in the frontline**

The core-category, making it work in the frontline, illustrates the main concern for the HCWs and describes the perceived liability when caring in the frontline of other individuals’ lives. The loading liability concerned the emotional contracts with clients, relationships to co-workers and being subjected to the final exposed position in delivering caring service. The home care workers perceived and described their capability to handle frontline situations and make it work, despite compromising their own health and rights (Figure 1).

**Meeting-lifting-moving-hurrying** concerns the task-related demands, like patient handling, carrying bags and transporting between clients, and the perceived time pressure when meeting clients and performing tasks.
Making it work in the frontline

Having emotional and practical contracts with clients concern the bonding relations to clients. This was both the benefit of working in home care work and the maintenance of physical demands. Own needs were placed in relation to those of the clients and, therefore, often compromised, e.g. described as high sickness presenteeism. Workers with close intensive relations expressed being too enmeshed in their client’s life by loads of practical details that had significance for the client.

The element being tools for competing interests and deficient resources concerns a situation related to competing interests between the quality of care, the economic costs and a beneficial work environment, the latter being perceived as the least prioritized of the three; for example, the problems getting proper cleaning equipment, the small bathrooms with slippery surfaces and the delay of lifting equipment.

The element being each other’s work environment refers to the lack of resources within the group of home care workers and the solidarity and sense of community between the workers that makes problems due to this element hard to claim. The poor resources refer to recruitment difficulties and the lack of qualified workers as well as the old workforce and the great number with musculoskeletal disorders. Solidarity and sense of community made it complicated to take care of their own health or to claim in situations where the problems belonged to someone in the group:

But that’s the way it’s been at work now: very few people and a lot to do and so on. So then you don’t even want to report sick for the sake of your poor workmates . . . there simply aren’t enough people.

The elements of everyday work environment problems were related to reporting occupational disorders. If the occupational disorders could clearly be derived from tasks related to situations of meeting, lifting, moving and/or hurrying they were easier to communicate and report than disorders arising from a mixture of work environment elements.

Defining, recognizing, communicating and reporting occupational disorder

Communicability and derivability of occupational disorder

Occupational disorders were perceived as those consequences from work environment that was able to communicate. The subcategory communicability of occupational disorder comprises the following dimensions: Definability was an important property for perceiving, communicating and reporting occupational disorders to others than HCWs. Central sources for definability were formulated societal regulations, the designs of reporting forms, media and significant others such as trade union representatives, doctors, leaders or the work group. An organizational culture that is concerned with improving the work environment was seen as supporting communicability, i.e. by time for reporting, encouragement by the supervisor and work group, and simplicity in the reporting procedure. The workers’ individual and work-group efficiency was another central property, concerning the ability to reflect and act in these issues, which was supported by sense of control, dignity and worth.

The defining, recognizing, communicating and reporting occupational disorder also seemed related to the derivability of occupational disorder of the problems. Easiest to derive were incidents defined

Figure 1. A substantive theory, “Making it work in the frontline”, that explains how occupational disorders are defined, recognized, communicated and reported among home care workers.
by time and place, i.e. overexertion while moving/ lifting, violence and scratching by clients, slips and falls. These disorders were easy to put down on the forms and most related to the task-related element: “meeting-moving-carrying-and hurrying”. Next, came the stress and fatigue-related disorders, i.e. gradually developed musculoskeletal disorders and perceived stress related to time pressure or providing poor quality care. Uncertainty and irresolution to communicate these disorders were described due to complex derivability and no time definability. These disorders were described as caused by a combination of work environment problems:

In fact I don’t really know what you’re supposed to judge as a work injury. If you’ve had it for a long time, what is there to report? […] ailments and aches and pains are something we all have.

Then, and less derivable, were the complex circumstances and problems. Great doubtfulness and insecurity were expressed about whether they are counted as work-related. A complex combination of work environment problems was described as giving rise to the disorders. The opinions and evidence of significant other people were sought to support communicability.

Constructing and reformulating complex problems within the work group

When the disorders were derived from a mixture of work element problems and were diffuse or intricate to communicate and report, a discussion and reformulation of the problem might occur in the work group. This may be described as a collective concern with work environment problems by striving for conformity in thinking. It may provide a relief by sharing experiences, thoughts and attitudes, reflecting and supporting each other. This conformity in thinking may also strengthen the group cohesiveness and the intellectual fellowship. The process of acknowledging occupational disorders was described as strengthening solidarity and community among the HCWs. The variety of collective concerns and strategies are further described in a forthcoming paper.

Reporting occupational disorders

One significance of reporting or not were related to achieving financial compensation. Then, reporting was a precautionary measure for individuals when there were believed to be long-term consequences. Motives for not reporting were that it is difficult to get financial compensation and that it takes too long. Therefore, problems were sometimes reformulated to be covered by private insurance companies.

Other motives were related to organizational political games. Then, reporting occupational disorders was performed to collect written evidence of work environment problems as a countermeasure to rationalisations. It was the powerful tool to support preventive efforts and communicate “grass-roots problems” to those who were in charge and allocate the resources. A described focused concern was the group of workers; locally and globally. A global significance was related to the collective concerns of “worker’s right” and the sense of duty to report. The duty was part of solidarity agreements between workers, and documented regulations/agreements between workers and employers. Non-reporting of occupational disorders was perceived as “cheating”:

S1: A work injury report is the only document you’ve got. The only thing that carries any weight to bring about a change. It’s absolutely the only thing you can do.

S2: It’s important that it comes out so that everyone knows about it, so that it doesn’t happen several times.

Reporting could also be done to gain an individual redress from a problematic work situation, e.g. communicating to the “big state” for having a redress and an own freedom from responsibility. Reasons for non-reporting in the organizational political game were experienced countermeasures from the employers, such as practical obstacles and not having support to report. For example, a delay in providing forms, lack of supportive attitude to reporting, making the workers write a polished version of the incidents or threatening the worker not to communicate the work situation to others.

Other motives, or doubts, were related to existential uncertainty about whether occupational disorder belongs to their chosen work and life. This concerns an acceptance of work-related problems when viewed in a wider life- and cultural perspective. Problems related to their own health and the work conditions were expressed as less important when put in relation to the clients’ overall problems. There was a described complex ambiguity in reflecting and acting about the problems, and an uncertainty in assessing and communicating occupational disorders. The ambiguity concerned whether their problems belonged to work and life itself, e.g. that their pain was a natural result of their choice in life and their place as human beings. That is, the view that HCWs belong to a group of society that has to bear
these problems. Meaning behind non-reporting was related to cultural and generational restraints, i.e. to refraining from challenging the existing order and routines in the neighbourhood area, particularly described in smaller communities, or a generational restraint, expressed by older female workers that had learned to struggle and work hard without complaining. Some of the older ones also described difficulties in understanding and keeping updated about the procedures around reporting and claiming compensation:

S1: I think it’s a bit of our generation too. The young ones know a bit about how it works and make sure that they get those things. I think we’re more used to having to put our backs into it a bit more.

S2: No, you mustn’t complain about everything. That was what we had to learn from the very beginning at home.

S3: Yes, that’s it. You’ve got to work, you’ve got to manage and you’ve got to keep at it.

Further, the reason for non-reporting occupational disorders also came from an assessment liability, which was connected to a great responsibility of one’s own in making an assessment, a feeling of not being believed usually, and weak efficiency in reflecting upon work conditions and taking actions to improve them. The significance of reporting was following requests from significant other people, i.e. the doctor, the supervisor or the work group.

Discussion

The present study shows that the perceived working situation as well as socialising group processes, communicability and derivability of their disorder direct HCWs’ way of defining, recognizing, communicating and reporting occupational disorders. The HCWs’ reporting occupational disorders was qualitatively related to how easy it was to communicate and derive the disorder from a certain time and event. The communicability was related to definability and influenced by societal agreements and legislation, to the organization cultures’ concern about work environment issues and to the efficiency of the workers to reflect, communicate and act to improve work environment problems. Disorders solely deriving from the task-related elements were easier to communicate and report than disorders derived from a mixture of work elements. Therefore, reporting seems more likely when the disorder is easily derivable and communicable, and when the reporting fits with strategies in the social and organizational environment. This illustrates influences of social environment, at societal, organizational and work-group level, on safety behaviour and possibly the distribution of health. It also illustrates the complexity of using self-reported data of occupational disorders in statistical comparisons.

We found underreporting due to conformity in thinking, lack of knowledge, assessment liability, perceived difficulty in getting financial compensation and restraints related to age, culture and powerlessness in the organization. The meanings related to underreporting, especially pronounced in some groups, come from existential beliefs that occupational disorders are part of work and life, a chosen place in life that can hardly be changed. Conformity in thinking facilitated a common conception of a phenomenon, such as occupational disorder. Conformity in thinking among professionals in homogeneous work groups in health care has earlier been found in a study on bullying (Strandmark & Hallberg, 2007). These cultural beliefs may hinder preventive measures of injury involvements, which rely upon the reporting of occupational disorders. It has been found in earlier studies that occupational injuries, defined in place and time, are less underreported than work-related diseases. Further, occupational disorders with long-term sick leave are also less underreported than others (Menckel & Kullinger, 1996; Quinlan & Mayhew, 1999), supporting the importance of the compensation system for the likelihood of reporting.

The results also indicated over-reporting of occupational disorders as a tool in an organizational political game. The motives and meanings for reporting derived from the group’s interests to improve their work environment. It is doubtful whether there is an objective “true” level of occupational disorders, or whether the level of disorders is more a part of a social construction. There is little knowledge about the concordance between the conceptualisations of occupational disorders of the scientific, the administrative and the subjective worker’s point of view (Hagberg et al., 1997).

The strong impact of the work group among HCWs has been described earlier (Olsson & Ingvad, 2001). In the present study, the group’s safety culture had an impact on the likelihood of their reporting through the process of ventilating the problem and constructing a communicable version that is either reported or not. In preventive efforts to increase compliance with safety regulations and procedures, it is important to account for the safety culture and climate. A relation between safety climate and knowledge and motivation regarding safety is also described (Neal, Griffin & Hart, 2000).
One study found that attitudes, experience, training and learning were important contributing factors to different work injury rates between Swedish and Danish construction workers (Spangenberg et al., 2003). Attitudes with relevance for safety culture are related to responsibility, commitment, awareness of risks, risk-taking, locus of control, fatalism and leadership communication (Lee, 1998).

In European countries, the need for home care service is growing with the growing proportion of elderly people, while HCWs are often hard to recruit and keep. HCWs have shown high levels of occupational disorders, especially musculoskeletal (Engkvist, Hagberg, Lindén & Malker, 1992; Myers, Jensen, Nestor & Rattiner, 1993; Ono et al., 1995; Meyer & Muntaner, 1999; Dellve et al., 2003b). There is a need to develop knowledge that may prevent occupational disorders, and that supports sustaining the work ability. The variation of occupational disorders between various organizations indicates a preventive potential. However, preventive actions are often based on conclusions drawn from studies of individual risk factors. Earlier studies have shown the relation between organizational conditions in health care work and the workers, especially related to emotional and physical demands, leadership, organizational support, relational problems, work climate (Johansson, 1995; Aronsson et al., 1998; Brulin et al., 1998, 2000; Engkvist et al., 2000; Dellve et al., 2003a). Financial cuts leading to shortage of personnel and perceived overload have earlier been described as problems that may lead to aspects of ill health (Brulin et al., 2000; Dellve et al., 2003a), and in the present study a perception of “being a tool in competing interests and deviant resources”. During the 1990s, organizational and economic cuts in the Swedish home care service had a negative impact upon the ability of work groups to cope with their work situation in a constructive manner (Olsson & Ingvad, 2001). To improve effects of workplace interventions, awareness of individual and group-wise grass-root attitudes may play an important role for facilitating constructive communication and handling of work environment problems.

Qualitative methods make it possible to explore and illustrate complex relations in a more contextual manner (Hallberg, 2006). The result of the present study is viewed as a substantive empirically grounded theory. The grounded theory method gives a description of the systematic and logical procedure of how theories are developed (context of discovery) rather than verification of pre-existing theories (context of verification) (Miller & Fredricks, 1999). Focus groups and grounded theory both focus on social processes and social interactions for the experience of phenomena and related coping.

Focus-group discussion supports interaction between participants that supports memory, reflections and encourages pointing out views of the focused phenomena. The face validity of focus groups is considered as high through participants’ response and accepting comments to each other that increase the trustworthiness (Nyamathi & Shuler, 1990). Recruiting “good” informants is crucial for valid information. Cooperation with the employers’ association, the Swedish Work Environment Authority, the local employer and trade union representatives may overcome obstacles in recruiting. Future studies are needed to study further and in more depth the collective concerns and strategies that may have a crucial impact on management of the work environment. Knowledge of these grass-root concerns and managements may be of major importance for effectiveness in intervention and development of sustainable work environments.

In conclusion, working situation and work group culture have importance for reporting of occupational disorders. Important mechanisms for reporting are also easiness to communicate and derive the occupational disorder. We found that easiness in communicating and deriving the occupational disorder were important mechanisms for reporting in the same way as underlying individual and workgroup motives. Disorders solely deriving from the task-related element were easier to communicate and report than disorders derived from a mixture of work elements. To support work-related health for HCWs, integrating communication should be developed about work-related challenges in work situation, as well as about attitudes, culture and efficiency within work-group.

Although organizational comparison of occupational disorder rates provides a basis for preventive actions, this should be interpreted in its context.

Acknowledgements
The authors are grateful to the Swedish Social and Working Life Foundation for financial support; to the home care workers who participated, to local employers and trade union representatives.

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