

Factors That Influence the Use of Safe Patient Transfer Technique in Home Care Service

Ingegerd Skoglund-Öhman

Department of Industrial Engineering and Management, University of Oulu, Finland

Katarina Kjellberg

Division of Occupational and Environmental Medicine, Karolinska Institutet, Stockholm, Sweden

The aim of this pilot study was to explore whether home care service personnel used knowledge and skills in transfer technique in their daily work; knowledge and skills gained by participating in training programmes, and to identify factors that may hinder and support their use. Focus group interviews were held with 2 home care service groups in 2 Swedish towns. Individual interviews were conducted with the personnel's managers, unit leaders and safety representatives. Qualitative content analysis was used. The findings revealed that the personnel tried to use their knowledge and skills. However, there were both hindering and supporting factors for the use of safe work technique. The findings indicate that training programmes in transfer technique should not be implemented as isolated actions without considering the physical environment, the wishes of persons receiving care and their relatives, the work organisation, the safety culture and the role of managers.

patient transfer technique training home care service

1. INTRODUCTION

Being able to continue living in one's own home as long as possible is the main guideline for the care of the elderly in Sweden. Home care services make it possible even for those with extensive needs to remain in their own homes. Elderly people who cannot cope on their own can be provided with assistance in activities such as personal care, cleaning, washing and shopping, and can thereby be able to continue living in their own home until the end of their lives [1]. The treatment periods and length of hospital care after injury or illness have decreased, becoming shorter and shorter. A very heterogeneous group of people get support and care from home care service personnel to manage everyday life in their

own homes [2, 3]. Working in people's home environment, in their private sphere of living, makes the work of home care service personnel unique compared to other workplaces in the public sector, such as health care institutions and old people's homes.

The incidence of work injuries is higher among staff in the elderly and handicap care sector than in other caring and service professions [4, 5]. The transfer of patients is a major risk factor for low back disorders and injuries among nursing personnel [6, 7]. In addition, home care service personnel have other physically demanding work tasks such as manual handling of loads, e.g., shopping and transporting daily food to persons receiving care, cleaning, cooking, etc. [5, 8]. The conditions necessary for a well-functioning home

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Correspondence and requests for offprints should be sent to Ingegerd Skoglund-Öhman, Älvsbyns kommun, SE-94285 Älvsbyn, Sweden. E-mail: <ingegeerd@krivision.se>.

care service are: enough time for the work tasks, continuity and decision authority [3].

The work task to assist persons during transfers in their homes is a critical risk factor for the physical health of home care service personnel. Such transfers can be complicated to perform, and put great demands on skills in terms of co-ordination of movements and muscle force, and the ability to co-operate with colleagues and care receivers [9, 10, 11].

In Sweden, the Swedish Work Environment Authority¹ stated that heavy manual handling and other physical demanding work should be avoided and that employees should be given necessary instructions in lifting and transfer technique [12]. The provision provides patient handling guidance for caring in home environments. The employer's responsibility to provide training in work technique and the employees' responsibility to follow instructions are stated more precisely in the provisions "Ergonomics for the prevention of musculoskeletal disorders" and "Manual handling" [13, 14]. Three countries in the European Union have national official manuals and guidance's for patient handling: Finland, Sweden and the UK [15].

To prevent low back disorders among nursing personnel, training programmes in patient transfer technique are common, most often comprising a theoretical basis and practical training [16, 17, 18, 19, 20, 21, 22, 23]. Results from evaluation studies show an immediate improvement of work technique in transfer tasks among participants after taking part in a training programme [16, 24, 25]. However, the long-term effects of training programmes regarding musculoskeletal disorders are doubtful [19, 25, 26, 27]. Several studies of nursing personnel indicated that training and education in isolation were not effective, but needed to be combined with ergonomic and work organisation interventions to be effective in reducing musculoskeletal symptoms [17, 18, 21, 28, 29]. In addition, it was shown that participatory approaches were advantageous [30, 31, 32]. One explanation of the negative findings

of training programmes as isolated interventions might be that employees are prevented from using their current knowledge of patient transfer technique in practice, e.g., owing to organisational factors such as time shortage, insufficient staffing and lack of policies [33]. Koppelaar, Knibbe, Miedema, et al. reviewed studies of intervention on patient handling and tried to identify barriers and facilitators for the implementation of different measures to prevent musculoskeletal disorders related to patient handling from these studies [33]. They found a number barriers and facilitators for the implementation of training and education in patient transfer technique. The most common were classified as environmental factors, e.g., enough time, availability of transferring aids and staff, and patient needs.

In a cross-sectional survey, Kromark, Dulon, Beck, et al. stated the need to improve facilitating equipment and training in handling these assistive devices for staff working in home care [34]. This is in concordance with Hasson and Arnetz, who compared the nursing staff's competence, work strain, stress and satisfaction between home care and nursing homes [35]. The staff in home care reported significantly less competence compared with staff in nursing homes. The researchers pointed out the importance of improving the competence and skills among the personnel.

2. AIM

The aim of this study was to explore whether home care service personnel having participated in transfer technique training programmes used their knowledge and skills in their daily work. A second aim was to identify factors that could hinder and support their use.

The main research questions were as follows: Assuming that the home care service personnel have received sufficient training in transfer technique, is their knowledge used in practical work situations? If not, what is the reason for not using their knowledge?

¹ In 2001, the Swedish National Board of Occupational Safety and Health changed its name to Swedish Work Environment Authority.

3. MATERIAL AND METHODS

This pilot study was based on two case studies in home care service. Individual interviews and focus group interviews [36, 37, 38, 39] were carried out. A qualitative method [39, 40, 41] with both an explorative and a descriptive approach was used.

3.1. Participants

One home care service group in a large town and one in a medium-sized town in Sweden were strategically selected for participation in the study. The reason for selecting groups in towns with different sizes was to obtain variation in work conditions for the home care service personnel. One selection criterion was that the workplace should have a functioning continuous training programme in patient transfer technique which was offered to the personnel. Participants selected for the study had all gone through a programme of this kind.

The participants in the large town had undergone a one-day (8 h) training programme and half-day follow-up training. The programme consisted of a theoretical part and practical training based on practical transfer situations in daily life. The follow-up training was based on basic ergonomic principles connected to work tasks in home care. The personnel in the medium-sized town had all participated in half-day (4 h) practical training based on basic ergonomic principles, such as work close to the care receiver, and transfer step by step. Training in the use of tools and equipment, and rehabilitation in daily life were elements in the training session.

Both groups were stable with a low personnel turnover. Managers and safety representatives in both towns had a positive attitude towards participation in the study.

Focus group interviews were performed in groups of 6 employees, one in each town. The focus group in the large town consisted of women aged 23–49 years (M 41). Their experience of home care service work varied between 6 months and 6 years. The participants in the focus group in the medium-sized town

were women aged 34–57 years (M 43). They had work experience ranging from 5 to 20 years in home care service. Contacts with the home care service groups were made in co-operation with their managers. The participants were asked about participation in the study by their manager, who also gave them oral and written information about the study.

Individual interviews were made with the unit leader, the operative manager and safety representatives in both towns to get their experiences of patient transfer technique programmes and hindering and supporting factors for the use of safe work technique. Contact was established by telephone with unit leaders, managers and safety representatives, who all agreed to participate in the study.

3.2. Interviews

Interview guides were developed and used as structures for the discussions in the focus group interviews as well as in the individual interviews. The main areas for discussion were the use of knowledge and skills in transfer technique gained by participating in training programmes in the daily work, obstacles to the use of safe work technique, communication and documentation routines, responsibility for a safe work environment, the desires and needs of the people receiving care, the role of the leaders and safety representatives, and safety culture. One of the authors acted as moderator conducting the focus group interviews, while a co-moderator took notes and recorded the interviews with a digital dictaphone. Each focus group interview lasted ~90 min. The individual interviews were semistructured and covered the same topics. They lasted ~30–60 min and were also recorded with a digital dictaphone. The recorded material from the focus group and individual interviews was transcribed verbatim, and the transcriptions were validated against the recorded material.

3.3. Analysis

The interview material from the focus groups was analysed by qualitative content analysis [40, 41], which is used for exploring patterns and

themes from interviews and texts. The material was read through several times and meaning units were identified on the basis of the research questions of the present study. Meaning units were condensed to codes to be understood in relation to the context. Codes that had something in common were sorted into subcategories according to similarities and differences in content. The subcategories were brought together in main categories, which can be considered as themes throughout the codes. Main categories formed overarching themes, which can be considered as an expression of the latent content, the underlying meaning of the text.

The interviews were listened through and compared with the transcriptions by a co-worker. The codes and categories were also checked by the co-worker. Discussions were also held with a second co-worker during analysis.

4. RESULTS

The analyses of the focus group interviews and the individual interviews resulted in four themes:

1. experiences and use of knowledge in transfer technique;
2. supporting factors for the use of safe work technique;
3. obstacles to the use of safe work technique; and
4. both supporting and hindering factors for the use of safe work technique.

These four themes became clear during the analysing process, which started with identifying meaning units in the written interview material, condensing those to codes and categorising them. Within these themes nine main categories were identified, describing the experiences of home care service personnel regarding knowledge, and the use of that knowledge, in transfer technique. A description of each main category follows.

4.1. Experiences and Use of Knowledge in Transfer Technique

4.1.1. *Participants' views about training programme*

Both groups had generally positive attitudes towards their training programmes and described them as fruitful and necessary for their work in home care. The home care service personnel tried to use their knowledge of patient transfer technique. This was illustrated by a participant's comment, "You think more of yourself now; otherwise you would have an aching body. You have to change your routines; otherwise you can't go on working for 20 more years".

One participant said that prior to going through the training programme she had thought she had enough knowledge of transfer technique. Now she noticed that the programme had given her new insights, which widened her view of how to transfer a person; "We didn't want to admit it from the beginning—what more do they think we need to know? A sort of feeling you have... but during the training I understood that I needed to keep on learning during my whole life. The training programme was a positive experience and we learnt a lot".

4.1.2. *Safety perspective*

In both towns the participants described an enhancement of their personal awareness of how to save themselves from injury, compared to before the training programme. They stated that the training programme had contributed to this awareness. Advising colleagues about good work technique was mentioned as a strategy for safety in the daily work. The group in the medium-sized town pointed out the role of the manager in making the personnel aware of the risks they may be exposed to in different work situations. The training programmes had provided information and knowledge about suitable equipment to use for facilitating transfers, and how to use it in practical work with the people receiving care.

Preventing injuries can be looked at from two points of view: how to prevent injury to the personnel performing the transfers, or from the point of view of the person receiving care. When

discussing how the home care service personnel think when facing a tricky transfer, one of them gave this illustration, “Well, you think of making it (e.g., the transfer) as easy and smooth as possible, to avoid injury. I usually think about my own safety and of the care receiver’s, too, of course...and about having a feeling of security for both of us...That I have a good grip when holding a care receiver and that he or she also has a good grip on me, and that we together feel secure, both of us”.

Another participant pointed out that she had an enhanced awareness of risks connected with patient transfer situations; “I believe almost every one of us, after the training programme, reflects on the risks before performing a transfer ‘the hard way’”.

4.1.3. Views from safety representative and managers

The safety representative has a twofold role to fulfil; the role of personnel in home care services and the role of personnel’s “safety voice regarding their work environment”. Different transfer situations in daily work are raised as problems by the staff to their safety representative. In some situations they have to explain their role to the person receiving care, to make clear that in the role of safety representative they act with the personnel’s work environment in focus. This means focus on the use of recommended equipment for transfers, as well as the use of safe work technique. “Well, in this case I have to act in my role of safety representative, not as ordinary personnel, and I have to tell the person receiving care: Now I am here according the safety, acting on behalf of my colleagues regarding the work environment, and with the goal of improving working conditions”.

The safety representatives were of the opinion that the training programmes were sufficient for the home care service personnel. They stated that the programmes made the personnel aware of risks connected to transfer situations and gave practical training in safe work technique.

One of the managers considered the gained awareness of safe work technique and theory combined with practical training the major

advantage of the programme. Another manager pointed out the importance of recurrent training programmes, offering opportunities to repeat and refresh the knowledge over time.

4.2. Supporting Factors for the Use of Safe Work Technique

4.2.1. Working with the individual care receiver in focus

Home care service groups in both towns said that they often used action strategies based on previous experience when meeting a new person who was to receive care. “Well, you listen to the person and judge the whole situation, and different situations in the environment in the person’s home, and then you recognise what has to be done and what is needed” was one comment.

The participants in both groups emphasised the importance of communication and co-operation between home care personnel, managers, the rehabilitation team and other partners in the municipality when putting the care receiver in focus and when formulating plans and goals for each individual. The managers interviewed in both towns described developing and functioning communication and co-operation within their home care organisation. One manager commented, “I think the network is very good and we co-operate naturally between different professions. You never hesitate to use the phone if you want something for somebody...”.

4.2.2. Support in safe work

The personnel occasionally mentioned the need for supervision based on the needs of the individual receiving care. The participants in the focus groups pointed out the importance of instructions based on the individual’s specific functional ability. In these cases it is essential that the entire home care personnel group have received these individual instructions. Besides supervision, the personnel interviewed emphasised the value of having a basic knowledge of patient transfer technique. One participant illustrated this in the following manner: “But if you feel a sense of insecurity

when performing a transfer task, then you tell the unit leader...now we need a briefing about how to transfer this person. And it is important to perform the transfer in the same manner; to perform it in the same way by all of us”.

Both home care service groups emphasised working towards safe work conditions. The safety representative's role in the mutual process was described as follows, “Previously we wouldn't have dared to point out work safety as essential. Now we believe in our safety representative, who has the authority to write things down on paper, and this can be seen as a factor to deal with. People receiving care and their relatives have to be aware of the necessary action to be taken to make it possible for the person receiving care to be able to continue living in his/her own home”. Home care personnel in both towns said that their managers gave them support in their efforts to make work safe by listening and acting when a group complained about problems in their daily work.

4.3. Obstacles to the Use of Safe Work Technique

4.3.1. Practical and personal obstacles

Both home care service groups gave similar descriptions of work situations when it was difficult to use safe work technique. Narrow working spaces and physical obstacles in the home environments made it difficult to use a good and safe work technique, or to use aids or equipment. The wishes of people receiving care and their relatives about ways to solve transfer situations might conflict with safety aspects in the work environment. This can cause dilemmas for the personnel when they try to emphasise the care receiver's right to decide things for him- or herself and at the same time take into account safety aspects. Lack of information about a person's status and abilities when returning home after hospital care was considered an obstacle, as this made it difficult to use techniques adapted to the individual.

4.3.2. Lack of Participation in the Planning Work

In both groups the personnel stated that their participation in the planning of their daily work had been reduced, due to a new computer-based planning system aimed at dividing the work among them. The personnel described how they had lost the overview of the people receiving care within their home care service area. This could cause problems in situations when new and inexperienced personnel were scheduled to help people with specific needs and needed assistance from experienced personnel with specific skills in patient transfer technique.

4.4. Both Supporting and Hindering Factors for the Use of Safe Work Technique

4.4.1. Communication, documentation, sharing information

The home care service groups in the two towns had different routines for reporting and documenting. In the large town the group used a report book, in which important information about the care receivers was written down to be read by all personnel in the group. No specific meetings for information or reporting were scheduled. In the medium-sized town a routine monthly meeting was scheduled to share structured information about the care receivers' status and goals for daily living. Insufficient information about their status and abilities from hospitals or primary health care centres was an obstacle to planning the care receivers' individual needs. This affected the home care service groups in both towns.

Both groups of home care personnel stated that they actively informed each other about the people in their care and their status. Information was often shared in an informal manner during the working day. This can be seen as an example of the attitude to safety culture within the work groups in both towns. The workmates were of the opinion that they knew each other well after having worked together for a long time. They had experience of working in different constellations within the working group and had

a feeling of safety and trust in their relations. “We can exchange colleagues and work in pairs with anyone in the group. But if somebody new comes along, a temporary worker who doesn’t have the knowledge or experience—then it can be difficult”.

4.4.2. Responsibility

All three categories of interviewed persons pointed out the home care personnel’s own responsibility for using safe work technique. Regarding the responsibility for using safe work technique in daily work, the operative managers in both towns commented like this, “Our responsibility is to inform and educate the staff, but the personnel also have their own responsibility. This is a part of the profession, in terms of considering ‘What am I doing? And how?’ This is a shared responsibility”. The home care personnel stated accordantly, “We all have our own responsibility, and we have to take that responsibility, especially after taking part in the training programme!” The safety representative also expressed views on the responsibility for using safe work technique as an individual issue, “You have to perform transfers safely, both in regards of yourself and in regards of the care receiver”.

5. DISCUSSION

The aim of this study was to explore whether home care service personnel used knowledge and skills in transfer technique in their daily work; knowledge and skills they had gained by participating in training programmes, and to identify factors that could hinder and support their use. The results showed that home care personnel tried to use the knowledge and skills they had gained during training in patient transfer technique.

However, factors were identified that obstructed the use of safe work technique, e.g., narrow working spaces and physical obstacles in the home environments. The wishes of people receiving care and their relatives about ways to solve transfer situations might be in

contradiction with safety aspects in the work environment. This may cause dilemmas for the personnel when they try to emphasise the right of the person receiving care to decide about things and at the same time take safety aspects into account. Lack of information about the status of the care receiver when returning home after hospital care made using techniques adapted to the individual difficult. A computer-based planning system was introduced in the home care organisation to facilitate scheduling and dividing work. As a result, the overview of the home care service personnel’s own group of care receivers decreased. The personnel experienced reduced participation in the planning of the work schedule and the division of work within the home care group.

In addition, factors supporting the use of safe work technique were identified. Group or unit leaders and safety representatives played an essential role in helping the personnel to gain awareness of work environment issues and to keep these issues alive in their daily work. Co-operation between home care service personnel, rehabilitation teams and other professions was perceived as essential for keeping the persons receiving care in focus.

The participants in the two home care service groups in this study were positive about their information and documentation routines. Some factors, such as no information about care receivers’ conditions and abilities, and inexperienced personnel scheduled to assist individuals with complex needs, were mentioned as obstacles to the use of safe work technique. Bearing the safety perspective in mind, it is important to identify factors that might influence safety in everyday working situations. Internal and maybe invisible rules used in the work group, and communication and information in a mainly informal manner are such factors related to safety culture.

The findings in the present study are in concordance with studies on the effects of training programmes in transfer techniques. These studies show that such programmes have poor effects as single interventions [19, 21, 26, 27, 28]. Combined with other ergonomic and

organisational actions, however, they may be more effective. The present study indicates what may hinder the use of safe work techniques. The results from this study give us a glimpse of the complexity of the working field of home care service, and point out the necessity of considering various factors when planning, e.g., training programmes in transfer technique.

Kjellberg, Lagerström and Hagberg showed a correlation between safe work technique for the nursing personnel and the patients' perceptions of safe and comfortable transfers [42]. Their findings point out that the transfer skills of health care personnel are also a matter of the quality of care. Accordingly, persons receiving care probably feel a sense of safety and trust when home care service personnel use safe work technique in transfer situations. Furthermore, transfers are often part of the rehabilitation process, in which fruitful opportunities for developing the person's own abilities can be created. Good transfer technique skills are a necessary condition for such opportunities among the personnel.

Working in the home care service is demanding both psychologically [2, 3] and physically [5, 8, 9, 10, 11]. The demands from care receivers and their relatives stand sometimes in contradiction to the regulations and expectations of the organisation, which may result in a feeling of insufficiency among the staff when handling daily situations. Work environment issues and work safety have to be considered when new people are given care.

This study points out the importance of solving work environment issues in co-operation with, e.g., occupational therapists and physiotherapists working in home care services in the municipality. Co-operation makes it possible to formulate adequate plans and goals for each individual, which can guide the personnel in their daily work. Functional training programmes led by the rehabilitation staff within the local work organisation help the home care staff to gain a wider knowledge of what it really means to transfer people. Knowledge about facilitating equipment, and how to use it in daily work, is important in training programmes. Moreover, it is

important to consider, from a safety perspective, how communication and documentation are dealt with within the work groups.

Group or unit leaders and operation managers are responsible for the personnel and their work environment in their home care service groups. Routines for safe work are developed in the municipalities in Sweden, on the basis of directives from the Swedish Work Environment Authority [12, 13, 14]. Safety representatives have an important role to play at the workplace, providing work safety support for the employees [12]. In the present pilot study, the participants described co-operation between the home care service group and leaders, safety representatives and rehabilitation staff. The collaboration was expressed as a natural element in their work organisation. However, there were problems to solve; problems connected with physical surroundings, work organisation, care receivers and their relatives.

When planning and organising work in a home care service organisation, questions such as the following should be asked:

- What can be done to improve the personnel's participation in the planning of their daily work?
- What can be done to improve providing the personnel with information about the condition and abilities of the persons receiving care?
- What can be done regarding adjustments in the home to improve the work environment of both the person receiving care and the home care service personnel?
- What can be done to improve the concordance between the expectations of the persons receiving care and their relatives and the expectations of the home care service personnel regarding a good work environment?

These questions may help managers, planners and other actors in the organisation in their work on developing sustainable and safe working conditions.

Supervision in transfer technique regarding individual care receivers in combination with regularly held transfer technique training programmes can be seen as essential elements of

learning in daily work. In the present study, the participants expressed the value of supervision at individual level as well as basic knowledge gained from training programmes. The managers pointed out the importance of recurrent training programmes to repeat and refresh the personnel's knowledge. An implication that can be drawn from this study is that training programmes may very well be conducted annually, or even every 6 months, combined with supervision in specific individual situations. It is good to focus on practical transfer situations in home care. The practical connections make the training realistic to the participating personnel, being able to connect the elements of training to their own work reality. Thereby the gained knowledge builds a bridge to practical performance in daily work. Suggested implications are in step with approaches of competency-based training [43], which is considered to influence the safety culture connected to patient transfers among nursing personnel.

Methodological Considerations

In this pilot study, focus group interviews were used as a method for investigating the experiences of transfer technique training among personnel in home care services. The choice of this method was based on our previous experiences of focus group interviews as a suitable method for collecting data on the participants' shared experiences. When people have a discussion, a fruitful sharing of thoughts and ideas can take place [36, 37]. In this study, the interviews were performed in groups of six, which may be considered an optimal size for this kind of interview. The moderator has an important role to play as group leader, facilitator and guide for the discussion [38]. The methodology for focus groups is based on a collective understanding of the theme in question, rather than focusing on individual experiences [36]. Individual interviews were held as a complement to the group interviews. Their purpose was to gain a deeper and wider description of how transfer technique for home care personnel are dealt with and perceived by managers and safety representatives.

One limitation of this study is that the interviews were held in only two home care service groups. Consequently, the extent to which the findings can be generalised is limited. Another limitation is the selection of participants, which may have affected the results. One of the criteria was to select workplaces with a functioning continuous training programme in patient transfer technique, which was offered to the personnel. The participants selected were those who had undergone a programme of this kind. The home care service groups both in the big town and in the medium-sized one proved to be good examples of the practical application of knowledge in patient transfer technique gained during training programmes within their organisation. Both groups were stable with a low personnel turnover. Managers and safety representatives had a positive attitude towards participation in the study, which may have influenced the home care personnel's active involvement in the interviews.

6. FUTURE RESEARCH

An increasing and heterogeneous group of people receive care from home care service personnel. Working in people's home environment makes demands on the personnel's skills and knowledge in patient transfer technique. Additional studies are needed for developing risk assessment tools, regarding patient transfer tasks among home care service personnel. Risk assessment can be considered building a base for the use of safe work technique, e.g., for safe transfers of persons receiving care. Studies indicate that training programmes are not effective as single interventions. Accordingly, intervention studies with focus on combining training programmes with interventions at organisational level are of interest. How the safety culture at a workplace affects the opportunities for the personnel to apply their knowledge and skills in the transfer technique they have gained during training programmes is another aspect that should be further explored.

7. CONCLUSION

This study reveals that home care personnel try to use their knowledge gained during training in patient transfer technique. However, there are both obstacles and supporting factors that affect the practical use of their knowledge. The findings in this study indicate the importance of considering both the obstacles and the supporting factors connected with the physical work environment, the people receiving care and their relatives, and the work organisation when planning and developing strategies for safe work technique. Group or unit leaders and safety representatives play an essential role in guiding the personnel to an awareness of work environment issues.

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