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Workplace Health and Safety in the Home and Community Care sector

A literature review prepared for the Home and Community Health Association

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Executive Summary

This literature review was prepared for the Home and Community Care Association. The aim of the literature review is to understand the causes and drivers of workplace injury in home-based health and disability support services. The literature review was based on international academic research, government generated research and reports, reputable consultancy organisations and other organisations such as unions. The time period focused on was 2008 to 2018 ensuring a reasonable scope while focusing on more recent developments (where insufficient research was published within that timeframe the search widened).

Home and community care is unique to other healthcare settings because it takes place outside of institutional settings such as hospitals. The care is also usually carried out by a non-registered health care assistant (HCA) or support worker who operates at a physical distance from the administrative and head office. The HCA works in isolation without immediate back up, in private residences out of sight and distanced from immediate assistance or support (Ayalon, 2012).

Five key issues for health and safety in home and community based care are identified in international research. These are:

- Musculoskeletal disorders
- Environmental exposure
- Emotional stress, fatigue
- Unsafe client homes and neighbourhoods
- Workplace violence

Research indicates that a holistic approach to health and safety culture will be most effective in mitigating these risks. Recommendations to address these risks include aspects such as:

- The physical environment of the client's home and neighbourhood
- The conditions of work
- Provision of cleaning materials and protective gear
- Training in workplace violence, medication and safe use and disposal of sharps
- Systems to provide immediate back up for HCAs should it be required
- Peer support and counselling available
- HCA and client participation in risk assessment and site specific training.

It is noted that in order to provide a positive WHS within home and community based care the way in which care is funded must be considered from a holistic perspective which acknowledges and fully funds organisations to provide supportive and positive environments that protect the health and safety for their employees and clients.

Te Pae Mahutonga framework may provide a useful holistic framework for health and safety that is appropriate for the New Zealand home and community care context.

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1.0 Introduction

This literature review was prepared for the Home and Community Care Association. The aim of the literature review is to understand what the causes and drivers of workplace injury are in home-based health and disability support services. The literature review was based on international academic research and government generated research and reports, reputable consultancy organisations and other organisations such as unions. The time period focused on was 2008 to 2018 ensuring a reasonable scope while focusing on more recent developments (where insufficient research was published within that timeframe the search widened). The search utilised the databases *Scopus, Science Direct and Google Scholar* covering a range of academic disciplines and enabling access to books and book chapters as well as peer reviewed journal articles. There was substantial academic research on health and safety in home and community care with more than 100 articles and reports sourced.

The search for practitioner focused guidelines and reports focused on the relevant government agencies in New Zealand, Australia, the United Kingdom, Canada and the USA, followed by reputable consultancies and other organisations such as unions. These countries were chosen for their similar historic legal backgrounds (Bamber et al., 2010), health funding models and employment relations contexts. They are also convenient sources as they are English speaking countries with generally well developed policy. The 'grey literature' surfaced a number of guidelines and practice guides, although there was not the same extent of information as in the academic research search.

This literature review followed the format of an in-depth literature review akin to a meta-analysis (Timulak, 2009). This type of review focuses not only on the key findings of sources (such as academic research, best practice guidelines), but includes consideration of the methodology used in their research. The benefit of such an approach is to provide greater understanding of how each study came to their conclusions. Such systematic reviews of existing research identify the key issues raised by international research, and the context within which they reach their conclusions, as well as highlighting any areas in which future research could be focused (Bettany –Saltikov, 2012). The systematic review of international research investigating 'what are the causes and drivers of workplace injury in home-based health and disability support services?' identified five key issues relating to workplace health and safety in the home and community care sector arising from this research:

- Musculoskeletal disorders
- Environmental exposure
- Emotional stress, fatigue
- Unsafe client homes and neighbourhoods
- Workplace violence

Two areas that are not well researched or understood are the health and safety of migrant workers, and the incidence and prevention of bullying in home and community care. These areas are worth future research attention as they impact WHS in the New Zealand context.

This literature review begins by outlining the New Zealand context, followed by a summary of the characteristics of home and community care work. The review then introduces the key issues identified internationally in relation to the workplace health and safety (WHS) for healthcare assistants in home and community care. Each 'issue' presents an explanation of the issue, usual causes, possible solutions, practice guidelines available internationally, and a comment on the significance of the issue for New Zealand. Appendices 1 and 2 provide a summary of reports and

guidelines available on these issues with Appendix 1 focused on home and community care and Appendix 2 focused on healthcare generally.

2.0 The New Zealand Context

This section provides a brief summary of the Health and Safety at Work Act 2015, and health and safety in the New Zealand context. New Zealand based research relevant to this literature review is incorporated into the sections identifying health and safety issues for home and community care. This legislative summary is neither legal advice nor opinion.

Legislative background

Worksafe New Zealand regulates health and safety, including inspection and monitoring, and the development of guidelines and education on health and safety in the workplace. This summary reviews key points from guidelines and information provided on the Worksafe New Zealand website, adding commentary on their specific relevance to home and community care as appropriate.

The Health and Safety at Work Act 2015 has been in force since April 2016. The new legislation clarifies clear responsibility for the issue of health and safety in the workplace. Part of this change introduced the concept of the *persons conducting business or undertaking (PCBU).* This term was introduced to broadly cover all aspects of businesses including profit-making businesses, sole traders, government organisations and charities. A PCBU does not include workers and volunteer associations. A further significant change to the legislation is in respect to *who* is covered by the Act. Previoushealth and safety legislation covered *employees*, but the term 'worker' was introduced in the Health and Safety at Work Act 2015 so as to include direct and indirect employees, as well as contractors and volunteers.

Importantly, PCBUs have a duty of care to their own workers, workers that their business influences or directs, as well as others who come into contact with the business such as customers. This means community care providers have a duty of care to their direct employees (eg HCAs), and their customers (clients), and maybe the client's family or visitors. Because the place of work is the client's home, this adds complexity to the application of the legislation which this summary does not address. However, all PCBUs involved in home and community care primarily have a duty of care towards HCAs. As Ravenswood and Kaine (2015) explained in relation to residential aged care, publicly funded care comprises a supply chain of care that originates with the government, their Ministries involved in funding and then government agencies such as ACC and District Health Boards. Consequently, health and safety issues for HCAs in home and community care are the responsibility of HCAs, their direct employer and then the government ministries and agencies involved in funding (outsourcing) the provision of care. This is what is referred to as 'upstream duties'. Their duties are to ensure that "the things that they do or the things that they provide to other businesses do not create health and safety risks" (WorkSafe New Zealand, 2018).

The duty of care of a PCBU is to provide and maintain "a work environment that is without risks to health and safety", which includes a safe physical environment and also a safe psychological work environment. WorkSafe New Zealand refers to a safe psychological work environment impacted by work arrangements such as shifts and long hours, deadlines, work-related stress and fatigue. These factors are emphasised more clearly as both hazards/risks and poor health and safety outcomes in

this current legislation than the previous statute. This requirement is reflected in many of the solutions to issues outlined in following sections around tight timeframes for providing care, long days for HCAs with split shifts, and a lack of rostering for breaks.

Further duties of care include "ensuring the safe use, handling and storage of plant, structures and substances", "providing adequate facilities for the welfare of workers when doing work for your business, ensuring access to those facilities", and "monitoring the health of workers and conditions at the workplace for the purpose of preventing injury or illness of workers when doing care for your business" (WorkSafe New Zealand, 2017c). The issues identified from international research in this literature review all directly relate to these duties of care, and therefore the recommendations given – based on international evidence – will support PCBUs in home and community care to meet their duty of care towards workers.

Further elements of the legislation include the right for a worker "to refuse work, or stop work, if they believe that doing the work could expose them or another person to a serious health or safety risk arising from immediate or imminent exposure to a hazard" (WorkSafe New Zealand, 2017a). However, workers cannot refuse work if the work itself usually involves an understood risk. An example of this in home and community care *may* be, that there is understood to be some physical risk in caring for clients with the moving and bending an HCA has to do. However, if a client is assessed as a 2-person lift and a second HCA was not available, that could be understood as a change to the hazard, and not one that is understood to be usual in the work. The *usual* risk would be if two HCAs were transferring the client.

The opportunity for workers to participate in health and safety systems remains in this current legislation with health and safety representatives encouraged, although participation is not limited to health and safety representatives alone.

Culture and health and safety

Research identifying key issues and trends for health and safety in New Zealand indicate that there is an increasing need to engage with diverse workers as the labour market expands. This includes new migrants, Māori, Pacific Island people, and both younger people and older people (Bohle et al., 2008). Furthermore, the increasing trend for people to be employed on a temporary (ie fixed term, casual, seasonal) basis poses challenges to how organisations address WHS concerns (Bohle et al., 2008). This relates to issues of training, but also fatigue and stress as people work longer hours, and may work non-standard hours such as shift work (Bohle et al., 2008).

Cultural safety in healthcare provision has long been an established part of hospital service and professional education such as nursing and medicine (Wepa, 2005). However, there is little, if any, research that investigates cultural safety or tikanga in relation to health and safety of workers. Prichard (2015) suggests that the Western rule-based model of workplace health and safety is limited, and suggests that cultural change in organisations to a Māori model based on manaakitanga would achieve greater success in health and safety outcomes. Prichard (2015) describes manaakitanga as "the Māori concept of respect, generosity, and care for others". People would take more care and respect with each other because their own mana and status would reflect how they care for and take care of others around them. The concept of manaakitanga contributing to workplace health and safety is in its infancy, at least in Western organisations, but with some examples emerging (see Worksafe New Zealand, 2018). Worksafe has a current strategy 'Maruiti 2025 – Safe Haven' which aims to improve the health and safety outcomes for Māori in the workplace (WorkSafe New Zealand, 2017b).

While specifically targeted at Māori workplace health and safety, improvements in workplace safety for one group are likely to have positive effects for others as well.

Another example of the development of New Zealand based health and safety is the University of Otago's (2016) health and safety framework based on Durie's (1999) Te Pae Mahutonga framework, a holistic model of health and safety that incorporates:

- Te mana whakahaere: autonomy/self-responsibility
- Ngā manukura: health and safety leadership
- Waiora: safe physical environment
- Toiora: healthy lifestyles
- Te oranga: participation in society
- Mauriora: positive health and safety culture

A framework such as this provides the underpinning values that inform practice based policy and could be used in home and community care. Many of these values will be familiar, perhaps differently framed, to providers in home and community care. However, extending the way in which we address workplace health and safety culture supports the creation of a comprehensive organisational approach to a positive health and safety culture.

3.0 Characteristics of Home and Community Care Work

Home and community care is unique to other healthcare settings because it takes place outside of institutional settings such as hospitals. However, in many instances the care is usually carried out by a non-registered[1] health care assistant (HCA) or support worker who operates at a physical distance from the administrative and head office. The HCA works in isolation, without immediate back up, in private residences out of sight (Ayalon, 2012). This also creates more autonomy for the client, family and HCA than when in a hospital setting (Lang et al., 2014). Because of this isolation HCAs are 'largely dependent on their own knowledge and skills to keep them safe' (Hansell, Knaster, & Phillips, 2018, p. 10). This is distinct from a hospital or rest home setting where immediate peer, managerial and registered nurse support is readily available. Increasingly HCAs may be employed by a bureau or labour agency that supplies HCAs to care provider organisations. An HCA in this situation potentially faces greater isolation and risk than an HCA directly employed by the provider (Quinlan, Bohle, & Rawlings-Way, 2015).

The nature of the care setting poses unique challenges for health and safety. To date, research has focused more on identifying the frequency of injury incidences than on identifying the home-care setting and hazards that are different from those in institutional settings (Macdonald, Moody, & MacLean, 2017). Moreover, as the care takes place in a client's personal residence, it is an uncontrolled environment (Amuwo, Lipscomb, McPhaul, & Sokas, 2013; Arlinghaus, Caban-Martinez, Marino, & Reme, 2013; Chalupka, Markkanen, Galligan, & Quinn, 2008; Lang et al., 2014), and therefore standardisation of a clean and safe home (of the client) is not possible with the same measures as a hospital or institutional environment (Craven, Byrne, Sims-Gould, & Martin-Matthews, 2012).

[1] For example, not a registered nurse or other registered health professional.

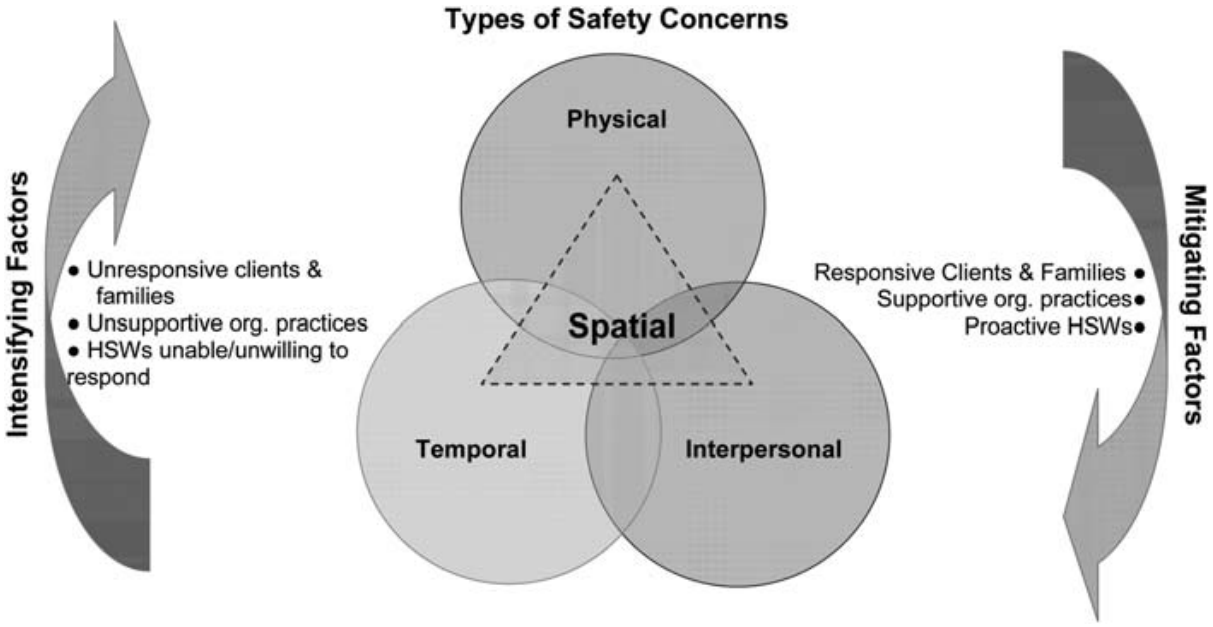
Some argue that the perceived lower status of this care work, due to its location in private homes and isolation, has the effect of HCAs (and others) tolerating hazards that would not be acceptable in a hospital environment (Markkanen et al., 2014). Hazards in a client's home are varied and may include cluttered or unstable walking areas through to violent neighbourhoods (Amuwo et al., 2013; Chalupka et al., 2008).

The lack of available back up also means it can be difficult for an HCA to leave their work and seek treatment in the case of injury or accident (Chalupka et al., 2008). The nature of home and community based care is necessarily mobile (Fitzpatrick & Neis, 2015), with HCAs required to travel from one client to another. This extra dimension to the work exposes workers to driving related hazards, timekeeping pressures as well as issues related to stress, fatigue and lack of time to follow WHS procedures correctly.

The work is complex, and internationally the focus of care work has shifted away from a focus on housework, to personal cares for those who are decreasing in independence (Doniol-Shaw & Lada, 2011). An HCA may have various clients who may require long term health maintenance, be suffering a short-term illness or condition, have a chronic condition requiring long term lifestyle changes, or require end of life care (Arlinghaus et al., 2013; Beer, McBride, Mitzner, & Rogers, 2014; Cloutier et al., 2008). Overall, tasks can vary from cleaning and meal preparation (Amuwo et al., 2013) to personal care. Personal care itself can include daily activities such as washing, dressing, toileting (Amuwo et al., 2013; Arlinghaus et al., 2013) and also health services such as bowel care and wound dressings (Amuwo et al., 2013; Arlinghaus et al., 2013). HCAs work within a complex network of relationships between clients, the client's family, the provider service, other HCAs and potentially other healthcare professionals (Cloutier et al., 2008).

Although it has not always been a focus of WHS research or policy, the work environment – including workplace policy and culture – has a direct impact on WHS outcomes for HCAs. The effect of heavy workloads, rushed schedules, grief at the loss of a client, poor workplace relationships, lack of training and support can directly lead to poor decision making by employees (Andersen & Westgaard, 2015; Lang et al., 2014), and is also connected to poor mental health and physical issues such as musculoskeletal disorders (Cloutier et al., 2008; Faucett, Kang, & Newcomer, 2013). Craven et al. (2012) illustrate this complex relationship in their model of health and safety concerns. This model illustrates the complexity in relation to the spatial (client's home and neighbourhood), temporal (time allocated per client, for driving, time of day etc), interpersonal (clients, managers, team –social, psychological and emotional) and physical (trips, slips, injury, harm to the physical body).

Figure 1. Conceptual Framework of Health and Safety Concerns



Source: Craven et al., 2012, p. 527

At first glance, the relationships depicted in Figure 1 may appear simple however, the intensifying and mitigating factors represent those aspects of organisational culture and relationships with clients and their families that can create a positive safety culture, or undermine good policy and intentions. For example, perhaps there is clear organisational policy on two person lifts, but one HCA calls in sick or has not had the appropriate training. What decision does the HCA make? Do they continue to care for the client, who may not want to wait? Do they refuse to lift unsafely, and report back to their supervisor? Does the organisation support them in these decisions, or might the HCA fear negative consequences such as a reduction in hours? The temporal aspect is around the timing of the care. This could include, as in the previous example, factors such as how HCAs are rostered for two-person clients. However, it is also influenced by funding models which may not sufficiently factor in time and financial resources for full assessments of safety concerns for each client. There also may not be a sufficient buffer in funding models to allow the flexibility for an HCA to refuse to attend to a client when it is unsafe.

When considered in detail, this model incorporates a psychosocial approach to health and safety, identifying both physical hazards, but also the emotional and work demands that can lead to both physical injury but also stress and fatigue amongst HCAs.

4.0 Workplace hazards, injuries and health and safety risks

Research from the USA indicates that the home and community based workforce may experience workplace injury at a rate four times that of the general work population (Hansell et al., 2018). It is also an older workforce, and some USA research indicates that it is a more overweight workforce which could require different approaches to health and safety in the workplace – although this has not been fully investigated in international research (Agbonifo, Hittle, Suarez, & Davis, 2017; Suarez, Agbonifo, Hittle, Davis, & Freeman, 2017; Wipfli, Olson, Wright, Garrigues, & Lees, 2012). Emerging

evidence points to increased chronic illness (diabetes, asthma, arthritis) among family carers (Stacey, Gill, Price, & Taylor, 2018) which may be the nature of the work, or the characteristics of the workforce itself. Research has identified that 17% of caregivers (including unpaid carers) indicate that their health has worsened due to their care responsibilities (Family Caregiver Alliance, 2016).

Another emerging, but little studied issue is the experience of migrant workers. Migrant workers risk facing double the isolation in both the workplace and the community because of their immigration status (Bourgeault, 2015). Issues such as cultural expectations and language proficiency need to be explored as they may impact these workers' understanding of their rights and duties in relation to WHS and may prevent them from reporting risks, hazards and injuries (Hoppe, Heaney, Fujishiro, Baron, & Gong, 2015). A further issue that may prevent migrant HCAs from reporting workplace risks, hazards and injuries is their visa status: migrants may be less likely to report if their visa is dependent on their employment with a specific provider (Fitzpatrick & Neis, 2015). New Zealand research indicates that temporary migrants are more vulnerable than other workers, although this has not specifically addressed HCAs in the home and community care sector (Ministry of Business, Innovation and Employment, 2014; Searle, McLeod, & Ellen-Eliza, 2015; Searle, McLeod, & Stichbury, 2015).

The following sections address each health and safety issue separately. Within each section, the issue will be defined along with the occurrence or frequency with which it occurs. For each issue, usual causes and possible solutions are explained and any international examples of practice based guidelines are identified. The issues addressed are:

- Musculoskeletal disorders
- Environmental exposure
- Emotional stress, fatigue
- Unsafe client homes and neighbourhoods
- Workplace violence

4.1 Musculoskeletal disorders

Defining musculoskeletal disorders & their frequency

Work-related musculoskeletal disorders (MSD) are "defined as an injury of the muscles, tendons, ligaments, nerves, joints, cartilage, bones or blood vessels in the extremities or back" (NORA Healthcare and Social Assistance Sector Council, 2009, p. xii). It may result in acute or chronic pain and injury of various severities in any or all parts of the body. Common outcomes for HCAs are lower back injuries, and shoulder and neck pain (Andersen & Westgaard, 2014). A Swedish study found that half of the participants reported sufficient pain that they would seek medical treatment (Andersen & Westgaard, 2014); another study in the US reported that 5.2% of participants reported at least one back injury per year. This rate was approximately twice that expected among US workers in other industries (Arlinghaus et al., 2013). New Zealand research indicates that back injury, sprains and strains are the most commonly reported work-related injury and illness, closely followed by chronic joint or muscle issues (Ravenswood & Douglas, 2017; Ravenswood, Douglas, & Teo, 2015).

Causes

The usual causes of musculoskeletal disorders, especially lower back injuries are physical movement and force (Agbonifo et al., 2017). One of the most common causes are slips, trips falls and overexertion usually while performing daily tasks (Agbonifo et al., 2017; Andersen & Westgaard, 2014; Hansell et al., 2018; Houston, Young, & Fitzgerald, 2013). However, repetitive movement as part of the daily job tasks for an HCA may also expose the HCA to risk of MSD. Examples of this include bending to clean and over exertion such as transferring clients and one study noted that walking to and from clients' homes was the most frequent ergonomic exposure to MSD, followed by lifting and carrying medical equipment and furniture, walking clients, and moving clients (Agbonifo et al., 2017). The long term impact of repetitive physical work is indicated in one study that found older HCAs may reduce their hours to part-time hours leading to retirement in order to reduce the risk of back injury and tendinitis as their bodies are worn out by the work (Doniol-Shaw & Lada, 2011). This response would most likely lead to under-reporting of risk and injury meaning that organisations may be less aware of the potential risk. Older workers and those who have been providing care for more than a year are more likely to report the physical strain of providing care as "high" (Family Caregiver Alliance, 2016).

Arlinghaus et al. (2013) found, counterintuitively, that the frequency of MSD increased when ergonomic equipment (such as hoists) were used. This may be due to faulty equipment being provided (for example, not maintained well), but also a lack of training and insufficient time or resources to follow procedures (Larsson, Karlqvist, Westerberg, & Gard, 2013). Increasing expectations of care, such as when a client's condition worsens, and a general increasing dependency of clients who remain in their homes, place greater physical strain on HCAs (Lang et al., 2014). HCAs may feel that they are responsible for adapting care and tasks to a client's declining condition (Lang et al., 2014), and do not wish to say 'no' when a client asks them to carry out more than is required (Markkanen et al., 2014). An HCA may not report either risk or injury because of a sense of loyalty to their client (Hansell et al., 2018).

Although physical exertion and slips and falls are most commonly associated with MSD, factors related to the emotional demand of the job (including the client's expectations) and the organisational level of support can contribute to MSD (Cloutier et al., 2008; Faucett et al., 2013; Love et al., 2017). Mental demands, such as having to make decisions under time pressure and dealing with unexpected situations is associated with increased musculoskeletal symptoms (Andersen & Westgaard, 2014). Organisational and policy factors have a significant impact on the mental demands that HCAs face. For example, increased workload and work intensification (eg. carrying out care tasks in shorter time allocations; less time allocated between clients for travel) lead to HCAs experiencing greater demands and stress (Delp & Muntaner, 2011; Doniol-Shaw & Lada, 2011). Mental demands may in part lead to increased MSD because under pressure, an HCA may take fewer pauses in their movements, may not use or incorrectly use an ergonomic device, or may simply rush through their movements (Andersen & Westgaard, 2014).

However, emotional demands also contribute to increased MSD suggesting that the general tension created by mental and emotional demands is a cause of MSD. This is a physical response to the stress of mental and physical demands (Andersen & Westgaard, 2014). Emotional demands may come from organisational factors such as job insecurity and poor work relationships (Cloutier et al., 2008). They are also connected to the nature of the work, and the HCA's sense of loyalty or commitment to their client. A client who does not want to receive care may be reluctant or obstructive, creating greater risk of injury for both parties during personal care and lifting (Faucett et al., 2013). Where there is a high level of trust between the HCA and the client, the HCA may carry out tasks upon the client's request that they would usually assess as high risk; or they may not comply with procedures for lifting,

for example (Love et al., 2017). This is linked with society's pervasive expectation that those involved in direct care work (including professions such as nursing) put their client's health and safety ahead of their own (Dellve & Hallberg, 2008; Delp & Muntaner, 2011).

Solutions

- Ensure that equipment is available, fit for purpose, in working order and regularly checked (Butler, 2018; Love et al., 2017).
- Ensure that HCAs assigned to clients requiring use of hoists and other ergonomic devices have received training in their use, which is frequently refreshed particularly when equipment is upgraded or new standards adopted (Macdonald et al., 2017).
- Include communication training to aid in reporting of MSD risk and incidence; but to also support the HCA in developing positive relationships with their clients to facilitate cooperation (reducing risk) and to support them in maintaining their safety and boundaries with the client (Faucett et al., 2013; Love et al., 2017).
- Include training on exercises that support the back, shoulders, knees and neck in conjunction with manual handling training. This combination has shown to most effectively reduce injury and pain amongst HCAs (Macdonald et al., 2017).
- Ensure that rostering and scheduling is managed around the level of client need (Czuba, Sommerich, & Lavender, 2012); and that sufficient time is allocated for client care and for breaks between clients in order to reduce the risks associated with HCAs needing to rush to complete assigned care, leading to insufficient rest time.

Practice Guidelines

<u>Appendix 1:</u>

3. A guide to working safely in people's homes

5. Home and community health worker handbook

8. Home healthcare workers: How to prevent musculoskeletal disorders

15. Supporting people to move at home: Practical tips for carers and support workers

16. Supporting people to move at home: Guide for Managers

<u>Appendix 2:</u>

4. A handbook for workplaces: Transferring people safely: Handling patients, residents and clients in health, aged care, rehabilitation and disability services

6. Patient handling in small facilities: A companion guide to handle with care

8. MSI risk assessment and control for client handling

13. Workforce health and wellbeing framework

17. Guidelines for nursing homes: Ergonomics for the prevention of musculoskeletal disorders

Significance of the issue

MSDs are well known negative outcomes of community care work. The physical nature of the job and its risk for musculoskeletal disorders is well established in international research and practice guidelines. Some work has been done on manual handling guidelines in New Zealand (see Appendix 1). Further research identifying how well organisations in New Zealand staff two-people clients, check ergonomic equipment and provide training for HCAs would be beneficial.

The psychosocial dimensions of health and safety in relation to MSD are now recognised. The impact of stress and fatigue on physical injury is important considering New Zealand's health and safety legislation which specifically addresses these factors. Therefore, a greater understanding by organisations of the complex relationship between workload, funding models for client care, rostering sufficient time for travel and breaks between clients, and workplace health and safety is important.

Furthermore, identifying best practice in community care in supporting HCAs in decision making, reporting, and in managing the client-HCA relationship to ensure that HCAs have the resources to follow WHS procedures would also be useful.

4.2 Environmental exposure

Environmental exposure and its frequency

As established earlier, home and community care is distinct from institutional settings as the care takes place in clients' private residences. The challenges in this environment are related to less control over the physical environment, including cleanliness, physical space, safety of the building; and the availability of safety and protection equipment compared to in a hospital, for example (Amuwo et al., 2013; Arlinghaus et al., 2013; Lang et al., 2014). Standardisation of a clean and safe home cannot be measured or achieved the same way as in a hospital environment (Craven et al., 2012). HCAs can therefore be exposed not only to unhygienic situations, but may also be exposed to chemicals through cleaning products that are not provided by their employer and they may not have sufficient instructions or a workspace conducive to their safe use. Some studies have shown that there is increasing long-term illness among community HCAs such as respiratory illness (Agbonifo et al., 2017; Suarez et al., 2017) and dermatitis (Nichol, McKay, Ruco, & Holness, 2018) that may be linked to chemical exposure. Nichol et al.'s (2018) Canadian study found hand dermatitis in 18% of participants, which is higher than that of the general population, although lower than in hospital settings. However, there is little research that measures the incidences or frequency of chemical exposure.

A particular chemical, and safety issue, which is under-researched is the exposure to chemicals via client smoking (Agbonifo et al., 2017). This is not only a chemical exposure risk, but also a safety risk with international research pointing to dangerous situations such as clients smoking while on oxygen machines (Markkanen et al., 2014).

Furthermore, challenges related to the context of community care include increasingly dependent clients with more complex care needs. This has, according to international research, led to a shift in the work of community HCAs from a housework focus to personal care focus (Doniol-Shaw & Lada, 2011). Increasingly this involves skilled personal care including health services such as bowel care and wound dressings (Amuwo et al., 2013; Arlinghaus et al., 2013). HCAs may therefore be exposed to disease spread via bodily fluids such as blood, faeces and urine. Research indicates that nurses more

commonly handle sharps and dressings in homecare. However, when HCAs use sharps they are more likely than registered nurses to experience needlestick injury. (Lipscomb et al., 2009). New Zealand research in a hospital setting indicates that needlestick injuries are often under-reported (Fullerton & Gibbons, 2011). This may also be the case in home and community care.

Causes

Biological exposure can occur when administering mouth treatment, vaginal/rectal suppositories, nebulizers and inhalers, urinary catheterisation, and changing dressings (Agbonifo et al., 2017). HCAs can be exposed to saliva, sweat, urine, faeces, vomit and other bodily secretions through personal cares such as toileting and washing, but also, for example, in cleaning client's bathrooms (Amuwo et al., 2013). Chemical exposure occurs during cleaning, but could include client smoking (Markkanen et al., 2014) and exposure to drug residue from dispensing medications (Agbonifo et al., 2017). Gershon et al. (2012) also identified mould and fungus in the home as biological hazards.

Chalupka et al. (2008) identified home healthcare settings as higher risk for sharps injuries than other settings. This is not only when an HCA administers care that requires needles but could be from the client's self-administered medication (Chalupka et al., 2008). While overall there is little known about sharps in the homecare environment, Markannen et al. (2015) found that providers of care (ie HCAs and registered nurses) usually followed safe practices, but clients may not – reusing sharps to save costs, and not disposing of needles appropriately - therefore causing hazards for HCAs and care professionals who enter the client's home environment. Other causes of puncture wounds included non-compliance with standardised procedures, a weak safety climate and mandatory overtime as well as 'household related stressors', and travel (Gershon et al., 2009). This suggests that, as indicated above, organisational factors around time, resources, training and support can impact on how an HCA makes decisions around safety procedures (Andersen & Westgaard, 2015; Lang et al., 2014).

Solutions

- HCAs should be provided with cleaning fluids, in a portable case if required, or each client be provided with cleaning equipment required to be used by the HCA. Where possible, low-allergen cleaning products should be provided to reduce respiratory illness and dermatitis (NORA Healthcare and Social Assistance Sector Council, 2009; Suarez et al., 2017).
- Regular training on chemical use, and how to do this safely in the *home environment.* This should include, for example, ratios of cleaning fluid to water and practical problem-solving examples (Suarez et al., 2017).
- Ensure adequate safety gear is easily accessible to HCAs and is provided by the organisation (Agbonifo et al., 2017).
- Training should include aspects such as blood and body fluids exposure (Amuwo et al., 2013).
- Include in WHS plan for each client an assessment of where sharps may originate and ensure that secure sharps disposal is installed in the client's home, and that clients have ready access to safe needles (Chalupka et al., 2008; Markkanen et al., 2015). This assessment could identify risk of infection i.e. communicable disease present in the client (Markkanen et al., 2014).

- Ensure that HCAs who attend clients with needle usage (self-administered or otherwise) first have specific WHS training in handling needles including the need for reporting injury (Gershon et al., 2009; Lipscomb et al., 2009).
- Teach clients about sharps safety and disposal (Markkanen et al., 2014).

Practice Guidelines

Appendix 1:

12. Home healthcare workers: How to prevent exposure in unsafe conditions

14. Home healthcare workers: How to prevent needlestick and sharps injuries

Appendix 2:

1. Cytotoxic Drugs and related waste. A Risk management guide for South Australian Health Services

3. Guide for handling cytotoxic drugs and related waste

5. Exposure to human blood/bodily fluids

10. Managing the risks of sharps injuries

16. Personal protective equipment for health care workers who work with hazardous drugs

Significance of the issue

Issues of environmental exposure are well researched in institutional environments, but less researched in home and community care situations. The risk of exposure to chemicals and biological hazards is one that could lead to work-related physical injury and illness. These risks should be monitored on an industry basis, particularly if the tasks required of HCAs becomes more complex, and action taken to mitigate these risks. Sharps injuries are under-reported in hospital settings. Little is known about exposure for registered and enrolled nurses and HCAs in home and community care, especially in New Zealand. Therefore, while the risk of sharps injuries may be small, it is unknown and further monitoring and investigation into the occurrence of sharps injuries in home and community care in New Zealand is recommended.

4.3 Emotional stress, fatigue

As WorkSafe New Zealand (2017d) identifies, stress is different to 'challenge': challenge may mean a temporary increase in workload or a new task or skill to be learnt. Stress is when the challenges exceed the individual's capacity to respond and can therefore create negative consequences. Stress occurs when individual and organisational resources are insufficient to meet the challenges. Negative consequences include anxiety, depression, poor physical health and personal relationships. In workplaces where work-related stress and fatigue is common there is evidence of lower productivity and staff morale.

However, there is no consistent agreement within the international research about the frequency of emotional stress and fatigue among HCAs in home and community care. Butler (2018) suggests that while only a minority experience it, it is a significant minority. This is similar to New Zealand research which found that stress was the third most common work-related illness amongst surveyed HCAs (Ravenswood & Douglas, 2017). The same survey found that 11.5% of HCAs who had suffered at least one workplace injury or illness in the previous year identified fatigue as the cause (Ravenswood & Douglas, 2017). Norwegian research found that chronic stress and exhaustion are common amongst home and community care HCAs (Andersen & Westgaard, 2014). Alarmingly, studies of migrant HCAs in Israel indicate as many as a quarter felt that their life was not worth living – pointing to an increased experience of stress amongst migrant HCAs who may feel isolation and lack of support both at work and in their social life (Ayalon, 2012). Geiger-Brown, Muntaner, McPhaul, Lipscomb and Trinkoff (2007) note that the mental health of HCAs is seldom considered. Indeed, Evesson and Oxenbridge (2017) note that there is little focus on *reducing* job stress for HCAs in home and community care.

Causes

A primary cause of emotional stress and fatigue among HCAs is high workloads which results in the intensification of working. The nature of the work, which necessarily revolves around key points in the day a client may need care, could mean that some HCAs work very long days. Whilst the total hours may not exceed a 'standard' work day the hours worked may be split across a 12 hour span (Delp & Muntaner, 2011). Other aspects of the work often include insufficient time allocated for care needs so that HCAs constantly feel rushed to finish client care within an allotted time (Doniol-Shaw & Lada, 2011) and there may not be sufficient time rostered for breaks or safe and reasonable travel between clients (Delp & Muntaner, 2011).

Interpersonal relationships, while also a potential source of pride and satisfaction for an HCA, can at times also cause stress and fatigue. Most commonly this may be a client who is resistant to a change in their independence and care (Beer et al., 2014) or a client who is difficult to manage interpersonally (Markkanen et al., 2014). From another perspective, an HCA's dedication to their work and client can mean that being unable to meet the care needs of a client (through lack of time, resources etc) can lead to depression (Kim, Noh, & Muntaner, 2013). Furthermore, the demands of multiple tasks, multiple locations, multiple clients as well as the responsibility of having to work and make decisions alone can create cognitive overload leading to stress and fatigue (Andersen & Westgaard, 2014).

The experience of stress and fatigue varies between HCAs. For instance, issues of workload and lack of support may be greater for migrant HCAs who can also be isolated in the community because of their immigration status (Bourgeault, 2015). Issues such as cultural expectations and language proficiency may also impact their experience of workplace stress and fatigue (Hoppe et al., 2015). Despite increasing numbers of migrant HCAs in community care, little is known about their psychosocial environment and health and safety outcomes (Hoppe et al., 2015).

A further aspect of interpersonal relationships is the experience of grief and loss when a client dies or moves into institutional care. The grief and loss experienced may be compounded by the potential loss of income (Tsui, Franzosa, Cribbs, & Baron, 2018). HCAs in community care do not have the same opportunities to share grief and loss as might happen in a hospital or residential aged care home, for example.

Isolation and lack of support are key themes emerging from research into home and community care. Part of this sense of isolation arises from the expectation of carers (both family carers and paid carers)

to prioritise their client or family member's care ahead of their own. The perception that selfcare is left to the carer or HCA creates a burden in their care work (paid or unpaid) and can then lead to the experience of stress and depression (Kapari, Addington-Hall, & Hotopf, 2010; Lilly, Robinson, Holtzman, & Bottorff, 2012). The physical isolation of the work can also lead to a lack of support when HCAs may face "stressful, threatening or traumatic incidents" (Quinlan et al., 2015, p. 100).

Solutions

- Rostering to ensure that there is not an overload of work, both in the sense of too many hours, but also to allow for breaks between clients and to avoid rushing through client care and adequate time for travel (Andersen & Westgaard, 2014; Beer et al., 2014; Delp & Muntaner, 2011).
- Rostering to avoid long days, such as the day beginning at 6.30am with client care, a gap in the afternoon, and then hours in the evening (Delp & Muntaner, 2011).
- Rostering for regular and predictable hours (Doniol-Shaw & Lada, 2011).
- Communication training to support HCAs in dealing with reluctant clients, but also in managing peer and management relationships (Andersen & Westgaard, 2015; Beer et al., 2014).
- Provide training on grief as well as access to counselling (such as an EAP programme), peer support or frequent supportive contact from a supervisor (Butler, 2018).
- Provide regular training on how to identify and respond to declining client and environmental conditions, including when to report declining conditions to a supervisor or assessor (Lang et al., 2014; Laparidou, Middlemass, Karran, & Siriwardena, 2018).

Practice Guidelines

Appendix 1:

4. A guide to reducing and managing job stress for home care and support workers in the aged and disability care sectors

9. NIOSH hazard review: Occupational hazards in home healthcare

Significance of the issue

The Home and Community Support (Payment for Travel Between Clients) Settlement Act 2016 and the arrangements for Guaranteed Hours should mean that, within the context of client care, regular hours should be more common for HCAs. Consequently, although this is a significant cause of stress and fatigue identified in international research, we should expect it to decrease following changes in regulation in New Zealand.

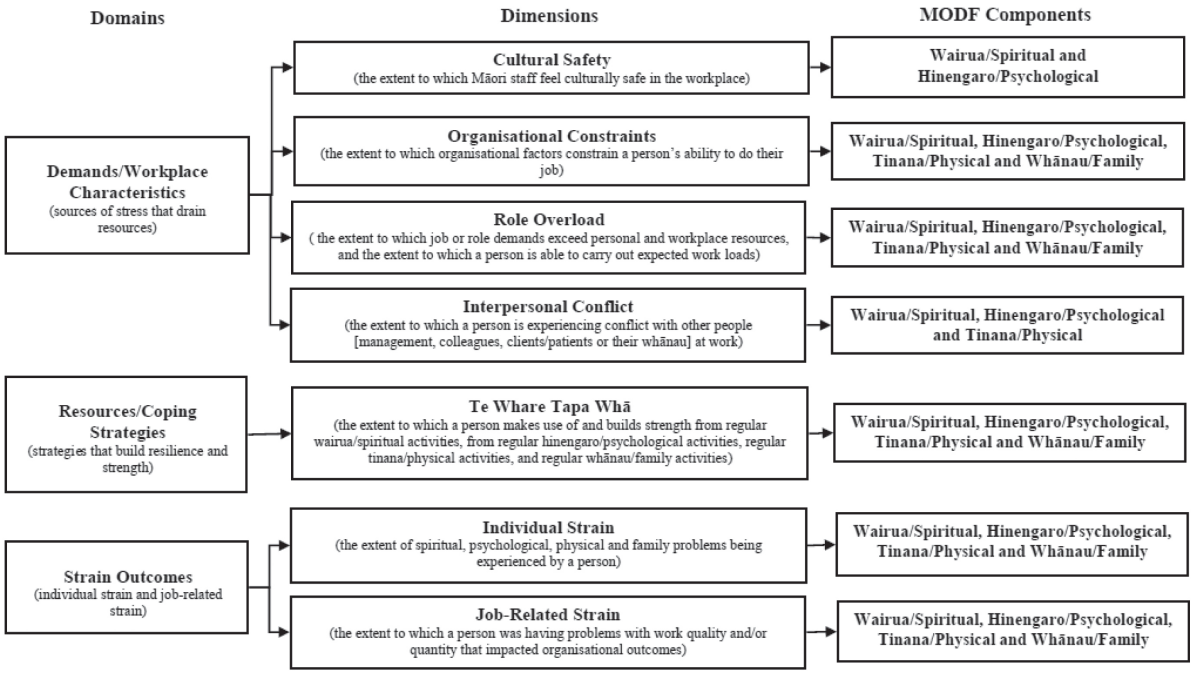
Support and training to deal with grief or emotional stress may be considered a requirement under the Health and Safety at Work Act 2015 to mitigate the hazards at work leading to workplace stress. Given the significant, but perhaps minority, experience of stress and fatigue amongst HCAs, understanding how often this is a concern in New Zealand would be advantageous.

Managing grief and loss when a client dies or leaves community care is under-researched, including the complex nature of the loss which may be the personal relationship with a long (or shorter term)

client, as well as the potential loss of hours of work and financial stability (Tsui et al., 2018). As there is little international research on best practice in mitigating emotional stress, fatigue and grief, seeking best practice examples in New Zealand could provide important information on this issue.

Seeking further best practice examples in New Zealand is particularly important given emerging research indicating that workplace stress is experienced and dealt with differently by Māori than non-Māori (Stewart & Gardner, 2015). Stewart and Gardner's (2015) research also points to workplace stress for Māori caused by a lack of cultural safety, and sometimes discrimination. Brougham and Haar (2013) also found that the safe expression of cultural identity, and the ability to work according to cultural values led to lower rates of depression amongst Māori. Similarly, a sense of isolation and lack of support when in non-Māori organisations can lead to increased workplace stress (Stewart & Gardner, 2015). Their model of workplace stress would be worth considering in home and community care in order to best understand and mitigate the experiences of workplace stress among Māori HCAs. Figure 2 illustrates Stewart and Gardner's (2015) model. MODF refers to 'Māori Outcomes Dimension Framework'.

Figure 2. Mahi Oranga Framework – Workplace Stress



Source: Stewart & Gardner, 2015, p. 82

4.4 Unsafe client homes and neighbourhoods

Research into unsafe client homes and neighbourhoods primarily focuses on identifying potential hazards and strategies to mitigate those. It does not quantify the frequency that HCAs may have clients in substandard or unsafe housing. International research does note that working in a client's home is vastly different to institutional settings with HCAs often working in surroundings that would not be acceptable in an institutional setting (Lang et al., 2014).

Unsafe homes can also refer to risk from the client and their family, however that is included in the following section on workplace violence. For the purposes of this report, unsafe client homes and neighbourhoods are homes that may be unhygienic (lack of cleaning) or unsafe buildings, for example rotting door steps (Lang et al., 2014). Unsafe neighbourhoods usually refer to physical safety from violence – but could include the risk of theft from HCAs' vehicles as one example, or unsafe roads (high speed rural roads, other busy roads, poorly maintained roads etc). It could also include the presence of unrestrained pets that may cause harm in the client's home and/or neighbourhood.

Causes

A major cause of unsafe client homes is due to the client being unable to keep up housework and maintenance of their home (Canton et al., 2009; Lang et al., 2014). In the USA, Markkanen, Galligan and Quinn (2017) point to poverty of the client leading to unsanitary conditions from a lack of clean water, electricity and heating. This may also contribute to a lack of cleaning products being available. Dangerous or unrestrained pets are also a hazard that may be faced by HCAs regardless of the physical environment of the home or neighbourhood (Agbonifo et al., 2017).

Solutions

- Additional support should be arranged for clients to access housework assistance, social welfare payments, building maintenance and so on.
- WHS assessment for clients should include hazards specific to the physical environment of the home and neighbourhood and the level of 'squalor' and physical safety of the house (Lang et al., 2014).
- Client plans should include agreed responsibilities of the client for pets (Agbonifo et al., 2017).
- Provide high-visibility vests and parking/road safety guidelines for HCAs visiting clients on high-speed, busy or rural roads.

Practice Guidelines

Appendix 1:

2. When community workers come to your home… Your home is a 'workplace' for community workers who visit and assist you

6. Make your home safe for care workers

13. Home healthcare workers: How to prevent driving-related injuries

Significance of the issue

The physical isolation of the HCA in the client's home and neighbourhood is an important consideration. The risks that are present may be less predictable than in institutional settings. It would be hoped given factors such as the universal pension, and access to social housing and support, that some of the issues identified internationally would be less common in New Zealand. It may be however, that in rural settings, 'squalor' is more likely as clients have less access to social support.

Given New Zealand's geographical context and increasing natural phenomena such as earthquakes and extreme weather events, it would be wise to consider how these affect the safety for HCAs when travelling, and when in a client's house and neighbourhood. Furthermore, road safety (including safe parking) must be considered especially when the client's residence is on a high speed, busy or rural road.

4.5 Workplace Violence

Workplace violence can be defined as "actions and incidents that may physically or psychologically harm another person" (Melbourne Health & Northeast Health Wangaratta's Aggression Prevention and Management, 2009, p. 2). Examples of physical violence include hitting, pushing, slapping and the threat of violence. Verbal abuse includes name calling, yelling, swearing, threatening and prejudicial comments (Geiger-Brown et al., 2007; Melbourne Health & Northeast Health Wangaratta's Aggression Prevention and Management, 2009; Nakaishi et al., 2013). Workplace violence may be inflicted by clients, a client's family members or colleagues and managers. Abuse from clients is the most frequent form in the home and community care sector (Geiger-Brown et al., 2007).

Another aspect of workplace violence is sexual abuse and harassment. Sexual abuse is largely under-researched and not well understood in home and community care (or other) settings. However, Nakaishi et al. (2013) usefully distinguish between sexual harassment (touching, rubbing, and sexual comments) and sexual violence (threat of sexual violence, forced sexual contact, rape) which enables a better understanding of these types of violence. Ultimately though all experiences of workplace violence can lead to work-related mental ill health such as depression (Delp & Muntaner, 2011).

Estimates of frequency indicate that physical, verbal and sexual abuse is not highly reported (Campbell, McCoy, Burg, & Hoffman, 2014; Zelnick, 2015). However, it is apparent that 92% of HCAs might experience some form of abuse from clients over their career (Campbell et al., 2014). Markannen et al.'s (2014) research suggests that HCAs may experience some form of workplace violence on a daily basis. Verbal abuse is more common (Geiger-Brown et al, 2007; Hanson, Perrin, Moss, Laharnar, & Glass, 2015) than physical or sexual abuse. New Zealand research indicates that over two thirds of HCAs in home and community care experience verbal abuse, and nearly half experience physical abuse at some point (Ravenswood & Douglas, 2017). Sexual harassment and assault is understudied but does occur for HCAs – possibly up to 30% of women in community care experience sexual harassment (Nakaishi et al., 2013).

Causes

The key concerns for workplace violence in home and community care appear to be a lack of risk mitigation. Research suggests that organisational factors increase the risk of workplace violence occurring. For example, when there is less time available to provide care (Galinsky et al., 2010) – which may be linked to violence being more likely to occur during personal cares such as toileting (Green & Ayalon, 2017). A lack of immediate back up has also been identified as key to the frequency of workplace violence – HCAs often work alone, and in isolation in a client's home compared to institutional settings where supervisors and colleagues are immediately available to assist (Galinsky et al., 2010). Job demands also increase the incidence of physical and verbal abuse (Ravenswood, Douglas, & Haar, 2018).

Organisational support, or a lack of it, is key in understanding and addressing workplace violence as some groups appear to be more vulnerable: workplace violence may occur more frequently for temporary workers (Galinsky et al., 2010) and migrants (Green & Ayalon, 2016). This may be because they receive less training or are more isolated from their employer because of their temporary or migrant status. They are less likely to report incidences of violence than permanent, non-migrant HCAs in home and community care (Galinsky et al., 2010; Green & Ayalon, 2016).

A further factor is organisational culture around the expectation of care for the client. Research suggests that healthcare workers and HCAs in home and community care will tolerate workplace violence more because of their perceived duty of care to prioritise the needs of the client (Byon, Storr, & Lipscomb, 2017; Nakaishi et al., 2013; Zelnick, 2015). This is further compounded by a greater incidence of workplace violence among clients with cognitive impairments such as mental illness and dementia (Galinsky et al., 2010; Geiger-Brown et al., 2007; Green & Ayalon, 2017), where violence such as scratching, bruising may occur accidentally (Byon et al., 2017). In these situations, training and support is essential to ensure that HCAs have the knowledge and resources to reduce the risk of violence (e.g. managing the client's behaviour) and how to respond should it occur.

Solutions

- Specific training on violence prevention should be regularly provided (McPhaul, Lipscomb, & Johnson, 2010). This could include "identifying warning signs of violence, safety planning, assertive communication, conflict resolution, de-escalation of conflict and self-care" (Hansell et al., 2018, p. 10).
- Communicate expected behaviour and policy to clients and their families (McPhaul et al., 2010).
- Clients who pose greater risk of violence should be visited in pairs, or with a security escort or supervisor (McPhaul et al., 2010).
- HCAs should be provided with means to communicate immediate need for support, such as a cellphone or personal alarm (Canton et al., 2009).
- HCAs should be supported to shorten, abandon or decline the visit (McPhaul et al., 2010) if threatened with violence or they feel unsafe.
- Change client's care schedule to a safer time of day (McPhaul et al., 2010).
- Training reduces physical and verbal abuse as evidenced by the reduction in reported incidents (Ravenswood et al., 2018).

Practice Guidelines

<u>Appendix 1:</u>

3. A guide to working safely in people's homes

5. Home and community health worker handbook

9. NIOSH hazard review: Occupational hazards in home healthcare

10. Home healthcare workers: How to prevent violence on the job

<u>Appendix 2:</u>

2. Prevention and management of aggression in health services

7. Take care: How to develop and implement a workplace violence prevention program

14. Work smart, work safe: Combating violence against care staff

15. Violence occupational hazards in hospitals

18. Guidelines for preventing workplace violence for healthcare and social service workers

19. Managing the risk of workplace violence to healthcare and community service providers: Good practice guide

Significance of the issue

More information is required on the frequency of physical, verbal and sexual violence for HCAs. It appears that at least half of all HCAs will experience workplace violence in some form over their career. They are more vulnerable because they work in a client's home with less control over the environment and a lack of immediate back up. Guidelines for health and safety in this sector should address workplace violence, and include clients and their famillies' responsibility and expected behaviours.

5.0 Conclusion

A systematic review of international research identified that there are five key areas of concern for WHS in home and community based care:

- Musculoskeletal disorders
- Environmental exposure
- Emotional stress, fatigue
- Unsafe client homes and neighbourhoods
- Workplace violence

Although the research focuses on HCAs, these issues apply to any person who provides direct care or service to the client, including RNs and ENs. A common theme that connects these WHS issues is the environment in which care takes place. The physical workplace is a private residence, in physical isolation from the employer and other colleagues. However, the psychosocial work environment is a crucial factor in reducing risk of injury, illness and harm in home and community based care.

Craven et al.'s (2012) conceptual framework helps understand the complex relationships that underpin WHS in home and community based care. They identify not only the physical workspace, but interpersonal relationships and temporal factors. Interpersonal relationships can be a source of support, such as supportive managers, supervisors and colleagues. However, they can be a source of negative stress such as pressure from client's family to provide care, violence from client and family towards the HCA or nurse, and an HCA's fear of reporting risk or injury to an unsupportive manager. Providing a positive, collegial workplace environment and supporting HCAs in communication and maintaining safe boundaries with clients and their families can mitigate not only the risk of emotional stress and workplace violence, but also the risk of MSD.

Training is crucial for prevention and mitigation of all of these WHS issues. Training also requires time, and funding to provide the training as well as the paid time at work for HCAs (and others) to complete

training. Ideally training will encourage participation and draw on HCAs' own experiences so that it builds their confidence in identifying risks and hazards, and taking action to mitigate or avoid them. Where possible and appropriate, WHS training should include the client and their family. Training areas should include communication, maintaining boundaries, and dealing with grief. Further to this, counselling should be made available to HCAs (and others) to manage the emotional stress involved in care work.

Craven et al. (2012) also refer to temporal factors. These can be factors such as how much time is allocated per client for care, if breaks for HCAs are rostered, how travel time is accounted for in rosters, as well as the length of the work day for HCAs. Rushing to complete client care within tight timeframes contributes to increased risk of MSD, environmental exposure, workplace violence, lack of reporting of unsafe client homes and situations, and increased emotional stress and fatigue. It is crucial, therefore, that this aspect of home and community care is incorporated into WHS assessment. Furthermore, a full health and safety assessment of a client and their home including factors such as: the physical building, the client's behaviours and health, the client's family and pets, the neighbourhood, availability of ergonomic equipment, identifying the need for two HCAs to attend a client, and identifying training is needed. This type of assessment requires considerable time and responsibility and would fall to the person who has responsibility for devising the care plan – usually an RN. The pressure to provide a safe environment without good support and resources may well contribute to increased emotional stress and fatigue for the person in this role.

Underpinning WHS in home and community based care is, of course, the funding model that allocates resources to care providers (Cortis, Macdonald, Davidson & Bentham, 2017). Funding models may underestimate the time it takes to provide care, in order to reduce the cost of care provision. Moreover, it may also not include elements such as training (including paid time), missed care due to health and safety concerns, adequate time between costs. Therefore, in order to provide a positive WHS within home and community based care the way in which care is funded must be considered from a holistic perspective which acknowledges and fully funds organisations to provide supportive and positive environments that protect the health and safety for their employees and clients.

6.0 Creating a Positive Health and Safety Culture in the Home & Community Care Sector

The key characteristic that differentiates home and community care from other care provision is that it is situated in the client's home and neighbourhood. Consequently, the HCA will face a unique environment with each client that they attend. Furthermore, the client's home environment may change unpredictably, including having the presence of the client's friends and family members or pets. HCAs work in physical and social isolation from their employer.

Many HCAs are the primary visitor to some clients' homes and may be the first person to identify hazards, or changes to existing hazards. The ability of HCAs to report these issues is a positive contribution to the overall wellbeing and care of both the HCA themselves and the client. Home and community care HCAs need to be able to make judgements on the risks and hazards to their own health and safety, to be able to make those decisions in relation to the care of their client, and to feel supported and valued in reporting those decisions. This complex work environment requires a supportive organisational culture that recognises the autonomy and responsibility of HCAs as well as

the demands of physical and social isolation and therefore provides the training and resources that equip HCAs to make safe decisions in changing and unique situations.

A positive health and safety work culture needs to be fully resourced. Training is one component and is essential to both assessing and reporting hazards, but also so that HCAs can mitigate risks, and successfully navigate difficult situations, for example, threatening behaviour and violence. Training can also encourage peer support, which decreases isolation and creates a supportive organisational culture. In addition, training can draw on practical examples from HCAs' own on the job experience, to create discussion points and possible solutions worked out in peer groups (Palesy & Billett, 2017). This encourages participation, peer support, and utilises actual situations HCAs have faced meaning that they are better prepared to make safe decisions in their daily work. It also acknowledges and respects their experience, skills and knowledge. A possible outcome from this approach is that the HCA feels more confident in their ability and knowledge, and is more likely to be confident in making safety conscious decisions, and reporting risks and hazards (Dellve & Hallberg, 2008; Gong et al., 2009; Larsson et al., 2013; Palesy, 2018; Palesy & Billett, 2017).

New Zealand legislation requires worker participation in health and safety. This does not need to be limited to 'traditional' health and safety committees but could be used in all aspects of a positive healthy and safe culture such as training (as outlined in the previous paragraph) and risk assessment. Clients and their families could also be involved in some training sessions (Palesy, 2016) thus emphasising the importance of a healthy and safe environment for all parties. Involving both the client and HCAs in risk assessment for a new client (or refreshed risk assessment) meets ideals of participation, but also reinforces the mutual responsibilities of client and HCA. It encourages a positive relationship between client and HCA at the same time as providing information and training to the client.

The Te Pae Mahutonga framework was outlined at the beginning of this literature review (Durie, 1999; University of Otago, 2016). This framework provides a New Zealand centred approach for health and safety, but also encourages a holistic approach to health and safety that is considered best practice internationally and meets New Zealand regulatory components. The following recommendations identify which aspects of Te Pae Mahutonga are addressed in each recommendation as an example of how this could be used in home and community care:

- Te mana whakahaere: autonomy/self-responsibility
- Ngā manukura: health and safety leadership
- Waiora: safe physical environment
- Toiora: healthy lifestyles
- Te oranga: participation in society
- Mauriora: positive health and safety culture

Recommendations

1. Value the HCA and their decisions (Te mana whakahaere, Ngā manukura, Te oranga)

- Initiatives that encourage risk and hazard reporting and reward healthy and safe behaviours (Hansell et al., 2018).
- Clear policy that supports HCAs requesting immediate advice or assistance (Galinsky et al., 2010; Quinlan et al., 2015).

- Clear policy that supports HCAs declining care if they judge the situation to be unsafe including transferring clients (Butler, 2009), without negative consequences for the HCA (Fitzpatrick & Neis, 2015; Hansell et al., 2018).

2. Holistic risk assessment (Te oranga, Waiora, Toiora, Mauriora)

- Clear policy that involves clients in risk assessment and acknowledges client involvement in a healthy and safe care environment (Lang et al., 2014).
- Risk assessment conducted for each client, and to include client specific factors such as smoking, medications, use of sharps, known to be aggressive (Agbonifo et al., 2017; Lang et al., 2014).
- Risk assessment of the client's home and neighbourhood including neighbourhood safety, physical hazards (such as spatial elements, squalor, poor repair) specific to each client's home (Agbonifo et al., 2017; Lang et al., 2014).
- Risk assessment should include organisational factors such as rostering for breaks, regular hours and avoiding long working days (Delp & Muntaner, 2011).
- Risk assessments should include identified possible solutions and back up plans for the HCA to follow (Quinlan et al., 2015).

3. *Healthy and safe physical work environments (Waiora, Mauriora)*

- Provision of safety gear, including cleaning equipment and chemicals, safe sharps disposal, gloves (Chalupka et al., 2008; Markkanen et al., 2015).
- Include client responsibility for factors such as tying up pets, refraining from pets and so on (Agbonifo et al., 2017).
- Provision of hi-vis vests, torches and other appropriate transportation safety equipment particularly for HCAs using rural roads to visit clients.

4. *Regular and practical training (Te mana whakahaere, Toiora, Te oranga, Mauriora)*

- Regular training, including refreshers, that draws on HCA's actual experiences, and encourages group participation and independent decision making (Palesy, 2018; Palesy & Billett, 2017).
- Site and client specific training for HCAs prior to their first visit to a client, ideally involving the client (Lang et al., 2014).
- Training on workplace violence: identifying warning signs of violence, assertive communication, conflict resolution, de-escalation of conflict (Hansell et al., 2018; McPhaul et al., 2010).
- Include training on safe sharps disposal, medications and identifying and dealing with declining client health (Gershon et al., 2009; Lipscomb et al., 2009).
- Training on maintaining positive client relationships and professional boundaries that respect the HCA's health and safety (Andersen & Westgaard, 2015; Beer et al., 2014; Lang et al., 2014; Laparidou et al., 2018).

5. *Care and support for healthy and safe HCAs (Ngā manukura, Mauriora)*

- Provision of cellphones or personal alarms so that HCAs have immediate support if they are in an unsafe situation (Canton et al., 2009; McPhaul et al., 2010).
- Clearly advertised and readily available free counselling (Butler, 2009).
- Training and support for dealing with grief and loss (Tsui et al., 2018).
- Time funded for clients and employers should acknowledge situations such as an unsafe neighbourhood or aggressive client (allowing for HCAs to work in pairs or teams), adequate time for unrushed care, HCA declining client care because it is unsafe, adequate breaks for the HCA (Andersen & Westgaard, 2014; Beer et al., 2014; Delp & Muntaner, 2011).

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Appendix 1: Summary of International Guidelines for Health and Safety in Community Care

Title	Publisher	Country	Year	Topic	Website	Notes
1. Community workers: Work health and safety guidelines	Government of South Australia	Australia	2014	Home care health and safety	https://www.safework.sa.gov.au/sites/g/files/net6011/f/3.20.5-communityworkerswhsguidelines.pdf?v=1524456775	Managing hazards p18 Hazardous manual tasks management p24
2. When community workers come to your home… Your home is a 'workplace' for community workers who visit and assist you	State of Queensland (Office of Industrial Relations)	Australia	2018	Home workplace hazards	https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0009/82980/community-workers-in-homes.pdf	2 page brochure
3. A guide to working safely in people's homes	State of Queensland	Australia	2018	Home care health and safety	https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0018/82503/community-working-safely-in-peoples-homes.pdf	Hazardous manual tasks p9 Work related violence p11 Slips, trips and falls p21 Driving risks p22
4. A guide to reducing and managing job stress for home care and support workers in the aged and disability care sectors	Employment Research Australia, United Voice, Attendant Care Industry Association	Australia	2017	Job stress	https://www.cadr.org.au/images/ch/1794/guide-to-reducing-home-care-worker-job-stress-pdf.PDF	Organisational practices to reduce stress
5. Home and community health worker handbook	Workers' Compensation Board of British Columbia	Canada	2006	Home care health and safety	https://www.worksafebc.com/en/health-safety/industries/health-care-social-services/topics/home-care	Overexertion and repetitive movements p2 Slips, trips and falls p13 Violence p15
6. Make your home safe for care workers	Workers' Compensation Board of British Columbia	Canada	2014	Home workplace hazards	https://www.worksafebc.com/en/health-safety/industries/health-care-social-services/topics/home-care	2 page information sheet
7. We care because you care: Domiciliary care lone worker safety guide	Skills for Care	England	2010	Lone working	https://www.skillsforcare.org.uk/Documents/Topics/Lone-Worker-Guide.pdf	Policy and procedures p17

8. Home healthcare workers: How to prevent musculoskeletal disorders	National Institute for Occupational Safety and Health	United States	2012	Musculoskeletal disorders	https://www.cdc.gov/niosh/docs/2012-120/pdfs/2012-120.pdf?id=10.26616/NIOSHPUB2012120	2 page information sheet
9. NIOSH hazard review: Occupational hazards in home healthcare	National Institute for Occupational Safety and Health	United States	2010	Home care hazards	https://www.cdc.gov/niosh/docs/2010-125/pdfs/2010-125.pdf?id=10.26616/NIOSHPUB2010125	MSD p 3 Occupational stress p.29 Violence p33
10. Home healthcare workers: How to prevent violence on the job	National Institute for Occupational Safety and Health	United States	2012	Violence prevention	https://www.cdc.gov/niosh/docs/2012-118/pdfs/2012-118.pdf?id=10.26616/NIOSHPUB2012118	2 page information sheet
11. Home healthcare workers: How to prevent latex allergies	National Institute for Occupational Safety and Health	United States	2012	Latex allergies	https://www.cdc.gov/niosh/docs/2012-119/pdfs/2012-119.pdf?id=10.26616/NIOSHPUB2012119	2 page information sheet
12. Home healthcare workers: How to prevent exposure in unsafe conditions	National Institute for Occupational Safety and Health	United States	2012	Home workplace hazards	https://www.cdc.gov/niosh/docs/2012-121/pdfs/2012-121.pdf?id=10.26616/NIOSHPUB2012121	2 page information sheet
13. Home healthcare workers: How to prevent driving-related injuries	National Institute for Occupational Safety and Health	United States	2012	Driving-related injuries	https://www.cdc.gov/niosh/docs/2012-122/pdfs/2012-122.pdf?id=10.26616/NIOSHPUB2012122	2 page information sheet
14. Home healthcare workers: How to prevent needlestick and sharps injuries	National Institute for Occupational Safety and Health	United States	2012	Sharps injuries	https://www.cdc.gov/niosh/docs/2012-123/pdfs/2012-123.pdf?id=10.26616/NIOSHPUB2012123	2 page information sheet
15. Supporting people to move at home: Practical tips for carers and support workers	Home and Community Health Association, Carers New Zealand, ACC	New Zealand	2015	Transferring people	http://hcha.org.nz/assets/Supporting-people-to-move-Web.pdf	Practical guidelines, illustrated
16. Supporting people to move at home: Guide for Managers	Home and Community Health Association, Carers New Zealand, ACC	New Zealand	2015	Transferring people	http://hcha.org.nz/assets/Moving-Handling-Guide-Web.pdf	Guide for risk assessment

Appendix 2: Summary of International Guidelines for Health and Safety in Healthcare

Title	Publisher	Country	Year	Topic	Website	Notes
1. Cytotoxic Drugs and related waste. A Risk management guide for South Australian Health Services	Government of South Australia	Australia	2015	Chemical/drug exposure	http://www.sahealth.sa.gov.au/wps/wcm/connect/f8aa68004b3f6cf6a340afe79043faf0/Safe+Handling+Cytotoxic+Guidelines.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-f8aa68004b3f6cf6a340afe79043faf0-lztcbFc	Includes section for community care
2. Prevention and management of aggression in health services	WorkSafe Victoria	Australia	2009	Aggression prevention	https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0004/82822/Prevention_management_health_services.pdf	Policy, procedures and practices
3. Guide for handling cytotoxic drugs and related waste	State of Queensland	Australia	2017	Chemical/drug exposure	https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0006/88710/guide-handling-cytoxic-drugs-related-waste.pdf	General approach
4. A handbook for workplaces: Transferring people safely: Handling patients, residents and clients in health, aged care, rehabilitation and disability services	WorkSafe Victoria	Australia	2009	Handling/ transferring people	https://prod.wsvdigital.com.au/sites/default/files/2018-06/ISBN-Transferring-people-safely-handbook-2009-07.pdf	Assessment worksheet, transfer guides and record keeping
5. Exposure to human blood/bodily fluids	Safe Work Manitoba	Canada	2014	Blood/ bodily fluid exposure	https://www.safemanitoba.com/Page%20Related%20Documents/resources/bulletin_161_swmb_sept_2014.pdf	2 page information sheet
6. Patient handling in small facilities: A companion guide to handle with care	Workers' Compensatio	Canada	2006	Handling people	https://www.worksafebc.com/en/resources/healt	Ergonomics requirements of

	n Board of British Columbia				h-safety/books-guides/patient-handling-in-small-facilities-a-companion-guide-to-handle-with-care?lang=en	occupational health and safety
7. Take care: How to develop and implement a workplace violence prevention program	Workers' Compensation Board of British Columbia	Canada	2012	Violence prevention	https://www.worksafebc.com/en/resources/health-safety/books-guides/take-care-how-to-develop-and-implement-a-workplace-violence-prevention-program?lang=en	Risk assessment and prevention
8. MSI risk assessment and control for client handling	WorkSafeBC	Canada	2017	Musculoskeletal disorders/ injuries	https://www.worksafebc.com/en/health-safety/industries/health-care-social-services	Section on home care
9. Workplace health and safety standards	NHS Employers	England	2013	Health and safety standards	http://www.nhsemployers.org/-/media/Employers/Publications/workplace-health-safety-standards.pdf	Extensive – includes sections on slips and trips, MSDs, violence, lone working, hazardous substances and work equipment
10. Managing the risks of sharps injuries	NHS Confederation	England	2015	Sharps injuries	http://www.nhsemployers.org/-/media/Employers/Documents/Retain-and-improve/Health-and-wellbeing/Managing-the-risks-of-sharps-injuries-v7.pdf	Sharps injury prevention
11. Improving the personal safety for lone workers: A guide for staff who work alone	NHS Employers	England	2018	Lone working	http://www.nhsemployers.org/-/media/Employers/Publications/HSWPG-Lone-	Employer and employee obligations

					Workers-staff-guide-210218-FINAL.pdf	
12. Improving safety for lone workers: A guide for managers	NHS Employers	England	2018	Lone working	http://www.nhsemployers.org/-/media/Employers/Publications/HSWPG-Lone-workers-managers-guide-210218.pdf	Risk assessment & management for 'lone workers'
13. Workforce health and wellbeing framework	NHS	England	2018	Health and wellbeing	http://www.nhsemployers.org/-/media/Employers/Publications/Health-and-wellbeing/NHS-Workforce-HWB-Framework_updated-July-18.pdf	Section on MSDs
14. Work smart, work safe: Combating violence against care staff	Skills for Care	England	2011	Violence prevention	https://www.skillsforcare.org.uk/Documents/Topics/Work-Smart-Work-Safe.pdf	Section on lone working
15. Violence occupational hazards in hospitals	National Institute for Occupational Safety and Health	United States	2002	Violence hazards	https://www.cdc.gov/niosh/docs/2002-101/default.html	Workplace violence
16. Personal protective equipment for health care workers who work with hazardous drugs	National Institute for Occupational Safety and Health	United States	2009	Chemical/drug exposure	https://www.cdc.gov/niosh/docs/wp-solutions/2009-106/pdfs/2009-106.pdf	3 page information sheet
17. Guidelines for nursing homes: Ergonomics for the prevention of musculoskeletal disorders	Occupational Safety and Health Administration	United States	2009	Musculoskeletal disorders/ injuries	https://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.pdf	Sections on MSDs and lifting

18. Guidelines for preventing workplace violence for healthcare and social service workers	Occupational Safety and Health Administration	United States	2016	Violence prevention	https://www.osha.gov/Publications/osha3148.pdf	Hazard identification, prevention and training
19. Managing the risk of workplace violence to healthcare and community service providers: Good practice guide	Department of Labour	New Zealand	2009	Violence risk management	https://worksafe.govt.nz/publications-and-resources/FilterSearchForm?Search=&Topic=881&Industry=&PublicationType=&action_resultsWithFilter=GoWithFilter	Violence to healthcare and community workers