RESEARCH PAPER

What Is Old Is New Again: Global Issues Influencing Workers and Their Work in Long-Term Care

Faire du neuf avec du vieux : les enjeux mondiaux qui influencent les travailleurs et leur travail dans les établissements de soins de longue durée

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Abstract

We offer a broad understanding of contemporary issues relevant to the long-term care (LTC) sector and its workers, globally, and the concurrent evolution and involution of these workers' roles, their work and policy environments. While contemporary, most issues are also longstanding and fall into two broad categories: issues relating to the work environments in LTC, including resource availability and worker support, and issues relating to the changing nature of LTC work. We identify five key challenges that relate to the system structures of the LTC sector.

Résumé

Cet article présente les problèmes actuels liés au secteur des soins de longue durée (SLD) et à ses travailleurs, à l'échelle mondiale, ainsi que de l'évolution et de l'involution simultanées des rôles de ces travailleurs, de leurs environnements de travail et des politiques. Bien qu'actuels, la plupart de ces problèmes sont présents depuis longtemps et se répartissent en deux grandes catégories : les problèmes liés aux environnements de travail dans les SLD, notamment la disponibilité des ressources et le soutien des travailleurs, et les problèmes liés à la nature changeante du travail dans les SLD. Les auteurs dégagent cinq défis clés liés aux structures systémiques du secteur des SLD.

Introduction

The European Commission's Policy of Public Health calls aging "one of the greatest social and economic challenges of the 21st Century" (Yepes-Baldo et al. 2018). Demographic shifts over recent decades are heavily influenced by people living longer than ever before. People entering long-term care homes (LTCHs) are older and frailer, with multiple age-related morbidities, and up to 70% of residents live with Alzheimer's disease and age-related dementias (ADRD) (Alzheimer's Disease International 2020). Researchers and practitioners alike have voiced concerns about the implications of longstanding resource shortfalls on residents' quality of care and quality of life, and on the quality of work and life for care staff (OECD 2020). Increasingly, over the past 20 years, some human resource shortfalls have been met through the immigration of workers, particularly in Asia and the developed West (Munkejord and Tingvold 2019; OECD 2020; Yu and Perng 2014). The reality, however, is that the severity of these issues will continue to amplify as the global population ages and demand for services grows. And demand *will* grow. Globally, as early as 2030, 1 in 6 people will be 60 years of age and older (WHO 2021), and the size of the LTC workforce will need to increase by 60% by 2040 to meet the demand of older persons requiring LTC (OECD 2020).

What is old is new again: The "current" crisis in LTC

The ongoing pandemic exposes gaps in preparedness and resources for LTCHs globally (Armstrong 2021; Berta and Dawson 2021; Estabrooks 2021) that are rooted in longstanding structural deficits, including persistent underinvestment in the sector; understaffing and lack of adequate and standardized staff training; and safety issues that are poignantly illustrated by efforts to implement infection protocols (OECD 2020; Oldenburger et al. 2022). In the first pandemic wave, an average of 38% of COVID-19 related deaths were connected to LTCHs and retirement homes in OECD countries, with considerably higher averages in some countries including Canada (~80%) and France (50%) (CIHI 2020; OECD 2020). The situation in the LTC sector during the COVID-19 pandemic is being described as a "crisis upon a crisis," as the LTC sector was already facing staffing shortages, an aging infrastructure, and the need to provide more complex care (Oldenburger et al. 2022: 54).

Purpose

Through this review we sought to gain a broad understanding of longstanding and contemporary issues relevant to the LTC sector and its workers globally and the concurrent evolution and involution of these workers' roles and changes to their work and policy environments. We focus specifically on nursing staff and healthcare aides who, together, provide the majority of direct care to LTC home residents. Our review spans geographies and time. Our findings stand to inform LTC policy that attends to enduring historical influences, current constraints, and emerging future trends influencing workers in this sector.

Methods

We completed a scoping review (Arksey and O'Malley 2005; Levac et al. 2010) to address this question: What is known about (features of and associations among) LTCH work environments, the nature of LTC work, and workers' (nursing staff and care aides') roles, work attitudes, and work outcomes? Databases included Medline, CINAHL, PsychINFO, EMBASE, Scopus and PSNet. We included publications through to March 2021; no restrictions were placed on publication date, design or geographic location beyond restricting our search to English language or translated studies only. Peer-reviewed articles and reviews were included; editorials and opinion pieces were not. To qualify for inclusion, articles needed to focus on staff who (1) work in LTCHs; (2) provide or assist in the direct care of LTC residents; and (3) are designated as a healthcare aide, personal support worker (PSW), registered nurse (RN), licensed practical nurse (LPN) or equivalent role. More detailed inclusion and exclusion criteria are noted in Box 1. Our final search strategy and inclusion criteria yielded 1,070 results. Removing duplicates left 686 articles. Our review of titles and abstracts for these, followed by full-text review, led us to exclude 408 articles. All data were synthesized and the evidence mapped following the guidance of the PRISMA-ScR guidelines for scoping reviews, with the exception of protocol registration (Tricco et al. 2018).

Data from the remaining 278 articles (see Appendix 1 for the complete bibliography, available online at www.longwoods.com/content/26853) were extracted into a table prepared as an Excel spreadsheet. Two authors (WB and CS) initially independently extracted data from a subset of articles for consensus, minimization of error, and clarity between reviewers regarding the choice of data selected for extraction. Discussion led to the identification of additional data extraction fields and to the development of categories within fields to facilitate coding of data from the articles. Information related to article characteristics, aim, research approach, context (including jurisdiction), level of analysis, types of participants (roles) and main findings was collected and entered into the data-extraction spreadsheet. Article characteristics were summarized graphically and descriptively (see the results below). Thematic analysis techniques (Braun and Clarke 2012) were used to organize key findings across the 278 included articles. Specifically, we used inductive thematic analysis to identify data patterns, and generate themes and sub-themes (Boyatzis 1998; Braun and Clarke 2012)

BOX 1. Inclusion and exclusion criteria

Date:	No date has been set limiting the scope of articles sourced.
Exposure of interest:	The participants of selected studies must be formal caregivers who have received training either as healthcare aides or as registered nurses and who work in an institutional/residential LTC facility.
Geographic location of study:	While the scope of this review will not be limited to a specific geographic region, included studies will be limited to those using sites whose organizational form resembles a residential/institutional LTC home.
Language:	In the interest of time, the studies included in this review will be limited to English language or translated studies only.
Participants:	Studies will be restricted to those whose participants work in an institutional/residential LTC facility, provide care or assist in the care of LTC patients and have been trained as either a registered nurse or a healthcare aide.
Peer review:	Peer-reviewed studies will be included, as will reports from government departments and professional associations.
Reported outcomes:	The reported outcomes must be critical or important to the area of interest covered in this review. For inclusion, studies should explore associations and relationships between/among work environments, workers' roles, workers' attitudes, and work outcomes in LTCH settings.
Setting:	Study settings will be restricted to sites providing institutional/residential LTC that employ health providers (healthcare aides or registered nurses) to distribute care to patients.
Study design:	All study designs will be looked at for this review.
Type of publication:	For the purpose of this review, only original studies and other reviews will be sourced. This excludes editorials and opinion pieces.

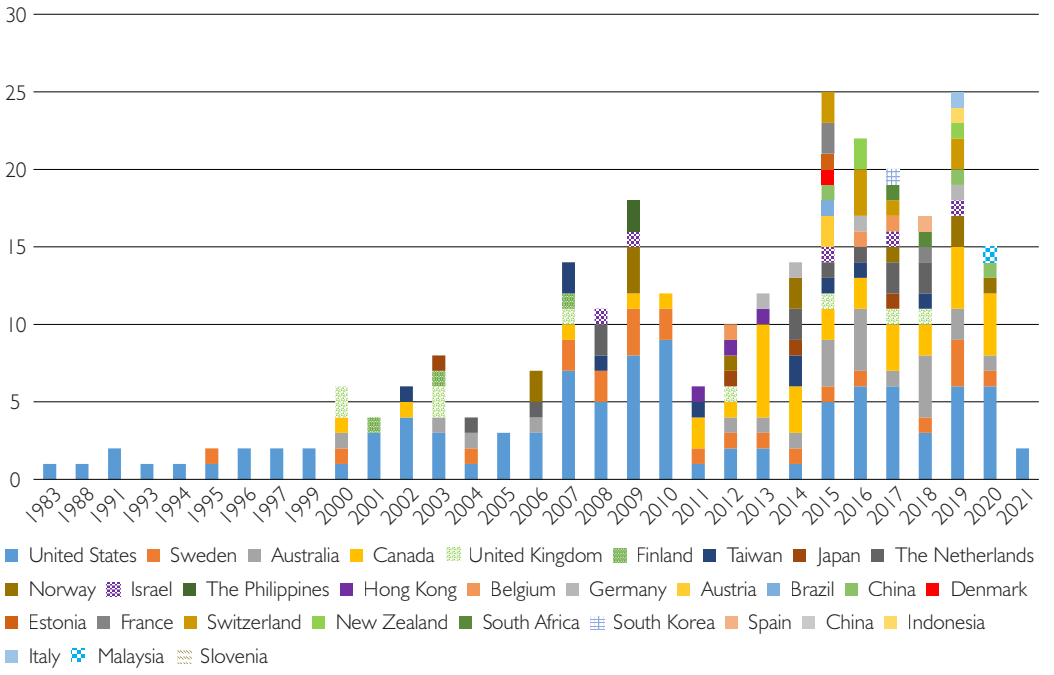
and identified these in an extension of the data-extraction sheet. We followed the analytic steps recommended for thematic analysis, including familiarizing ourselves with the data, generating and applying a coding scheme and generating and refining themes and sub-themes. When generating and refining themes, we organized them into two broad categories or issues that were representative of the data: (1) those relating to LTC work environments, distinguishing between external and internal environments, and (2) those relating to the nature of LTC work. In addition to generating sub-themes relating to each of these main themes, we made note of how the main themes (and sub-themes) related to one another and how they related to the work outcomes of workers. To ensure rigour (Krefting 1991), multiple researchers (WB and CS) worked to analyze the data (in a literature review, the content of the included articles is the data and this is the focus of the analysis) and recorded major decisions and findings. While WB and CS led the data analysis, the other author (AB) contributed to the identification and differentiation of themes and sub-themes, to their refinement, and to the identification of the five key challenges to the sustainability of LTC presented in the Discussion section.

Findings

Figure 1 summarizes the origins of the articles, excluding two reports prepared by international entities, included in the review. The figure underscores the extensiveness of the issues globally that we describe below. Of the 278 articles included in the review, 145 (~52%) were

quantitative studies, 90 (~33%) were qualitative studies, 25 (~9%) were mixed or multi-methods studies, 16 (~6%) were reviews and 2 (~0.01%) were reports prepared by global entities that focused on the state of the LTC sector.

FIGURE 1. Articles included in the review, by country and year of publication



Issues relating to LTC work environments

RESOURCE AVAILABILITY

Resource availability in LTCHs is highlighted as problematic in dozens of studies across diverse jurisdictions. Persistent human resource shortages in the LTC sector have been identified in Australia (Moyle et al. 2003; Wells et al. 2019), Brazil (Mariano et al. 2015), Canada (Morgan et al. 2002; Song et al. 2020), France (Pélissier et al. 2015), Malaysia (Yasin et al. 2019), Taiwan (Yu and Perng 2014), Norway and Denmark (Krane et al. 2014), the US (Pfefferle and Weinberg 2008; White et al. 2019, 2020; Zhang et al. 2019) and other countries. Multiple studies show that resident care quality relates directly to staffing levels (Anderson et al. 2004; Armstrong 2021; Cohen-Mansfield 1997; Flackman et al. 2007). Other studies link staffing levels and staff outcomes: lower levels are associated with staff physical health, including back/joint pain (Dhaini et al. 2016), work stress (Bae and Brewer 2010; Islam et al. 2017; Lapane and Hughes 2007), intention to leave (Senecal et al. 2020) and work effectiveness (Temkin-Greener et al. 2009; 2010). Limited staffing is also shown to lead to presenteeism, with staff working when they are ill (Joseph et al. 2013).

The pandemic has tragically highlighted the severity of endemic resource and staffing shortages in LTC (Leskovic et al. 2020; White et al. 2021). It has been suggested that upwards of 50% of COVID deaths in LTCHs could have been prevented through infrastructure and workforce investments in adequate staff training, improved environments and prioritizing care quality and safety (OECD 2020).

Beyond human resources, the myriad impacts of the lack of availability of on-the-job resources have been documented. An Australian study helpfully categorized these resources as physical, psychosocial and environmental, and all were deemed fundamental to work performance (Jeong and Keatinge 2004). One study set in the Philippines found that lack of resources was a key root cause of RNs' "inability to provide optimum care" (de Guzman et al. 2009) while a Canadian study similarly noted that limited time negatively impacted workers' ability to provide whole-person care (Sims-Gould et al. 2010). A Dutch study found that physical and emotional resources buffered stress for workers, suggesting the importance of matching job resources to job demands (van den Tooren and de Jonge 2008).

Workers in LTC are poorly compensated, relative to other health sectors and the broader labour market, and relative to the demands of their work. Undercompensation is directly associated with pervasive recruitment and retention issues in LTC (Armstrong 2021; WHO 2015). This is not a recent observation. Persistent staffing shortages noted in the early 1980s in the US LTC sector were attributed to "limited material rewards" for nursing personnel and care aides (Halbur 1983: 399). A more recent scoping review on care aides in the US, Canada, Australia, the UK, Denmark, Brazil, Ireland, Taiwan, New Zealand, Norway and Japan called for comprehensive government intervention, including education, health and immigration, in order to jointly address severe resource concerns around the care aide workforce (Hewko et al. 2015). Others have called for improvements to care aides' working conditions, such as "training, career opportunities, appropriate workloads, flexible work hours and … meaningful authority to make decisions." (WHO 2015: 136).

LTCH CHARACTERISTICS

LTCH location, size, resident mix and ownership type are associated with worker attitudes, and worker and resident outcomes.

1. *Rural versus urban location:* For rural workers, smaller pools of workers, inclement weather (Joseph et al. 2013), economic marginalization (Meyer et al. 2014) and limited access to services/resources (Morgan et al. 2002) can lead to absenteeism and create more resource-constrained circumstances. Nurses working in LTCHs in Estonia's capital were more dissatisfied with work schedules/shifts and salaries than nurses in rural LTCHs (Sepp et al. 2015), and care aides in the US were less likely to leave rural LTCHs (Choi and Johantgen 2012). Another Canadian study found that RNs working in rural LTCHs were more satisfied with their jobs than their urban counterparts (Kulig et al. 2009), and a US article suggested that RNs in rural LTCHs were more

influenced by job satisfaction and serving community than by pay (Pan et al. 1995). While there is emerging awareness of the different challenges confronting workers and managers in urban and rural LTCHs on the part of policy makers (Estabrooks 2021), some researchers note that current funding models are not sufficiently nuanced to incorporate local needs (Oldenburger et al. 2022) nor do they take into account the diverse needs of foreign-born workers who are employed disproportionately in urban LTCHs (Aboderin 2007; Khatutsky et al. 2010; Rapp and Sicsic 2020; Sloane et al. 2010).

2. *LTCH size:* Care workers in small-scale Dutch LTCHs have higher job satisfaction, lower work demands and higher levels of worker autonomy than those in larger-scale LTCHs (Adams et al. 2017b; Willemse et al. 2014). In the US, Belgium and Sweden, care workers in small-scale LTCHs have higher job satisfaction, lower work demands, more time with residents, less burnout and improved communication/teamwork (Halbur 1983; Vermeerbergen et al. 2017). Swedish LTCHs with more beds had higher rates of workplace violence (Isaksson et al. 2009).
3. *Type of ownership:* Job satisfaction and turnover have been the foci of research in the LTC sector since the mid-1990s, largely driven by concerns of poor retention and care quality. Turnover rates for care aides are higher in for-profit homes in the US (Banaszak-Holl and Hines 1996; Kennedy et al. 2010), Canada, Australia and the UK (Hewko et al. 2015). For-profit homes also have lower worker satisfaction (Decker et al. 2009; Probst et al. 2010), more resident hospitalizations for infection (Zimmerman et al. 2002), poorer work environments (White et al. 2020), lower hours of direct care per resident and overall poorer performance (Estabrooks 2021). In Finland, job security and concern over stability were highest among care workers in for-profit homes and lowest in not-for-profit homes (Heponiemi et al. 2012).
4. *Resident mix:* Studies emphasize positive outcomes for staff and residents working in specialized units – for example, where residents experience similar morbidities such as ADRD or Parkinson's disease (Lee et al. 2013; te Boekhorst et al. 2008) and negative outcomes for those working in units requiring more heterogeneous resident care (Morgan et al. 2002). That said, several studies identified that work was more challenging for staff in ADRD and psychiatric units, with lower job satisfaction and increased emotional exhaustion and work stress (Chamberlain et al. 2016; Isaksson et al. 2009; Zimmerman et al. 2005).

WORKPLACE HEALTH AND SAFETY

Workplace health and safety issues in LTC, largely focused on infection control and prevention (Castle et al. 2009; Lee et al. 2018) and workplace injuries (OECD 2020), have been a focus across many jurisdictions for over a decade. The most prevalent types of worker injury include back pain/injury, joint pain and shoulder pain/injury (Iridiastadi et al. 2019; Yeung 2012). Musculoskeletal disorders and symptoms are common among LTCH care aides (OECD 2020; Yeung and Yuan 2011; Zhang et al. 2016) and nurses (Sepp et al. 2015).

One report of OECD countries notes that over 60% of LTC workers experience physical risk factors at work, resulting in high levels of absenteeism (OECD 2020: 22). Increases in these risks over time correlate with increasing proportions of older people requiring LTC who have greater frailty and who are living with dementia (Morgan et al. 2012).

In an effort to understand injury prevalence in LTC, safety culture has been examined. In the Netherlands and other OECD countries, safety culture in LTCHs is worse than in acute care hospitals, with less safety-focused training for LTC workers (Buljac-Samardzic et al. 2016; OECD 2020). Safety and safety culture improvement interventions relying on education and training have had mixed success (Koo et al. 2016). Studies in the US (Castle et al. 2009) and Canada (Joseph et al. 2013) suggest that workplace health and safety interventions should specifically target care aides through infrastructure investments since they are more likely to detect safety problems (Joseph et al. 2013) and less likely to report them (Hughes and Lapane 2006). Others suggest management intervention to enhance workplace safety (Berta et al. 2018; Perreira et al. 2019). A US study recommended employee training to manage expectations of safety practices (Banaszak-Holl et al. 2017), while a study of Swiss nursing homes showed clear associations between safety culture and quality of resident care (Zúñiga et al. 2015). One Canadian study notes, "[F]eatures of work environments such as available resources, communication, and leadership … are starting points for interventions to improve worker health and well-being." (Hoben et al. 2017: 798).

MANAGEMENT AND LEADERSHIP

Management and leadership unquestionably influence LTC workers and their work. Numerous studies over the past 20 years in diverse health systems including the US (Brannon et al. 2002), Canada (McGilton et al. 2014), Taiwan (Kuo et al. 2014), the Philippines (de Guzman et al. 2009), Norway (Heponiemi et al. 2012) and South Korea (Lee et al. 2018) demonstrate strong positive associations between management support and LTC workers' attitudes and work outcomes. Management and supervisor support is significantly associated with workers' work attitudes including job satisfaction (Bondevik et al. 2017; Choi et al. 2021; Rahnfeld et al. 2016; Söderlund and Fagerberg 2019; Wallin et al. 2012; Willemse et al. 2015); feelings of commitment to the organization (Kostiwa and Meeks 2009); perceptions of safety culture (Vaismoradi et al. 2020); perceptions of the general work environment (Backman et al. 2018; Tellis-Nayak 2007); and work engagement (Biggs and Carr 2019; Bishop et al. 2008; Caspar and O'Rourke 2011). Supervisory and management support is also associated with work outcomes, including job retention (Banaszak-Holl et al. 2017; Berta et al. 2018; Gao et al. 2015; Gaudenz et al. 2019; Hsieh and Su 2007; Huang and Bowblis 2020; Stearns and Darcy 2008); likelihood of leaving the job (Culp et al. 2008; Mittal et al. 2009; Nakanishi and Imai 2012; Rosen et al. 2011); burnout (Anderson et al. 2004; Chu et al. 2014; Cooper et al. 2016; Hunt et al. 2012; Yeatts et al. 2018); job stability (Heponiemi et al. 2012); ability to complete work (Sawan et al. 2018; White et al. 2020); empowerment to speak up (Escrig-Pinol et al. 2019) and to act

autonomously (Elliott et al. 2017); participation in quality improvement initiatives (O'Brien et al. 2013; Tyler and Lepore 2017); involvement in supportive programming and social activities (Castle and Ferguson-Rome 2015; Huai-Ting et al. 2008); and capacity to manage difficult job aspects such as resident death (Irvin 2000). One study of LTC nurses in France found that strained relationships with managers are a primary factor contributing to their intention to leave (Pélissier et al. 2018).

Issues relating to the nature of LTC work

MODELS OF CARE

Resident-centred models of care are replacing task-based medical models, giving workers and residents significantly more autonomy in care planning and provision (Brown et al. 2016; Dhami and Donnelly 2020; Jones and Moyle 2016; Laakso and Routasalo 2001). To some extent, this is a consequence of older adults now entering LTCHs who "demand more choice, service quality, and autonomy, while needing more intensive care and resources" (Zuniga et al. 2015: 860). While a recent integrative review directly links resident-centred care models and resident quality of life (Rajamohan et al. 2019), research conducted as early as 2002 in Canada (Morgan et al. 2002), Sweden (Haggstrom et al. 2004) and the US (Castle and Ferguson-Rome 2015; White-Chu et al. 2009) showed the beneficial effects of individualized care.

The interprofessional relationships and communication required of resident-centred care have been shown to enhance LTC workers' job satisfaction, work motivation and job performance, including resident care quality in Canada (Caspar et al. 2013; Leclerc et al. 2014; Sims-Gould et al. 2010), Italy (Vainieri et al. 2019), New Zealand (Fryer et al. 2016), Norway (Munkejord and Tingvold 2019), the Netherlands (Adams et al. 2017b), Switzerland (Gransjon Craftman et al. 2016), Taiwan (Tsai et al. 2016) and the US (Dellefield et al. 2015; Ersek et al. 1999).

WORK AND WORK DESIGN

Work and work design in LTC is changing. Work in LTC has evolved over recent decades in response to changing resident care needs. Nurses now fill multifaceted roles as supervisors of care aides and paraprofessionals and carry out complex care duties and administrative tasks acting as "administrator, manager, supervisor, coordinator, or surveillance person" (Montayre and Montayre 2017: p. 45). With increased paperwork and administrative duties in LTCHs, RNs and LPNs spend less time on direct resident care (Lane and Philip 2015; Oldenburger et al. 2022), delegating some duties (e.g., incontinence care) to care aides (Ostaszkiewicz et al. 2016). Some researchers refer to the "tyranny" of excessive paperwork that prevents RNs from assisting care aides in resident care (Jervis 2002), and others find that it is associated with decreased job satisfaction and cooperation among nurses and the care aides they supervise (Cherry et al. 2007; Storm et al. 2017). A Swiss study found that rationing

documentation increases the odds of better care quality (Zúñiga et al. 2015) and technology has been suggested as a way to reduce the paperwork burden (Oldenburger et al. 2022).

Care aides spend most of their workdays assisting residents with activities of daily living, typically engaging in short repetitive tasks (Mariano et al. 2015; Qian et al. 2012) that are – particularly within increasingly resource-constrained work environments – susceptible to frequent interruptions as they assist another resident or care worker (Mallidou et al. 2013). Historically, care aides have also been instrumental in meeting residents' needs for psychosocial care, especially for residents without family members (Chamberlain et al. 2020) or those living with dementia (Chung 2013; Marshall et al. 2020; Moss et al. 2003; Ødbehr et al. 2014). Care aides, especially, see psychosocial care as an essential element of their role (Holmberg et al. 2013), ranking it higher in importance than physical tasks (Gray et al. 2016).

However, psychosocial care is increasingly forfeited when care is rushed as shown in studies in Canada (Knopp-Sihota et al. 2015; Song et al. 2020), Sweden (Haggstrom et al. 2010), the US (Bowers et al. 2001) and Israel (Ron 2008). Rushed care is also associated with neglect of dental care (Lindqvist et al. 2013; Malmedal et al. 2009a, 2009b).

ROLE CLARITY

Role clarity is a pervasive issue, with studies in Canada, the UK, Japan, Australia (Hewko et al. 2015), Belgium, Australia and the US (Crogan and Shultz 2000), Norway (Eriksen 2006) and France (Pélissier et al. 2015) showing that task shifting to care aides, along with the expansion of nurses' roles, contributes to tension between nurses and care aides, toxic work environments (Pickering et al. 2017), lower job satisfaction (Ron 2008) and reduced staff retention (Cohen-Mansfield 1997).

EDUCATION AND TRAINING OF STAFF

Education and workforce training of LTC staff do not match the work environment. A recent global report observed that "LTC workers do not always have enough training on geriatric conditions, interpersonal skills, care after hospital discharges, and management of emergencies or bereavement" and that this directly impacts resident care quality (OECD 2020: 14). As with other issues identified above, the observation that worker training and skills are incommensurate with the needs of people entering LTC is not new. Studies of nurses in Taiwan (Li et al. 2008), Canada (McGilton et al. 2014), the Netherlands (van Rumund et al. 2014) and China (Zhang and Sun 2019) identified unmet training needs over a decade ago based on the increasingly complex physical and socio-psychological care required by LTCH residents. Specific skill deficits noted in other studies of nursing staff include palliative care in Australian LTCHs (Lane and Philip 2015), infection prevention knowledge in South Korean LTC settings (Lee et al. 2018) and medical error detection and reporting in Swiss LTCHs (Vaismoradi et al. 2020). In some studies, care aides themselves call for more knowledge on complex care, including dementia care and behavioural handling

(Aloisio et al. 2019; Braun et al. 1997; Ericson-Lidman et al. 2014; Levin et al. 2003), palliative care (Fryer et al. 2016), pain management (Zwakhalen et al. 2017) and psychiatric care (Hasson and Arnetz 2008). Beyond meeting critical knowledge needs for improving resident care, training offers opportunities for professional development, which care aides consistently rate as poor or lacking in the LTC sector (Castle et al. 2006; Yamada and Sekiya 2003).

Research has accumulated since the mid-1990s (Streit and Brannon 1994) from the Netherlands (Collet et al. 2018), Norway (Kada et al. 2009), Sweden (Engstrom et al. 2011) and the US (Jervis 2001) that demonstrates direct relationships between work outcomes and worker training. Education intervention studies show significant improvements to care quality for residents experiencing dementia in Sweden (Hasson and Arnetz 2008), Norway (Kada et al. 2009) and Australia (Moyle et al. 2016) and to residents' dental health in Sweden (Wadensten et al. 2009).

Discussion

While the range of themes and sub-themes observed across the articles included in this review is admittedly broad, the themes are relatable. Aspects of external environments in which LTC homes operate (e.g., resource allocation policies across healthcare, market characteristics within LTC) and their internal work environments (e.g., structural and operational, including resource availability, compensation, nursing home characteristics, management support) appear to be associated with the work of LTC (i.e., the nature and scope of work) and to workers' attitudes and outcomes (including but not exclusive to performance). In this section, we synthesize our findings further to identify five key areas that represent the main challenges to the sustainability of LTC, globally, that warrant attention and action.

Under-resourcing is endemic to LTC

Chronic under-resourcing profoundly influences LTC workers' jobs, work outcomes (including resident care quality and quality of life) and staff work attitudes and outcomes (Song et al. 2020). Under-resourcing in the LTC sector has been highlighted for decades, with researchers and practitioners alike calling for oversight and industry leaders to address shortfalls in human and physical resources. Understaffing and under-resourcing relate to recruitment, retention and turnover, all of which are also identified as key issues in the sector. Recruiting LTC workers is challenging because work is physically demanding and is carried out in resource-poor and undervalued care settings, with limited opportunities for professional growth (Berta et al. 2018; Chamberlain et al. 2019). These same features make turnover high in LTC, particularly among nurses with more job mobility than care aides. Some countries have begun to address these recruitment challenges. Japan, for example, has introduced a unique 3-level certification system as a career ladder for care aides, attracting younger people to the profession (Yamada and Sekiya 2003).

Health human resources research needs to progress beyond computing staffing ratios

Studies in LTC have historically focused on staffing ratio formulations and their correlation with resident care outcomes. Human resources research in other industries extends well beyond these metrics. Human resource management (HRM) attends to people, their work environments and workplace culture and engaging them through fulfilling work and opportunities for personal growth. Strategic HRM considers employees' motivations and incorporates this knowledge into recruitment and retention strategies. As identified by researchers and many global reports, strategic HRM is virtually absent in the LTC sector. Several years ago, for example, the WHO noted the urgent need for "training, career opportunities, appropriate workloads, flexible work hours and giving care workers meaningful authority to make decisions" (WHO 2015: 136). These are aspects of HRM that are normative considerations in most industries. Health human resources in LTC must progress beyond staffing ratios to a more sophisticated understanding of the workforce where "increasing retention rates through better job quality and training" is a policy priority (OECD 2020: 11). The COVID-19 pandemic has underscored the essentiality of investments in human resources in an industry so prone to health and safety risks (OECD 2020).

Work environment matters

The context/environment of LTC work influences worker attitudes and outcomes, findings corroborated in voluminous amounts of literature on work psychology and organizational behaviour and in the growing literature on health work psychology. Applying established theories of human behaviour to worker behaviours in the LTC sector is likely to afford insights that can improve the modifiable features of work context and influence worker attitudes and outcomes. Our findings on management and leadership suggest great value in investments in developing LTC leadership (Rodriguez-Monforte et al. 2020; Schwendimann et al. 2016; Tong et al. 2017; Tyler and Lepore 2017; Wagner et al. 2018). Across numerous studies in diverse settings, competent supportive leadership is associated significantly with worker attitudes and outcomes – from job satisfaction and organizational commitment to turnover intentions – and is related to a positive safety climate and quality of resident care. In some studies, leadership had protective or compensatory effects: mitigating challenges like care worker burnout from resource shortages and offsetting resource deficits that negatively impacted care quality (Yeatts et al. 2018). LTC workplace health and safety issues, common across jurisdictions, often relate to modifiable features of work context, including structural barriers. Several studies place the onus on managers to create work environments that support training around health and safety and support workers in voicing experiences and concerns (Hoben et al. 2017). Admittedly, this is challenging in chronically under-resourced work environments, but a few studies highlight substantial benefits including improved safety climate (White et al. 2020), increased reporting of health and safety issues (Hughes and Lapane 2006) and increased job satisfaction (Schwendimann et al. 2016). A recent global report promotes developing "numerous innovative

models of safety standards, from legislation on staffing ratios to advanced accreditations that may be effective for improving … safety of care." (OECD 2020: 27). Relatedly, Denmark, Sweden, Norway, Finland and Portugal are developing national indicators for health and safety in LTC settings (OECD 2020).

Role clarity

Role clarity is both an old and emergent issue in LTC that merits addressing. Shifts to reliance on unregulated workers for most direct resident care has re-surfaced role clarity as an issue in the LTC sector (Dellefield et al. 2015). Researchers across numerous countries (Hall and O'Brien-Pallas 2000; Hsu et al. 2007; Perry et al. 2003; Shannon and McKenzie-Green 2016) have long called for role re-articulation in the LTC system to involve policy makers, LTCH administrators and stakeholders in the active implementation of standards that clarify role boundaries.

Revolutionizing training and education

Revolutionizing training and education in LTC may be key to many outstanding issues. There is distinct disconnect between staff training and education and the contemporary care needs of LTC residents. Training in this sector is simply not commensurate with the needs of increasingly frail residents with multiple chronic conditions and diagnoses of ADRD. Numerous studies, across time and jurisdictions, conclude by urging LTC policy makers and LTCH managers to prioritize education and training of nurses and care aides, emphasizing direct benefits to LTCH residents and other staff (Band-Winterstein et al. 2019; Brannon et al. 1988; Chen et al. 2018; McGillis Hall et al. 2011; Pélissier et al. 2018; Yeatts et al. 2018). Additionally, some experts urge policy makers and industry leaders to set minimum standards for education for all direct care workers (Estabrooks 2021).

Leveraging linkages between training and education, worker attitudes and outcomes and health human resources is particularly promising. Recently synthesized work showed linkages between worker training/education and work attitudes and outcomes, including retention and care quality (WHO 2015). Investment in training may increase retention, as it has with a Japanese care worker training initiative that demonstrated positive effects on worker retention and equipped workers with skills appropriate to care needs of LTC residents (OECD 2020). We appreciate that this comes with far-from-trivial costs. With greater investment in worker training will come an expectation that wages are reflective of enhanced skills. Beyond who is responsible for funding the training is the question of who is responsible for providing the training. Quality concerns from inconsistent training, and severe resource constraints on LTC operators, suggest that higher levels of governance are best to take responsibility for revolutionizing training and education. A few national initiatives are promising. Japan's national licensing system for care aides both improved retention and facilitated recruitment of younger, more highly trained workers through established career ladders (Yamada and Sekiya 2003).

Limitations

Our search strategy was limited to publications in English and translated into English; thus, potentially relevant studies in other languages were excluded. Second, grey literature was not included, excluding observations produced by policy entities; this omission was outweighed by the inclusion of peer-reviewed literature to ensure the quality of data reviewed (Adams et al. 2017a). We incorporated reports prepared by global entities like the World Health Organization into our background and discussion sections, and these frequently if judiciously synthesize both peer-reviewed and grey literature. Finally, the definitions of "nurses" and "care aides" varies internationally; hence, we consulted with experts in LTC to ensure that we included search terms that addressed our interests in this review of global literature.

Conclusion

The findings that we summarize in this review were derived from original studies and research reviews focussed on LTC workers, and their work environments, in more than 30 countries spanning more than 30 years. Global demographic shifts have led to increased demand for LTC, and for LTC workers. Tasks and care models for these workers are increasingly complex but the structures of LTC systems, including funding structures driven by policy on aging, largely remain woefully out of step with the challenges confronting the LTC sector and its workers. Our review demonstrates that these are global phenomena that have arisen due to longstanding issues common across jurisdictions.

Some of the literature that we reviewed suggests ways in which to begin to address these issues and describe ongoing initiatives that stand to afford highly relevant insights. For example, efforts in Europe to develop national indicators for health and safety warrant earnest evaluation in terms of their influence on worker recruitment, retention and well-being. And the long-term effects and outcomes of initiatives like Japan's national licensing system, relating to strategic health human resources and professional advancement, certainly merit attention as they promise to afford insights into the types of training and education and other forms of investment needed to develop and retain knowledge workers in this sector. Initiatives like these also stand to inform others to formulate standards that clarify role boundaries in this sector, where role clarity is identified as an increasing concern with reliance on unregulated workers to provide direct care necessitated by pervasive resource scarcity in the sector.

We note that the five key challenges presented above relate to the system-structures of the LTC sector, with most identified through research that began many years ago. This is not to suggest that these are intractable issues – instead we aim to highlight them as real, and enduring, and in want of serious consideration because they are longstanding, pervasive and at the root of concerns for the sustainability of the LTC sector.

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