International Journal of Ageing and Later Life, 2010 5(2): 53–75. © The Author

Tasks performed by primary caregivers and migrant live-in homecare workers in Israel

By ESTHER IECOVICH*

Abstract

The issue of migrant live-in homecare workers has been barely addressed in the gerontological literature, in spite of the increase of older persons being cared for by such persons in many Western countries. The purposes of the study are to examine the extent to which migrant live-in homecare workers substitute family caregivers or complement the care that is provided by primary caregivers, and to examine if there are differences in primary caregivers' involvement in providing help with activities of daily living (ADL) and instrumental activities of daily living (IADL) before and after hiring a migrant live-in homecare worker, by caregivers' employment status and gender. The data were drawn from a study that included 335 triads (care recipients, their primary caregivers, and their Filipina live-in homecare workers).

The findings show that for the most part primary caregivers continue to play a significant role in providing care, in particular with regard to IADL tasks, even when there is a migrant live-in homecare worker. Several patterns of division of labor between the formal and informal caregivers were identified; that is, in some cases they complement each other while in

**Esther Iecovich*, Department of Sociology of Health and Gerontology, Faculty of Health Sciences, Ben-Gurion University, Beer-Sheva, Israel

other cases the migrant live-in homecare workers substitute for the care previously provided by the primary caregivers. Significant differences between male and female caregivers and between working and non-working caregivers were found with regard to involvement in providing care before and after employment of a migrant homecare worker.

Keywords: frail elderly, migrant live-in homecare workers, primary caregivers, tasks, substitution, complementary.

Introduction

There is a growing general unmet demand for professional and para-professional health care workers in high-income countries, due in part to rapidly aging populations, resulting in more agencies actively sourcing workers internationally (WHO 2006). However, the rapid increase in the population of frail elderly people who need domiciliary long-term care services, in particular those who live alone or without easily available family members to care for them, has increased the demand for paid carers. The shortage of local manpower to meet these growing needs has increased the demand for migrant live-in homecare workers who provide care around the clock. These workers compensate for insufficient or unavailable informal caregivers by providing homemaking services and personal care (Browne & Braun 2008; Howe 2009; Polverini & Lamura 2004; Redfoot & Houser 2005), thus enabling elderly persons to age in place and avoiding or delaying institutionalization.

The issue of migrant live-in homecare workers has been barely addressed in the gerontological literature, in spite of the increase in many Western countries of older persons being cared for by such persons, either legally or illegally (Doyle & Timonen 2009). Most of the migrant workers come from countries, such as the Philippines, India, China, sub-Saharan Africa, Mexico, the Caribbean, Eastern Europe, and the Pacific Islands (AARP, 2005). Thus, although the family remains the most important caregiver and is expected to continue to be so, the use of live-in migrant homecare workers is also expected to expand. Van der Geest et al. (2004) provide several examples in which the involvement of a stranger in the care of a parent was regarded as a respectable and appropriate solution for the

problem of absent children and grandchildren, provided there is good quality of care.

In most cases, the elderly person lives alone with the migrant paid caregiver. In Italy and Greece, for example, most of those with migrant homecare workers were severely dependent, in particular, mentally frail (Rothgang & Lamura 2005). These homecare workers are considered an irreplaceable support for older persons and their families. Their presence around-the-clock helps to significantly decrease the family's burden and allows many families to work and lead normal lives, while continuing to provide some care for their elderly members, thus filling the traditional role played by family caregivers (Iecovich 2007; Polverini & Lamura 2004). This raises several key questions about the extent to which these workers substitute for or complement the care provided by the family. Specifically, the question that is raised is to what extent do family caregivers continue to be involved in care provision to frail family members when there is a migrant live-in homecare worker who is co-residing with the care recipient and providing care around the clock. Another question is to what extent are there differences in patterns of family involvement in caring for their frail elderly family members following the employment of migrant live-in homecare workers and what affects these differences.

The purposes of this study are, therefore, three-fold: first, to examine the extent to which the primary caregivers share the activities of daily living (ADL) and instrumental activities of daily living (IADL) caregiving tasks when there is a migrant live-in homecare worker, that is the extent to which any of them is currently involved in performing each of the tasks; second, to examine changes in primary caregivers' roles following the employment of a migrant live-in homecare worker. Specifically, the study aims to examine the extent to which primary caregivers are involved in performing ADL and IADL tasks prior to the employment of migrant live-in homecare workers and the extent to which their involvement in performing these tasks ceased afterwards, which can provide a perspective on the that extent to which tasks that were performed by primary caregivers in the past continue to be performed also at present. Finally, the third purpose is to examine if there are employment and gender-based differences between primary caregivers that affect the roles performed by them before and after employment of a migrant homecare worker. In other

words, the major aim is to examine the extent to which migrant live-in homecare workers substitute family caregivers or complement or supplement the care that is provided by primary caregivers.

The Interface Between Informal and Formal (Paid) Care

Several theoretical approaches address the interaction between formal and informal caregiving (Denton 1997). The first is the substitution hypothesis that implies that there is a hierarchy of support providers who may be replaced by others when needed (Cantor & Bernnan 2000), suggesting that when informal care is unavailable or inadequate, formal care, as like assistive technology, is used to substitute for informal care, thus reducing the informal care (Agree et al. 2005; Penning & Keating 2000). However, evidence for a substitution effect is scarce (Litwin & Attias-Donfut 2009; Noelker & Bass 1989). The second approach is supplementary or complementary according to which family caregivers are in charge of providing care to their elderly family members; the formal care is supposed to complement or supplement the care provided by the informal care system (Litwak 1985; Noelker & Bass 1989). Several studies that were conducted in various countries lend empirical support to this approach. For example, Noelker and Bass (1989) found that elderly persons with higher levels of physical impairment and morbidity used more formal service care. This type included households in which both the primary caregiver and service provider jointly helped the care recipient with one or more tasks. Several studies that were conducted in Israel examined the interplay between the formal and informal care systems in providing care to frail elderly people found consistent findings supporting the complimentary model. For example, Brodsky and colleagues (2004) found that almost two-thirds of family members were involved in providing assistance with personal care and most help with homemaking. Most of the care recipients received assistance in all areas of care from both formal services and family members. Another study (Green & Auslander 2008) found that frail elderly persons received help from formal carers, but the most extensive instrumental help with personal care was received from their families. A comparative study (Litwin & Attias-Donfut 2009) between France and Israel examined whether formal home care services delivered

to frail older persons substituted for or complemented informal support. The pattern that was most common was that of complementarity, suggesting co-existence of formal and informal care and mixed provision, in particular in situations of greater need. In other words, research findings suggest that frail elderly persons receive instrumental help with personal care and housekeeping from both systems, formal and informal, and that family caregivers play a key role in providing care to their elderly members even if there is a paid homecare worker.

These approaches are criticized for not being comprehensive because they assume that the two systems of care are not only different, but that informal care is preferred to formal care and that the latter is supposed to supplement the former (Ward-Griffin & Marshall 2003). Furthermore, Ungerson (1990) argues that the conceptual splitting of ''formal'' and ''informal'' care is a false dichotomy by assuming that the nature of the relationship that prevails in each of these spheres is totally different. In contrast to this approach, she argues that it is important to analyze formal and informal care together. Furthermore, from a research perspective, very few studies examined the perspectives of dyads of caregivers (formal and informal) as did Ward-Griffin and Marshall (2003). They argue that there is a dialectic relationship between informal and formal care systems and provide empirical evidence that both the substitution and supplemental models are interwoven and occur simultaneously. However, most of these studies did not examine these issues with respect to this dialectic between primary family caregivers and migrant live-in homecare workers, who co-reside with the care recipients and form some kind of hybrid caregiver (Ungerson 1999). Thus, in this study changes in primary caregivers' roles will be examined by comparing the ADL and IADL performed by them before and after the employment of a migrant homecare worker. Furthermore, the extent to which primary caregivers and migrant homecare workers performed different or same tasks simultaneously will be examined.

Homecare Services to Frail Elderly Person When the Homecare Worker is a Migrant Live-in Worker

One question is to what extent family caregivers are involved in providing instrumental help to their frail elderly family members when there is a

migrant live-in homecare worker who co-resides with the care recipient and provides care around the clock. It was hypothesized that primary caregivers of care recipients who have a migrant live-in homecare worker will be less involved in providing instrumental help. Few qualitative studies that related to the roles and tasks performed by migrant live-in workers found that family carers continued to play a key role in providing care to their elderly persons even when there was a migrant live-in homecare worker who was available around the clock, although their roles shifted from providing direct care to care management. For example, Doyle and Timonen (2009) found that in Ireland high demands and expectations were placed on the live-in homecare workers. They had to carryout generic care-work duties and domestic chores. Their personal freedom was limited because they had to provide care round-the-clock. Ayalon's (2009) study on Filipina live-in homecare workers in Israel found that family members did not relinquish their roles as caregivers but rather their roles changed by assuming the role of care managers and being in charge of all aspects of the life of the care recipient, including managing the personal care, housekeeping, and finances. Yet, children refrained from performing intimate personal care tasks, such as changing diapers and bathing due to traditional taboos, and expected the migrant workers to perform all the instrumental tasks related to personal care as well as to housekeeping tasks.

However, there are no quantitative studies that examined the involvement of family caregivers when there is a migrant live-in homecare worker, neither is there an in-depth examination of the changes in specific ADL and IADL roles performed by primary caregivers prior to hiring a live-in homecare worker and their involvement after hiring a migrant live-in homecare worker. These issues are addressed in this study.

Migrant Live-in Homecare Workers in Israel

To meet the growing needs for homecare services on the one hand and to face the shortage of local manpower on the other, the Israeli Government decided to allow the recruitment of migrant live-in homecare workers to fill these gaps. Thus, during the early 1990s manpower agencies started

to recruit migrant live-in homecare workers. To-date, there are about 57,300 migrant live-in homecare workers in Israel, who provide care to severely frail elderly persons who are either physically or mentally frail (Natan 2009). Most of these workers come from the Far East, in particular from the Philippines. These formal caregivers are employed by the care recipients and almost all of them co-reside with the care recipients. These workers are expected to perform all personal and housekeeping tasks, thus freeing family caregivers from providing direct instrumental help with these tasks. In spite of the very detailed regulations concerning the responsibilities and rights of migrant workers, there are neither explicit role definitions of the tasks that these workers have to perform, nor are there any instructions about what should they not perform. Thus, the issue of role definition is left to negotiation between the worker and his/her employers (the care recipient and his/her family).

Methods

Sample

Data for this study were drawn from a study that included 335 triads (care recipients, their primary caregivers, and their live-in migrant homecare workers) (Iecovich 2010). This article draws upon data from the interviews with the primary caregivers and the migrant live-in homecare workers. The sample included all care recipients that were registered in two national homecare organizations that the author had accessibility to and who employed Filipina homecare workers. It should be noted that, in general, homecare agencies do not provide data about their clients due to privacy rules and regulations, but since the author had accessibility to these two organizations data were drawn only from these two organizations. The first organization had four agencies in the central and northern regions of the country and the second organization had 16 agencies in the central and southern regions of the country, thus covering the entire country. These lists included 462 care recipients of whom only 237 were interviewed. Those who were not interviewed included 95 who were mentally frail and therefore were uninterviewable, 20 passed away, 79 refused, and 31 were

unavailable. In addition, 98 triads were recruited using a snowball procedure by asking the interviewees if they knew other elderly persons who employed Filipina migrant homecare workers. If their answers were positive they were asked to give their names and telephone numbers, and the interviewers contacted them. Data were collected through face-to-face interviews using a structured questionnaire at the care recipients' homes and/or at the primary caregivers' homes. Data collection was conducted during September 2008 and September 2009.

Variables

(a) Patterns of caregiving involvement – the primary caregivers and the homecare workers were presented with a list of eight tasks of ADL (washing, dressing, feeding, toileting, helping with indoor mobility, cutting nails, putting on shoes, and surveillance) and with ten IADL (light home chores, heavy home chores, light laundry, big laundry, meal preparation, shopping, arrangements, bringing medicines from the pharmacy, accompanying the care recipient to the clinic, and taking care of financial affairs). Every dyad of primary caregiver and homecare worker was asked if they performed each of the ADL and IADL tasks, with answers 1 = yes and 0 = no.

(b) Changes in roles performed by primary caregivers before and after hiring a migrant homecare worker – the primary caregivers were presented with eight ADL and ten IADL and for each task they were asked two questions: "Did you perform this task prior to employment of the migrant live-in homecare worker?" and the second question was: "Do you perform this task at present when there is a migrant live-in homecare worker?" For each question answers were 1 = yes and 0 = no.

(c) Socio-demographic characteristics of the respondents: both caregivers and migrant homecare workers were asked about their age, gender, education, and marital status. In addition, the primary caregivers were asked about their relationship to the care recipient (spouse, adult child, or other family member), and employment status (1 = work,

0 = don't work). The paid carers were asked about their professional background (nurses and homecare workers versus otherwise), their length of stay in Israel, and how long they had been providing care to their current care recipients.

Findings

Characteristics of the Primary Caregivers

The mean age of the primary caregivers was 54.5 (SD = 8.06), 53.5% were women, suggesting that a significant proportion of primary caregivers were men. Education attainment included 13.8% who had 0–8 years of schooling, 17.6% had 9–12 years, and 68.5% had high education (13+ years). The vast majority (80.5%) was married, 79.7% were either a son or a daughter of the care recipient, 13.1% were spouses, 3% were grandchildren, 3% were non-kin (friends, neighbors), and 1.2% were other family members (siblings and daughters-in-law). The majority (70.4%) were working caregivers and most of them (75.85%) worked full-time jobs. More than half (55%) shared the expenditures of the migrant homecare worker's salary and this expenditure ranged from 100 to 3500 NIS (about US$920) a month with an average of NIS 658 (SD = 790) a month (US$173). Caregivers provided 1–60 h a week with an average of 13.6 (SD = 10.29) weekly hours.

Characteristics of the Migrant Live-in Homecare Workers

As noted, the study included only Filipina homecare workers. The mean age of the Filipino homecare workers was 36.07 (SD = 7.17), 85.4% were women and the majority (58.5%) was married. Their education attainment included 11.7% with 0–8 years of schooling, 23.1% with 9–12 years, and 65.3% had high education (13+ years). On average, they cared for the current care recipients for 24.07 months (SD = 22.37) and the profession of most of them was a nurse or caregiver (69.3%) with the remainder coming from fields of teaching, business, or no profession.

Table 1. Tasks performed by primary caregivers and by migrant live-in homecare workers

Task	Neither do (%)	Both do (%)	Only primary caregiver does (%)	Only homecare worker does (%)	χ2
ADL					
Washing	3.3	14.6	0.6	81.5	0.00
Dressing	7.2	15.5	0.3	77.0	2.84
Feeding	27.8	10.4	3.9	57.9	0.54
Changing diapers	49.5	5.1	0.9	44.5	10.69***
Mobility	16.4	20.0	5.1	58.5	0.11
Cutting nails	17.4	10.4	5.7	66.5	5.34*
Putting on shoes	6.9	17.0	0.3	75.8	3.12
Surveillance	26.9	20.9	16.1	36.1	0.03
IADL					
Light home chores	6.3	19.4	2.4	71.9	0.63
Difficult home chores	35.5	5.7	3.6	55.2	0.00
Light laundry	5.1	14.0	2.4	78.5	4.78*
Big laundry	30.1	6.3	7.2	56.4	5.70*
Meal preparation	4.2	27.5	13.4	54.9	37.08***
Shopping	8.1	37.0	21.8	33.1	11.86***
Bring medicines	6.9	34.9	12.8	45.4	9.96***
Accompany to the clinic	6.0	37.6	6.9	49.5	1.62
Arrangements	9.9	35.8	40.0	14.3	3.55*
Financial affairs	18.8	3.6	76.7	0.9	0.00

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

ADL and IADL Tasks Performed by Primary Caregivers and Migrant Live-in Homecare Workers

The tasks performed by the formal and informal caregivers and the extent to which either both or one of them performed each of these tasks are shown in Table 1.

The results reveal four patterns: only the primary caregiver performed the specific task, only the homecare worker performed the task, both

performed the same task, and neither of them performed a specific task. The findings show that for all ADL tasks, for the most part, only homecare workers performed these tasks, in particular washing, dressing, and putting on shoes. Negligible percentages of primary caregivers were the only ones to perform these tasks, except for surveillance where about 16% of them were the only ones to perform this task. Between 10% and 21% of both the primary caregivers and homecare workers shared the ADL tasks, except for changing diapers where only 5.1% shared this activity. Yet, significant proportions of primary caregivers and homecare workers did not perform some specific tasks, such as feeding, changing diapers, and surveillance because in most cases the care recipient did not need help with these activities.

The findings show that for most housekeeping tasks, such as cleaning the house, doing laundry, and preparing meals, the majority of homecare workers were the only ones to perform these tasks, while in most instances the primary caregivers were the only ones to managing the finances of the care recipients. Also, a significant proportion (40%) of primary caregivers was solely responsible for making various arrangements. With regard to other IADL tasks, such as shopping and health care (bringing medicines from the pharmacy and accompany the care recipient to the health clinic), the primary caregivers and the homecare workers shared these activities. A significant proportion of neither the primary caregiver nor the homecare workers performed heavy home chores and big laundry because there was also a hired homemaker who performed these housekeeping chores.

In other words, while the most prevalent pattern regarding personal care tasks was that this was performed solely by the homecare workers, the next most prevalent pattern was shared responsibility by both the formal and informal caregivers, and the least prevalent pattern was that of primary caregivers who were the only ones to perform ADL tasks and this related in particular to surveillance. With regard to IADL tasks, the most prevalent pattern was that of homecare workers performing solely housekeeping tasks, while the majority of primary caregivers solely managed financial affairs. Yet, various errands (e.g. bringing medicines from the pharmacy, shopping) for the most part were either shared by both caregivers or performed only by the homecare workers.

Changes in ADL and IADL Tasks Performed by Primary Caregivers

In general, four major patterns of caregivers' involvement were identified: (1) primary caregivers who were not actively involved in performing a specific ADL and IADL task either before or after employment of the migrant live-in homecare worker, (2) primary caregivers who were actively involved in performing specific ADL and IADL tasks before and after employment of the homecare worker, (3) primary caregivers who were not actively involved in performing specific ADL and IADL tasks prior to employment of the migrant-live-in homecare worker but started to be involved afterwards, and (4) primary caregivers who were actively involved in performing specific ADL and IADL tasks prior to employment of the migrant-live-in homecare worker but ceased to be involved afterwards.

Figure 1. ADL tasks performed by primary caregivers before and after the employment of a migrant homecare worker (percentages)

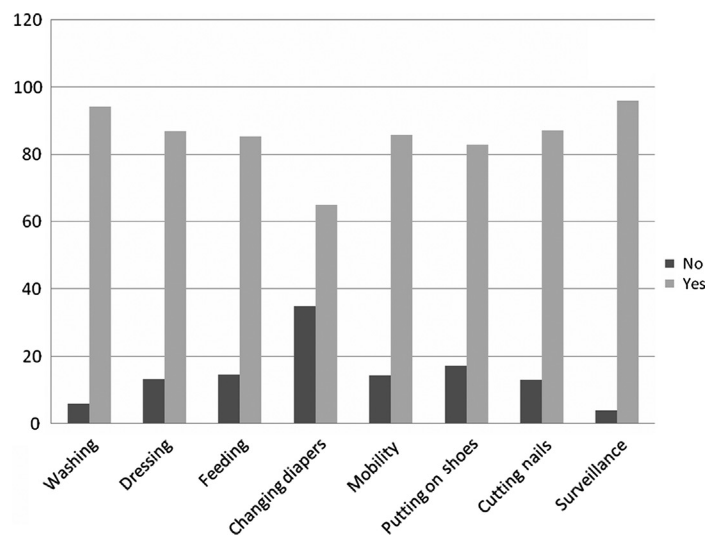
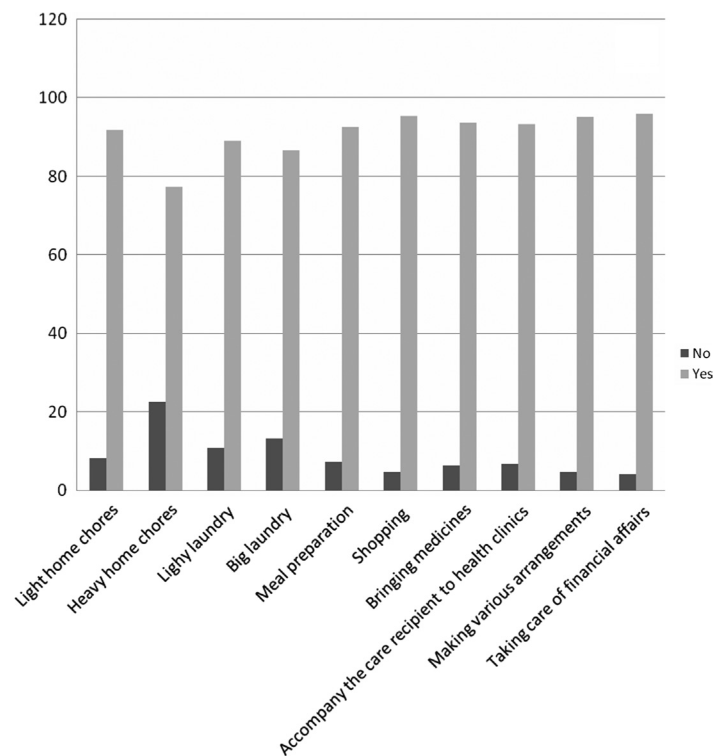


Figure 2. IADL tasks performed by primary caregivers before and after the employmnet of a migrant homecare worker (percentages)



In general, as shown in Figure 1, among those primary caregivers who reported that they were currently involved in performing each of the ADL tasks, most of them were also actively involved in performing these tasks prior the employment of the migrant carer, whereas only a minority did not perform these tasks in the past. A similar picture is obtained with regards to IADL.

Figure 2 shows that among those primary caregivers who currently performed IADL tasks, the vast majority used to be actively involved in

Table 2. Patterns of involvement in performing IADL tasks before and after employment of a migrant homecare worker by employment status of the primary caregiver

	% Employed ($N = 236$)				% Unemployed ($N = 99$)				
Task	No/No	Yes/Yes	No/Yes[a]	Yes/No[b]	No/No	Yes/Yes	No/Yes[a]	Yes/No[b]	χ^2
ADL									
Washing	69.1	11.4	0.8	18.6	48.5	20.2	2.0	29.3	12.94**
Dressing	68.3	9.7	0.8	21.2	44.4	23.2	5.1	27.3	20.70***
Feeding	77.1	8.1	0.8	14.0	52.5	22.2	5.1	20.2	25.09***
Changing diapers	88.2	3.4	5.9	2.5	80.8	5.1	2.0	12.1	4.45
Mobility	65.7	18.2	3.0	13.1	50.5	28.3	7.1	14.1	8.82*
Cutting nails	71.2	14.0	1.7	13.1	61.6	14.1	3.0	21.2	4.46
Putting on shoes	69.2	11.4	0.8	18.6	48.5	20.2	2.0	29.3	10.16*
Surveillance	51.3	29.7	0.4	18.6	24.2	44.4	4.0	27.3	24.81***
IADL									
Light home chores	61.4	16.5	0.8	21.2	38.4	28.3	5.1	28.3	19.01***
Difficult home chores	71.6	6.8	0.8	20.8	56.6	8.1	4.0	31.3	9.74*
Light laundry	67.9	9.7	0.8	21.6	56.4	25.3	3.0	25.3	19.50***
Big laundry	73.7	8.9	0.8	16.5	55.6	18.2	4.0	22.5	13.75**
Meal preparation	53.0	30.5	2.1	14.4	21.5	56.1	6.1	16.3	31.25***
Shopping	23.2	60.2	3.0	13.6	22.2	46.5	2.0	29.3	12.08**
Bring medicines	21.6	44.5	2.1	31.8	14.1	45.5	4.0	36.4	3.42
Accompany to the clinic	24.6	40.7	3.8	30.9	21.3	41.4	3.0	34.3	0.72
Arrangements	19.5	66.9	5.5	8.1	12.1	79.9	4.0	4.0	5.75
Financial affairs	18.6	75.8	3.4	2.1	14.3	79.6	3.1	3.1	1.16

[a]Was not involved prior to employment of the homecare worker but is currently involved.
[b]Was involved prior to employment of the homecare worker but is not currently involved.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

performing each of the IADL tasks also prior to the employment of the migrant homecare worker, in particular with regard to taking care of financial affairs. However, only a small minority who was involved before was not currently involved in performing any of the IADL tasks.

Changes in Performing ADL and IADL Tasks by Employment Status of Caregivers

The findings in Table 2 present the differences in patterns of caregiving tasks before and after employment of the migrant live-in homecare worker by employment status of the primary caregiver. The findings indicate significant differences between working and non-working caregivers in terms of patterns of personal care involvement. The findings show that significantly more employed caregivers were not involved in providing personal care, either before or after hiring of the migrant worker, except for changing diapers whereby the majority in both groups did not perform this task because the majority of care recipients did not need help with this task. A similar picture is obtained with regard to housekeeping tasks whereby significantly more working caregivers were not involved in helping with these tasks. Yet, in all other IADL tasks that are related to errands and financial management, except for shopping where significantly less working caregivers helped with this task, there were no significant differences between the two groups. However, the majority of the primary caregivers were involved in performing arrangements and taking care of financial affairs, while with regard to health care the majority in both groups either used to perform and share these tasks or were not involved in them in both points of time.

Changes in Performing ADL and IADL Tasks by Gender of Caregivers

When comparing changes in performing ADL tasks by gender of primary caregiver, significant differences are revealed. It is seen in Table 3 that the vast majority of male caregivers were not actively involved in performing most ADL tasks both before and after employment of the worker, except for changing diapers, while only a third to a half of the female caregivers were not involved in performing these tasks either in the past or at present.

Table 3. Patterns of involvement in performing ADL tasks before and after employment of a migrant homecare worker by gender of primary caregiver

	% Men ($N = 140$)					% Women ($N = 195$)				
Task	No/No	Yes/Yes	No/Yes[a]	Yes/No[b]	χ^2	No/No	Yes/Yes	No/Yes[a]	Yes/No[b]	χ^2
ADL										
Washing	82.1	9.3	0	8.6	65.92***	49.2	17.9	1.6	31.3	34.71***
Dressing	84.3	7.1	1.4	7.2	51.10***	44.6	18.5	2.5	34.4	25.50***
Feeding	87.9	5.7	0.7	5.7	57.01***	56.9	16.9	3.1	23.1	40.43***
Changing diapers	49.3	3.6	46.4	0.7	2.79	45.7	12.3	36.9	5.1	7.52**
Mobility	71.4	20.0	3.6	5.0	82.48***	54.3	22.6	3.6	19.5	55.43***
Cutting nails	90.0	2.2	1.4	6.4	17.50**	52.3	22.6	2.6	22.5	52.73***
Putting on shoes	86.4	6.5	2.1	5.0	52.40***	50.8	20.0	3.6	25.6	37.18***
Surveillance	55.7	32.9	0.7	10.7	84.85***	34.3	37.4	2.1	26.2	53.56***
IADL										
Light home chores	9.3	9.3	81.4	0	1.47	3.6	64.1	27.7	4.6	131.88***
Difficult home chores	35.7	5.0	54.3	5.0	0.56	19.0	26.7	35.4	19.0	54.06***
Light laundry	5.0	5.7	89.3	0	0.447	2.6	52.8	37.9	6.7	97.85***
Big laundry	36.4	4.3	56.4	2.9	0.002	15.4	25.6	38.5	20.5	60.66***
Meal preparation	5.7	14.3	75.7	4.3	6.07*	2.6	56.4	20.5	20.5	117.38***
Shopping	5.8	42.1	30.0	22.1	5.44*	3.6	54.4	14.3	27.7	13.11**
Bring medicines	2.9	52.1	28.6	16.4	4.28*	2.6	67.2	12.8	17.4	14.86**
Accompany to the clinic	5.0	56.4	30.7	7.9	0.091	2.6	70.3	16.9	10.2	9.05*
Arrangements	10.7	33.6	15.0	40.7	1.85	7.2	41.0	10.3	41.5	4.05
Financial affairs	20.0	75.0	3.6	1.4	103.15***	15.4	78.4	3.1	3.1	2.08

[a]Was not involved prior to employment of the homecare worker but is currently involved.
[b]Was involved prior to employment of the homecare worker but is not currently involved.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

More female caregivers who used to be involved in providing help with ADL's continued to do so even after employment of the homecare worker, compared to male caregivers who continued to help with these tasks, except for indoor mobility and surveillance where no significant differences were found between male and female caregivers. Yet, more women than men ceased performing these tasks after the employment of the homecare worker. In addition, only minimal percentages of those who were not involved in performing ADL tasks became involved after the employment of a migrant live-in homecare worker, except for changing diapers, whereby a significant proportion of all caregivers became involved in helping with this task after the employment of the homecare worker and this proportion was higher among male than female caregivers. In general, when taking into account all those who were actively involved in performing ADL tasks before and after the employment of a migrant live-in homecare worker, more female caregivers were involved in performing the personal care than male caregivers.

The IADL tasks performed by primary caregivers before and after employment of the homecare worker by gender are shown in Table 3. The findings show that only a small proportion of men and women were not involved in performing IADL tasks either before or after employment of a migrant live-in homecare worker. Yet, more male than female caregivers were not involved in housekeeping chores (e.g. difficult home chores and big laundry). Most female caregivers used to be involved in performing IADL tasks, except for hard housekeeping tasks (difficult home chores and big laundry) and arrangements before and after employment of the homecare worker. Most male caregivers who were involved in helping with most IADL tasks ceased doing so after the employment of migrant homecare workers, except for help with health care (bringing medicines and accompanying the care recipient to health clinics) and taking care of the financial affairs of the care recipients. Furthermore, most male caregivers who were not involved in providing help with IADL prior to the employment of the homecare worker helped with housekeeping tasks at present. It appears, however, that at present the majority of male and female caregivers alike were involved in providing help with all IADL tasks, in particular with financial affairs.

Conclusions

The findings of this study show that although there was a migrant live-in homecare worker who was available around the clock and who was supposed to perform all the personal and housekeeping tasks, some primary caregivers shared these activities while the majority of homecare workers solely performed these tasks when necessary. Yet, in activities that were connected with shopping and health care two patterns prevailed: either the homecare worker performed them or both caregivers shared these activities. In respect to arrangements and taking care of financial affairs, the most prevalent patterns were either the primary caregiver solely performed these tasks or s/he shared it with the homecare worker. Furthermore, when relating to changes in the involvement of the primary caregivers in the two points of time, those who used to be involved in providing personal care and helping with IADL prior to employment of the homecare worker, continued to be involved in assisting their elderly family members afterwards.

There are several reasons for this: first, from a cultural perspective, in Israel filial responsibility and intergenerational solidarity is still high, even more than in other western countries (Lowenstein & Daatland 2006), and therefore primary caregivers continue to play a key role in caring for their elderly family members. Second, according to the labor laws in Israel, migrant live-in workers are entitled to take a weekly one-day leave, usually on Sundays. Thus, when the worker is on leave, she or he is replaced by the primary caregiver and therefore the latter performs personal care tasks on this day. However, the extent to which primary caregivers perform these tasks only on the worker's day off or on a more regular basis was not examined and therefore this point merits further investigation. Third, according to the regulations in Israel, to be entitled to employ a migrant live-in homecare worker the care recipient must be severely disabled (homebound, bedridden, or mentally frail). Thus, it might be that two persons are needed to share most of the ADL and IADL tasks because performing these tasks entails substantial physical effort. Therefore, even when there is a live-in migrant worker she or he might not be able to perform all the caregiving and housekeeping tasks without help from somebody else.

The study identified four patterns of family caregivers' involvement in care provision following the employment of a live-in migrant homecare worker: (a) caregivers who were not involved in providing help either before or after employment of a migrant live-in homecare worker; (b) caregivers who were not involved in providing help prior to the employment of a migrant live-in homecare worker but started to help after their employment; (c) those who were involved in providing help prior to employment of the migrant worker but ceased afterwards; and (d) those who were involved in providing help prior to employment of the migrant worker and continued to be involved afterwards. These findings showed significantly different patterns between working and non-working caregivers with regard to involvement in performing most of the ADL and IADL. This suggests that while most working caregivers were not involved in performing personal care at any time, most non-working caregivers were involved in performing these tasks in the past and either continued to be involved or ceased performing these tasks. A similar picture is obtained with regard to housekeeping chores, but the majority in both groups used to perform the arrangements and taking care of financial affairs, whereas for health care the most prevalent patterns were that caregivers in both groups either performed these tasks in both points of time or used to perform them but were replaced by the homecare worker. In other words, as expected with respect to personal care and housekeeping chores, the substitution pattern was more prevalent among working caregivers, while the complementary or supplementary patterns were more applicable to non-working caregivers. With regard to other tasks such as arrangements and taking care of financial affairs, the majorities in both groups were the only ones to perform these tasks. A somewhat similar picture is obtained with regard to gender, where with personal care and housekeeping chores the substitution pattern was more prevalent among male caregivers, while the complementary or supplementary pattern was more applicable to female caregivers. Yet, with regard to other tasks such as arrangements and taking care of financial affairs, the majorities in both groups were the only ones to perform these tasks.

The findings, however, reflect the complexity of caregivers' involvement in help provision, suggesting that specific groups of caregivers are substituted by migrant live-in homecare workers for certain tasks, while for other tasks

they are complemented by the migrant workers. Furthermore, it can be concluded that when there is a migrant live-in homecare worker, the substitution and complementary models coexist simultaneously, thus providing support to Ward-Griffin and Marshall's (2003) findings. However, the present study found that the prevalence of each model differs by type of task and by the characteristics of the primary caregiver.

Taking into account that those who employ migrant live-in homecare workers are severely disabled, either physically and/or cognitively, the study may have several implications for policy. The study shows that significantly more working caregivers were uninvolved in providing personal care and in performing housekeeping chores neither prior nor after the employment of a migrant live-in homecare worker compared to their unemployed counterparts. Therefore, more awareness among employers to the specific needs of working caregivers is needed to enable them more flexibility in working hours and leaves in order to be more available to their older family members who need their help. The unemployed caregivers may experience an economic and physical burden due to the expenditures entailed in employing a live-in homecare worker in addition to direct care, taking into account that many of them are at the age of retirement. Thus, compensation schemes based on income tests should be adopted in order to financially support those with lower revenues and to avoid institutionalization of the care recipient.

Though, the study has several limitations: first, the study is based on a convenience sample and snowballing and included only Filipina workers. Therefore, care with generalization of the findings is warranted. Further studies that will include larger and random samples and workers from different cultural backgrounds can provide more information on the impact of the workers' ethnicity and cultural backgrounds on the division of labor between the formal and informal carers and enable generalization. Second, the study did not include multivariate analyses that could provide more insight into the factors that best explain the division of labor between the two carers as well as those explaining changes in primary caregivers' roles prior and after the employment of a migrant homecare worker. Third, the study did not examine the health and functional status of the care recipient prior to the employment of the migrant homecare worker. It might be that changes in the care recipients' health and functional status

raised the need to employ a migrant worker, suggesting that the changes in primary caregivers' roles before and after the employment of the migrant homecare workers as well as the division of labor between the two carers may be influenced by the dynamic changes in the care recipients status in addition to primary caregivers' characteristics such as gender and employment status. Therefore, longitudinal studies may provide better insight into the dynamics changes in primary caregivers' roles and dialectics of the division of labor between the primary caregivers and migrant live-in homecare workers at different points of times. Fourth, further research is necessary to examine differences in caregivers' patterns of involvement in help provision when there is a migrant live-in homecare worker compared to a local live-out homecare worker. Therefore, further research is necessary to throw light and fill the gap in knowledge in this new challenging field of research.

Acknowledgements

This research was supported by a grant from the Israeli Ministry for Senior Citizens.

Corresponding Author

Esther Iecovich, Department of Sociology of Health and Gerontology, Faculty of Health Sciences, Ben-Gurion University, Beer-Sheva, Israel. Email: Iecovich@bgu.ac.il

References

AARP. (2005). AARP International forum on long-term care. Available on http://www.aarp.org/research/international/events/ltcforum_landing.html (Accessed: December 16, 2004).

Agree, E. M., Freedman, V. A., Cornman, J. C., Wolf, D. A. & Marcotte, J. E. (2005). Reconsidering substitution in long-term care: When does assistive technology take the place of personal care. *Journals of Gerontology Series B* 60(5): S272–S280.

Ayalon, L. (2009). Family and family-like interactions in households with round-the-clock paid foreign carers in Israel. *Ageing & Society* 29(5): 671–686.

Brodsky, J., Naon, D., Resnizky, S., Ben-Noon, S., Morginstin, B., Graa, R. & Schmeltzer, M. (2004). *Recipients of Long-Term Care Insurance Benefits: Characteristics, Formal and Informal Assistance Patterns and Unmet Needs*. Jerusalem: JDC-Brookdale Institute.

Browne, C. V. & Braun, K. L. (2008). Globalization, women's migration, and the long-term care workforce. *The Gerontologist* 48(1): 16–24.

Cantor, M. H. & Brennan, M. (2000). *Social Care of the Elderly: The Effects of Ethnicity, Class and Culture*. NY: Springer.

Denton, M. (1997). The linkages between informal and formal care of the elderly. *Canadian Journal on Aging* 16(1): 30–50.

Doyle, M. & Timonen, V. (2009). The different faces of care work: Understanding the experiences of the multi-cultural care workforce. *Ageing & Society* 29(3): 337–350.

Green, V. & Auslander, G. (2008). Social networks and social support among functionally impaired older persons living in the community. *Gerontologia* 35(2): 111–126 [Hebrew].

Howe, A. L. (2009). Migrant care workers or migrants workers in long-term care? A review of Australian experience. *Journal of Aging & Social Policy* 21(4): 374–392.

Iecovich, E. (2007). Live-in and live-out homecare services and care recipient satisfaction. *Journal of Aging and Social Policy* 19(4): 105–122.

Iecovich, E. (2010). *Primary Caregivers and Migrant Homecare Workers in Elder Care: Factors that Explain Caregiving Burden and Satisfaction of Primary Caregivers and Job Satisfaction of the Migrant Homecare Worker: A Research Report*. Israel, Beer Sheva: Ben Gurion University.

Litwak, E. (1985). *Helping the Elderly: The Complementary Roles of Informal Networks and Formal Systems*. NY: Guilford Press.

Litwin, H. & Attias-Donfut, C. (2009). The inter-relationship between formal and informal care: A study in France and Israel. *Ageing and Society* 29(1): 71–91.

Lowenstein, A. & Daatland, S. O. (2006). Filial norms and family support in a comparative cross-national context: Evidence from the OASIS study. *Ageing & Society* 26(2): 203–223.

Natan, G. (2009). *Migrant Workers in Israel: Key Issues and A Current Picture*. Jerusalem: The Knesset [Hebrew].

Noelker, L. S. & Bass, D. M. (1989). Home care for elderly persons: Linkages between formal and informal caregivers. *Journal of Gerontology: Social Sciences* 44(2): S63–S70.

Penning, M. J. & Keating, N. L. (2000). Self, informal and formal care: Partnerships in community-based and residential care settings. *Canadian Journal on Aging* 19 (Suppl. 1): 75–100.

Polverini, F. & Lamura, G. (2004). *National Report on Italy: Labour Supply in Care Services, Ancona: Italy*. Ancona, Italy: Instituto Nazionale di Riposo e Cura Anziani, Department of Gerontological Research.

Redfoot, D. L. & Houser, A. N. (2005). *''We Shall Travel On'': Quality of care, economic development, and the international migration of long-term care workers: Research Report*. AARP Public Policy Institute, AARP Public Policy Institute. Available on: http://www.aarp.org/research/long termcare/quality/inb104_intl_ltc.html (Accessed: November 27, 2005).

Rothgang, H. & Lamura, G. (2005). *Labour Market Participation, Income and Migrant Care Workers.* Brussels: Pan European Network. EUROFAMCARE (Unpublished presentation).

Ungerson, C. (1990). The language of care: Crossing the boundaries. In C. Ungerson (ed.), *Gender and Caring: Work and Welfare in Britain and Scandinavia* (pp. 8–33). NY: Harvester.

Ungerson, C. (1999). Personal assistant and disabled people: An examination of hybrid form of work and care. *Work, Employment and Society* 13: 583–600.

Van der Geest, S., Mul, A. & Vermeulen, H. (2004). Linkages between migration and the care of frail older people: Observations from Greece, Ghana and The Netherlands. *Ageing and Society* 24(3): 431–450.

Ward-Griffin, C. & Marshall, V. W. (2003). Reconceptualizing the relationship between ''public'' and ''private'' eldercare. *Journal of Aging Studies* 17(2): 189–208.

WHO (World Health Organization). (2006). *The World Health Report – Working Together for Health.* Available on: http://www.who.int/entity/whr/2006/en/ (Accessed: December 10, 2006).