ORIGINAL ARTICLE



Caring for older persons in rural and urban communities: perspectives of Ghanaian informal caregivers on their coping mechanisms

Williams Agyemang-Duah ¹ · Alhassan Abdullah ² · Charlotte Monica Mensah ³ · Francis Arthur-Holmes ⁴ · Bright Addai ³

Received: 12 February 2019 / Accepted: 7 May 2019 / Published online: 27 May 2019 © Springer-Verlag GmbH Germany, part of Springer Nature 2019

Abstract

Objective Studies on informal caregiving for older persons in Ghana have only reported the challenges of the caregivers without providing their coping mechanisms. Considering the myriad of challenges facing informal caregivers in Ghana, we sought to explore the coping mechanisms utilised by informal caregivers in rural and urban settings of Ghana to overcome their caregiving challenges. **Methods** In-depth interviews were conducted with 20 purposively selected caregivers from the Ejisu-Juaben Municipality and Kumasi Metropolis in the Ashanti Region of Ghana. The data were thematically analysed and common themes were reported as findings. **Results** Six key coping mechanisms were found; faith in God, support from friends and family, borrowing from friends, acceptance and encouragement, reducing expenditure on other activities, and taking time off.

Conclusion The findings provide key strategies to policy-makers in the health sector to prevent the burnout of informal caregivers. Considerations from the coping mechanisms enumerated in the current study could guide the design and implementation of policies towards improving the informal healthcare sector in Ghana, which is crucial to the realisation of the United Nations' health-related Sustainable Development Goals.

Keywords Informal healthcare · Coping mechanisms · Caregiving · Older persons · Ghana

Introduction

Globally, the population of older persons aged 60 years or more was 900 million in 2015 and is expected to reach 2 billion by 2050 (Kowal and Byles 2015). Evidence has shown that the population of older people aged 60 years or above in sub-

- Alhassan Abdullah abdullahalhassan 14@gmail.com
- Department of Planning, Kwame Nkrumah University of Science and Technology, Private Mail Bag, University Post Office, Kumasi, Ghana
- Department of Sociology and Social Work, Kwame Nkrumah University of Science and Technology, Private Mail Bag, University Post Office, Kumasi, Ghana
- Department of Geography and Rural Development, Kwame Nkrumah University of Science and Technology, Private Mail Bag, University Post Office, Kumasi, Ghana
- Oxford Department of International Development, University of Oxford, Oxford, UK

Saharan Africa will rise from 46 million (4.8% of the total population) in 2015 to 161 million (7.5% of the total population) by 2050 (He and Kowal 2016). The population of older people aged 65 years or more in Ghana has increased from 213,477 in 1960 to 1,643,381 in 2010, which are 4.5% and 6.7% of the total population, respectively (Nortey et al. 2017). Further, the Ghana Statistical Service (2012) reports that over 737,743 people, representing 3% of the total population, suffer from disability and Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS). The increased numbers of dependent population (HIV/AIDS persons, persons with disability and older persons) predict an increase in the demand for informal or family-based caregivers to provide for the general and healthcare needs of older persons who would otherwise be left unattended (Mwinituo and Mill 2006).

About three-fifths of older persons with poor health status globally are cared for by family members and relatives who are mostly women (National Alliance for Caregiving and the American Association of Retired Persons 2009). Family-based care has become an integral component of world health systems and an issue of global concern due to increased

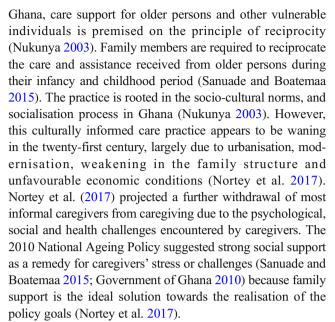


number of older persons (Sharma et al. 2016). Records from the past three decades have shown a tremendous increase in the utilisation of informal healthcare services for older people (Agyemang-Duah et al. 2018). Informal healthcare constitutes care and assistance provided to older people, children or people suffering from chronic diseases and those with some form of disability (National Alliance for Caregiving and the American Association of Retired Persons 2009). Informal care for older people takes different forms, from emotional to instrumental support, such as assisting individuals with utilising formal healthcare services. Major roles performed by informal caregivers include driving individuals to the hospital or for appointments, preparing meals, assisting clients in bathing, helping with medical needs, treatments and toileting issues (Kim et al. 2012; Thrush and Hyder 2014). The term 'informal or family-based care' is used to describe and differentiate caregivers from those in the formal sector and also to emphasise that the services they provide are voluntary and not paid for (Nortey et al. 2017). The practice is considered as an important component of the Ghanaian family structure. This explains why most caregivers are not paid for the care provided to family members or friends (Agyemang-Duah et al. 2018). Roles performed by caregivers in the informal systems are as essential as those provided by professionals and licensed health workers of formal healthcare centres (Sudhinaraset et al. 2013).

Providers of informal healthcare form an important aspect of the healthcare system in both developed and developing countries because of its' affordability, accessibility and availability (Sudhinaraset et al. 2013). Due to the pressure on public health facilities and inadequate health workers in some countries, policy-makers and authorities are advocating for most adults to move into the informal system of caregiving (Steiner 2015). Evidence from the United States shows that about 30% of the US population provided care for chronically ill, disabled or aged family members and friends (National Alliance for Caregiving and the American Association of Retired Persons 2009). Similarly, in sub-Saharan Africa, as at 2013, informal health caregivers constituted about 48% of the entire group of health providers in the sub region (Sudhinaraset et al. 2013). The General Social Survey (GSS 2019) on caregiving and care receiving estimated that the majority of people in Europe aged 15 years and above provided care to a family member at some point in their lives. As at 2012, over 4 million Canadians had provided care to relatives (Steiner 2015). The increased utilisation of informal healthcare services justifies the need for detailed research into the dynamics and coping strategies of the caregivers.

Informal care in Ghana

Informal care or family-based care has been an important aspect of the cultural practices of most developing countries. In



In Ghana, family-based care is also useful to provide care and assistance for parentless children (Abdullah et al. 2018; Nukunya 2003). This is because the traditional system in Ghana sees childcare as a communal responsibility (Nukunya 2003). Family-based care is described within childcare parlance as a kinship care (Nukunya 2003). Family members provide care support for children even if their parents are deemed capable of caring for them. The ultimate goal of the traditional kinship care practice in Ghana is to foster family connections and ties and provide reciprocal support to members (Manful and Cudjoe 2018). The goal of reciprocity is also evident in caring for older persons (Nortey et al. 2017). Similar to the issues surrounding the dwindling of informal care for older people, globalisation and modernisation have also contributed to the waning of the traditional kinship care support. It is on this premise that we seek to understand the personal and communal support used by informal caregivers to overcome their caregiving burden. Identifying caregivers' source of support could be a useful method to plan and educate others in order to reduce the burden and burnout of caregivers.

Challenges among informal caregivers

The National Alliance for Caregiving and the American Association of Retired Persons (2009) reported that the burden of providing informal care varies based on gender, spatial setting, ethnicity and hours of providing care. According to them, informal care providers in rural areas experience intense shortcomings differently from those in urban areas due to fewer available formal services, physicians, health education services and transportation, as well as geographic distance. Independent studies in Ghana and Canada found caregivers' financial difficulties, feeling of isolation and propensity to



social exclusion as some notable challenges faced by caregivers in both rural and urban communities (Agyemang-Duah et al. 2018; Nordmeyer 2002). The challenge of social exclusion occurs due to caregivers' inability to engage in social activities unless they find an alternative carer to perform their caregiving role (McGhan et al. 2013). The findings support the call for respite care support for informal caregivers (Kongsuwan et al. 2018). A study by McGhan et al. (2013) identified caregivers' limited resources and lack of necessary information on what they need to do and what they need not to do as a challenge hindering the successful execution of caregivers' responsibilities. Caregivers working with AIDS patients may feel guilty and fear contracting the disease in the process (Wight et al. 1998). However, these challenges are felt more by female caregivers than males. This is because, aside from caregiving, women play additional roles as wives and mothers when there are young children at home (Taylor et al. 1996; Wight et al. 1998). The burden resulting from caregiving is complex when the recipient has other morbidities which also need the attention of the caregiver (King et al. 2010).

Coping strategies of informal caregivers

Despite the numerous challenges encountered by informal caregivers, some research reports have suggested ways in which caregivers address the challenges they face. These coping mechanisms range from personal and familial to community support (Olson and Defrain 1999). According to Olson and Defrain (1999), the key coping mechanism is the mentality of the caregivers to withstand emerging challenges and threats. Also, social support from friends and other family members in the form of instrumental aid (such as food and money, emotion and information by receiving advise and getting feedback about what to do) is an important source and type of coping mechanisms for caregivers (Nortey et al. 2017; Sanuade and Boatemaa 2015). Caregivers in southwest rural Uganda reported that they seek financial assistance from family members and friends, and sometimes sell their farm produce to get money to care for the sick and the young ones (Taylor et al. 1996). Sun et al. (2010) categorised emotional help, instrumental support, suppressing competing demands, activity coping and planning as deliberate coping styles while venting anger, denial, behaviour and mental disengagement were termed as avoidance coping styles. A research by DiGirolamo and Salgado de Snyder (2008) revealed that Mexican women coped with the challenges of caregiving through a display of their personal strength and resilience.

Studies on informal caregiving in Ghana (Apt 2013; Darkwa 2000; Nortey et al. 2017; Sanuade and Boatemaa 2015; Agyemang-Duah et al. 2018) have only reported the challenges faced by caregivers without mentioning the coping

mechanisms adopted by the caregivers. Hence, data on the coping mechanisms from the perspective of rural and urban caregivers in Ghana are scarce. Consequently, there is the need for detailed research into the coping mechanisms adopted by informal caregivers to help inform policy decisions. The term 'coping mechanism' is used in this context to describe a range of personal, social and community resources used by caregivers to overcome challenges and adversities whilst performing their role as caregivers.

Methods

Design and context

Dealing directly with real-life episodes and narratives of experiences provided by caregivers, we conducted an exploratory qualitative study to provide evidence on the coping mechanisms utilised by informal caregivers to overcome their caregiving challenges in urban communities, Bantama and Tafo, of Kumasi Metropolis and rural communities, Kwaso and Deduako of Ejisu-Juaben Municipality. The use of qualitative research is useful in describing complex and delicate issues such as those surrounding informal healthcare. This method was used to understand the topic from the perspectives of the research participants (Patton 2014).

Sample and procedure

This study was conducted among 20 women who were caregivers of older persons in the rural and urban communities. Five participants were purposively selected from each of the four study sites. Purposive and snowball sampling methods were used. The first purposively selected caregiver interviewed was asked to direct us to other people acting as caregivers. Following Babbie (2016), members of an identified target group provided interviewers with information about how other members could be located. The process ensured that caregivers who met the eligibility criteria were recruited.

Eligibility criteria

The actual selection of participants followed a set of eligibility criteria. First, due to our focus on older people, caregivers providing care support to anyone below 60 years of age were exempted from the study. The selection of persons below 60 years could defeat our study focus and render the study findings meaningless. In order to ensure that caregivers have in-depth knowledge on the subject, we purposively recruited caregivers with more than 4 years of caregiving experience.



Data collection

In-depth, face-to-face interviews were conducted using a semi-structured interview guide. The use of the semistructured interview guide gave the participants the freedom to provide information that may not have crossed the researcher's mind (Hesse-Biber and Leavy 2010). The interviews were conducted in 'Twi' (the local dialect of the study participants) and translated into English for overall understanding and further analysis. The interview questions centred on the coping mechanisms adopted by the caregivers to overcome their caregiving challenges. Each interview was audio-recorded and lasted approximately 50 minutes. Interviews were conducted between January and February 2017. All participants were assured of strict anonymity and confidentiality. Also, participation in the study was voluntary. Data collection ended with the 20th participant after the researchers realised similarity in the responses of the participants. Therefore, data or information saturation was deemed to have been reached (Shenton 2004). In line with the argument of Shenton (2004), the attainment of data or information saturation ensures trustworthiness in qualitative findings. Verbal informed consent was obtained from all the study participants.

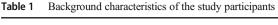
Data analysis

Data were analysed using the five-stage thematic analysis procedure suggested by Braun and Clarke (2006). The findings were categorised and grouped under identified themes. The transcribed data were reviewed several times by the researchers to identify topics and content relevant to the research objective. Passages and quotations were used to give more insights into the emerged themes.

Findings

Background characteristics of the participants

The study involved 20 purposively selected research participants who were providing care assistance for older people aged 60 years or above. Table 1 provides the background characteristics of the 20 study participants. Most of the participants were aged 60 years or above (8) and married (16), with no formal education (11). Most of the participants were from the Akan ethnic group (19) and engaged in farming (11). All participants were Christians. The participants were victims of a range of diseases, notable among them included stroke, blindness, hypertension, paralysis, wounds and fragility.



Variable	Category	Frequency
Age (years)	20–29	2
	30–39	3
	40–49	2
	50-59	5
	60 or above	8
Marital status	Single	2
	Married	16
	Divorced	1
	Widowed	1
Educational background	None	11
	Junior high school	7
	Senior high school	2
Ethnicity	Akan	19
	Ewe	1
	Other	_
Religion	Christian	20
	Muslim	-
	Traditionalist	-
Occupation	Farming	11
	Trading	5
	Not working	4
	=	

Source: field data, January-February, 2017

Coping strategies adopted by the caregivers

Caregivers showed how, in spite of the myriad of difficulties, they are able to manage and cope with them in order to support those that need care assistance. Each of them had their own strategies of living with the challenges they encountered, which, in turn, minimised the effect. Common themes that emerged from the narratives of the research participants are explained in the subsequent sections.

Faith in God

Caregivers were religious and admitted that their belief in God kept them going. The belief in God served as a source of resilience for the caregivers to overcome their caregiving challenges. The participants believed that the condition of their recipients would get better, so they have kept their hope in God. As the saying goes, "service to mankind is like service to God"; hence, in spite of the challenges, they went ahead to serve and support care recipients. The following is a representation of their responses:

"I am very hopeful his condition will improve in no time so that he would get enough strength and help me with the farm work. In spite of all the difficulties, I am still going to be with him. I always pray to God to strengthen me." (Caregiver, Kwaso, rural area.)



Support from friends and family members

Caregivers also indicated that gifts (in cash or in kind) from friends and family members were used to support their work and motivate them to move on despite the challenges they encountered. According to the caregivers, sometimes they receive donations in the form of money and foodstuffs from friends and family members who pay them a visit. A participant noted how these supports motivate them to continue with their caregiving responsibilities:

"Sometimes, his friends come here and other family members also pay us a visit. Through that, they give me some money since they are aware of the challenges I am facing. At least such good gestures make me feel okay to continue with the care." (Caregiver, Tafo, urban area.)

Caregivers are sometimes given foodstuffs which are used to prepare food for the care recipients. One respondent mentioned that:

"When my elder brother's wife is coming from the city, she would bring us bread, rice, tomato, onions, pepper and meat. Then I will use it to prepare our food." (Caregiver, Deduako, rural area.)

Many of the caregivers claimed that support from friends and relatives were provided on a regular basis and not sustainable; it was, however, able to help them for a considerable period of time.

Borrowing

Other caregivers had to borrow money from friends or their neighbours to cater for their relatives as they do not receive enough support. This was one of the major strategies that most of the caregivers used to overcome their financial challenges, especially for those in rural areas. Participants indicated that monies borrowed had to be repaid later with interest. Sometimes, caregivers were unable to pay the monies borrowed due to the fact that most of them were not working. This led to mistrust between the lenders and them. In light of this, one respondent indicated that:

"I borrow money from a lady who lives in the next house when I do not have enough money so that I can take my mother to the herbalist. I go alone but sometimes the herbalist would ask that I bring her and the money would not be enough so I borrow to support that." (Caregiver, Deduako, rural area.)

Acceptance and encouragement

Some caregivers felt that it was their responsibility to provide care for older people within the family. Despite complaints that it was challenging, almost all the caregivers had the mindset that it was their duty to care for the older people. This mental orientation encouraged caregivers to provide care and support despite the multifarious challenges they encountered. Many of the caregivers believed that there is no one to care for the older people should they decide to stop their caregiving role. The lack of alternative carers encouraged caregivers to take up the mantle. The mentality and acceptance of caring for the older persons as a mandatory family responsibility could be attributed to the customs and traditions of most Ghanaian communities. This quote explains the plight of the respondents:

"She is my elder sister so I have to do whatever I can to help her. I cannot sit down and let her husband do all that. If my mother was around, she would be the one to do it but because she is not alive to do it, I have to do it on my own." (Caregiver, Tafo, urban area.)

Another caregiver stated:

"It is part of our family values and norms to care for older people within the family. So it is my duty to take care of my grandmother." (Caregiver, Kwaso, rural area.)

Reducing expenditure on other activities

One other way caregivers were using to reduce or live with the challenges they were encountering was to reduce their expenditure on other activities. Because they had stopped working and were staying with their care recipients, their income level dropped to the extent that, if they did not reduce or change their spending pattern, there was no way they were going to survive. For most of the caregivers, they had not bought new clothes or shoes for years and had not visited the salon for some months. The monies they had were channelled into supporting their care recipients. One respondent shared with us that she has not been able to buy even a pair of slippers for herself in the last 7 months:

"Hmmm... my dear, I have not in the last seven months been able to buy common slippers for myself not to talk of going to see the hairdresser. You might not believe me but it is the truth. No one is supporting me so the little that I have I need to manage it so that it can last longer." (Caregiver, Deduako, rural area.)

Caring for their family together with the care recipient costs a lot of money which requires support from other benevolent



individuals. Yet, most caregivers complained of not getting enough support and, hence, they have to reduce or cut off their expenditure to meet the needs of the care recipient. This is evident in a statement by one respondent:

"My other siblings do not help me, I do everything on my own and this has really made things difficult for me. The only way I survive is by reducing my expenditure on other stuffs and concentrate." (Caregiver, Tafo, urban area.)

Taking time off

In order to be relieved, some caregivers said they took a brief or short break to visit their nuclear family (husband and children), especially those that were not living with them. One woman said that, on weekends, her two children who live with her take over from her whilst she goes to visit the husband. This, she said, reduces the stress she goes through and it makes her feel energised and prepared. One respondent mentioned that:

"On weekly basis, I visit my husband and children at a nearby village because I do not live with them; I am here with my mother. This is the way I use to reduce the pressure and difficulties I face. I am able to relax and have some time for myself when I go there." (Caregiver, Kwaso, rural area.)

Discussion

This study sought to identify the coping mechanisms used by informal carers to overcome challenges whilst caring for older persons in rural and urban communities in Ghana. An initial report revealed inadequate funds, caregivers' inability to work effectively and emotional trauma as some challenges facing caregivers who provide care assistance to older persons in Ghana (Agyemang-Duah et al. 2018). The findings from this study revealed several methods that caregivers use to overcome their caregiving challenges.

The study findings suggest that caregivers providing assistance and support to older persons develop a mental toughness to resist negative thoughts of quitting their caregiving responsibilities. Caregivers believed that caring for older people is a call from God; as a result, they await to receive their reward from God in the hereafter. This mental toughness enabled caregivers to cope with challenges emerging from their caregiving role. Caregivers' personal beliefs and mental toughness were identified by Olson and Defrain (1999) as key coping mechanisms for persons providing assistance to older persons. It appears that the lack of alternative carers further

strengthened caregivers' beliefs and acceptance of their caregiving role. Consequently, caregivers have developed a personal resilient strategy, such as personal emotional support and suppressing of depression, to overcome emerging challenges (Sun et al. 2010).

Consistent with the findings of Taylor et al. (1996), the study found that caregivers received material support, including food and money, from close relatives and friends. These supports enabled the caregivers to overcome financial challenges they encountered whilst taking care of relatives and older persons. Though some caregivers lamented on the weak and unpredictable nature of support from family members and close friends, the little support provided enabled caregivers to overcome their caregiving challenges. In times when caregivers are unable to get support from friends and relatives, they resort to borrowing resources and monies from people as a means to meet the needs of those in their care. Caregivers resort to borrowing options as a last resort after they have sold off personal properties to care for older persons in their care (Olson and Defrain 1999). Though borrowing was identified as a coping mechanism, excessive borrowing may pose further challenges to caregivers, which may worsen their living situation. Therefore, efforts to strengthen support from friends and relatives would be essential in preventing caregivers from engaging in excessive borrowing.

Further, taking time off to visit friends and relatives was identified as a useful coping mechanism by the caregivers. Caregivers took time off from their caregiving role to relax and rejuvenate themselves for the task ahead. Findings from a Ghanaian study revealed caregivers' stress levels as one of the challenges they encountered (Agyemang-Duah et al. 2018). This finding provides insight into the ways caregivers can reduce their stress levels. However, questions may be raised on the perceived challenges that would be encountered by the interim substitute caregivers whilst caregivers take time off to reduce their levels of stress. These questions may be a subject for further investigations.

Strengths and limitations of the study

This study has some strengths that need to be remarked upon. First, to the best of our knowledge, this is the first known study that provides evidence on the coping mechanisms of women who provide care to older persons in rural and urban settings in Ghana. Second, the interpolation of data and incorporation of viewpoints and experiences of the actual people who are directly involved in the caregiving act makes the study unique. It, therefore, demonstrates a good depth of understanding from the views of a multicultural and multiethnic population and offers an important contribution to addressing the existing gap in knowledge. Our findings could serve as a baseline for the government and other stakeholders in



formulating future policies towards putting in place support mechanisms for caregivers and informal healthcare as a whole.

In spite of the above strengths, the following limitations of the study are noted. First, the interpretation of the study findings must be done with caution due to the non-probability sampling techniques adopted in this study. Second, we were not able to identify differences in coping mechanisms between rural and urban Ghanaian women.

Conclusion

This study explored the coping mechanisms of Ghanaian informal caregivers who provide care to older persons in rural and urban Ghana. The study found that participants employed multiple coping mechanisms, including faith in God, support from friends and family, borrowing from friends, acceptance and encouragement, reducing expenditure on other activities and taking time off. In line with our previous work on the role of women and challenges faced as caregivers in rural and urban Ghana, we still recommend that caregivers should be trained by healthcare providers to give them basic knowledge on how to provide certain services that are important to the wellbeing of the care recipients (Agyemang-Duah et al. 2018). It is also important for policy-makers to consider the coping mechanisms enumerated in this study, in order to guide the design and implementation of policies towards improving the informal healthcare sector in Ghana. This is crucial for the realisation of the United Nations' health-related Sustainable Development Goals.

Compliance with ethical standards

Conflict of interest The authors declare no potential conflicts of interest with respect to and received no financial support for the research, authorship and/or publication of this article.

References

- Abdullah A, Cudjoe E, Manful E (2018) Barriers to childcare in children's homes in Ghana: caregivers' solutions. Child Youth Serv Rev 88:450–456. https://doi.org/10.1016/j.childyouth.2018.03.045
- Agyemang-Duah W, Mensah CM, Peprah P, Arthur F, Addai B, Abalo EM (2018) Informal health care: examining the role of women and challenges faced as caregivers in rural and urban settings in Ghana. J Public Health. https://doi.org/10.1007/s10389-018-0953-1
- Apt N (2013) Older people in rural Ghana: health and health seeking behaviours. In: Maharaj P (ed) Aging and health in Africa. Springer US, Boston, pp 103–119. https://doi.org/10.1007/978-1-4419-8357-2_5
- Babbie ER (2016) The basics of social research, 7th edn. Cengage Learning, Boston

- Braun V, Clarke V (2006) Using thematic analysis in psychology. Qual Res Psychol 3(2):77-101. https://doi.org/10.1191/1478088706qp063oa
- Darkwa OK (2000) Toward a comprehensive understanding of the needs of elderly Ghanaians. Ageing Int 25(4):65–79. https://doi.org/10.1007/s12126-000-1012-z
- DiGirolamo AM, Salgado de Snyder N (2008) Women as primary caregivers in Mexico: challenges to well-being. Salud Publica Mex 50(6):516–522
- Ghana Statistical Service (2012) 2010 Population and housing census. Summary report offinal results, Author, Accra, Ghana
- Government of Canada, S. C. (2019). General Social Survey Social Support and Aging (GSS). Retrieved from http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=5719
- Government of Ghana (2010) National Ageing Policy: Ageing with Security and Dignity. Author, Accra, Ghana
- He W, Kowal P (2016) An aging world: 2015. Washington (DC): U.S. Census Bureau, International Population Reports
- Hesse-Biber SJ, Leavy PL (2010) The practice of qualitative research, 2nd edn. SAGE Publications, Inc., Los Angeles
- Kim H, Chang M, Rose K, Kim S (2012) Predictors of caregiver burden in caregivers of individuals with dementia. J Adv Nurs 68(4):846– 855. https://doi.org/10.1111/j.1365-2648.2011.05787.x
- King RB, Ainsworth CR, Ronen M, Hartke RJ (2010) Stroke caregivers: pressing problems reported during the first months of caregiving. J Neurosci Nurs 42(6):302–311
- Kongsuwan W, Borvomluck P, Locsin RC (2018) The lived experience of family caregivers caring for patients dependent on life-sustaining technologies. Int J Nurs Sci 5(4):365–369. https://doi.org/10.1016/j.ijnss. 2018.09.011
- Kowal P, Byles JE (2015) 900 million and counting: epidemiologic data for demographic and policy transitions. Popul Horiz 12(2):68–76. https://doi.org/10.1515/pophzn-2015-0011
- Manful E, Cudjoe E (2018) Is kinship failing? Views on informal support by families in contact with social services in Ghana. Child Fam Soc Work 23(4):617–624. https://doi.org/10.1111/cfs.12452
- McGhan G, Loeb SJ, Baney B, Penrod J (2013) End-of-life caregiving: challenges faced by older adult women. J Gerontol Nurs 39(6):45–54. https://doi.org/10.3928/00989134-20130402-01
- Mwinituo PP, Mill JE (2006) Stigma associated with Ghanaian caregivers of AIDS patients. West J Nurs Res 28(4):369–382. https://doi.org/10.1177/0193945906286602
- National Alliance for Caregivers and American Association of Retired Persons (2009). Caregiving in the United States. https://www.caregiving.org. Accessed October 2016
- Nordmeyer K (2002) Gender role perceptions and women's caregiving experiences. [MSC Thesis], University of Utah, Salt Lake
- Nortey ST, Aryeetey GC, Aikins M, Amendah D, Nonvignon J (2017) Economic burden of family caregiving for elderly population in southern Ghana: the case of a peri-urban district. Int J Equity Health 16:16. https://doi.org/10.1186/s12939-016-0511-9
- Nukunya GK (2003) Tradition and change in Ghana: an introduction to sociology. Ghana Universities Press, Accra
- Olson DHL, Defrain JD (1999) Marriage and the family: diversity and strengths, 3rd edn. Mayfield Pub Co., Mountain View
- Patton MQ (2014) Qualitative research & evaluation methods: integrating theory and practice, 4th edn. SAGE Publications, Inc., Thousand Oaks
- Sanuade OA, Boatemaa S (2015) Caregiver profiles and determinants of caregiving burden in Ghana. Public Health 129(7):941–947. https:// doi.org/10.1016/j.puhe.2015.05.016
- Sharma N, Charkrabati S, Grover S (2016) Gender differences in caregiving among family-caregivers of people with mental illnesses. World J Psychiatry, 6(1):7–17
- Shenton AK (2004) Strategies for ensuring trustworthiness in qualitative research projects. Educ Inf 22(2):63–75. https://doi.org/10.3233/EFI-2004-22201



- Steiner A (2015) The lived experiences of sandwich generation women and their health behaviours. Theses and Dissertations (Comprehensive). 1722. Retrieved from https://scholars.wlu.ca/etd/1722
- Sudhinaraset M, Ingram M, Lofthouse HK, Montagu D (2013) What is the role of informal healthcare providers in developing countries? A systematic review. PLoS One 8(2):e54978. https://doi.org/10.1371/journal.pone.0054978
- Sun F, Kosberg JI, Kaufman AV, Leeper JD (2010) Coping strategies and caregiving outcomes among rural dementia caregivers. J Gerontol Soc Work 53(6):547–67
- Taylor L, Seeley J, Kajura E (1996) Informal care for illness in rural Southwest Uganda: the central role that women play. Health Transit Rev 6(1):49–56
- Thrush A, Hyder A (2014) The neglected burden of caregiving in lowand middle-income countries. Disabil Health J 7(3):262–272. https://doi.org/10.1016/j.dhjo.2014.01.003
- Wight RG, LeBlanc AJ, Aneshensel CS (1998) AIDS caregiving and health among midlife and older women. Health Psychol 17(2):130–137

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

