The Influence of Public Perception of Primary Care Givers on the Uptake of Institutionalized Care in Nakuru County, Kenya

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Abstract
Globally, few of the older people have access to institutional care homes for older people and African lags behinds. Nearly half of the population of the elderly people in the developed world have access to these services but actual percentage of African older people who have access to the services is not clearly documented. It is however believed to be below 5%. This study sought to determine whether primary care givers have an influence on the decision to enroll the elderly people in formal care homes. The study engaged 400 respondents from Nakuru County, who were selected through purposive and stratified random sampling. Data for the study was collected through the use of questionnaires and in-depth interviews. The results reveal that actually, the decision to enroll the elderly persons to care homes lies outside the purview of the primary care givers. It could be a societal issue beyond the sole decision of a primary care giver. The paper therefore recommends that deeper societal understanding be made on the perception on this subject rather than narrowing the scope to primary care givers' attributes.

Key words: Public perception, Elderly people, Self-efficacy, Care giver, Institutionalized care

1.0 Background

Changing family structure, dynamic migration patterns and associated risks of ill health in later life, place a higher need for long-term care and support (World health organization, 2018). Family-centered care for the elderly people continues to gain momentum in the modern world. But the fragmentation of the traditional large family groups into small family units as a result of socio-economic realities and dual career family orientation has drastically reduced the number of people especially women who can provide care to dependent elderly family members (Gaddis & Klasen 2014). The increased female participation in the labour market as expressed by Cazes & Verick (2013) means that a shift towards paid work for care giving is quite necessary. This and tighter regulation of labour markets has resulted in the availability of a very small pool of family members who can provide care to the family. It can be observed that this disintegration of traditional care provision structures has left many elderly people vulnerable to solitary lives, mal-care and elder abuse (Cazes & Verick, 2013).

Family care is thus slowly being substituted with formal paid care for the elderly people. Relationships between the formal health system and informal community caregiver programmes have not in the past been highly structured and often they depend on the individual efforts of staff in organisations and facilities (Pletzen & MacGregor, 2013). This limited degree of complementarity between formal and informal services is one of the problem areas that the. The physical and psychological health and coping ability of the care giver can be moderated by the specific domain of their self-efficacy for the caring role (Chenoweth et al., 2016). Therefore understanding the underlying processes that influence a person's ability to adapt positively to the caring role is an important prerequisite to the development of carer support systems. According to Chenoweth et al. (2016), one

influential factor in this exercise is the carer's belief that they have the capacity to undertake complex tasks in caring for a family member. Self-efficacy often changes within the individual over time and in response to specific life experiences, such as taking on the carer role in adult life and having to deal with the changing behaviour and abilities in the elderly persons. This research intended asses the perception on the efficacy of primary care givers to provide the much needed care for the elderly people. The paper indends to meet two objectives: One, to determine the perception of the society in Nakuru on the efficacy of the primary care givers to provide care to the elderly people. The second objective was to determine the influence of the perception on the uptake of formal care services in Nakuru County, Kenya.

2.0 Literature review

2.1 Perceived Self-efficacy of Primary Care Givers to Take Care of the Elderly

Self-efficacy refers to the belief one has in their own abilities, specifically their ability to meet the challenges ahead of us and complete a task successfully (Akhtar, 2008). General self-efficacy refers to our overall belief in our ability to succeed, but there are many more specific forms of self-efficacy as well (for instance in academics, sports and parenting, sports). Here, literature concerning self-efficacy of the primary care givers as related to the uptake of formal care services for the elderly people is listed and discussed.

2.2 Pre-old Age Relationship

The relationship that existed between the a member of the public and his/her elderly relative earlier is said to have a significant influence on the self-efficacy of the member of the public providing care to his/her elderly relative(s). Formal and informal caregivers differ both in terms of their relationship to the care receiver and also in the manner in which they embrace and experience the care giving role. That is, caregivers differ in what they do, how they do it, and how long they do it. In general, the closeness of the familial relationship has been established to influence self-efficacy toward elderly persons (Delgado & Tennstedt, 2007). Despite many common experiences, caregivers' roles are highly variable across the course of caregiving. The diversity of families, the timing of entry into the caregiving role, the duration of the role in relation to the overall life course of the caregiver, and transitions in care experienced over time all shape the nature of the caregiving role (Schulz & Eden, 2016). The committee conceptualized caregiving over time as "caregiving trajectories" to highlight the dynamic nature of the role and the different directions it can take.

In populations in which the care recipients become increasingly impaired over time, such as with increasing frailty, dementia, Parkinson's disease, or advanced cancer. Thus, the caregiving role expands accordingly and the nature of the relationship between the patient and the care givers matters a lot. In populations in which care recipients experience short-term or episodic periods of disability, such as early-stage cancer and heart failure, the caregiving role may be short term but intense or it may wax and wane over time (Schulz & Eden, 2016). This study observed that it is indeed possible that the kind of rapport that existed between the potential caregiver and elderly relative can influence the attitude of the caregiver toward elderly persons, which may further have a bearing on caregivers' self-efficacy. For example, where a good develop good rapport and mutual concern between the potential caregiver and elderly person prior to old age may make the former have positive attitude toward the elderly relative. This may in turn the caregiver feel more obligated to care for the elderly relative. However, potential caregiver who feels that his/her elderly relative was unsupportive and unconcerned about his/her welfare in the past may find very little incentives to provide care for the elderly relative.

Family relationships and quality of life may also be impacted by caregiving demands, although this topic has received relatively little attention in the caregiving literature. In a large panel study of Health and Retirement Study participants, Amirkhanyan and Wolf (2006) found that adverse psychological effects of caregiving are dispersed throughout the family and not just the active caregivers.

Sigurdardottir et al. (2009) argue that providing care to an older relative as being a challenging task because it is a task that younger relatives do not plan for in advance and are not always expecting to fill. Younger relatives never prepare for the gradual or sudden decline in the physical and psychological conditions of their older relatives as well as the many tasks that go with care giving. Some of the tasks that go with care giving and in which younger people have to provide to their older relatives include preparing meals, dressing, bathing, going to the bathroom, transportation, medications and laundry. The challenge faced by primary caregivers in providing for their older relatives is well explained by Oyama, Tamiya, Kashiwagi, Sato, Ohwaki, & Yano (2012), in their study. The authors, while basing their arguments on Life course theory posits that unexpected transitions are more stressful than transitions that are expected such as marital and employment roles.

Although most of the care provision for older people is still given by relatives of older people, some families are embracing institutional care for their relatives. In Africa, for instance, countries such as Zimbabwe and Botswana have been providing institutional care services to their elderly populations since late 1990s (El-Badry, 2013). However, only 2.4% and 1.5% of older people are enrolled for institutional care in Zimbabwe and Botswana respectively (El-Badry, 2013). Although the uptake of institutional in Africa as demonstrated by the aforementioned countries, there was need to establish personal factors members of the public consider in their decision whether to enroll their older relatives for institutional care.

This study held that perceived importance and their role in society could act as a source of impetus to primary care givers to provide care to their older relatives and as such consider home based rather than institutional care. However, primary care givers who do not appreciate the importance of older people in society could be less motivated to take care of their older relatives and could thus opt for institutional rather than home based care. This study also held that institutional homes whose existence primary care givers were most aware of and which were also legally operating, had adequate staff whose attitude toward older people was favourable were highly likely to be considered by primary care givers to take care of their older relatives.

Many studies, however, do not say much on the extent to which the pre-old age relationship between the potential caregiver and his/her elderly may influence the former's decision on whether or not to enroll the latter in a formal care institution. There is therefore need to understand the kind of relationship members of the public have with their elderly relatives. This is important so that we can understand how such relationship is likely to inform their decision to enroll or not enroll their elderly relatives for formal care services in formal care homes for the elderly.

2.3 Psychological Strength of the Primary Care Givers

Close family and other informal caregivers provide the vast majority of long-term care to older adults as well as others with chronic illnesses and disabilities (Ennis, Rosenbloom, Canzian, & Topolovec-Vranic, 2013; Viana et al., 2013; Penning and Wu, 2016). Empirical accounts suggest that caregiving is stressful and therefore, likely to have negative implications for the mental health and well-being of caregivers. However, limited research attention has been directed toward the implications of caregiver–care recipient relationships

for an understanding of caregiving outcomes as well as the role of gender, age, or other social structural factors in influencing these implications (Litwin, Stoeckel & Roll, 2014; Penning & Wu, 2016). Yet, recent theoretical and empirical developments direct their attention to their combined importance for an understanding of the experience and consequences of caregiving. This study addresses these gaps in knowledge, examining the psychological strength of the primary care givers and its implications on the uptake of the formal care services by the older people.

It is possible as suggested by Stajduhar & Cohen (2009) that care providers may experience a lot of psychological problems in the course of their work. Therefore, the ideas of Stajduhar & Cohen (2009) are important since it informs the proposed study of the psychological context of care giving and more so that of the caregiver, they however, do not explain how such psychological problems experienced by the caregivers in the course of their work affects their decision on whether or not to take enroll their elderly relatives in formal care institutions for the elderly. The current study not only established the kind of psychological context of care giving for the elderly, but also how such context informs the decision of the public to consider formal care giving institutions to the elderly.

A study by Chipangura, Van Niekerk & Van Der Waldt (2016) found that most of the primary care givers would seek the wishes of their older relatives before deciding on whether to enroll for institutional care. For instance, most of the respondents indicated that their older relatives would wish to be accorded proper burial that is honorable, meaningful and acceptable to their cultures. This expectation made most of the primary care givers to shy away from seeking institutional care out of the concern that the burial wishes of their older relatives may not be fulfilled under institutional care practices. There is no clear literature linking the psychological strength of the care givers on the adoption of institutionalized care for the elderly. Thus, psychologically people may be obliged to honor the requirements of the elderly when they ate still alive to show respect and regard for them. This study sought to establish the influence of psychological strength of the care givers on the uptake of the institutionalized care.

2.4 Financial Capacity of the Primary Care Givers

Self-efficacy entails the confidence in one's own ability to undertake the target behaviour (Luo et al., 2018). People generally have strong motivation towards tasks where self-efficacy is high and thus strongly influences a person's behavioural choice. The self-efficacy of members of the public to care for their older relatives may also be influenced by the financial strength of the primary care givers. A research on filial expectations and responsibilities in the context of societal expectations for women has shown that women often stretch themselves to the breaking point to provide care to their elderly relatives (Coward et al., 2014). Caregiving can be demanding and time consuming, usually without financial compensation. Relatives caring for older adults may have additional responsibilities, such as working or looking after other family members to get the financial strength to foot the bills in the course of the activity. These multiple and potentially conflicting obligations can cause stress, ill health and an increased risk of mortality (Gray, Hahn, Thapsuwan & Thongcharoenchupong, 2016). It is common for caregivers to experience what scholars call 'carer burden', the belief that current and future resources (emotional, physical, social, and financial) cannot meet the role demands of caregiving. Sometimes the care givers may opt for care homes for their older relatives to allow themselves time for working to get the finances to pay for the services instead of committing their entire time to rendering the service.

2.5 Theoretical framework: Theory of Self-Efficacy

Bandura (1997b) postulated this theory where the author understood self-efficacy as the beliefs in one's internal capabilities to organize and execute the courses of action required to manage a particular situation. This basic idea behind this theory is that motivation and performance are determined by how successful people believe they can be (Bandura, 1997b). In terms of performance outcomes, positive and negative experiences can influence the ability of an individual to perform a given task. Self-efficacy is influenced by encouragement and discouragement pertaining to an individual's performance or ability to perform. Using verbal persuasion in a positive light leads individual's to put forth more effort; therefore, they have a greater chance at succeeding. However, a negative verbal persuasion can lead to doubts about one self-resulting in lower chances of success. For instance, an informal caregiver who is appreciated by the care recipient-in this case the elderly relative, may feel more encouraged and motivated and such may put more effort in his/her care provision role. On the other hand a caregiver who is often bashed or scorned by his elderly relative may feel discouraged and demotivated leading to low self-efficacy in care provision, and may consider formal care services for the elderly relative. Lastly, for the physiological feedback (emotional arousal), people experience sensations from their body and how they perceive these emotional arousals influence their beliefs of efficacy (Bandura, 1977). In the context of the current study, Self-efficacy theory suggests that increasing the self-efficacy of care providers and care recipients will boost motivation and performance in care provision to elderly people.

3.0 Methodology

This study adopted an exploratory research design to establish the effect of public perception of the efficacy of the primary care givers on the uptake of formal care services for the aged people in Nakuru County. The design was considered relevant in this study because it is concerned with associations that exist between public perception and the uptake of institutionalised care. Nakuru County is one of the 47 counties of the republic of Kenya established in the Constitution of Kenya 2010. The study used purposive and stratified sampling methods. Purposive sampling method was used to select the key informants. County government official in charge of elderly people and formal homes for the elderly people, heads of homes for elderly people, expert in gerontology or associated profession, medical doctor and a professional counselor were the key informants. A sample of 400 persons was collected from a population of 895,783 aged between 20 and 59 years Using Yamane's formula (Yamane, 1973) for sample size determination. A Multifactor Leadership Questionnaire (MLQ) scale items related to public perception of the formal care services for the elderly people was modified to suit the purpose of the study (Bass et al., 1985). The research tool entailed the items for focus group discussions and the section with interview schedules for personal interviews. Chi-square test, Pearson's correlation, and Multiple regression analyses were conducted to understand the functional relationships between the dependent and independent variables (Wooldridge, 2002). The dependent variable was the uptake of institutionalised whereby enrol for the services was regressed against the three dimensions of efficacy of the primary care givers (Pre-old age relationship, Psychological strength, Financial capacity). The average score for each dimension was used in the model.

Hypothesis: Public perception of self-efficacy of the primary care givers does not significantly influence the uptake of institutionalized care in Nakuru, Kenya.

4.0 Results

4.1 Socio-economic characteristics of the Respondents

The descriptive analysis of the socio-economic characteristics of the respondents is presented in this sub-section. Respondents' background information covered were gender, marital status, age, source of income, and level of education. As indicated in Table 5, 56% of the respondents were females while 44% were males. Provision of care to older people is largely within female gender domain (Jayachandran, 2015). It is for this reason that majority of the respondents were women. Further, the population of females generally in Kenya is slightly higher than that of men (KNBS, 2017). Therefore, the high number of females in the study sample was reflective of their numerical advantage over the male gender in the general population. In the African context, gender ascribes certain roles that are instituted by society and sanctioned by customs. For instance, women provide care for the sick, children, frail and the elderly (Sharma et al., 2016). However, men also play an important role in prevision of physical security and financial support to vulnerable members such as women, children and the elderly. The role played by different gender in society made gender an important consideration in this study hence its coverage as one of the profile of the respondents. Table 1 represents gender of the respondents.

Table1: Demographic characteristics of the respondents

Variable	**Frequency**	**Percentage**
Gender of the respondents		
Female	217	56.07
Male	170	43.93
Total	**387**	**100.0**
Marital Status		
Single	111	31.8
Married	83	23.8
Widowed	84	24.1
Separated	41	11.7
Divorced	30	8.6
Total	**349**	**100.0**
Age distribution of the respondents		
18-26 Years	49	12.7
27-32 Years	86	22.2
33-38 Years	152	39.3
39-44 Years	79	20.4
45-51 Years	11	2.8
52-59 Years	10	2.6
Total	**387**	**100.0**
Education Level of the respondents		
No Formal Education	6	2.2
Primary	158	40.9
Secondary	166	43.0
College	38	9.7
University	19	4.3
Total	**387**	**100.0**

The results for marital status presented in Table 1 indicate that about 32% of the respondents were single. This was followed by widows and married individuals who constituted 24% and 23.8% respectively of the respondents. Further, examination of the results in Table 5 shows that 11.7% and 8.6% of the respondents were separated and

divorced respectively. Individual's marital status may accord him/her respect, status, and added obligations and responsibilities in society, which may further shape his/her perception of people, events and issues affecting society (Jayachandran, 2015). Older people are related to individuals in any form of a marital relationship as parents, parents in law, or other forms of kinship connections. It is this significance of marriage that made marital status one of demographic profiles of the respondents considered in this study. The study engaged respondents from diverse marital background as shown in Table 1.

In terms of gage of the respondents, it was revealed that majority of the respondents were aged between 33-38, 27-32 and 39-44 years. In particular, persons aged 33-38, 27-32 and 39-44 years accounting for 39.3%, 22.2% and 20.4% of the respondents respectively. Another important age, the current study surveyed was those aged 18-26 years, which accounted for 12.7% of the respondents. Persons aged 45-51 and 52-59 years constituted 2.8% and 2.6% of the respondents respectively as shown Table 5. Although society expects everyone to be mindful of each other, the moral obligation on care provision to vulnerable populations such as the elderly was placed on adults (Moses, 2015). In most communities, one graduated into adulthood upon initiation (Ginsberg et al., 2014). Most African communities initiate their children around the age of 18 years. Conventionally, a person is considered an adult after attaining the age of 18 years.

Therefore at the age of 18 years a person is considered an adult both traditionally and conventionally and as such is required to be fairly responsible to society. It is for this reason that this study considered individuals aged 18 years and above as its respondents. The fact that old age begins at 60 years meant that it was only individuals below the age of 60 years that could be considered as respondents as possible care providers to the elderly. This explains why this study considered individuals aged 18-59 years as its respondents. Age determines ones perception and responsibility towards members of society including vulnerable populations including older people (Moses, 2015).

Education level of an individual may influence how individuals perceive different phenomena in society including the perception on aging. Further, education as one of the profiles of a population provides insights, social status and shapes the standard of living of people (Luo et al., 2018). The level of formal education of the respondents was analyzed and results were presented as shown in Table 5. From the results, it is evident that the respondents with secondary education constituted 43% of the respondents. This was closely followed by respondents with primary education, which accounted for 40.9% of the respondents. Individuals with college and university level of education formed 9.7 and 4.3% of the respondents respectively.

Finally, in terms of source of income for the respondents, the results presented in Figure 1 indicates that business was the most common source of income that supported up to 46% of the respondents.

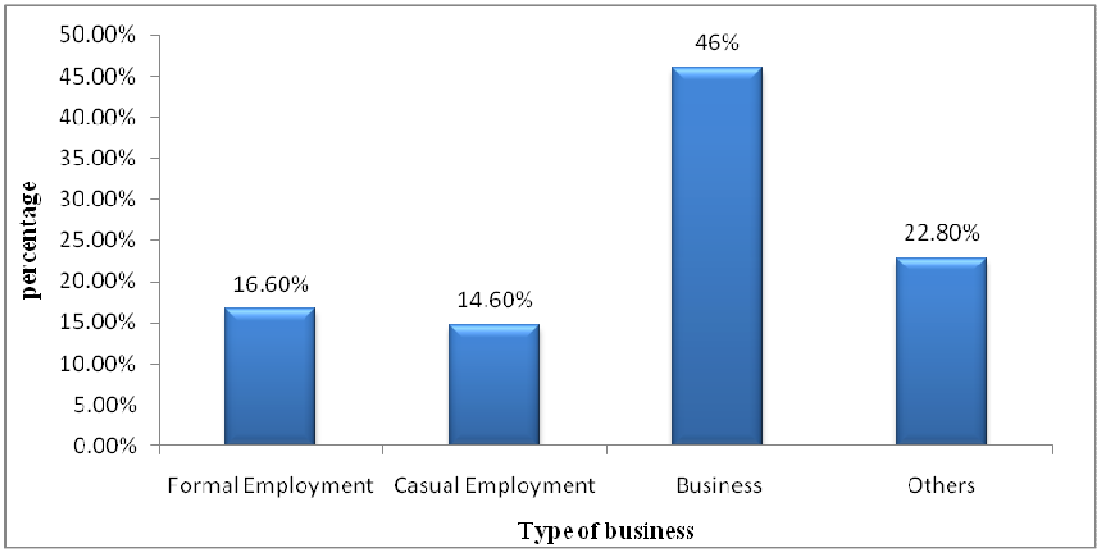

Figure 1: Main Source of Incomes of the Respondents

Formal employment was a source of livelihood to about 16.6% of the respondents. Casual employment was source of livelihood to 14.6% of the respondents. This made it the least source of income to the respondents who participated in this study as Figure 2 shows. Another 22% of the farmers were engaged in other means of livelihood other than the three mentioned categories of sources of income. They included, small scale farming, motorcycle transport (popularly known as *bodaboda)*, and conductors at the bus stops among others. It was important to analyze the source of income since it could influence the amount of income as well as the time available to provide care for the elderly people or enroll them to formal care giving institutions. Ordinarily, a formal engagement in employment which consumes much time of the care giver would necessitate the enrolment of the elderly to care homes to allow the supposed care giver an opportunity to eke out a living through the formal jobs.

4.2 The Influence of Perceived Self-efficacy of Primary Care givers on the Uptake of Institutionalized Care for the Elderly in Nakuru County, Kenya.

The hypothesis was perceived self-efficacy of the primary care givers does not significantly influence the decision to enrol for institutional care in Nakuru, Kenya. Multiple regression model was used. The dependent variable was the average scores for each dimension of perceived self-efficacy of the primary care givers. The dimensions included: Pre-old age relationship, psychological strength and financial capacity of the primary care givers. The intension was to understand the impact of these dimensions on the uptake of institutionalized care.

The results as presented in Table 2 indicate that the model was not significant and the therefore pre-old age relationship, psychological strength and financial capacity of the primary care givers did not significantly influence the uptake of institutionalised care. The F statistics of 1.415 was no significant (Sig=0.238) and thus the null hypothesis which stated that perceived self-efficacy of primary care givers does not significantly influence the decision to enrol older people in institutional care in Nakuru, Kenya was supported. This result implies that the conditions of the primary care givers in terms the pre-old age relationship with the older relatives, their psychological strength and financial capacity of do not matter in their decision to pay for the institutionalised care services for their older

relatives. Further, the uptake of the institutionalised care services is therefore influenced by other factors but not the perceived self-efficacy of the primary care givers.

Table 3: Perceived Self-efficacy of the Primary Care Givers

Model Summary

Model	R	R Square	Adjusted R Square	F(ANOVA)	Sig
1	.112[a]	.012	.004	1.415	0.238[b]

a. Predictors: (Constant), Psychological strength, Pre old relationship, Financial capacity

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.823	.293		9.638	.000		
	Pre old relationship	-.045	.044	-.057	-1.016	.311	.936	1.069
	Financial capacity	-.057	.083	-.048	-.689	.491	.600	1.668
	Psychological strength	-.073	.115	-.045	-.634	.527	.573	1.745

a. Dependent Variable: WTP SCORES

5.0 Conclusions and recommendations

Perceived efficacy of the primary care givers does not influence the uptake of institutionalised care for the elderly people. Primary care givers attributes such as pre-old age relationship with the older relatives, their psychological strength and financial capacity of do not matter in their decision to pay for the institutionalised care services for their older relatives. Although primary care givers acknowledged that their elderly relatives often experienced psychological problems, they considered such condition as not being critical enough to influence the uptake of institutional care. Thus, the uptake of the institutionalised care services is therefore influenced by other factors but not the perceived self-efficacy of the primary care givers. It is important to consider a wide range of issues related to the general community norms and beliefs while trying to advance the use of these important services. Primary care givers may be willing to enroll their relatives in the care homes but the decision to do so may be outside their purview. Thus, deeper understanding the societal evaluation of such decisions is important.

6.0 References

Akhtar, M. (2008). What is self-efficacy? Bandura's 4 sources of efficacy beliefs. *Positive Psychology UK.*

Amirkhanyan, A. A, Wolf, D. A. (2006). Parent care and the stress process: findings from panel data. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61(5), S248-S255.

Bandura, A. (1997b). Self-Efficiency: The exercise of control. New York: Freeman.

Cazes, S., & Verick. S. (2013). The Labour Markets of Emerging Economies: Has Growth Translated into More and Better Jobs? Geneva and Basingstoke, UK: ILO and Palgrave Macmillan.

Chenoweth, L., Stein-Parbury, J., White, D., McNeill, G., Jeon, Y. H., & Zaratan, B. (2016). Coaching in self-efficacy improves care responses, health & well-being in dementia carers: a pre/post-test/follow-up study. BMC Health Services Research, 16(1):1-16. doi:10.1186/s12913-016-1410-x

Chipangura, P., Van Niekerk, D., & Van Der Waldt, G. (2016). An exploration of objectivism and social constructivism within the context of disaster risk. Disaster Prevention and Management. An International Journal, 25(2), 261-274.doi:10.1108/dpm-09-2015-0210

Coward, R.et al., (2014). Demographic Perspectives on Gender and Family Caregiving. In J. Dwyer & R.T. Coward (eds.), Gender, Families, and Elder Care (pp. 18-33). Newbury Park, CA: Sage.

Crosnoe, R., Prickett, K. C., Smith, C., & Cavanagh, S. (2014). Changes in young children's family structures and child care arrangements. Demography, 51(2), 459–483. doi:10.1007/s13524-013-0258-5

Delgado, M., & Tennstedt, S. (2007). Making the case for culturally appropriate community services: Puerto Rican elders and their caregivers. Health and Social Work, 22, 246–255.

Gaddis, I., & S. Klasen. Economic development, structural change, and women's labor force participation: A reexamination of the feminization U hypothesis. Journal of Population Economics, 27:3 (2014), 639–681.

Ginsberg, P. E., Kariuki, P. W. & Kimamo, C. (2014). The Changing Concept of Adolescence in Kenya: Three Generations Speak. Psychological Thought, 7(1), 55-65.

Gray, R. S., Hahn, L., Thapsuwan, S., & Thongcharoenchupong, N. (2016). Strength and stress: Positive and negative impacts on caregivers for older adults in Thailand. Australasian journal on ageing, 35(2), E7–E12. doi:10.1111/ajag.12266.

Jayachandran, B. (2015). The Roots of Gender Inequality in Developing Countries. Annual review of economics, 7, 63-88.

Kenya National Bureau of Statistics (2017). Women & Men in Kenya: Facts & Figures 2017. Retrieved from: http://www.knbs.or.ke/download/women-men-kenya-facts-figures-2017/

Luo, M., Xue, Y., Zhang, S., Shunxing Zhang, Yuanyuan Dong, Dandan Mo, Wei Dong, Kun Qian, Yue Fang, Huigang Liang, Zhiruo Zhang, Z. (2018). What factors influence older people's intention to enrol in nursing homes? A crosssectional observational study in Shanghai, China. British Medical Journal, 8(9), 1-8.

Moses, S. M. (2015). Ethics and the elderly: the challenge of long-term care. Orbis Books, MaryKnoll, New York. Retrieved from**:** https://books.google.co.ke/books?id

=TT11CQAAQBAJ&pg=PT80&lpg=PT80&dq=moral+obligation+on+care+provision+to+vulnerable+populations+such+as+the+elderly+was+placed+on+adults&source=bl&ots=51poLkfY6j&sig=PofRwU2kZavu6cixo1rAU5Za9Uo&hl=en&sa=X&ved=2ahUKEwjD04GziePfAhWbVBUIHWO2AKQQ6AEwCHoECAQQAQ#v=onepage&q=moral%20obligation%20on%20care%20provision%20to%20vulnerable%20populations%20such%20as%20the%20elderly%20was%20placed%20on%20adults&f=false

Oyama, Y., Tamiya, N., Kashiwagi, M., Sato, M., Ohwaki, K., & Yano, E. (2012). Factors that allow elderly individuals to stay at home with their families using the Japanese long-term care insurance system. Geriatrics and Gerontology International, 13(3), 764-773.doi:10.1111/ggi.12002

Penning, M. J. & Wu, Z. (2016). Caregiver Stress and Mental Health: Impact of Caregiving Relationship and Gender. The Gerontologist, 56(1), 1102-1113. https://doi.org/10.1093/geront/gnv038

Schulz, R. & Eden, J. (2016). Committee on Family Caregiving for Older Adults; Board on Health Care Services; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine. Washington (DC): National Academies Press (US); 2016 Nov 8. Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK396398/

Sharma, N., Chakrabarti, S. & Grover, S. (2016). Gender differences in caregiving among family - caregivers of people with mental illnesses. World Journal of Psychiatry, 22; 6(1), 7-17.

Sigurdardottir, S., Andelic, N., Roe, C. & Schanke, A. K. (2009). Cognitive recovery and predictors of functional outcome 1 year after traumatic brain injury. Journal of the International Neuropsychological Society, 15(5), 740-750.

Stajduhar, K. & Cohen, R. (2009). Family care giving in the home. Family Carers & Palliative Care. Oxford University Press; Hudson P, Payne S.

van Pletzen, E. & MacGregor, H. (2013). Multi country research on community caregivers: the backbone of accessible care and support - South Africa report. The Caregivers Action Network.

Wooldridge, J. M. (2002). Econometric Analysis of Cross Section and Panel Data. Cambridge, MA: MIT Press

World Health Organization (WHO). (2018). Aging and Helath.https://www.who.int/news-room/fact-sheets/detail/ageing-and-health