

FACTORS INFLUENCING UNIVERSAL HEALTH CARE ACCESS BY THE AGEING POPULATION IN THE RURAL AREAS IN KENYA: A CASE OF THE NATIONAL HOSPITAL INSURANCE FUND BENEFICIARIES IN MARSABIT COUNTY

Peter Ltisiano Leitemu

Master of Arts in Project Planning and Management, University of Nairobi, Kenya

Amos K. Gitonga

School of Open and Distance Learning, University of Nairobi, Kenya

©2019

International Academic Journal of Information Sciences and Project Management (IAJISPM) | ISSN 2519-7711

Received: 20th August 2019

Accepted: 28th August 2019

Full Length Research

Available Online at:

http://www.iajournals.org/articles/iajispm_v3_i4_672_697.pdf

Citation: Leitemu, P. L. & Gitonga, A. K. (2019). Factors influencing universal health care access by the ageing population in the rural areas in Kenya: A case of the National Hospital Insurance Fund beneficiaries in Marsabit County. *International Academic Journal of Information Sciences and Project Management*, 3(4), 672-697

ABSTRACT

Subsidized health insurance cover costs can stimulate uptake of health insurance covers due to price elasticity as the people might perceive it to be more affordable after introduction of government subsidies. Marsabit County an attempt to improve the situation it seems not much has been achieved in raising the quality of service in public health institutions and this is compounded by limited information on the factors that ail the delivery of service quality. This study was guided by the following objectives. To determine the influence of institutional factors accessibility/quality of services offered, demographic factors, cost of services, socio-cultural factors on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. This study was grounded on Abraham Maslow's Theory, Resource Dependence Theory and Stakeholder Theory. The study's target population was 307 that consists of ageing population residents in the Marsabit County, community leaders, County Health officers and NHIF staff working in this region. A sample population of 171 was arrived at by calculating the target population of 307 with a 95% confidence level and an error of 0.05 using the below formula taken from Nassiuma (2000). The study selected the respondents using stratified proportionate random sampling technique. Primary data was obtained using self-administered questionnaires. The drop and pick method was preferred for questionnaire administration so as to give respondents enough time to give well

thought out responses. Data was analyzed using Statistical Package for Social Sciences (SPSS Version 25.0). After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented in form of tables. The qualitative data from the open-ended questions was analyzed using conceptual content analysis and presented in prose. Multiple regression analysis was used to establish the relations between the independent and dependent variables. In testing the significance of the model, the coefficient of determination (R^2) was used to measure the extent to which the variation in access to universal health care is explained by the variations of factors. The study found that facility fees and physician charges greatly influences the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. Though, the study found that transport costs moderately influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study concluded that cost of services had the greatest effect on the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County, followed by institutional factors, then accessibility/quality of services offered then social cultural factors while demographic factors had the least effect to the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study recommends an enforcement of Kenya's Health Policy

2011–2030 and the 2010 Constitution of Kenya both of which require an appropriate and equitable distribution of health workforce in public health facilities and their subsequent training and development, enhancing their retention packages and

incentives and upgrading of institutional and health worker productivity and performance.

Key Words: *universal health care access, ageing population, rural areas, National Hospital Insurance Fund, beneficiaries, Marsabit County, Kenya*

INTRODUCTION

The world's older population has been increasing, but the pace of growth has recently accelerated compared to the past. The global population age 65 or older was estimated at 461 million in 2004, an increase of 10.3 million just since 2003. Projections suggest that the annual net gain will continue to exceed 10 million over the next decade which is more than 850,000 each month. In 2005-2010, the growth rate of the older population, at 2.6 per cent annually, was more than twice that of the total population (1.2%). By 2025-2030, world projections indicate that the population aged 60 or over will be growing about 4 times mostly in urban areas. Studies indicate that by 2050, nearly 80 per cent of the world's older population will be living in less developed countries. In 2005, more than half (51.5 per cent) of the world's older population lived in urban areas. Slightly over one fourth of older persons (174 million) lived in the urban areas of the less developed regions. The number of older persons is growing most rapidly in the urban areas of less developed regions. The increase in the number of ageing population people worldwide has implications for provision of services for the aged in all sectors: political, economic, education, security, housing, social welfare, rights, health among others. Health is a major concern of ageing population people since it determines their ability to care for themselves and undertake other roles in society (UN, 2010).

Universal health coverage, a major goal in under Sustainable Development Goals, seeks to ensure people obtain the health services whenever they need and devoid of risk catastrophic health spending. The world's older population has been increasing. This is due to the advancement in medical treatment and technology, prevention and eradication of many infectious diseases, and improved nutrition, hygiene and sanitation. Older people in developing countries are highly vulnerable group of the society exposed to hardship, malnutrition, poverty and old-age-related diseases. Health is a major concern of ageing population people since it determines their ability to care for themselves and undertake other roles in society. Older people in developing countries find it hard to access health-care when they need it (Help Age International, 2010).

Globally, the percentage of older people is projected to double from 10 per cent in 2000 to 20 per cent in 2050. Older people also often lack access to a steady income, such as pension, or retirement benefit, or salaries from good employment. Even those who do receive pensions will find it difficult to cover their healthcare needs (Help Age International, 2013). Half of the disease

burden in low and middle-income countries is now from NCD, and these diseases are turning into a global pandemic that threatens the health of a large number of people and their economies (WHO, 2011). Though NCD affect older people of all nations, those in low- and middle-income countries are at peculiarly high risk of NCD (Help Age International, 2013)

In Europe healthcare service delivery is given a wide definition in the Union context, going beyond the avoidance of accidents and prevention of disease to include all aspects of the worker's well-being. The competence of the EU to intervene in the field of health and safety at work is defined by the provision in Article 153(1 and 2) TFEU, which authorizes the Council to adopt, by means of directives, minimum requirements as regards 'improvement in particular of the working environment to protect workers' health and safety' (a provision originating in the Single European Act 1986). The significance of this broad scope of 'health and safety' is immense, as it underpins the potential of EU health and safety policy to prescribe minimum standards to protect all aspects of the worker's well-being. Article 118A (now Article 153(2) TFEU) lay down minimum requirements concerning health and safety at work. According to this principle, the Member States must raise their level of protection if it is lower than the minimum requirements set by the directives to help provide quality healthcare service to all people (Sirrs, 2016).

In Germany the healthcare system has remained the same with German Statutory Health Insurance (national health insurance), Brown and Amelung view the German case as manacled competition, whereas Uwe Reinhardt counters that regulated competition is a more apt description. However, the puzzle is not the nature of competition but why German health policy continuously reinforces the status quo. Even though recent reforms have introduced competitive elements, they should not be mistaken as a crusade for market economics in health care. The guiding principles of German national health insurance solidarity, decentralization, and nonstate operations have not changed but are complemented by a new layer of ideas. Indeed, historical analysis is vital to cross-national health policy research. It allows us to sort out short-term from long-term factors, to pay attention to political factors, and to raise sensitivity to how concepts are bounded by particular cultures (Offe, 2018).

Issues such as universal coverage, benefits, portability of insurance, and participation by physicians and hospitals are important in describing the German health care system but they are secondary to the history of power relations among the major stakeholders, agenda control, and the reinforcement of the structure of national health insurance at critical junctures in Germany's tumultuous history. In contrast to political stability in post 1949 German democracy, the 14 years of the Weimar Republic (1918–1932) saw 21 cabinets. Yet even with the mega-inflation in 1923 and the financial crash in 1929, health financing was never turned into a tax-financed system; national health insurance remained stable, based on employer and employee contributions, even during this unstable time (World Health Organization, 2018).

Developing countries have recently switched towards a health insurance model in attempts to achieve universal health coverage and access. A desk research done by (Help Age International, 2010) in African countries identified under-financing of health systems, over-stretched health workforces, poor health management information systems (HMIS), unreliable supply of medicines, physical barriers to access health-care and distance-related barriers, as the main constraints that contribute to older people's poor access to health-care services. The rise in the number of older people increases the burden of providing social services, including health-care services, on duty bearers in developing countries, who may be forced to leave much of the needs of these groups of people unaddressed (Help Age International, 2013).

In Nigeria the federal government's role is mostly limited to coordinating the affairs of the university teaching hospitals, Federal Medical Centres (tertiary health care) while the state government manages the various general hospitals (secondary health care) and the local government focus on dispensaries (primary health care), which are regulated by the federal government through the NPHCDA. The total expenditure on health care as % of GDP is 4.6, while the percentage of federal government expenditure on health care is about 1.5%. Historically, health insurance in Nigeria can be applied to a few instances free health care provided and financed for all citizens, health care provided by government through a special health insurance scheme for government employees and private firms entering contracts with private health care providers. However, there are few people who fall within the three instances. In May 1999, the government created the National Health Insurance Scheme, the scheme encompasses government employees, the organized private sector and the informal sector. Legislative wise, the scheme also covers children under five, permanently disabled persons and prison inmates. In 2004, the administration of Obasanjo further gave more legislative powers to the scheme with positive amendments to the original 1999 Legislative Act (Punch magazine, 2012)

Many countries in sub-Saharan Africa are unable to provide adequate quality and coverage of health services because of economic factors and dwindling resources. This has prompted many countries to advocate for decentralization as a key factor to drive health sector reforms with a view to maximizing the use of available resources in improving access and quality of health care services provided. Improving the productivity and performance of health workers to ensure that quality healthcare is efficiently delivered continues to be a major challenge for African countries. Human resources for health, consisting of clinical and non-clinical staff, are the most important assets of health systems. The performance of a health organization depends on the knowledge, skills and motivation of individuals. It is therefore important for employers to provide suitable working conditions to ensure that the performances of employees meet the desired standards. African countries are trying to improve the functioning of health care delivery systems to ensure that the populations they serve receive timely quality care (World Health Organization, 2015).

In South Africa for instance the healthcare varies from the most basic primary care offered by the government to specialized and hi-tech health services offered in both private and public

hospitals. However, the public sector is over resourced in some places while the state contributes about 40% of all expenditures on health, the public health centres are under pressure to deliver services to about 80% of the population. Health care in Africa faces difficult challenges such as shortage of health workers, increased caseloads for health workers due to migration of skilled health personnel, and the double burden of disease and the HIV/AIDS scourge that affect both the general population and health personnel, Shortage/low motivation of health workers inadequate human resources have (Owolabi, 2017).

In Uganda's health sector has been trying its best to fulfil to its mandate. In November 2008, 51 Percent of the approved positions in the public health service were filled (MoH, 2009). Moreover, wide variations exist among districts. For example, Pader had 35 percent of the posts filled. Butologo HC II in Mubende district (a difficult to reach area located 25 miles from Mubende town), had only one nurse who was observably over worked. Shortages of critical staff such as nurses, doctors, nutritionists, and anaesthetic and laboratory workers have greatly constrained the provision of medicines and health services in general.

In Kenya, the number of ageing population people has grown from 385,000 in 1950 to about 1,396,125 (KNBS, 2009). The rise in the number of older people increases the burden of providing social services, including health-care services (Help Age International, 2013). A study conducted in Kenya, identified that lack of finance, absence of family support, physical inaccessibility of health service providers and practicing quacks are the major factors deterring older people from seeking healthcare services. Kenya health sector strategic and investment plan adopts a broader approach that entails moving from the emphasis on disease burden to the promotion of healthy life styles of individuals, with attention to the various stages in the human life cycle. The ageing population is cohort five (60+) years. Each cohort needs different interventions that respond to its specific needs. The promotive and preventive services needed for this cohort are annual screening and medical examinations, exercise and the promotion of general hygiene and Social/emotional/community support. The curative services they need are access to drugs for degenerative illnesses. (Kenya health sector strategic and investment plan, 2012-2017).

The health services received by the ageing population in Kenya today are part of the standard services provided for the all life cohort, without strategic attention to geriatric health requirements including physical, social and emotional needs. The Second World Assembly adopted the Madrid International Plan of Action on Ageing, marking a turning point in how the world addresses the key challenge of building a society for all ages. The health services received by the ageing population in Kenya today are part of the standard services provided for the all life cohort, without strategic attention to geriatric health requirements including physical, social and emotional needs. The health sector comprises the public system, with as major players the MOH and parastatal organizations, and the private sector, which includes private for-profit, NGO, and FBO facilities (World Health Organization, 2015).

Health services are provided through a network of over 4,700 health facilities countrywide, with the public sector system accounting for about 51 percent of these facilities. The public health system consists of the following levels of health facilities: national referral hospitals, provincial general hospitals, district hospitals, health centers, and dispensaries. In this case, the risk emanates from unpredictability of falling sick and resultant costs associated when seeking treatment which at times can be of catastrophic. This risk is one of the critical components determining uptake of health insurance, however, not entirety. Contrastingly, as an expected utility model, people at times enroll in health insurance as a form of income transfer which they stand to benefit whenever they fall sick from risk pool. Health insurance as a moral hazard tend to induce people to over-utilize health services to reap maximum benefits from premiums they pay, which explains increased hospital visits among insured persons (Hester, 2017).

Marsabit County is located in the upper eastern region of Kenya. It borders Ethiopia to the North, Wajir to the north east, Isiolo to the south East, Samburu to the south east and Turkana to the west. It is located in an area that has a porous border with kith and kin traversing the Ethiopia-Kenya border with no adequate controls. The county has four major livelihoods zones including: pastoralists, agro-pastoralists, fisheries and urban segregated in different proportions as Pastoralists 81%, Agro-pastoralists 16 % and others (formal employment, casual wage labor, petty trade & fisheries) 3%. Pastoralists dominate almost all parts of the four sub-counties with agro-pastoralists mostly notable in Saku and some parts of Moyale sub-counties while others are mainly notable in urban areas mainly the county and sub-county capitals. The contiguous border allows for movement of people across Kenya and Ethiopia with ease. It presents an opportunity for movement of illicit small arms and light weapons across the frontier. Some government policies implemented over the years have contributed to the security lapses in the County especially on resource sharing, access, control, and management (Matunda, 2016).

Marsabit County experience numerous inter-tribal pastoralist clashes between Gabra and Borana, the conflict which started in August 2013 and continued until September 2013 in two rounds. There has been routine attacks within Moyale which is one of the Marsabit sub counties. After the August clashes houses that were evacuated from were found looted. The month of October 2013 had series of attacks that left 9 people wounded. During that time of pastoralist clashes, transport from Moyale town to Nairobi was paralyzed in the month of November 2013 as the roads were blocked and some people looted from. Fresh attacks were reported in the month of December where 29 people reportedly injured, 4900 displaced (some fled to Ethiopia, Wajir North (Bute) and others to their relatives in Marsabit town). Different agencies stepped up to offer humanitarian support to the victims (Marsabit Secondary Data Review on Conflict-KIRA, 2013).

STATEMENT OF THE PROBLEM

Subsidized health insurance cover costs can stimulate uptake of health insurance covers due to price elasticity as the people might perceive it to be more affordable after introduction of government subsidies. It is widely acknowledged that health workers are not producing the desired output of health interventions. Also, health insurance uptake seems to suffer from adverse selection where uptake is more skewed to persons likely to fall sick and thus stand high chance utilizing risk pool yet insurance companies ought to make profits from coordinating risk pooling. As a result, persons who are at risk of falling to poverty levels due to unpredictable income might have higher probability of enrolling for health insurance coverage. The provision of high- quality affordable healthcare services is a difficult challenge this is because of the complexities of healthcare services that include cost, service delivery and organization financing (WHO, 2018). Marsabit County in an attempt to improve the situation it seems not much has been achieved in raising the quality of service in public health institutions and this is compounded by limited information on the factors that ail the delivery of service quality. Uptake of health insurance in is low with only a few own health insurance. Changing lifestyles and eating habits have resulted in non-communicable diseases including cardiovascular, cancers, diabetes that closely related to obesity and represent a significant development challenge. Monitoring and screening for NCD is not routinely done and as such early detection and prevention measure are poorly instituted. Overweight and obesity are risk factors for non-communicable diseases such as hypertension, diabetes and cardiovascular diseases. According to WHO 28 % of all deaths result from NCD's. Ownership of health insurance is low despite proportion of the ageing population is increasing rapidly in Marsabit County. This comes up with health problems like hypertension, diabetes, cancers among others. Which can be delayed if good health care is accessed, whether the healthcare is prepared to take care of the ageing population has not been extensively investigated. Sixty-three per cent of older people find it hard to access healthcare when they need it (Help Age international, 2011). Locally, Wairiuko (2014) determinants of access to healthcare among the ageing population.the case of Kibera informal settlement, Nairobi County, Kenya, Akacho (2014) factors influencing provision of health care service delivery in kenya. a case of Uasin Gishu District Hospital in Eldoret, Masengeli, Mwaura-Tenambergen, Mutai and Simiyu (2017) determinants of uptake of health insurance cover among adult patients attending Bungoma County Referral Hospital. The study established that older population has been increasing. This is due to the advancement in medical treatment and technology, prevention and eradication of many infectious diseases, and improved nutrition, hygiene and sanitation. Older people in Kenya are highly vulnerable group of the society exposed to hardship, malnutrition, poverty and old-age-related diseases. Health Though studies have been done, none focused on factors influencing access to universal health care by the ageing population in rural areas. a case of NHIF beneficiaries in Marsabit County, a research gap that this study seeks to bridge.

PURPOSE OF THE STUDY

The general objective of this study was to examine factors influencing access to universal health care by the ageing population in rural areas. a case of NHIF beneficiaries in Marsabit County.

OBJECTIVES OF THE STUDY

1. To determine the influence of institutional factors on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.
2. To evaluate the influence of accessibility of services offered on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.
3. To determine the influence of demographic factors on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.
4. To assess the influence of cost of services on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

EMPIRICAL LITERATURE REVIEW

Access to Universal Health Care

As the population grows older the demand for health services also increases. In Africa, data on geriatric service provision and utilization is lacking (Joubert and Broadshaw, 2006). Studies suggest that the older populations are more likely to experience malnutrition, chronic physical and mental conditions, hearing and sight difficulties, depression and dementia (Abodein, 2010). Studies conducted in Kenya, South Africa and Pakistan identified that lack of finance, absence of family support, physical inaccessibility of health service providers and practicing quacks are the major factors deterring older people from seeking healthcare services (Ladha et al., 2009, Paxton ,2008, Waweru et al., 2003,). Under-financing of health systems, over-stretched health workforces (from doctors to community health workers), poor health management information systems, unreliable supply of medicines, physical barriers to access healthcare and distance-related barriers are other factors that contribute to older people's poor access to healthcare (Help Age International, 2013).

A study conducted on accessibility to health care facilities in Montreal was lower precisely among the seniors (Antonio et al., 2010). The network of health centers provides many of the ambulatory health services. Healthcare centers generally offer preventive and curative services, mostly adapted to local needs. Dispensaries are meant to be the system's first line of contact with patients, but in some areas, healthcare centers or even hospitals are effectively the first points of contact. Dispensaries provide wider coverage for preventive health measures, which is a primary goal of the health policy. The government health service is supplemented by privately owned and

operated hospitals and clinics and faith-based organizations“ hospitals and clinics, which together provide between 30 and 40 percent of the hospital beds in Kenya (RoK, 2010). Depending on their comparative advantage, Non-Governmental Organizations, Faith Based Organizations and community-based organizations (CBOs) undertake specific health services (RoK, 2010).

Institutional Factors and Access to Universal Health Care

At the individual level, the ageing population face numerous barriers in accessing healthcare. Some of the barriers which have been identified include interpersonal relations and communication problems between health providers and ageing population patients and lack of knowledge about services and treatment. A study on health-seeking behavior in Kenya found that negative attitudes of healthcare workers were associated with older people delaying seeking healthcare (Waweru et al., 2003). In Tanzania, 40% of older people reported that the tone language used by medical staff was disrespectful and mocking, while over a third had to wait between 4 and 6 hours in order to see a doctor (Help Age International, 2008).

In South Africa, older people expressed dissatisfaction with the quality of healthcare at the primary level, including inefficient appointment systems, long waiting times and apparent lack of interest of staff in the health problems of the ageing population. Older people in urban and rural areas revealed that the quality of public healthcare services they received was major concerns including; shortage and unavailability of assistive devices, and perceived lack of respect and sharing of information by health personnel who attended to them. In Kenya, 62% of older people reported buying over the counter drugs This high level of older people accessing over the counter drugs is indicative of the efficiency of health services in meeting needs of the ageing population in developing countries. These constraints in health service provisions are exacerbated by the shortage of staff trained in the care and treatment of older people. The economic situation of the ageing population is closely tied with the overall situation of extended family (Maharaj, 2012). In Kenya, 73% of older people reported lack of money as hindering their access to healthcare. In a qualitative study titled condition affecting the ageing population primary health care in urban health care centers of Iran who reported limitation of distance to health as a barrier of utilizing health care centres by the ageing population (Firoozeh et al., 2009).

Additionally, in Africa, only a small proportion of health workers have specialist training in management of chronic illness among health workers in general is poor. A study on the perceptions and attitudes of medical students towards older patients in Tanzania found that 45% of respondents regarded older people as dependants, unpleasant, unhealthy dull and ugly. It was noted that only 2% of these respondents had attended courses related to ageing, all of which were outside the country. This study concluded that a lack of geriatric teaching and exposure to geriatric medicine contributes to negative perceptions around the ageing population and reduces

the quality of services delivered. Economic barriers to accessing services and treatment are often experienced by older people who lack financial and social support (de-Graft Aikins et al., 2010)

Accessibility of Services Offered and Access to Universal Health Care

Decline in clinic attendance with increasing distance of residence. The poor state of the road infrastructure has been identified as a major constraint to economic and social development. A road condition survey carried out in December 2002 by the Material Branch of the Ministry of Roads and Public Works on the classified road network estimated that 17% of the network is in good condition, 39% in fair condition (due for periodic maintenance), 27% in poor condition (requires rehabilitation) and the remaining 16% is failed and requires reconstruction. Of the unpaved classified network, it is estimated that 60% is in maintainable condition while the rest requires heavy maintenance (re-graveling and rehabilitation). However, it should be noted that the condition of the unpaved roads, particularly earth roads, can change quickly over time One critical variable that has consistently been shown to affect access to care in developing countries is the distance of the patient's household from a clinic. The phenomenon of decreasing health care utilization with increasing distance lived from a facility is often called the distance-decay effect. First documented in the 1920s in America, in recent years the distance-decay effect is mostly described in developing countries. It has been demonstrated in Kenya, other African countries and Asian countries, indicating that it is a robust finding in developing country settings (Feikin et al., 2009).

Also, the distance-decay effect was more marked in some clinics than others, suggesting that factors intrinsic to the clinic also play a role in health care utilization. These variations in the distance-decay effect based on sex, age and severity of illness, and particular clinic characteristics, show that other important factors influence a decision to go to a certain clinic in addition to distance lived. Since the Alma-Ata declaration developing countries have focused on expanding the coverage of curative health services. Despite the fact that some parts of Africa are still remote from health facilities, much progress has been made in improving physical access to health care. However, gains in health care outcomes have not followed health infrastructure investments (Klemick et al., 2009).

Rural households in developing countries face considerably greater obstacles to obtain health care than urban households because they live further from health facilities and because rural facilities are of lower quality. For these households, access to health care is a matter of both distance and quality. In the rural areas of developing countries, distance and quality both matter because households do not seek care at the average facility nor at the closest facility, but rather they frequently choose to bypass low quality health facilities in search of higher quality care. Thus, access is not simply a function of the distance to the nearest facility, or of the quality of care at the nearest or average facility, but of the distances and qualities of all facilities within a household's health facility portfolio (Jacobson, 2018).

If care is to be effective it should be of good quality. Quality of care, though, is a complex term. The observed quality of care focuses merely on the structure, the process and the outcome. Structure refers to facilities, personnel and organisation. Process refers to interaction between provider and consumer. Outcome measures the extent to which the service interaction meets the consumers' expectations. The observed quality of care relates to professionally defined standards of care and the perceived quality of care reflects the views of the patients. For example, patients can be satisfied even after receiving treatment in a health system which does not offer quality of care according to professional standards. The opposite is true if a doctor offers good quality of care but communication with the patient does not satisfy the patient (Manners, 2017).

Demographic Factors and Access to Universal Health Care

In many countries divorced, separated and widowed persons tend to use more health services, whereas never married persons use fewer services than married people. A study done detected an association between residential socioeconomic status and health care utilization. Level of education was not associated with access. Another study reported that evidence is accumulating that education may affect the health care services received by individuals aged 65 years and older. Income is a strong predictor of access to health care in the ageing population, independent of race (Mwanyangala et al., 2010).

Age is often presented as a proxy for accumulated experience, including the use of health services. It is associated with marital status, socioeconomic status and decision-making power. Older persons are possibly more confident and influential in household decision-making than younger ones and adolescents in particular. (Gabrysch et al., 2009) On the other hand, older individuals may belong to more traditional cohorts and thus be less likely to use modern facilities than young people. Maternal age acted as a strong predictor of health care seeking after 35 years of age, as these older mothers were less likely to seek health care for their children.

There are multiple potential pathways that could explain why education is consistently and strongly associated with all types of health behavior. These include increased knowledge of the benefits of preventive health care and awareness of health services, higher receptivity to new health-related information, socialization to interact with formal services outside the home environment and familiarity with modern medical culture. In addition access to financial resources and health insurance, more control over resources within the household and wiser spending are possible explanatory factors. Furthermore, better communication, more decision-making power, increased self-worth and self-confidence, better coping abilities and negotiating skills as well as reduced power differential towards health care providers and thus better communication and ability to demand adequate services have a share in this multiple-pathway clarification. Education also reflects a person's childhood background, including familiarity with health services and certain beliefs and norms (Gabrysch et al., 2009).

It has also been suggested that there may be community effects of education, with more highly educated communities organizing themselves and demanding better public services and a higher position for health on the political agenda. By contrast, better awareness of poor quality in many facilities and higher confidence in self-care may delay care-seeking among educated individuals. Furthermore, where strong public health programs reach out to disadvantaged sectors of the population, the education gradient in health service use may be small (Flora, 2018).

Cost of Services and Access to Universal Health Care

The cost of access to health care is shown to be another important determinant of health service utilization. If an individual is ill and knows that health care will cure the disease, he or she might still not seek care if the marginal cost of access is too high. The concept of access costs goes beyond billed charges such as physician and facility fees, and includes transport costs associated with the visit, as well as more indirect costs, such as the opportunity cost of utilization. The utilization effect of user charges and distance are expected to be negative. Past studies generally confirm this relationship (O'Donnell 2007). Travel time is expected to matter particularly in developing countries, where the majority of the population lives in rural areas and health care facilities as well as good road infrastructure are concentrated in cities (Mudege & Ezeh, 2009).

Another important access variable is the opportunity cost of the time used to seek health services, which is represented by the time spent away from productive activities. Some evidence suggests that this cost could form more of a barrier to women's use of health care than men's. Even though women are less involved in the cash economy, the real social value of women's time might be higher than that of men, considering the workload and diverse responsibilities of a woman in the household. In Zambia 64.38% of the population live on less than 1.90 US dollar a day and 27% of households are headed by females. Although poverty levels affect men and women, women are more vulnerable because they have lower education than men and have a very small share in formal employment. They have to work very hard to meet the family requirements and, as a result, they neglect their own health needs. Measures to alleviate poverty have not matched the worsening situation of the poor due to limited funding, cumbersome procedures and lack of awareness of the existence of these programmes by the women in need. Poverty reduces women's access to food and health services which ultimately worsens their health status (Pandya, 2018).

In sub-Saharan Africa, access to healthcare in both public and private sectors is largely dependent on a patient's ability to meet OOP expenses at the point of care. Insurance arrangements are virtually non-existent in many health systems. The role of OOP payments in influencing access has been a subject of growing academic and policy interest.^{1,4-6} Since the early 2000s, several African countries have abolished user fees in an effort to reduce financial barriers to access to needed healthcare, especially for the poor.⁷⁻¹⁰ User fees were considered to pose a significant barrier to access to appropriate health services The government of Zambia

abolished user fees on outpatient primary healthcare services, firstly in 2006 in rural areas, and extended the policy to urban areas in 2012. The goal of this policy was to increase utilisation and access to health services in both rural and urban primary healthcare facilities (Mudege & Ezeh, 2009).

THEORETICAL FRAMEWORK

Abraham Maslow's Theory

Maslow's hierarchy of needs is a theory in psychology proposed by Abraham Maslow in his (1943). The theoretical and empirical framework of this study was derived from Abraham Maslow's theory, Maslow described human needs as ordered in a hierarchy a pressing need would need to be mostly satisfied before someone would give their attention to the next highest need. According to Maslow's theory, when a human being ascends the levels of the hierarchy having fulfilled the needs in the hierarchy, one may eventually achieve self-actualization. Maslow's hierarchy of needs is going to form the basis of this study it is going to be used to discuss why quality health provision is important to everyone so as to ensure good health and low mortality rate. For example, in most public hospitals there is lack of enough infrastructures such as wards, maternity wards, stocked labs and chemists to provide required services to the patients.

Maslow constructs a hierarchy of human needs from the lowest which is psychological needs, self-esteem needs and topped with self-actualization. The psychological needs those needs that help a person to be in comfortable state in which their bodies are in a good state to enable them perform well for example able to maintain the required body temperature and maintain pH balance. After being psychologically fulfilled a person will need a safe surrounding that will ensure that they are secure after which they will need to be loved and be showed sense of belonging and if this is achieved then they will start to show the need to take up careers to help develop themselves and help themselves in life. Because of the attainment of love and belonging, the individual will develop a sense of self-esteem for example self-respect and competence and finally lead to self-actualization where an individual will now be in a position to understand themselves better and know what they want to do with their lives

Since health is considered to be a basic need, it can be left to operate on its own without fulfilling the other needs for example a person has to be psychologically stable/ fulfilled so as to concentrate, after being psychologically stable a person has to be shown love since it directly affects the psychology of an individual. A sense of belonging also has to be realized for example a patient in public hospital has to receive the same warmth and love as the patient in a private hospital and also the hospitals should receive enough staffing and funding so as to help in the smooth running of the hospital and provision of quality health services.

Stakeholder Theory

Freeman postulated an article on Stakeholder theory in the California Management Review in late 1983. According to Freeman (1983) the stakeholder theory looks into how an organization influences both its internal and external environment. In adopting this theory to this study, the researcher argues that solar lanterns projects, it is important understand how their operations are influenced by others and how they influence others. The leadership of these should lay emphasis on the relationships of the firm with its stakeholders, by finding ways to balance and assimilate the different relationships and objectives that a firm can have. However, according to Freeman (2008) an organization's leadership should categorize its stakeholders as primary stakeholders and secondary stakeholders with greater priority granted to primary stakeholders.

Management competence should prioritize their influence on these stakeholders and the influence of these stakeholders the solar lanterns project objectives. Secondary stakeholders could include; government, media and other special interests' groups. This theory address research questions which sought to unpack the effects of management competency in projects, the theory will explain the important role that it plays as part of the overall system influence operations.

RESEARCH METHODOLOGY

Research Design

The study adopted across-sectional survey research design A cross-sectional survey research design enables collection of data about given phenomena within a limited time horizon which can help describe incidences of events or provide an explanation of factors related to an organization (Tashakkori & Teddlie, 2012). This approach was suitable for this study, since the study collected comprehensive information through descriptions which was helpful for identifying variables. The cross-section research design was selected because the study is a survey involving collection of data at one point in time. In addition, the cross-sectional survey was preferred because it enabled assessing relationships between variables and it provides opportunity to identify moderators between variables.

Target Population

According to Pole and Lampard (2010), a target population is classified as all the members of a given group to which the investigation is related, whereas the accessible population is looked at in terms of those elements in the target population within the reach of the study. The study's target population consisted of 307 ageing population residents in the Marsabit County, community leaders, County Health officers and NHIF staff working in this region.

Sample Size

A sample is a proportion of the population selected by a researcher for the purposes of collecting data. A sample population of 171 was arrived at by calculating the target population of 307 with a 95% confidence level and an error of 0.05 using the below formula taken from Nassiuma (2000).

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

Where: n = sample size; N = population size; C = coefficient of variation which is 50%; e = error margin which is 0.05

Sampling Procedures

The study selected the respondents using stratified proportionate random sampling technique. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness. The goal of stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Kothari, 2004). The study used simple random sampling to pick the respondents in each stratum.

Data Collection Instrument

Primary data was obtained using self-administered questionnaires. Primary data is information gathered directly from respondents (Kombo & Tromp, 2006). For this study the researcher used questionnaires and interview schedule were administered to the senior director. The questionnaires were administered to the managing officers and support staff while interview schedule was administered to senior director. The open-ended questions were used in order to allow respondents to provide information which they may deem relevant for the study. Closed ended questions were used in order to standardize the responses and save on the respondents' time taken to fill in the questionnaire.

Data Collection Procedure

Data collection, in this project, refers to gathering of information for research purposes. Prior to commencing data collection; the researcher obtained a letter of introduction from the university. The drop and pick method was preferred for questionnaire administration so as to give respondents enough time to give well thought out responses. Research assistants were trained on interviewing skills including developing rapport, convincing respondents to provide relevant data

and seeking clarifications whenever necessary. Research assistants booked appointment with respondent organizations at least two days before visiting to administer questionnaires.

Data Analysis Techniques

According to Orodho (2008), data analysis involves carrying out some type of grouping of data collected, thereafter placing the data in common categories and computing a number or a percentage of each division. Data was analyzed using Statistical Package for Social Sciences (SPSS Version 25.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented in form of tables. The qualitative data from the open-ended questions was analyzed using conceptual content analysis and presented in prose. Inferential data analysis was done using multiple regression analysis. Multiple regression analysis was used to establish the relations between the independent and dependent variables. Multiple regression was used because it is the procedure that uses two or more independent variables to predict a dependent variable. The multiple regression model generally assumes the following equation;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where: Y= Access to universal health care; β_0 =constant; β_1 , β_2 , β_3 , β_4 and β_5 = regression coefficients; X_1 = Institutional factors; X_2 = Accessibility/quality of services offered; X_3 = Demographic factors; X_4 = Cost of services; X_5 = Socio-Cultural factors; ϵ =Error Term

In testing the significance of the model, the coefficient of determination (R^2) was used to measure the extent to which the variation in access to universal health care by the ageing population in rural areas is explained by the variations of the factors. F-statistic was also computed at 95% confidence level to test whether there is any significant relationship between access to universal health care by the ageing population in rural areas and the factors affecting it. All necessary diagnostic tests were performed.

RESEARCH RESULTS

The study sought to examine how Institutional factors influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study found that institutional factors influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County greatly. Moreover, it was revealed that Services provided and availability of drugs and equipment greatly influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County while health workforce were established to influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County in a moderate extent.

The study further sought to determine how accessibility/quality of services offered influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County in Galbatula Sub-County and found that access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County is influenced very greatly by accessibility/quality of services offered. The study established that the transportation infrastructure and distance travelled influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County to a very great extent while observed quality of care had a moderate influence on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study further sought to assess how demographic factors influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County in Galbatula Sub-County. It was established that demographic factors influences the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County to a very great extent where this was as a result of great influence by marital status, age and level of education as on the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County to a great extent. However, the study found that sex moderately influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study sought to find out how cost of services influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study revealed that there is a great extent to which the cost of services affects the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. It was found that facility fees and physician charges greatly influences the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. Though, the study found that transport costs moderately influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study sought to find out how social cultural factors influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study found that there is a great extent to which the social cultural factors affects the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. Further the study found that family support and beliefs greatly influences the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study also revealed that taboos and religion moderately influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

INFERENCE STATISTICS

The study used a regression model to test the hypothesis between Institutional factors, accessibility/quality of services offered, demographic factors, cost of services, social cultural

factors and access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.890	0.792	0.784	1.506

The outcome of table 1 found that R-Square value (coefficient of determination) is 0.673, which indicates that the independent variables (Institutional factors, accessibility/quality of services offered, demographic factors, cost of services and social cultural factors) explain 78.4% of the variation in the dependent variable (access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County) leaving 21.6% percent unexplained. This implies that there are other factors that influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County that were not covered in this study.

Table 21: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1168.88	5	233.776	99.973	0.000
	Residual	306.33	131	2.338		
	Total	1475.21	136			

The results are shown in Table 2 revealed that the model had predictive value and thus it was significant. This was because its p-value was less than 5%, $p=.000$ and F calculated (99.973) was significantly larger than the critical F value (2.4472).

Model coefficients provide unstandardized and standardized coefficients to explain the direction of the regression model and to establish the level of significance of the study variables. The results are captured in table 3.

Table 3: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.053	0.117		9.000	.000
Institutional factors	0.782	0.249	0.759	3.141	.003
Accessibility/quality of services offered	0.701	0.311	0.680	2.254	.030
Demographic factors	0.599	0.206	0.581	2.908	.006
Cost of services	0.813	0.091	0.789	8.934	.000
Social cultural factors	0.673	0.278	0.581	2.421	.016

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4+$

$\beta_5 X_5 + \epsilon$) becomes:

$$Y = 1.053 + 0.782X_1 + 0.701X_2 + 0.599X_3 + 0.813X_4 + 0.673X_5$$

The findings showed that if all factors (Institutional factors, accessibility/quality of services offered, demographic factors and cost of services) were held constant at zero access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County will be 1.053. The findings presented also show that taking all other independent variables at zero, a unit increase in the institutional factors would lead to a 0.782 increase in the scores of access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The findings also show that a unit increase in the scores of accessibility/quality of services offered would lead to a 0.701 increase in the scores of access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. Further, the findings show that a unit increase in the scores of projects management would lead to a 0.599 increase in the scores of access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study also found that a unit increase in the scores of resources would lead to a 0.813 increase in the scores of access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study also established that a unit change in social cultural factors would lead to 0.673 change in access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

As per the findings, at 95% confidence level, the study revealed that cost of services had the greatest effect on the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County, followed by Institutional factors, then accessibility/quality of services offered then social cultural factors while demographic factors had the least effect to the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. All the variables were significant as the p-value was less than 0.05.

CONCLUSIONS

The study concluded that institutional factors influenced access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County greatly, positively and significantly. This was attributed to great influence on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County by Services provided, availability of drugs and equipment and training as well as a moderate influence of health workforce on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study further concluded that there was a significant influence of accessibility/quality of services offered on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. This was as a result of very great influence by accessibility/quality of services offered. It could also be attributed transportation infrastructure

and distance travelled influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County greatly influencing on access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study concluded that demographic factors influenced access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County very greatly and significantly. The study deduced that marital status, age and level of education greatly influenced access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County while sex moderately influenced access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study concluded that cost of services influenced access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County in a great extent and significantly. It was deduced that facility fees and physician charges greatly influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County while transport costs moderately influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

The study also concluded that social cultural factors influence access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County significantly. The study found that family support and beliefs greatly influences the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County. The study also revealed that taboos and religion moderately influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

Finally, the study concluded that all the variables were significant with cost of services having the greatest effect on the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County, followed by institutional factors, then accessibility/quality of services offered then social cultural factors while demographic factors had the least effect to the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County in Galbatula Sub-County, Isiolo County.

RECOMMENDATIONS

Based on the present findings and analysis, the study recommends an enforcement of Kenya's Health Policy 2011–2030 and the 2010 Constitution of Kenya both of which require an appropriate and equitable distribution of health workforce in public health facilities and their subsequent training and development, enhancing their retention packages and incentives and upgrading of institutional and health worker productivity and performance.

The National and County governments should consider paying or subsidizing premiums for the very poor, the elderly and the disabled who are often excluded from social security programs. This should be one of the strategies by the national and county governments to reduce poverty

and increase access to quality health care. Enrollment of more members to NHIF may not necessarily result to improved access to healthcare for the poor if there are no quality health care facilities available. The National and County Governments should therefore increase the number health facilities and improve the quality of care offered. This would guarantee that all persons who are registered into NHIF and other insurance schemes get value for their premiums

The National Government, county government and health stakeholders should take responsibility in investing more financial and human resources towards increasing the number of strategic health facilities, encouraging contemporary health facilities usage by all citizens and having many more mobile clinics and more health facilities supply to accommodate the ever growing population.

The County Government should organize healthcare services around people's wants and prospects, assimilate health care into all sectors, pursue collective models of policy dialogue and increase shareholders bottom up engagement approach to promote a sense of ownership and boost access to healthcare service delivery. Household's distance to the nearest health facility must be made very short to promote the usage of modern services, primary healthcare services and health development.

The county ministry of health and sanitation services should employed more health care service providers who are trained to offer accessible and satisfactory services to the users and sponsor students for specialized health courses to solve the barrier of few specialized service providers and regularly trained health human resource to enable them provide the much needed service in the health facilities they are attached to by improving the care that they daily deliver.

The County Ministry of Health and Sanitation service to ensure that the management of all health facilities must have effective planning, effective coordination, efficient control and appropriate commanding of healthcare services to increases access to affordable healthcare services and in turn improves immunization coverage rates and subsequently reduces infant mortality rates. The study also recommends that social health insurance institutions should not arbitrary come up with unfavorable premiums and contributions because these premiums and contributions deter members from joining the health insurance schemes leading to low implementation of Universal Coverage in Kenya.

It further recommends that the county government with the help other central government agencies and the ministry of health should put in place measures that would ensure health grants from international governments are utilized for the implementation of intended health care projects. Further, the county government with the help of anti-corruption agencies should combat corruption to ensure revenue from local taxation is appropriately utilized to implement health care projects for the provision of health care services at the county level. The county government should also encourage benchmarking trips amongst the implementers of the health care project and further enhance performance evaluations and appraisals to motivate its employees.

REFERENCES

- Abiero, O. A. (2010). *Challenges of stakeholder management in implementation of Sondu Miriu hydro-electric power project in Kenya*. A Doctoral dissertation, University of Nairobi.
- Abrahamsson, P., Salo, O., Ronkainen, J. & Warsta, J. (2017). Agile software development methods: Review and analysis. *arXiv preprint*, 17(9), 843-9.
- Appleyard, L. (2011). Community Development Finance Institutions (CDFIs): Geographies of financial inclusion in the US and UK. *Geoforum*, 42(2), 250-258.
- Ayuso, S., Ángel Rodríguez, M., García-Castro, R. & Ángel Ariño, M. (2011). Does stakeholder engagement promote sustainable innovation orientation? *Industrial Management & Data Systems*, 111(9), 1399-1417.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Boserup, E. (2017). *The conditions of agricultural growth: The economics of agrarian change under population pressure*. Abingdon: Routledge.
- Bowling, A. (2009). *Research methods in health: Investigative Health and Health Services* (3rd Ed.). New York: McGraw-Hill.
- Burns, N. & Grove, S. K. (2003). *Understanding nursing research* (3rd Ed.). Philadelphia: W. B. Saunders Company.
- Centre For Enhancing Democracy And Good Governance (CEDGG) (2011). *CDF Social Audit Project – II. “Towards Improved Level of education and Transparency in Constituency Development Fund through Social Audit”*. Final Narrative Report, Nakuru Town and Rongai Constituencies.
- Chepkemboi, K. M. (2014). *Influence of Community Participation on Sustainability of Constituency Development Fund Projects in Tinderet Constituency, Nandi County, Kenya*. A Master’s Research Project, University of Nairobi.
- Chikati, J. (2009). *Project Cycle Management: An Integrated Approach and Logical Framework*. Nairobi: Signal Printers.
- Chinyio, E. & Olomolaiye, P. (2010). *Construction Stakeholder Management* (1st Ed.). London: Wiley-Blackwell.
- Creswell, J. W. & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage publications.
- Davis, J., MacDonald, A. & White, L. (2010). Problem-structuring methods and demographic factors: an example of Institutional factors using Hierarchical Process Modeling methodology. *Journal of the Operational Research Society*, 61(6), 893-904.
- Duer, H. & Christensen, P. O. (2010). Socio-economic aspects of different biofuel development pathways. *Biomass and Bioenergy*, 34(2), 237-243.
- Evaluation of Urban Water Supply and Health Projects in Kenya: Case of Kisii Town, Kisii County. *Journal of Geography and Natural Disaster*, 6(2), 13-32.
- Fageha, M.K. & Aibinu, A.A. (2016). Identifying stakeholders’ involvement that enhances project scope definition completeness in Saudi Arabian public building projects. *Built Environment Project and Asset Management*, 6(1), 6-29.
- Feurer, R. & Chaharbaghi, K. (1997). Strategy development: past, present and future. *Training for quality*, 5(2), 58-70.

- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge: Cambridge university press.
- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Gorard, S. (2013). *Research design: Creating robust approaches for the social sciences*. Thousand Oaks: Sage.
- Heravi, A., Coffey, V. & Trigunarsyah, B. (2015). Evaluating the level of Institutional factors during the project planning processes of building projects. *International Journal of Demographic factors*, 33(5), 985-997.
- Hogan, P. C. (2012). *Cognitive science, literature, and the arts: A guide for humanists*. Abingdon: Routledge.
- Hongwei, W., Huixin, L. & Jian-bo, Y. (2009). Dynamic analysis of a two-stage supply chain—a switched system theory approach. *International Journal of Advanced Manufacturing Technology*, 43(1/2), 200-210.
- Hussein, H. M. (2018). *Implementation Practices of Constituency Development Fund Projects in Kenya: a case of Wajir East Constituency*. A Doctoral dissertation, Kenyatta University.
- International Budget Partnership. (2010). *Constituency Development Funds: Scoping Paper*.
- Kast, F.E. & Rosenzweig, J.E., (1985), *Organization and management: A systems and contingency approach* (4th Ed.). New York: McGraw Hill.
- Kerzner, H. & Kerzner, H. R. (2017). *Demographic factors: a systems approach to planning, scheduling, and controlling*. Hoboken: John Wiley & Sons.
- Kimani, F., Nekesa, P. & Ndungu, B. (2009). *Best Practices in Constituency Development Fund (CDF)*. A Research Publication, Kenyatta University.
- Kobusingye, B. (2017). Influence of stakeholders' involvement on project outcomes: A Case of Water, Sanitation, and Hygiene (Wash) Project in Rwanda. *European Journal of Business and Social Sciences*, 6(6), 195- 206.
- Kratochwill, T. R. (2015). Single-case research design and analysis: An overview. In *Single Case Research Design and Analysis (Psychology Revivals)*, 1(2), 13-26.
- La Rovere, R. K., Abdoulaye, G., Dixon, T., Mwangi, J., Guo, W. M. & Z Banziger, M. (2010). *Potential impact of investments in drought tolerant maize in Africa*. Mexico: CIMMYT.
- Lewis, J. (2015). *Fundamentals of demographic factors*. New York: Amacom.
- Mahmoud-Jouini, S., Midler, C. & Silberzahn, P. (2016). Contributions of Design Thinking to Demographic factors in an Innovation Context. *Demographic factors Journal*, 47(2), 144-156.
- Mandala, E. (2018). *Influence of Stakeholder's Involvement in Demographic factors on the Performance of Road Construction Projects in Kenya: a case of Bondo Sub County, Siaya County*. A Master's Research Project, University of Nairobi.
- Masole, T. M. & Howie, S. (2013). Exploring Teachers' Assessment Practices of Performance Tasks in Agriculture and Factors Influencing Their Choice. *Journal of Agricultural & Food Information*, 14(3), 209-224.
- Mbaabu, P. P. (2012). *Factors influencing implementation of road construction projects in Kenya: a case of Isiolo County, Kenya*. A Master's Research Project, University of Nairobi.
- Meyers, L. S., Gamst, G. & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Thousand Oaks: Sage publications.

- Mutua, R. M. (2014). *Critical success factors influencing the design of public private partnership projects: case of Lamu port south-sudan Ethiopia transport (lapsset) corridor project*. A Masters Research Project, University of Nairobi.
- Mwagwabi, L. (2008). Enhancing Constituency Development Level of education; the Case of Bahari Constituency Development Fund. *The Governance Link*, 5(9), 52-59.
- Nassiuma, D. K. (2000). *Survey sampling: Theory and methods*. Nairobi: University of Nairobi press.
- Njogu, E. M. (2016). *Influence of stakeholder's involvement on project performance: a case of NEMA automobile emission control project in Nairobi County*. Unpublished MBA project, University of Nairobi, Kenya.
- Nyaguthii, E. & Oyugi, L. A. (2013). Influence of Community Participation on Successful Implementation of Constituency Development Fund Projects in Kenya: Case Study of Mwea Constituency. *International Journal of Education and Research*, 1(8), 99–123.
- Nyandika, O. F & Ngugi, K. (2014). Influence of Stakeholders' Participation on Performance of Road Projects at Kenya National Highways Authority. *European Journal of Business Management*, 1 (11), 384-404.
- Ochanda, G. (2010). *Survey findings on poverty reduction through improved governance on Constituency Development Fund (CDF)*. Nairobi: Kenya Episcopal Conference.
- Ondieki, W.M. (2016). Stakeholders. Capacity Building and Participation in Monitoring and
- Otieno M. P. (2009). *An assessment of the factors influencing the performance of CDF funded projects in Isiolo North Constituency*. Unpublished MA project, University of Nairobi.
- Otim, G. & Alinaitwe, H. M. (2011). *Factors affecting the performance of pavement road construction projects in Uganda*. Unpublished Masters Project, Makerere University.
- Owour, G. O. (2013). *Stakeholders Involvement in Strategic Formulation in Kenyan State Corporation*. Unpublished MBA report, University of Nairobi.
- Pahl, G. & Beitz, W. (2013). *Engineering design: a systematic approach*. Berlin: Springer Science & Business Media.
- Persson, U. & Olander, S. (2004). *Methods to estimate stakeholder views of sustainability for construction projects*. Eindhoven: Passive and Low Energy Architecture Conference.
- Plummer, F. (2011). *Project engineering: the essential toolbox for young engineers*. Oxford: Butterworth-Heinemann.
- Puche, J., Ponte, B., Costas, J., Pino, R. & De la Fuente, D. (2016). Systemic approach to supply chain management through the viable system model and the theory of constraints. *Production planning & control*, 27(5), 421-430.
- Roba, K. (2014). *Factors Influencing Implementation of Constituency Development Fund projects in Kenya: a case of Moyale Constituency*. A Doctoral dissertation, University of Nairobi.
- Rummler, G. A. & Brache, A. P. (2012). *Improving performance: How to manage the white space on the organization chart*. Hoboken: John Wiley & Sons.
- Ruwa, M. C. (2016). *The Influence of Stakeholder Participation on the Performance of Donor Funded Projects: A Case of Kinango Integrated Food Security and Livelihood*

- Project (Kifslp), Kwale County, Kenya. A Master's Research Project, University of Nairobi.*
- Seekings, J. (2013). Is the South 'Brazilian'? The public realm in urban Brazil through a comparative lens. *Policy & Politics*, 41(3), 351-370.
- Shuttleworth, M. (2008). *Qualitative research design*.
- Swallow, B. M. & Goddard, T. W. (2013). Value chains for bio-carbon sequestration services: Lessons from contrasting cases in Canada, Kenya and Mozambique. *Land use policy*, 31(1), 81-89.
- Tabo, L.M. (2013). *Challenges of Strategy Implementation among the Private Security Companies in Kenya*. Unpublished MBA project, University of Nairobi.
- Transparency International. (2014). "Constituency Development Fund: An Overview of KeyConcerns". *Adili News Service*, 1(68), 1-6.
- Trochim, W.M.K. (2005). *The Research Methods Knowledge Base*. Cincinnati: Atomic Dog.
- UNDP (2010). *Handbook on Monitoring and Evaluation for Results*. New York: UNDP.
- Von Bertalanffy, L. (1972). The History and Status of General Systems Theory. *Academy Of Management Journal*, 15(4), 407-426.
- Wairi, J.N. (2017). *Factors influencing stakeholders' participation in ward development fund projects: a case of Ndaragwa Sub-County, Nyandarua County, Kenya*. A Master's Research Project, University of Nairobi.
- Wamugu, J. W. & Ogollah, K. (2017). Role of stakeholders' participation on the performance of Sub County development fund projects in Mathira East Sub County in Kenya. *International Academic Journal of Information Sciences and Demographic factors*, 2(1), 104-125.
- Webber, C. M. & Labaste, P. (2010). *Building competitiveness in Africa's agriculture: a guide to value chain concepts and applications*. Washington, DC: World Bank Publications.
- Wernerfelt, B. (1984). A resource- based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Xue, Y., Turner, J. R., Lecoeuvre, L. & Anbari, F. (2013). Using results-based monitoring and evaluation to deliver results on key infrastructure projects in China. *Global Business Perspectives*, 1(2), 85-105.
- Young, T. L. (2013). *Successful Demographic factors*. London: Kogan Page.
- Zenko, Z. (2013). General Systems Theory Completed Up by Dialectical Systems Theory. *Systems Research & Behavioral Science*, 30(6), 637-645.