

**GENDER DIFFERENCES IN MOBILE PHONE OWNERSHIP AND USE AMONG
THE AGED IN KITERE VILLAGE, RONGO DISTRICT, KENYA**

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ABSTRACT

Mobile phone adoption by older adults is radically increasing however, few studies have investigated the specific use of mobile phones among the aged. This study investigates mobile phone ownership and use among the aged males and females in Kitere village, Rongo district, Kenya. The study is guided by the following objectives: To establish gender differences in the ownership and use of mobile phones among the aged, to establish challenges in the use of mobile phone among the aged in Kitere village, Rongo district, Kenya. This study adopted a mixed approach in the generation and analysis of data. The study employed case study as the research design. It applied questionnaires and interviews as data generation techniques. The study established that there is a significant number of the aged in Kitere Village who do not own mobile phones however more males than females own mobile phones and more aged females than males share phones with others. The aged who do not have phones cited the high cost of purchasing the phone as an inhibiting factor in the acquisition of a mobile phone. In addition, the aged females who own phones majorly acquired them as gifts from their children, friends and other relatives while the aged males majorly acquired their mobile phones by buying on their own. However, in regard to the kind of phones the aged in Kitere village own there are no gender differences since the males and females own mobile phones of low functionality. The study also found out that the aged males in Kitere make more phone calls than the aged females, while the females receive more calls than they make. In terms of the content of the phone calls, most aged females and males received phone calls from family and friends inquiring about their welfare while more males than females made and received business calls although the number of the business calls was significantly low. More aged females than males made calls to request for money from their husband, children and friends, in addition, fewer females than males received calls from their friends and their children requesting for money. The other major use of mobile phone is money transfer services, this therefore suggest that the mobile phone is not only a means for communication for the aged in Kitere Village but also a means for mobile money transfer services. However, the patterns of money transfer are different for the aged females and males. Important to note is that both

the aged males and females use their mobile phones in a minimalist manner. The study established that small buttons, complex menus, complicated functions, small screens, low battery life, difficulty in purchase of the airtime, unease with the language of the mobile phone, illiteracy are the challenges the aged encountered in the use of mobile phones. The study recommends the following for the efficient use of mobile phones among the aged: increased button size, display size and size of the phone, voice control for the illiterates and the visually challenged, ringtone for call or message for the illiterates and the visually challenged, higher hearing aid compatibility, mobile interface in vernacular language, inbuilt medicine reminder and inbuilt health monitoring devices. In addition, the aged should be allowed to purchase phones at a subsidized price.

KEYWORDS: Gender, Gender Mobile Divide, The Aged

1.0. INTRODUCTION

The world is growing older. The United Kingdom anticipates that 50% of the adult population will be aged 50 or over by the year 2020 (Laslett, 1998). In the United States, 12.4 % of the whole population was over the age of 65 in 2004, and 20% is anticipated by 2030 (Day, 1996; U.S. Census Bureau, 2005). In recent years, mobile phones have become pervasive throughout the world. In 2004, there were approximately 1.7 billion mobile phone subscribers in the world, and it is anticipated that 2.6 billion phones will be in use by the end of the year 2009 (Business Communications Review, 2005). The United States has seen a 56 percent increase in the adoption of mobile phone services in the last six years (1999 – 2005), and nearly 194 million mobile subscribers were reported in 2005, which accounted for 66% of the population (CITA, 2005).

Mobile phone adoption by older adults is also radically increasing. A recent Yankee Group report estimated that about 50 percent of Americans ages 65 to 74 were mobile subscribers, and 30 percent of those ages 75 to 94 had mobile phones in 2005 (Brown, 2005). Despite the increasing adoption rates among older adults, few studies investigated the specific use for mobile phones among the aged.

Wireless technologies have become widespread all over the world. Many people are mobile phone subscribers and own devices such as mobile telephones, digital cameras, personal digital assistants and laptops that are enabled with wireless fidelity (Wi-Fi) (Katz, 2005). Despite the increased adoption of mobile phone technology there exist a mobile phone gender divide. Studies by Cherie Blair Foundation (2010) indicate that despite the increase in mobile phone ownership, a woman is still 21 % likely to own a mobile phone than

a man. This figure increases to 23% if she lives in Africa, 24% if she lives in the Middle East, and 37% if she lives in South Africa. Studies carried out in Rwanda by Blumenstock and Eagle (2010) shows that while 47 % Rwandans are male, males account for 67% of phone owners. The study also shows that it is the privileged male members of the Rwandan society who own and use mobile phone. Studies by Donner (2008) also show that in East Africa, one mobile phone is likely to be shared by multiple individuals and women are the ones who are likely to share phones.

Rice and Katz (2003) also consider age in their statistics indicating that in the US 47.8% of mobile users in 2003 were younger than 40 years and 52.2% were greater than or equal to 40 years old.

According to the Kenya National Bureau of Statistics (KNBS 2009) mobile phone ownership in the households in Kenya is 63.2% while that of Rongo District is 56.6%. The census of 2009 on which these statistics is based did not aggregate mobile phone ownership by gender ,age or sex. This study aims to establish the gender differences in mobile phone use and ownership among the aged in Kitere village, Rongo District Kenya.

2.0 .LITERATURE REVIEW

2.1 Gender, age and mobile phone use

Usage of mobile telephony by men and women across varied age ranges (Dunn 2011).According to (Mitra 2005), technologies are not used in the same way by men and women. Studies by Nordli and Sorensen (2003) show that young people use their mobile phones as a tool of social organization. Young girls use their phones more frequently so as to express their feelings while boys are more interested in the technical aspect (Doring et al., 2004).Saunders & Quirke (2002) stated that males expected the new technology to offer to them easy and quick answers and they worked alone or sometimes even in pairs .On the other hand, females are interested in the quality of the product and they prefer interactive group work. A survey conducted among Greek students show that students tend to use their devices mostly for conversations and sending and receiving SMS. Moreover they do not deal with many of the devices characteristics .Generally, both genders do not use the Internet and they do not send or receive e- mails via their mobiles. This might occur due to their current habits, lack of support and knowledge, cost of the devices and of subscribing to mobile internet services, or some other reasons (Comscore 2007)

According to Economides (2009), young females appear to make more phone calls than men. Moreover, they take more photos and record more sounds than their male peers. In addition they listen more hours to the radio than men and they tend to send and receive more messages from friends. On the other hand, males tend to use more the computers and internet, but they do not access the internet via their mobile devices.

Despite the increased use of mobile phones among older adults, there is little related research investigating how older adults use their mobile phones. While few studies investigated older adults' mobile phone usage in their lives, two previous studies revealed that older adults tend to use mobile phones for very limited purposes, such as calling or texting in an emergency situation, but are reluctant to use more complex functions (Kurniawan, Mahmud, & Nugroho, 2006; Mann et al., 2004). Kurniawan et al. (2006) conducted a focus group study with seven older female participants using an exploratory approach. This study found that older women would most likely use mobile phones only in emergencies, and they seldom used the phone for casual conversations. The Rehabilitation Engineering Research Center on Technology for Successful Aging conducted a large-scale survey with 596 elders with impairments (Mann et al., 2004). In this survey, they found that the majority of elders (60%) valued their mobile phone, but a large proportion (87%) used the mobile phone for emergencies only, while one third of elders reported using their mobile phone daily. Although this exploratory study provided potentially valuable information about the older adult's experience, their findings cannot be generalized due to the small number of participants and the nationality of participants (British) because nationality is one cultural factor that may affect mobile phone usage patterns (Choi, Lee, & Kim, 2006). The applicability of these results is also limited since the population studied in the survey was the elderly with impairments, which presumably impacted their use of mobile phones. There is a need for studies investigating active healthy older users' perspectives. This study based in Kitero Village, Rongo District, Kenya, focuses on the active older users.

Studies carried out in the Caribbean by Dunn (2010), show that older women were more avid and interested users of mobile phones. Older males used their mobile phones in a minimalist way. According to Blumenstock and Eagle (2010), men report a large number of total calls, as well as more frequent contact with friends and business contacts, women report more frequent contact with family. There are differences in the lengths of calls made (women talk longer), in the direction of the calls (women receive more calls than they make:

men are opposite, in international calling, both women receive more than they call, but women receive more than they make while in airtime gifts , women receive more airtime.

2.2. Challenges in the use of mobile phone technology among the aged

Older adults have reported they experience frustrations when interacting with mobile devices. Older adults may find it harder learning to use technology than the younger age groups. For example, in the study of Ziefle and Bay (2005), they found that older adults (50-65 years old) showed a lower performance than younger adults (20-35 years old) when handling the interface of a mobile phone. Also, the older adults spent more time on task, and took over 40% more unnecessary steps than the younger ones. Ling (2008) explained that for older adults who have organized their life without mobile phone the adoption of the devices is associated with readjustment of their routine way of life .They may not want to change and have anxiety feelings towards unfamiliar technology, Kurniawan (2008). Moreover, current mobile industry is mainly targeting younger age groups who switch phones relatively frequently and admire small devices with multifunction. The requirements and needs of older people are commonly not given sufficient consideration, Ehmen (2012). Once older users do not have the same visual and hearing sensitivity, finger dexterity, and working memory as the younger age groups, they may have problems using mobile phones with small buttons, limited size of the screen and text, and complex functions, Mallenius, et al (2007) & Kurniawan (2008).

Most of mobile phones today include camera, MP3, address book, and more advanced features such as sending and receiving e-mails and video calls. However, it is not known whether these phones meet the needs of elderly users. Mobile phones with fewer functions may not satisfy users' demand, while with too many functions will make the devices more complex and result in redundant learning. The older adults, due to their own physiological and psychosocial characteristics are different from the younger age groups on the requirements and needs of mobile phone usage. Therefore, it is important to understand and identify the functions that are perceived to be useful by elderly users since suitable functions can increase the usability and reduce the difficulties of operating mobile phones, Fisk (2009). Moreover, knowing the mobile phone usage by elderly users provides insight on how to improve mobile phone design and functions for older users.

The research by Kurniawan et al. (2006) revealed usability problems associated with small buttons, complex menus, complicated functions, and small screens. This study revealed that, overall, older adults perceived their current mobile phone as difficult to use; understanding error messages, text input, and the reference manual were the main challenges in mobile phone use. Several characteristics of older adults may affect their interaction with mobile phones. The decline of memory functions and spatial abilities with age may interfere with feature navigation, which is further complicated by unfamiliarity with technical terms in error messages (Zajicek & Brewster, 2004). A previous study with a limited number of participants found that older adults were found to consequently delve into distraction, not easily navigating their way back once entering a wrong path within the menu (Ziefle & Bay, 2005).

3. METHODOLOGY

The study adapted a qualitative and quantitative approach to research. It employed a case study as a research design; data was collected through questionnaires and interviews. The interviews for this study, were conducted at the participants' homes and places of economic activities such as market places, shopping centers and farms . They were conducted in the language the participants were comfortable using, that is, English, Kiswahili or vernacular. English is the official language in Kenya, Kiswahili the national language and Luo, the vernacular language of Kitere Village, Rongo District. The researcher allowed for flexibility in the choice of language so that the information was delivered appropriately .15 men and 15 women aged between 61- 70 years were selected through non probability sampling to participate in the study. The analysis of data was quantitative and qualitative. Qualitative data analysis was descriptively presented explaining the variables investigated. Qualitative data consist of words, not numbers; therefore, qualitative modes of data analysis provide ways of discerning, examining, comparing and contrasting and interpreting meaningful patterns or themes. Direct quotes were captured in the text to explain certain issues of interest. The percentages of dully filled in and returned questionnaire and interviews were compared to the sample. Data was then thematically analyzed using percentages. It was then matched with qualitative information. Direct quotes were captured in the text to explain issues of interest. Data was also presented in form of tables. This is for easy understanding (Kombo, 2006).

4.0. FINDINGS

4.1. Gender Differences in Ownership of Mobile Phones among the aged in Kitere Village, Rongo District, Kenya.

To establish the gender mobile polarization among the aged the following question was asked: Do you own a mobile phone?

65% of the female respondents own mobile phones ,35% reported that they used the mobile phones of their spouse, children and neighbours.

85 % of the male respondents own mobile phones ,15 % reported that they used the mobile phones of their spouse, children and neighbours.

4.1. 1.How the aged in Kitere Village acquired the mobile phones they own

35 % of the females reported that they bought their mobile phones themselves, 40% indicated that their children purchased the phones for them, 25% indicated that their husband bought the phone for them.

60% of the males indicated that they bought their mobile phones themselves, 40 % indicated that their children purchased the phones for them.

4.1.2. Reasons why the aged in Kitere Village do not own mobile phone

70% of the males and females indicated that they do not own mobile phones because the cost of its purchase is high.25 % of the respondents indicated that they do not possess mobile phones because they find them difficult to use. 5 % indicated that they do not need mobile phones.

4.1.3.The features of mobile phones of the aged in Kitere village, Migori county, Kenya.

To establish the technological capacity of the mobile phones of the aged in Kitere Village, the respondents were asked which features their phone had, this question was therefore asked :What features does your phone have ?

80% of females reported that their phones had calling features ,messaging features, money transfer services features ,Torch, Radio , 1% indicated that their mobile phones had internet settings 85% of males indicated that their phones had the following features ; messaging features, money transfer services features, Torch, Radio,3 % indicated that their mobile phones had internet settings,1 % indicated that they owned smart phones.

4.2. Gender differences in the use of mobile phones among the aged in Kitere Village, Kenya

4.2.1. How aged females in Kitere Village use their mobile phone

Use of mobile phones	Percentage
Making calls	40
Receiving calls	80
Messaging	2
Radio	1
Money transfer services	
receiving money	40
sending money	15
saving money	2
Entertainment	1
Internet	1
Social Media	1

The study found out 80% of aged females use their mobile phones majorly for receiving calls, 40% for making calls, 40% for receiving money via mobile money transfer services, 15% for sending money, 2 % for saving money ,1% for entertainment , 1% for internet and 1% for social Media.

4.2.2. How the aged males and females in Kitere Village use their mobile phones

Use of mobile phones	Percentage
Making calls	85
Receiving calls	50
Messaging	1
Radio	1
Money transfer services	
receiving money	10
sending money	30
saving money	3
Internet	2
Entertainment (Radio)	1

The study found out that 85% of men use their mobile phones for making calls, 50% receiving calls, 1% for Messaging, 10% for receiving money via mobile money transfer services, 30% for sending money, 3% for saving money, 2% Internet, 1% for messaging, 1% for entertainment (radio)

4.3. The subject of the phone calls of the aged males and females in Kitere Village

70% female and 80% male respondents indicated that they made phone calls to make inquiries on the welfare of their loved ones and to also discuss their welfare. 85% female and 70% male respondents indicated that they received phone calls from family and friends inquiring about their welfare. 2% female and 5% male made and received business calls.

85% female and 65% males made calls to request for money from their children and friends, in addition 20% females and 35% males received calls from their friends and their children requesting for money.

4.4. Challenges in the use of mobile phone technology among the aged in Kitere Village, Kenya

40% of the females and 25% of the male respondents indicated that they could not read, therefore relied on other people to help them make and receive calls. The respondents added that they were not comfortable with the mobile phone language which is English and Kiswahili. 70% of males and females indicated that the letters were too small for them.

“I strain to identify the letters and numbers, identifying names from the phone book and dialing numbers is difficult” VV1, V4, V5, V10

70% of the males and females indicated that they strained to hear what the other speaker on the phone is saying

“I have to listen carefully or I fail to hear what the other person on phone is saying” V7, V2, V15

40% percent of the females and 20% of the males indicated that they had difficulties raising money to purchase airtime.

‘Buying airtime every now and then is a challenge’ V13, 16

‘I have to choose between buying airtime and food’ V4, V3

65% of the females and the males indicated that the short battery life of the mobile phone is a challenge in the use of mobile phones.

‘I can listen to the radio through my mobile phone but I only do that once in a while because my phone battery dies fast’ V20,21

4.5. The other functionalities the aged in Kitere Village would like their mobile phones to perform

85 % females and 65 % males indicated that they would like their mobile phones to help them manage their health

“ I suffer from high blood pressure ,I have to keep on taking drugs, sometimes I forget my regimen ,I wish my phone could be set in such a manner that it would remind me to take my medicine on time.” V2, V3, V10, V11

“I have diabetes ,I want a phone that can alert me when my blood sugar level is getting to critical levels” V4,V7,V8

5.0. DISCUSSION

5.1. Gender and mobile phone use among the aged in Kitere Village, Rongo District, Kenya

The study found out that 65 % of the female respondents own mobile phones ,35 % reported that they used the mobile phones of their spouse, children and neighbours .85 % of the male respondents own mobile phones ,15 % reported that they used the mobile phones of their spouse, children and neighbours. These findings are concurrent with those of Cherie Blair Foundation (2010) which indicates that despite the increase in mobile phone ownership, a woman is still 21 % less likely to own a mobile phone than a man. This figure increases to 23% if she lives in Africa, 24% if she lives in the Middle East, and 37% if she lives in South Africa. From these findings, it is evident that in Kitere village, Rongo District, Kenya there is a significant difference in mobile phone ownership between the aged females and the males. It is also evident that more aged females than males are sharing phones .This is also concurrent with the findings of Donner (2008) that show that in East Africa, one mobile phone is likely to be shared by multiple individuals and women are the ones who are likely to share phones. So the conclusion that can be drawn from this is that there is a gender mobile divide among the aged. These findings indicate that indeed there exist a gender mobile divide among the aged in Kitere village, Kenya .The fact that there is a significant number of aged females and males who do not own mobile phones could also suggest that there is a generational mobile divide. A comparative study of mobile phone ownership among the young and the aged could be done to establish that.

35% of the females reported that they bought their mobile phones themselves, 40% indicated that their children purchased the phones for them, 25% indicated that their husbands bought the phones for them. On the other hand, 60% of the males indicated that they bought their mobile phones themselves, 40 % indicated that their children purchased the phones for them. These findings points to the economic dependency of the aged in Kitere village since a significant number ,more so the females did not purchase their mobile phones.

70% of the males and females indicated that they do not own mobile phones because the cost of its purchase is high . This points to the low purchasing power of the aged in Kitere Village .25% of the respondents indicated that they do not possess mobile phones because they find them difficult to use. 5 % indicated that they do not need mobile phones. The aged in Kitere village may be conservative, they may be sluggards in the adoption of technology hence hesitant to integrate technology into their lives.

80% of females reported that their phones had calling features ,messaging features, mobile money transfer services features services, Torch, Radio, 1% indicated that their mobile phones had internet settings. 85% of males indicated that their phones had the following features ; messaging features, mobile money transfer services features, Torch, Radio,3 % indicated that their mobile phones had internet settings,1% indicated that they owned smart phones. From these findings, it is evident that the aged in Kitere Village own mobile phones of low functionalities; their mobile phones only perform basic functions as they are of low technological capacity.

5.2. Gender differences in the use of mobile phones among the aged in Kitere Village, Rongo District, Kenya

The study found out that 80% of aged females use their mobile phones majorly for receiving call, 40% for making calls. On the other hand , 85% of males use their mobile phones for making calls and 50% of the males use their phones for receiving calls. This finding concurs with that of Blumenstock and Eagle (2010), which stated that women receive more calls than they make. The aged males in Kitere make more phone calls than the aged females ,while the females receive more calls than they make.

40% of females use their mobile phones for receiving money via mobile money transfer services, 15% for sending money mobile money transfer, 2 % for saving money via mobile money saving platform. On the other hand, 10% of males use their mobile phones for receiving money via mobile money transfer, 30 % for sending money via mobile money

transfer, 3% for saving money on the mobile money saving platform. This therefore suggest that the mobile phone is not only a means for communication for the aged in Kitere Village but also a means for mobile money transfer services. However, the patterns of money transfer is different for the aged females and males. More females than males receive money via mobile money transfer services while more males than females send money via mobile money transfer services, on the other hand, more males than females save money via mobile money transfer services. The use of mobile money transfer services and mobile banking (M-Banking) among the aged is a phenomenon that should be investigated further.

1% of the aged females and males in Kitere village use their mobile phones to listen to the radio, 2% of males and 1% of females for internet. 1% of the females and males use their mobile phones for messaging. From these findings, it is evident that the aged males and females in Kitere village use their mobile phones in a minimalist way. The frequency with which they use their phones for entertainment (radio) and messaging is low. Only one percent of the aged in Kitere use their mobile phones for internet services and social media. These findings are similar with those of Kurniawan, Mahmud, & Nugroho, 2006; Mann et al., (2004); Kurniawan et al. (2006) which revealed that older adults tend to use mobile phones for very limited purposes.

5.3. The subject of the phone calls of the aged in Kitere Village, Rongo District, Kenya.

70 % female and 80% male respondents indicated that they made phone calls to make inquiries on the welfare of their family and friends and to also discuss their welfare. 85% female and 70% male respondents indicated that they received phone calls from family and friends inquiring about their the welfare. 2% females and 5% males made and received business calls. According to Blumenstock and Eagle (2010), men report a large number of total calls, as well as more frequent contact with friends and business contacts, women report more frequent contact with family. As opposed to the study of Blumenstock and Eagle (2010), this study did not compare the ratio of calls to and from friends and family.

85 % female and 65 % males made calls to request for money from their children and friends, in addition 20 % females and 35% males received calls from their friends and their children requesting for money. This finding reveals that the aged in Kitere village are

economically dependent on their children and other relatives and their use of the mobile phones is mainly geared towards the fulfillment of their survival needs .

5.4. Challenges in the use of mobile phone technology among the aged in Kitere Village, Rongo District, Kenya.

40% of the females and 25% of the male respondents indicated that they could not read, therefore relied on other people to help them make calls and receive calls. Illiteracy is a problem in Kitere village, Kenya just as it is in other parts of the world. Indeed, UNESCO Report (2006) indicates that around 16% of the adult populations are illiterate: 2/3 of these are women. The respondents added that they were not comfortable with the mobile phone language which is English and Kiswahili. These two languages are taught in school and therefore those who haven't been through formal education may not be conversant with the two languages .

70 % of males and females indicated that the letters of the mobile phone were too small for them Therefore dialing numbers and navigating the menu was complex as they can hardly read the letters. This finding is concurrent with the study of Kurniawan et al. (2006) which revealed that usability problems are associated with small buttons, complex menus, complicated functions, and small screens. This study revealed that, overall, older adults perceived their current mobile phones as difficult to use

70% of the males and females indicated that they had difficulties hearing the other person on the phone speak .This is because the senses of hearing ,sight ,touch... decrease with age. This is in line with the findings of Mallenius, et al (2007) & Kurniawan (2008) which state that once older users do not have the same visual and hearing sensitivity, finger dexterity, and working memory as the younger age groups, they may have problems using mobile phones.

This study found out that the aged in Kitere village had difficulty in raising money for airtime. This can be attributed to the fact that most of the aged in Kitere are not economically stable ,only 30% of those who took part in the study are engaged in economic activities.5% of them are on pension, the rest are economically dependent on their children ,younger brothers ,cousins, uncles and aunts .

This study also found out that the aged in Kitere village could not efficiently utilize their phones because of the low battery life of the mobile phones. They hardly listened to the radio because this led to rapid discharge of the battery of the mobile phones .This

means that the aged are missing out on the information flow. The radio feature in the mobile phone can be an empowering tool for the aged since critical information such as health information, political information, environmental information, security and current affairs which are important for the wellbeing of the aged are communicated through the radio. Since the mobile phone is ubiquitous, the aged could easily receive information real time however this is hindered by the short battery life of the mobile phone.

5.5. The other functionalities the aged in Kitere Village would like their mobile phones to perform

85 % female and 65 % males in Kitere village indicated that they would like their mobile phones to help them manage their health. Most of the aged are prone to lifestyle diseases associated with old age such as diabetes, hypertension and high blood pressure. Indeed 70% of those who participated in this study indicated that they suffer from one of these lifestyle diseases. These diseases require precision in timing for the dosage. Since most the aged people are susceptible to memory loss they are unlikely to remember to take the medicine on time.

5.6. RECOMMENDATIONS

The study recommends the following for the efficient use of mobile phones among the aged: increased button size, display size and size of the phone, voice control for the illiterates and the visually challenged, ringtone for call or message for the illiterates and the visually challenged, higher hearing aid compatibility, mobile interface in vernacular language, inbuilt medicine reminder and inbuilt health monitoring devices.

First and foremost in order to enable the aged to easily use their mobile phone, the phone design should be improved. The button size, display size and the overall size of the phone should be increased; on the other hand, the complexity of the phone should be decreased. Secondly, voice control for mobile phones is necessary for the aged who are illiterate and visually challenged. It is important to note that old age comes with failing eyesight for most people. Voice control can be handy for the elderly people for various functionalities like dialing number, answering call and navigating in menu. The users of mobile phones can perform these functionalities through giving verbal command. If the contact details of person named X are saved in contact menu then whenever person X calls then the ringtone will be "You have a call from person X". So there is no need for the elderly people to look at the

screen as they may have vision problems. They can directly know who is calling by the ringtone itself. Thirdly, the mobile phone designed for the aged should comply with the M4 rating of the hearing aid compatibility. Fourthly, most of the aged in Kitere village can neither read nor write English and Kiswahili, they are more familiar with their vernacular languages, for the mobile phone to be more user friendly for the aged, the mobile interface should be provided in the local language. Mobile phones for the aged should have an inbuilt feature Medicine Reminder such as an alarm. The reminder for the medicine could be set and be handy for the time to time reminder of the intake of medicines. The reminder may also be in the local language to suit the user. The mobile phone for the aged should have an applications for health monitoring devices like Blood Pressure Monitor Heart Beat Monitor and monitor for other diseases associated with old age. This will be handy in ensuring the wellbeing of the aged. Lastly, the aged should be allowed to purchase phones at a subsidized price.

6.0. CONCLUSION

The study established that there is a significant number of the aged in Kitere Village, who do not own mobile phones however more males than females own mobile phones and more aged females than males share phones with others. The aged who do not have phones cited the high cost of purchasing the mobile phone as an inhibiting factor in the acquisition of a mobile phone. In addition, the aged females who own phones majorly acquired them as gifts from their husbands, children, friends and other relatives while the aged males acquired their mobile phones by buying on their own. However, in regard to the kind of phones the aged in Kitere village own there are no gender differences since the males and females own mobile phones of low functionality. Regarding the content of the phone calls most females and males indicated that they made phone calls to make inquiries on the welfare of their loved ones and to also discuss their welfare. Most aged females and males respondents indicated that they received phone calls from family and friends inquiring about their welfare. More males than females made and received business calls although the number of the business calls was significantly low. More aged females than males made calls to request for money from their children and friends, in addition fewer females than males received calls from their friends and their children requesting for money. The other major use of mobile phone is mobile money transfer services, this therefore suggest that the mobile phone is not only a means for

communication for the aged in Kitere Village but also a means for mobile money transfer services. However, the patterns of money transfers are different for the aged females and males. The aged reported that small buttons, complex menus, complicated functions, small screens, low battery life, difficulty in purchase of the airtime, unease with the language of the mobile phone, illiteracy are the challenges they encountered in the use of mobile phones. The study recommends the following for the efficient use of mobile phones among the aged: Increased button size, display size and size of the phone, voice control for the illiterates and the visually challenged, ringtone for call or message for the illiterates and the visually challenged, higher hearing aid compatibility, mobile interface in vernacular language, inbuilt medicine reminder and inbuilt health monitoring devices. In addition, the aged should be allowed to purchase phones at a subsidized price.

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