Socio-Demographic Characteristics of Healthcare Workers and Their Attitudes Towards Older People in Nairobi, Kenya

John Kipruto, Wilson Kiptala, Shikuku Mulambula

***Abstract*— The purpose of the study was to investigate socio-demographic characteristics of health care workers' and their attitudes towards older people in Nairobi, Kenya. The objectives of the study were to: evaluate the influence of age and level of education of healthcare workers on their attitude towards older people and examine the influence of experience of healthcare workers on their attitudes towards older people. The study was guided by Ajzen and Fishbein's Theory of Reasoned Actionand Townsend's Structured Dependency Theory. The ontology was post-positivism and the epistemology was realist/objectivist. The research method was quantitative. The research design was ex-post-facto. Random sampling, stratified and purposive sampling were applied. Data was generated using questionnaires. A 60-item Attitudes Towards Older People Scale (ATOPS) was the main instrument for data generation. A total of 295 participants, responded to the Questionnaire. The data collected was analyzed using descriptive statistics, frequencies and percentages. The findings revealed that there was a statistically significant influence of their level of education on their attitudes towards older people; it also revealed that there was a significant influence of healthcare workers' experience on their attitudes towards older people. It recommended that Geriatric curriculum should be developed to correct misunderstandings and improve the attitudes of health care workers toward older people.**

***Index Terms*— socio-demographic, Health care workers', perception, older people.**

I. Introduction

In recent years, the world has witnessed a rapid increase in the absolute and relative numbers of older people (defined as 65 years old or over) in both developing and developed countries(United Nations, 2009). According to the United Nations (2009), the total number of older people aged 65 years and over has been increasing at unprecedented rate. In 1980, just prior to the convening of the First World Assembly on Ageing, there were 378 million people in the world aged 65 years and above. In 2010, the figure doubled to 760 million, and it is projected to rise to 2 billion by 2050 (United Nations, 2009).

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 (UNPD, 2012). The increase in the number of elderly 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 elderly people since it determines their ability to care for themselves and undertake other roles in society (WHO, 2000; Charles &Sevak, 2005).

In Kenya, the number of elderly people has grown from 385,000 in 1950 (world population prospects 2008), to about 1,396,125 (KNBS, 2009) in 2010. With the current population growth rate of 2.6% annually the total population by 2030 will be 3,473,000 (UNPD, 2008).Nairobi typifies the current urban population boom and its associated health and poverty problems, characteristic of many sub-Saharan African cities. During the colonial era, restrictive settlement policies on migration to the city maintained the growth within certain limits, with a population of 120,000 in 1948 (Muwonge, 1980). With the elimination of the "pass" system, in which migrants were required to obtain a permit to reside in Nairobi, and the relaxation of other migration rules following Kenya's independence in 1963, Nairobi's growth entered its second phase; its population reached 350,000 in 1962 and 500,000 in 1971, with an estimated one-third living in unauthorized housing (Muwonge, 1980). The 1999 Kenyan Population Census enumerated the population of Nairobi at 2.3 million (Republic of Kenya, 2001). With economic declines since the 1980s, 60 to 70 percent of the Nairobi population is currently estimated to be living in informal settlements that occupy only 5 percent of the residential land area of the city (Matrix Development Consultants, 1993; UN-Habitat, 2003).

When perceiving fellow human beings, most people are automatically inclined to categorize them along the three dimensions; race, gender and age (Nelson, 2002). This research dealt with the latter and more specifically the phenomenon of ageism. When ageism was first defined as "the systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this for colour and gender" (Butler, 1969), the phenomenon was viewed as something directed at old people only and characterized by negative valence. Ageism has been referred to as the third *ism* of human society following racism and sexism (Butler, 1995).

Ageism has been described as the ultimate prejudice and the last discrimination (Butler, 1995). Unlike other prejudices, ageism is universal as everyone has the potential to become a

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target of ageism provided they live long enough (Palmore, 2004). Ironically though, it is claimed that many people are still consciously unaware of this relatively recently defined and subtle concept (Palmore, 2001). He stated that his most disturbing finding was that most people knew little about ageing and harboured a number of misconceptions. The implication is that ageism is likely to be reflected in behaviours toward older people due to the negative attitudes resulting from lack of knowledge and education about older people. The constant propagation of ageism from one generation to the next is not only negative and discriminatory but it also promotes ageist attitudes that become a self-fulfilling prophecy in Kenyan society.

Ageism is a type of prejudice that involves the stereotyping, derogation and discrimination of older people (Butler, 1969). Together with racism and sexism, ageism is one of the most chronic and pervasive forms of prejudice against an easily distinguished minority (Nelson, 2002). Studies have shown that younger people often hold negative attitudes towards older people and view them as senile, asexual, religious, intellectually rigid, isolated, helpless, useless, unproductive, stubborn and 'over the hill' (Palmore 2004). Further, the constant emphasis on youth, beauty, vitality and strength indirectly strengthens the negative aspects of ageing.

There are powerful forces in society which tend to denigrate and diminish older people. Some are deeply rooted and irrational as they spring from fears about ageing and death and from the psychological need to distance themselves from selected groups of people (Stevenson, 1989). Public stereotypes of older people are damaging as they affect how people regard themselves as they grow older and create problems in the achievement of a satisfactory emotional adjustment (Gibson, 1992). Older people are erroneously thought to be senile, resistant to change, inflexible, incompetent and a burden to the young. They generally react to prejudice against them in the same way that racial and ethnic minorities react – by displaying self-hatred and by being self-conscious, sensitive, and defensive about their social and cultural status (Zastrow&Kirst-Ashman, 2001). Individuals who frequently receive negative responses from others eventually tend to come to view themselves negatively. This socially-constructed ageism is a threat to ageing well in the 21st century.

At present, the Kenyan society is still in what might be described as the "apologetic stage" where terms such as "old folk", "old geezer", "fossil", "over the hill", "one foot in the grave" "vultures are circling" are used to refer to older people which are condescending and derogatory. Terms like the "elderly" and the "old" appear to refer to groups rather than recognize the individuality of older people. These perceptions can result in compassion, but also in excessive care, patronizing and pacification of many older people, in other words, discrimination which is negative in its consequences.

It is important that health care workers possess the correct attitudes toward older people and not have ageist attitudes so as to respond to future health and support needs of older people (Doherty, Mitchell & O'Neill, 2011).

The persistence of age-related stereotypes is curious given the existence of considerable evidence that older people are generally as capable as their younger counterparts. Workplace researchers have found chronological age not to be a valid (negative) predictor of performance for many tasks (Cleveland &Landy, 1983). Research on the construct of ageism also appears to be warranted given the potential negative impact of ageism on both individuals and organizations. For individuals, ageism can lead to ageist discourse, expressed ageist attitudes, and discriminatory practices based on age which have been shown to cause lowered self-efficacy, decreased performance, and stress (Levy, Hausdorff, Hencke, & Wei, 2000). However, despite this evidence, few researchers have investigated ageism, its measurement, its structure, and both individual and group differences in the construct of ageism.

Objectives of the study

The purpose of the study was to investigate health care workers' attitudes towards older people in rift valley region, Kenya. The objectives of the study were to:

1. Evaluate the influence of age and level of education of healthcare workers on their attitude towards older people.
2. Examine the influence of experience of healthcare workers on their attitudes towards older people.

II. Method

Participants

To answer the research questions, the author sought views from healthcare workers. A total of 295 respondents participated in the study as illustrated below in Table 1;questionnaires were used to generatedata.The participants were registered nurses, student nurses, social workers, psychiatrists, physiotherapists, Counsellors', Priests and Doctors.They were healthcare workers in sites (hospitals, residential homes, hospices, nursing homes, psychiatric wards, rehabilitation wards, medical wards and surgical wards) at Nairobi, Kenya.

Table 1 Sample Size

Sample Group of Health Workers	Sample Size
Females	117
Male	178
Total	**295**

Measures and procedure(s).

Data was generated using questionnaires. A structured, descriptive and non-experimental quantitative design using a self-report questionnaire was used to collect data from a sample of healthcare workers (N=295). The researcher administered a closed-ended items' questionnaire (ATOPS) modified from Kogan's (1961)'s Old People Scale (KOPS) which is the first standardized scale developed to assess the attitudes toward older people in general. This instrument consisted of 60 statements regarding older people. Half of these statements represent negative attitudes and the other half represents positive attitudes towards older people.

Participants evaluated these statements on a 5-point Likert scale from 1 'strongly disagree' to 5 'strongly agree'.

III. Results

Age and attitude towards older people

The age of the professional health care workers were varied during the study as summarized in Figure 1. The age of the employees with 94(31.9%) of the employees aged between 41 and 50 years, (81) 27.5% of the aged between 31 and 40 years, with 53(18%) aged between 51 and 55 years, while (48) 16.3% aged between 21 and 30 years and the least 19 (6.4%) aged above 55 years. These findings indicated that majority of the employees were 50 years and below.

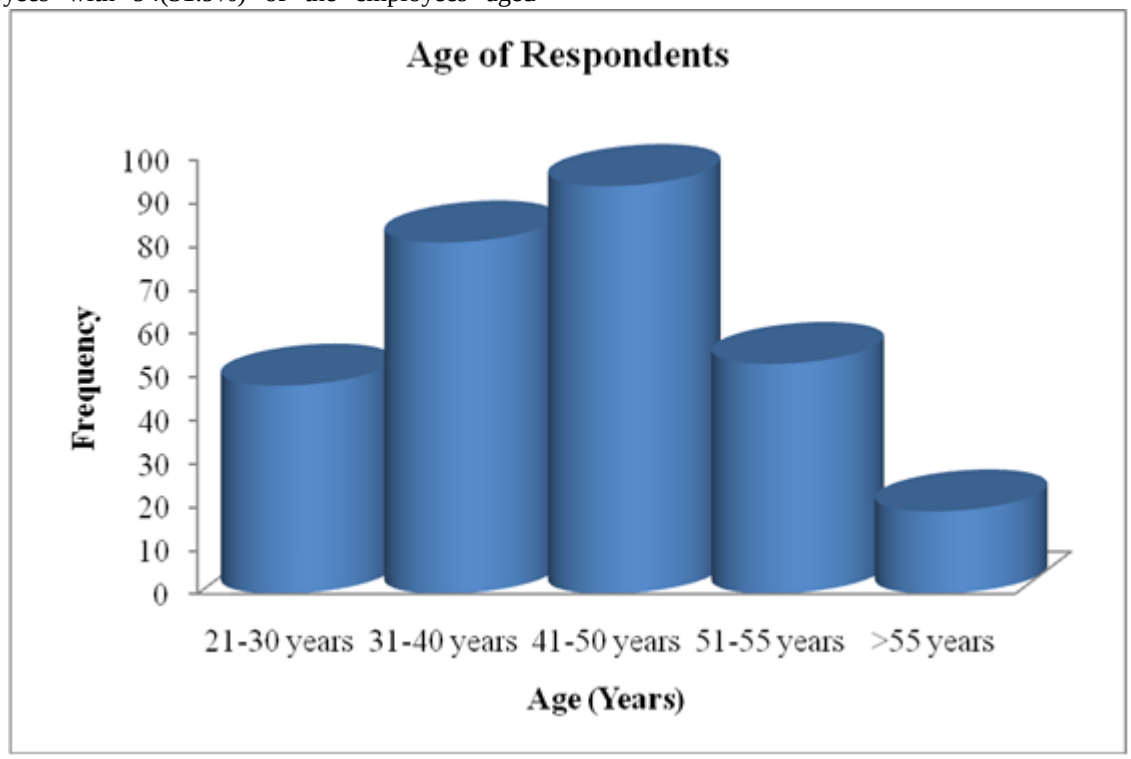

Figure 1: Age of Respondents

Age of Health Care Workers on their Attitudes towards Older People

The age categories of the professional health care workers were used to compare their attitudes towards older people. The average attitude was computed using the cross tabulation in which the influence of age on attitudes towards older people was done. From the study, it showed that the mean attitude of employees between 21 and 30 years was slightly higher than those of above 55 years as shown in Table 4.7. The findings showed that the attitudes of professional health care workers with 21 and 30 years was 3.34, with SD of .358, those between 31 and 40 years had a mean of 3.25, SD of .278, employees between 41 and 50 had a mean attitude of 3.25, SD of .323 with those workers aged between 51-55 years had a mean attitude towards old age of 3.17, SD of .308 and workers of above 55 years had a mean attitude of 3.18 and SD of .372. These findings indicated that the attitudes of professional health care workers towards older people were average and decreases with increase in age.

Table 2: Age on Healthcare Workers' Attitudes towards Older People

	Frequency	Percent	Minimum	Maximum	Mean	Std. Deviation	Chi-Square Tests
21-30 years	48	16.3	2.67	4.05	3.3418	.35802	χ^2=1081.72
31-40 years	81	27.5	2.42	4.04	3.2470	.27792	df=1076
41-50 years	94	31.9	2.35	3.97	3.2466	.32299	p=.008
51-55 years	53	18.0	2.50	3.86	3.1656	.30763	
>55 years	19	6.4	2.60	3.99	3.1719	.37208	
Total	**295**	**100.0**	**2.35**	**4.05**	**3.2428**	**.32052**	

The Contingency Coefficient (C) was used to determine if there was astrong relationship between the ages of health care workers and their attitudes towards older people. From the results it showed that Contingency Coefficient was .886 and significant ($p<0.05$). Thus it showed there was significant relationship between the age of health care workers and their attitudes towards older people as summarized in Table 3.

Table 3: Multiple Comparisons on Least significant difference on Age and Attitudes towards Older People

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
21-30 years	31-40 years	.09477	.05792	.103	-.0192	.2088
	41-50 years	.09523	.05641	.092	-.0158	.2062
	51-55 years	.17618*	.06335	.006	.0515	.3009
	>55 years	.16992*	.08618	.050	.0003	.3395
31-40 years	21-30 years	-.09477	.05792	.103	-.2088	.0192
	41-50 years	.00046	.04820	.992	-.0944	.0953
	51-55 years	.08141	.05618	.148	-.0292	.1920
	>55 years	.07515	.08105	.355	-.0844	.2347
41-50 years	21-30 years	-.09523	.05641	.092	-.2062	.0158
	31-40 years	-.00046	.04820	.992	-.0953	.0944
	51-55 years	.08095	.05462	.139	-.0265	.1884
	>55 years	.07469	.07998	.351	-.0827	.2321
51-55 years	21-30 years	-.17618*	.06335	.006	-.3009	-.0515
	31-40 years	-.08141	.05618	.148	-.1920	.0292
	41-50 years	-.08095	.05462	.139	-.1884	.0265
	>55 years	-.00626	.08502	.941	-.1736	.1611
>55 years	21-30 years	-.16992*	.08618	.050	-.3395	-.0003
	31-40 years	-.07515	.08105	.355	-.2347	.0844
	41-50 years	-.07469	.07998	.351	-.2321	.0827
	51-55 years	.00626	.08502	.941	-.1611	.1736

*. The mean difference is significant at the 0.05 level.

There was a statistically significant influence of age of healthcare workers on their attitudes toward older people indicating that older workers had more favourable attitudes toward older people. The influence of age on attitudes towards older people is consistent with the hypothesis of this study and the results of other previous studies (Edwards & Aldous, 1996) suggesting that older workers had more favourable attitudes toward older people.

Level of education and attitude towards older people

The level of education of the professional health care workers was varied during the study as summarized in Figure 4.1. Most 98 (33.2%) of the employees having Diplomas as their highest education level, with 87 (29.5%) had Degree qualification, with 78(26.4%) having Certificates, while 32(10.8%) had Masters Qualification. The findings indicated that a large number of employees had above Diploma level of education, comprising of Diploma, Degree and Masters.

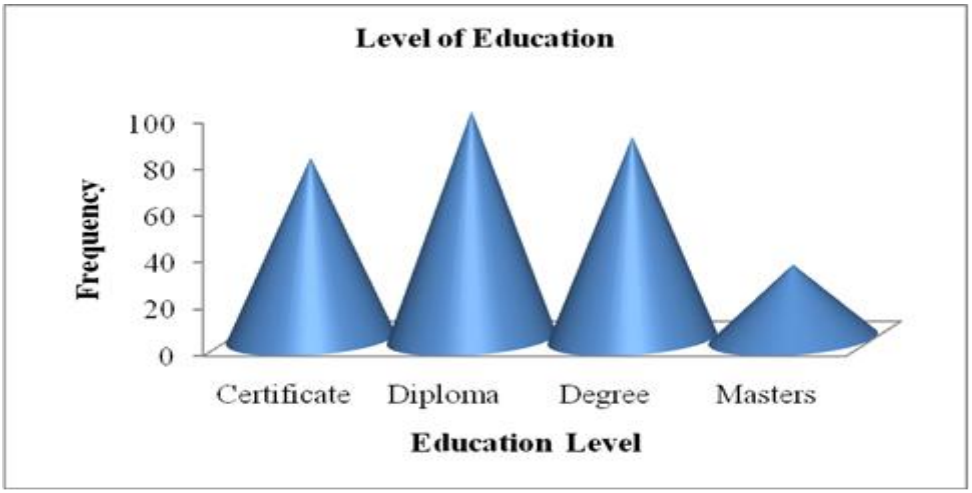

Figure 2. Level of Education of Respondents

The prevalence rate of highest educational attainment was ascertained in Table 4 and it was observed that 33.2% (98) of the healthcare workers were Diploma holders, 29.5% (87) were Degree holders, 26.4 (78) were Certificate holders while 10.8% (32) were Masters degree holders.

The level of education of the professional health care workers was used to compare their attitudes towards older people. The average attitude was computed using the cross tabulation and the influence of level of education on their attitudes toward older people was determined. From the study, it showed that the mean attitude of employees with higher education level was slightly higher than those with lower education level as shown in Table 4. The findings showed that the attitudes of professional health care workers with Master's education level was 3.49, SD of .323, those with Degree had a mean attitude of 3.27, SD of .337, employees with Diploma education had a mean attitude of 3.26, SD of .288 and workers with Certificate level of education level an attitude of 3.19 and SD of .339. The findings indicated that the attitudes of professional health care toward older people were above average and increased with the level of education.

Table 4. The Influence of Level of Education of Healthcare workers on their Attitudes towards Older People

	Frequency	Percent	Min	Max	Mean	Std. Deviation	Chi-Square Tests
Certificate	78	26.4	2.42	4.03	3.1937	.33907	χ^2=1116.50
Diploma	98	33.2	2.50	3.97	3.2567	.28799	df=1076
Degree	87	29.5	2.35	4.05	3.2700	.33641	p=.006
Masters	32	10.8	5.75	6.91	3.4944	.32260	
Total	295	100.0	**2.35**	**4.05**	**3.2428**	**.32052**	

The Contingency Coefficient (C) was used to determine if there is a relationship between the level of education of health care workers and their attitudes towards older people. From the results it showed that Contingency Coefficient was .857 and significant ($p<0.05$). Thus it showed there was significant relationship between the level of education of health care workers and their attitudes towards older people.

A One-way Analysis of Variance was conducted to explore the variation in the attitude of health workers with respect to their level of education. There was statistically significant difference at the $p<.05$ level of significance [F (3, 291) =2.187, p=.000]. Since the influences of level of education variation were found to be significant, it implies that the means differ more than would be expected by chance alone and despite reaching statistical significance, the actual difference in mean scores between the education levels was quite small.

Table 5 One-way ANOVA on the Influence of Level of Education of Healthcare Workers on their Attitudes towards Older People

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.551	3	.517	5.252	.002
Within Groups	28.652	291	.098		
Total	30.203	294			

Work Experience and attitude towards older people

The work experience of the professional health care workers was varied during the study as summarized in Figure 3. The working experience 107 (36.3%) employees had worked for between 11 and 15 years, with 90(30.5%) had between 6 and 10 years. However, 54(18.3%) had below 5 years working experience, while 34(11.5%) had between 16 and 20 years and the least 10(3.4%) had above 21 years of work experience. The findings showed that majority of the employees had above 10 years work experience.

Figure 3. Work Experiences of Respondents

The work experience of the professional health care workers was used to compare their attitudes towards older people. The average attitude was computed using the cross tabulation and the influence of work experience on attitudes toward older people was determined. From the study, it showed that the mean attitude of employees with low work experience was slightly higher than those with higher experience as shown in Table 6. These findings showed that the attitudes of health care workers with less than 5 years as well as those with 11 to 15 years' experience had a mean of 3.27, SD of .340 and .327 respectively. From the study, the workers with 6 and 10 years of experience had a mean attitude of 3.3, SD of .260. Healthcare workers with 6 and 10 years of experience had a mean attitude of 3.3, SD of .260.

The findings showed that the attitudes of health care workers with 16-20 years as well as those with above 21 years of experience had a mean of 3.1, SD of .265 and .339 respectively. The findings indicated that the attitudes of health care workers towards older people with less work experience were slightly higher than those with higher work experience.

Table 6. Work Experience and Attitudes toward Older People

	Frequency	Percent	Min	Max	Mean	Std. Deviation	Chi-Square Tests
0-5 years	54	18.3	2.73	4.03	3.2667	.34019	χ^2=1096.3
6-10 years	90	30.5	2.81	3.97	3.3000	.25987	df=1076
11-15 years	107	36.3	2.35	3.87	3.2674	.32639	p=.004
16-20 years	34	11.5	2.64	3.52	3.0743	.26465	
>21 years	10	3.4	2.74	3.45	3.1182	.33913	
Total	**295**	**100.0**	**2.35**	**4.05**	**3.2428**	**.32052**	

The Contingency Coefficient (C) was used to determine if there is a relationship between the work experience of health care workers and their attitudes towards older people. From the results it showed that Contingency Coefficient was .888 and significant ($p<0.05$). Thus it showed there was a significant relationship between the work experience of health care workers and their attitudes towards older people.

IV. Discussion and Conclusion

Age and Attitudes towards Older People

The first objective was to determine the influence of age of healthcare workers on their attitudes towards older people. Data analyses and interpretation revealed that age had a significant influence on the healthcare workers' attitudes towards older people. The study findings established that as healthcare workers age, they tend to have more favourable or positive attitudes towards older people. Age of the respondents did correlate with their attitudes towards older people.

The research findings indicated that a significant negative relationship exists between participants' chronological age and attitudes towards older people scores indicating a tendency for younger healthcare workers to be more ageist than older workers. This finding supports past research that has found similar effects (e. g. Damrosch, 1984; Finkelstein et al. 1995; Lifshitz, 2002;Gellis et al.,2003;) and counters past research that has not detected such an effect (e. g. Hellenbusch et al. 1994; Tierney et al., 1998). In the present study, it was found that a relationship exists between chronological age and attitudes towards older people which is congruent with the research of Kite and Stockdale (2004).

Although past research work has shown that older persons (as opposed to younger persons) are more prejudiced in general (von Hippel, Silver & Lynch, 2000), the present results suggest that this may not be the case when the focus of the prejudice is one's own group (i.e., older people). When age is the target of prejudice, an opposite effect occurs. That is, younger individuals show more negative attitudes towards older people than do older individuals.

Level of Education and Attitudes towards Older People

The first objective was to determine the influence of the level of education of healthcare workers on their attitudes towards older people. Data analysed and interpreted a statistically significant influence of their level of education on their attitudes towards older people.

Consistent with other studies (Anguillo et al, 1996; Shahidi&Devlen, 1993; Hope 1994), the level of education was a predictor of positive attitudes toward older people. This finding suggests attitudes toward older people may be modifiable by increasing the level of education of health care workers. A positive predisposition toward older people can provide a successful base for increasing their knowledge and motivation to consider working with older people. Therefore, curriculum reform is essential to have an impact on improving health care workers' attitudes toward older people. To increase workers' knowledge about older people and sensitize them to the needs of older people, curriculum interventions must be employed in gerontologicalprogrammes.

In this study, the overall attitude scores between the various levels of education of healthcare workers were statistically significant. This might be the result of the overall Kenyan culture of extended families and respect for seniors. The majority of the older people live with their children and grandchildren. Prior exposure to older people has a relationship with the attitudes of workers towards older people. The more older people the healthcare workers knew well, the less the negative attitudes towards older people.

Studies have shown that healthcare workers interact more frequently with older people with whom they are able to communicate than with those who have communication problems. However, the finding of this study showed that with increased level of education, the more positive attitudes towards older people. This can be interpreted as indicating

that when healthcare workers have positive attitudes towards older people, they regard older people as significant and their existence as important (Norbergh et al. 2006). This indicates that when healthcare workers perceive older people as unique and valuable persons, they experience their work as very important tasks and, thus, older people feel important themselves.

The results indicated also that the educational backgrounds of the health care workers were consistent in terms of gerontological education. On a more practical note, there is clear evidence from this study that there was a high mean positive attitudes toward older people when healthcare workers have higher level of education. The level of education has been identified in previous studies as a predictor for positive attitudes towards older people (Lovell, 2006). The finding that staff with higher education had significantly higher mean ATOPS scores than those with lower education is particularly interesting in light of the shift in the care of older people as more achieve higher education.

Work Experience and Attitudes towards Older People

The second objective of this study was to determine the influence of work experience of healthcare workers on their attitudes towards older people. Data analysed and interpreted detected a significant influence of healthcare workers' experience on their attitudes towards older people. Years of experience correlated with healthcare workers' attitudes towards older people. As the number of years of work experience increased, the healthcare workers developed more positive attitudes towards older people.

Socio-psychological theories have emphasized that negative attitudes towards older people are the result of general stereotypes about older people rather than the result of direct negative work experiences of healthcare workers (Ebersol& Hess, 1997). However, Sheffler (1998) and Hartley et al. (1995) concluded that the primary determinant of healthcare workers attitudes towards older people was their work experience with older people rather than their general stereotypes about them. They found that less experienced healthcare workers hold negative stereotypes about, and attitudes towards, older people. They also indicated that younger healthcare workers had more negative attitudes towards older people than their older counterparts.

REFERENCES

[1] Anguillo, L., Whitbourne, S., & Powers, J. (1996). The effects of instruction and experience on college students' attitudes toward the elderly.*Educational Gerontology*, 22, 483-495.
[2] Butler, R. N. (1969). Age-ism: Another form of bigotry. *Gerontologist*, 9, 243-246.
[3] Butler, R. N. (1995). *Ageism*. In G. Maddox (Ed.), The encyclopaedia of aging (2nded.,pp 38-39). New York: Springer.
[4] Cleveland, J. N., &Landy, F. J. (1983).The effects of person and job stereotypes on two personnel decisions.*Journal of Applied Psychology*, 68, 609-619.
[5] Damrosch, S.P (1984). Graduate nursing students' attitudes toward sexually active older persons, *The Gerontologist*, 24 299-302.
[6] Doherty, M., Mitchell, E. A. & O'Neill, S. (2011). Attitudes of Healthcare workers towards Older People in a Rural Population: A Survey Using the Kogan Scale. *The Journal of Applied Gerontology*, 7, 2, 351-360.
[7] Ebersol, P. & Hess, P. (1997).*Toward Healthy Aging*, 5thEdn, C. V. Mosby Company, St. Louis.
[8] Edwards, M. J. & Aldous, I. R (1996). Attitudes to and knowledge about elderly people: A comparative analysis of students of medicine, English and computer science and their teachers. *Med Educ.* 30: 221.
[9] Finkelstein, L. M., & Burke, M. J., Raju, N. S. (1995). Age discrimination in simulated employment contexts: An integrative analysis. *Journal of Applied Psychology*, 80, 652-663.
[10] Gellis Z. D., Sherman, S. & Lawrence, F. (2003).First year graduate Social Work students; knowledge of and attitude toward older adults.*Educational Gerontology*, 29, 1-16.
[11] Gibson, H.B. (1992). *The Emotional and Sexual lives of older people.A manual for professionals*.Chapman & Hall. London.
[12] Government of Kenya (2000).Second report on poverty in Kenya.Volume I: Incidence and depth of poverty. Nairobi: Central Bureau of Statistics, Ministry of Planning and National Development;. Available:http://www4.worldbank .org/afr/poverty/pdf/docnav/02880.pdf
[13] Hartley, C. L. et al. (1995). The effect of early nursing home placement on student attitudes towards the elderly.*Journal of Nursing Education*, 34, 128-130.
[14] Hope, K. W. (1994). Nurses' attitudes toward older people: A comparison between nurses working in acute medical and acute care of the elderly patient settings. *Journal of Advanced Nursing*, 20(4), 605-612.
[15] Hellbusch, J. S., Corbin, D.E., Thorson, J. A., & Stacy, R. D. (1994).Physicians' attitudes towards ageing.*Gerontology and Geriatrics Education*, 15 (2), 55-65.
[16] Kenya National Bureau of Statistics (2009).Population Reference Bureau estimates and projections; and UN Population Division, World Population Prospects: The 2008 Revision (2009). PRBWorldPopulationDatasheet2009:http://www.prb.org/Publications/ Datasheets/ 2009/2009wpds.aspx
[17] Kite, M. E. & Stockdale, G. D. (2004). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*.
[18] Kogan, N., (1961). Attitudes toward old people: The development of a scale and examination of correlates. *Journal of Abnormal and Social Psychology*, 62(1), 44-54.
[19] Levy, B. R., Hausdorff, J. M., Hencke, R., Wei, J. Y. (2000). Reducing cardiovascular stress with positive self-stereotypes of aging. *Journal of Gerontology*, 55, 205-213.
[20] Lifshitz, H. (2002). Attitudes toward Ageing in Adult and Elderly People with Intellectual Disability.*Educational Gerontology*, 28, 745-759.
[21] Lovell, M. (2006).Caring for the elderly: Changing perceptions and attitudes.*Journal of Vascular Nursing*, 24, 22-26.
[22] Matrix Development Consultants (1993). Nairobi's informal settlements: An inventory. Nairobi, Kenya: U.S. Agency for International Development. A report prepared forUSAID/REDSO/ESA.
[23] Muwonge, J.W. (1980). Urban policy and patterns of low-income settlement in Nairobi, Kenya. Population and Development Review.;6:595–613
[24] Nelson, T. D. (2002). *Ageism: Stereotyping and Prejudice against Older persons*. Cambridge, MA: MIT Press.
[25] Norbergh, K., Helin, Y., Dahl, A. Hellzen, O. &Asplund, K. (2006). Nurses' Attitudes Towards People with Dementia: The Semantic Differential Technique. *Nursing Ethics*, 13, 264,
[26] Palmore, E. B. (2001). The Ageism Survey: First findings. *Gerontologist*, 17, 315-320.
[27] Palmore, E.B. (2004). *Ageism*.Presentation at the Symposium on Ageing, University of Tennessee, Knoxville.
[28] PRB (2009). Population Reference Bureau (PRB) estimates and projections; and UN Population Division, World Population Prospects: The 2008 Revision (2009). PR BWorldPopulationDatasheet2009:http://www.prb.org/Publications/Datasheets/ 2009/2009wpds.aspx
[29] Republic of Kenya (2001). The 1999 population and housing census, volume 1: Population distribution by administrative areas and urban centers. Nairobi: Government Press.
[30] Shahidi, S., &Devlen, J. (1993).Medical students' attitudes to and knowledge of the aged.*Medical Education*. 27, 286-288.
[31] Sheffler, S. J. (1998). Clinical placement and correlates affecting student attitudes toward the elderly, *Journal of Nursing Education*, 37 (5), pp. 216-218.
[32] Stevenson, O. (1989). *Age and Vulnerability*. Edward Arnold, London.
[33] Tierney, A. J., Lewis, S. J., &Vallis, J. (1998). Nurses' knowledge and attitudes toward older patients admitted to acute orthopaedic wards. *Journal of Orthopaedic Nursing*, 2(2), 67-75.

[34] UN-Habitat (United Nations Human Settlement Programme) (2003).Slums of the world: The face of urban poverty in the new millennium? Nairobi, Kenya: Global Urban Observatory.
[35] United Nations, (2009).*World Population Prospects*, 2008 Revision, Population Database.
[36] United Nations, (2009).*World Population Ageing*, 2009.
[37] United Nations Population Division (UNPD) (2012) Population ageing. Wall chart. New York: UNPD.
[38] UNPD, (2008).An overview of urbanization, internal migration, population distribution and development in the world. Population Division, Department of Economic and Social Affairs, United Nations Secretariat, New York:UNPD
[39] Von Hippel, W., Silver, L. A., & Lynch, M. E. (2000).Stereotyping against your will: The role of inhibitory ability in stereotyping and prejudice among the elderly.*Personality and Social Psychology Bulletin*, 26, 523-532.
[40] World Health Organization (2002). Active ageing: A policy framework; WHO contribution to the Second United Nations World Assembly on Ageing; April 8-12; Madrid.