

Socioeconomic Determinants Of Maternal Healthcare-Seeking Behaviour In The Informal Settlements Of Nairobi, Kenya: The Case Of Korogocho Slums, Nairobi

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Abstract: Maternal morbidity is a grave global concern because of its devastating effects on the life of a woman and society at large. Millions of women experience maternal morbidity every year, yet most cases of maternal morbidity can be prevented or treated by good maternal healthcare-seeking behaviour (MHsB). Despite the fact that the government of Kenya has taken several steps to make it easier for all women to access MHS, studies show that MHsB continues to be poor among rural communities and the urban poor, resulting in adverse maternal health indicators in these areas. In view of the aforementioned, this study sought to investigate the socioeconomic determinants of MHsB in Korogocho. Specifically, the study assessed the influence of educational attainment, income and occupation on MHsB in the study area. The main respondents were 512 women who delivered in the 12 months preceding data collection. The respondents were selected through the stratified random sampling method, from sampling frames generated with the help of village elders. Forty-six healthcare practitioners, comprising of doctors, clinical officers, general nurses, and midwives were purposively selected from health facilities in the study area. Traditional birth attendants (TBAs) TBAs were selected through the snowball method. Data was collected from main respondents using questionnaires and focus group discussions, and from key informants through in-depth interviews. Descriptive statistics were applied to present the characteristics of the respondents, which have been displayed in frequency tables and charts. Inferential statistics have been used to determine the association between sociodemographic determinants and status of women and MHsB. The study revealed that there is a strong and positive association was also established between educational attainment, income, and occupation and MHsB. The study recommends that the Kenyan national, and Nairobi County governments put in place measures to improve equitable distribution of socioeconomic resources in order to improve MHsB, and maternal health outcomes.

Keywords: Maternal health; socioeconomic factors; Healthcare-seeking behaviour; informal settlements; healthcare practitioners

I. INTRODUCTION

Every year, an unacceptably high number of women continue to die due to pregnancy or birth related complications. In 2015, the global Maternal Mortality Rate (MMR) stood at 216 maternal deaths per 100,000 live births (World Health Organization, 2015 ; UNFPA, 2015), which translated to more than 300,000 deaths worldwide. Developing

countries accounted for approximately 99% of all maternal deaths, with sub-Saharan Africa alone accounting for roughly 66%, followed by Southern Asia at approximately 22%. Maternal mortality can be prevented and maternal morbidity successfully treated if an expectant mother attends a minimum of four Ante-Natal Care (ANC) clinics during pregnancy, delivers in a health facility under the supervision of a trained practitioner, and receives Post-Natal Care (PNC) from a

skilled provider immediately after child-birth. Cognisant of this fact, governments in the developing world have undertaken several interventions to reduce maternal morbidity and mortality. These measures include reduction, and in some cases abolition of fees for maternal healthcare services (MHS) like ANC, delivery and PNC, extension of maternal healthcare services to underserved areas, and investments in maternal resources (Afulani, 2015; Obermeyer, et al., 2015; Vaghella, et al., 2014). However, despite these measures, the rate of reduction of maternal mortality in developing countries has been very slow. Between 1990 and 2015, the global maternal mortality reduced by only 44% (Alkema, et al., 2016; Say, et al., 2014; World Health Organization, 2015 (b)). Several studies have attributed the slow rate of reduction in maternal morbidity and mortality to the fact that most interventions aimed at improving maternal health have been largely facility based, targeting the improvement of maternal healthcare service delivery, while ignoring the factors that influence maternal healthcare-seeking behaviour (MHsB), which is an important component of maternal health (Afulani, 2015; Ahmed, 2015; Anderson, Park, Sanders, Jesus, & Akufuor, 2015). MHsB refers to the actions taken, or not taken, by a woman to prevent or manage morbidity during pregnancy, delivery and the post-partum period (Afulani, 2015; Ahmed, 2015; Anderson, Park, Sanders, Jesus, & Akufuor, 2015). MHsB can range from good to poor. A woman is said to have good MHsB if she promptly seeks and obtains preventive or curative care from skilled healthcare practitioners during pregnancy, delivery and the post-partum period. In contrast, if a woman fails, for whatever reason, to seek skilled care from healthcare practitioners during pregnancy, delivery and the post-partum period, she is said to have poor MHsB. Poor MHsB may result in negative maternal health outcomes including further morbidity, disability and even death. The possibility of prevention and successful treatment of maternal morbidity notwithstanding, and despite the negative outcomes of poor MHsB, maternal healthcare-seeking behaviour remains poor in developing countries (WHO, 2015; UNICEF, 2014; Say et al, 2014; Titaley et al. 2010; Firoz et al. 2013). Studies have attributed the poor MHsB in developing countries to several, largely social factors (Obermeyer et al., 2015). This study therefore sought to evaluate the relationship between the status of women and their maternal healthcare-seeking behaviour in the study area. Specifically, the study assessed the influence of educational attainment, income, and occupation, on MHsB.

II. MATERIALS AND METHODS

This was a cross sectional survey that also involved analysis of secondary data. It was conducted in Korogocho, which is located approximately five kilometers East of the center of the City of Nairobi, and is one of the more than 200 informal settlements in Nairobi County. Korogocho is one of the most congested informal settlements in Nairobi, with more than 250 dwelling units per hectare. It is estimated to be home to approximately 196,000 people and is the fourth largest informal settlement in Nairobi after Kibera, Mathare and

Mukuru-kwa-Njenga in that order (Government of Kenya, 2015).

The questionnaire served as the primary data collection instrument for this study, and was administered 512 main respondents, who comprised of women who delivered within the one year preceding the study. Respondents were selected through the stratified random method, from sampling frames generated with the help of village elders. The reliability of the questionnaire was ascertained by employing the test-retest method. Face validity was established in consultation with research supervisors, then the questionnaire was pilot-tested by administering it to 56 respondents (10% of the sample size) in Mukuru Kwa Njenga, which is another informal settlement in Nairobi, located approximately ten kilometers away from Korogocho. Principal components analysis (PCA) was then used to identify underlying components. Internal consistency of questions was then checked using the Cronbach's Alpha (CA). Finally, the questionnaire was revised based on the information gleaned from the PCA and CA analyses.

The questionnaire was supplemented by focus group discussions (FGDs) with the main respondents, and in-depth interviews with 46 healthcare practitioners in the study area. The key respondents included of 36 healthcare practitioners, comprising of doctors, clinical officers, general nurses, and midwives who were purposively selected from health facilities in the study area; and eight Traditional birth attendants (TBAs) who were selected through the snowball method.

Consent was sought and obtained from all participants, after explaining the purpose and importance of the study. Only those respondents who consented to participating, and signed a consent form, were included in the study.

A thematic analysis was used to analyze qualitative data. Descriptive statistics were applied to present the characteristics of the respondents, which have been displayed in frequency tables and charts to aid in the visual appreciation of the variables under study. Inferential statistics were applied to test the hypotheses by assessing the relationship between various independent variables and MHsB, which was defined as a three category variable, ranging from good, to average and finally poor. The chi square test of significance and gamma correlation coefficient were used to test the relationship between socio-demographic factors and socioeconomic status by cross-tabulating them against MHsB.

III. STUDY RESULTS

Approximately one third of the respondents had obtained post-secondary school education, with only 3.13% having no formal education. Slightly less than one fifth (17.97%) had only primary school education. The mean monthly income was between KES 10,001 and 15,000. The largest segment of the respondents (42.77%), were casual labourers in the nearby factories. Only a small proportion of the respondents (9.96%) were unemployed, as indicated in Table 1.

Socio-Demographic Characteristics		Number of Respondents (n = 512)		
		Frequency	Percentage	Cumulative Percentage
No formal education		16	3.13	3.13
Primary school		92	17.97	21.09

Level of Education	completed			
	Secondary school completed	231	45.12	66.21
	Post-secondary education	173	33.79	100.00
	Total	512	100	
Monthly Income	KES 5,000 or Less	39	7.62	7.62
	KES 5,001 – 10,000	82	16.02	23.63
	KES 10,001 – 15,000	226	44.14	67.77
	KES 15,001 – 20,000	113	22.07	89.84
	Above KES 20,000	52	10.16	100.00
Total	512	100		
Occupation	Unemployed	51	9.96	9.96
	Petty Trading	164	32.03	41.99
	Casual Labour	219	42.77	84.77
	Permanent Employment	78	15.23	100
	Total	512	100	

Table 1: Distribution of socio-economic characteristics of the respondents

The data in Table 1 shows that most of the respondents had attained at least secondary school education. The relatively high level of education could mean that on average, the women in the study area have a high level of awareness on maternal health since, according to Ministry of Health, Government of Kenya (2015) and Godia, et al., (2013) reproductive health is one of the subjects taught in both primary and secondary schools in Kenya.

The levels of income as indicated in Table 1 reveal that most of the respondents are in the lower income bracket, based on Government of Kenya, World Bank and International Labour Organization (ILO) categorization (Gakuru & Mathenge, 2012; World Economic Forum, 2017; International Labour Organization, 2016). The results in panel 3, Table 1 show that less than a fifth of the respondents have a reliable source of income, since most of them are casual labourers, or are engaged in petty trading. Qualitative data revealed that because most respondents do not have a reliable source of income, they have to work on an almost daily basis in order to make ends meet.

Selected socioeconomic characteristics of the respondents were cross-tabulated against their healthcare seeking behaviour, as shown in Table 2. The gamma statistical tool was applied to determine their association. The results in Table 2 reveal that there is a strong and positive association between each of the socioeconomic characteristics and MHSB.

Socio-Economic Characteristics		Level of Maternal Healthcare Seeking Behaviour			Total
		Poor Healthcare Seeking Behaviour	Average Healthcare Seeking Behaviour	Good Healthcare Seeking Behaviour	
Level of Education Completed	No formal education	09	05	02	16
	Primary school	56	31	05	92
	Secondary school	67	93	71	231
	Post-secondary school	09	40	124	173
	Total	141	169	202	512
Gamma = 0.5872					
Monthly Income	KES 5,000 or Less	33	06	00	39
	KES 5,001 – 10,000	60	21	01	82
	KES 10,001 – 15,000	42	92	92	226
	KES 15,001 – 20,000	06	41	66	113
	Above KES 20,000	00	09	43	52
Total	141	169	202	512	
Gamma = 0.7494					
Occupation	Unemployed	25	17	9	51
	Petty Trading	61	58	45	164

	Casual Labour	55	86	78	219
	Permanent Employment	00	8	70	78
	Total	141 (27.54)	169 (33.01)	202 (39.45)	512 (100)

Gamma = 0.5928

Table 2: Cross tabulation of socioeconomic characteristics and maternal healthcare-seeking behaviour

The results in Table 2 reveal that as the level of education increases, so does the level of MHSB. Respondents with no formal education reported poor MHSB, while those with post-secondary school education had good MHSB. The strong and positive association between women's level of education and their MHSB could be attributed to the fact that education increases one's knowledge about maternal health in general. Therefore, educated women are more likely to understand the need for ANC, health facility delivery and PNC more than their counterparts who are not educated. Furthermore, because reproductive health is taught within the Kenyan education system, educated women are more likely to recognize danger signs for obstetric complications more than their counterparts who are not educated. According to Godia et al. (2013), in the Kenyan education curriculum, the higher the level of education, the more detailed reproductive health becomes. Therefore, women with only primary level of education are likely to be familiar with only the basic information about maternal health. However, as they proceed with their education, women get to learn about reproductive health in greater detail. This could explain why MHSB improves as the level of education increases.

Educated women are therefore more likely to understand that reproduction is a bio-physiological process. They are therefore more likely to prevent any complications through seeking biophysical/medical interventions, like ANC, delivery care and PNC. They are more likely to take bio-medical preventive measures to ensure that their pregnancies are free of complications, and biomedical remedial measures to address complications when they arise. Moreover, education exposes women to literature on, among other things, the need for seeking assistance from skilled providers in managing maternal health. Literature could also expose readers to information about the potential risk factors that can predispose mothers to complications during and after pregnancy. This is even more so in the 21st century, due to the e-revolution, whereby information is easily available on the internet.

The positive association between the level of education and MHSB, as shown in Table 2, could also be related to the function of education as an enhancer of the capacity for critical thinking and ability to analyse situations before acting. According to Griffin (2016), the more educated one is, the higher their capacity to make rational decisions based on a critical analysis of the situation. Thus, educated women are more likely to analyze their condition (pregnancy or danger signs for obstetric complications) and choose to seek help from a healthcare practitioner, than their counterparts who are not educated. Studies have shown that educated women are receptive to new ideas and change (Griffin, 2016; Muennig, 2005; World Economic Forum, 2016). Therefore, educated women are more likely to overcome cultural misconceptions about maternal health and causes of obstetric complications. Education also enhances one's chances of earning a good income, either through employment or private business. Studies

have shown that educated people perform better in business (Griffin, 2016).

The results in table 2 concur with previous studies in Nigeria (Idowu, 2013; Ononokpono, 2015), Tanzania (Mpembeni et al., 2010), and Kenya (Shukria, 2015; Okero, 2014) which found a strong and positive association between women's education and MHSB. In Nigeria, Idowu (2013) found that women with post-secondary education were more likely to utilize maternal healthcare services than their counterparts with either primary or secondary education only. Ononokpono (2015) also found that the utilization of MHS is higher in Western Nigeria, largely due to the higher level of education in that region. In Tanzania, Mpembeni et al. (2010) found that the level of educational attainment was a key predictor of delivery in a health facility and uptake of ANC and PNC services since an educated woman is empowered to make decisions.

Similarly, studies have found that investment in female education contributed to the reduction of maternal mortality in Ethiopia (Birmetaet al., 2013) and Bangladesh (Chowdhury, et al., 2013). However, in contrasting results, Kyomuhendo (2003) found that the introduction of free education in Uganda had not led to changes in maternal mortality rates. It is instructive to note that the author made this observation in 2003, just a few years after the introduction of free primary education in Uganda. However, according to UNESCO, it sometimes takes many years for the benefits of education to be realized (UNESCO, 2013).

The results in Table 2 also show that there is a strong and positive association between women's monthly income and MHSB, with a gamma of 0.7494. The results in Table 2 reveal that none of the respondents who earn 5,000 shillings attained the requirements for good MHSB. In contrast, none of the respondents who earned more than 20,000 Kenyan shillings reported poor MHSB. The data in Table 2 shows that maternal healthcare seeking behaviour improves with increasing monthly income.

The positive and strong association between monthly income and MHS as shown in Table 2 may be due to the fact that a higher monthly income increases one's disposable income. Several studies have found that people with a higher disposable income tend to utilize healthcare services, including MHS, more than those with less disposable income (Obermeyer, et al., 2015; Say, et al., 2014; World Health Organization, 2015).

Even though MHS are offered free of charge in all government health facilities, visiting a health facility for ANC, delivery and PNC services usually comes with many incidental costs, including transport. Due to the physical state of an expectant woman, walking can be quite a challenge, especially when she is going to deliver, or immediately after delivery, or if she develops a complication (Doctor et al., 2013). Therefore, women have to hire taxis to transport them to health facilities of their choice during such moments.

Qualitative data also revealed that although delivery services are free of charge, women still have to buy their own delivery care commodities, like buckets, methylated spirit, and cotton wool. In many cases, public health patients lack essential drugs, and in such circumstances, patients are

required to buy drugs from private dispensing chemists. As one FGD discussant put it:

Further, qualitative and secondary data revealed that the free maternity program as offered by the government of Kenya, covers only ANC, delivery, PNC and complications that may arise during delivery (Netherlands Enterprise Agency, 2016). It does not cover complications during and after pregnancy. Most respondents found the cost of treating complications to be prohibitive, because the cost of treating complications includes the cost of tests and scans, some of which are very expensive and medicine. Additional costs may be incurred if one is admitted in a health facility. All these costs require financial endowment, which most of the respondents have a shortage of, as indicated in Table 1.

In addition, low income might affect a woman's ability to get time to visit a health facility. Most of the respondents are compelled to work every day in order to make ends meet. This increases the opportunity cost of visiting a health facility, since making the visit implies loss of income.

The findings in Table 2 concur with the results of Obermeyer et al. (2015) who observed that the level of income was one of the major determinants of uptake of reproductive health services in developing countries. Other studies in India (Navaneetham and Dharmalingam, 2014), and Nepal (Matsumura, and Gubhaju, 2013), also found a strong relationship between level of income and utilization of maternal healthcare services. Similarly in Indonesia, women with a lower wealth index were associated with underutilization of MHS services (Titaley et al., 2010).

In Africa, studies in Nigeria (Ononokpono, 2015; Idowu, 2013) and in Tanzania (Mpembeni et al., 2010), also show a strong and positive association between level of income and utilization of maternal health services. Family income was also found to influence the uptake of MHS in Kenya (Shukria, 2015; Republic of Kenya, 2015; Oduor et al.). Nzioki et al., (2015) equally observed that women who earned more than one US dollar per day were more likely to utilize MHS than their counterparts who earned less than a dollar per day.

In relation to occupation, almost all of the respondents who were permanently employed had good MHSB, and none of them reported poor MHSB, as indicated in table 4.22. In contrast, approximately half of those who were unemployed had poor MHSB. Only 7.87% had poor maternal healthcare seeking behaviour. Less than a third of the respondents who were engaged in petty trading had good MHSB. Respondents who were engaged as casual labourers had average MHSB.

The positive and strong association between occupation and MHSB, as shown in Table 2, could be attributed to the social protection that comes with permanent employment. According to the International Labour Organization, (2010), casual labourers in developing countries do not enjoy any social protection benefits that cover their healthcare needs. In the case of permanent employment however, employers are bound by both international and national laws to provide social protection safeguards that cater for maternal health. (International Labour Organization, 2010 (b)). In Kenya, one of the social protection safeguards is a mandatory maternity leave of 90 days for all women who have delivered a child (Government of Kenya, 2007). This benefit is however an entitlement only for women who are in permanent

employment (Government of Kenya, 2007). Another social protection safeguard that women in permanent employment enjoy include being given time off work to attend ANC, without losing income for the day she has not reported for work (Muiya & Kamau, 2013). In addition, some organizations, including some of the factories where women from the study area work, also have medical schemes that cater for MHS (Fotso and Mukiira, 2012). Even those that do not have medical schemes still have to make mandatory contributions on behalf of all employees to the National Health Insurance Fund (NHIF), which entitles the employee to receive MHS in all public, and selected nonprofit and private health facilities (Deolitte, 2011).

The implication of the lack of social protection safeguards that cater for MHS needs for women in casual labour, petty trading and the unemployed is that the opportunity cost of visiting health facilities for MHS is very high. Permanent employment enables women to receive MHS at health facilities without losing income. In addition, it enables women to get rest without losing income. Finally, working women are likely to have greater access to and control of financial resources, which increases their autonomy. They are therefore likely to afford to pay for their MHS. As shown in panel 2 of Table 2, there is a positive and strong association between the level of income and MHSB.

Other studies have similarly found a positive and strong association between occupation and MHSB. In Nigeria, Aremu (2011), and Adamu (2011) found that women who were in permanent jobs demonstrated better utilization of MHS. However, Ononokpono (2015) found mixed results and concluded that the effects of occupation on utilization of MHS is moderated by other factors such as ethnicity, level of education and religious affiliation.

IV. CONCLUSIONS AND RECOMMENDATIONS

The study established that the socioeconomic status of women is a major determinant of maternal healthcare-seeking behaviour. The levels of educational attainment and income, type of occupation, all had a strong positive association with maternal healthcare-seeking behaviour. This implies that social inequalities have a big role to play in maternal health. Thus, reducing, or eliminating social inequalities could drastically improve maternal health outcomes.

The researchers recommend that the Kenyan national government should more actively implement policies that enhance equitable distribution of socioeconomic resources and opportunities to minimize disparities in maternal health outcomes. There is also need for a further research on the influence of the spouses' socioeconomic status on MHSB.

REFERENCES

[1] African Population and Health Research Center. (2014). Population and health dynamics in Nairobi's informal settlements: report of the second Nairobi cross-sectional slums survey (NCSS) 2012. Nairobi: APHRC.

[2] Afulani, P. (2015). Determinants of maternal health and health-seeking behavior in sub-Saharan Africa: The role of quality of care. PhD Thesis Submitted to the University of California, Los Angeles.

[3] Ahmed, L. (2015). Social Determinants of Utilization of Maternal Healthcare Services in Ghana. *Asian Journal of Science and Medicine* 97(11), 389-408.

[4] Alkema, L., Chou, D., Zhang, S., Moller, A., Gemmill, A., & Daniels, L. (2016). Global, Regional, and National levels in maternal mortality between 1990 and 2015, with scenario-based projections to 20130: a systematic analysis by the UN maternal mortality estimation inter-agency group. *Lancet*, 462-474.

[5] Anderson, G., Park, H., Sanders, L., Jesus, N., & Akufuor, M. e. (2015). Healthseeking Behaviour for Maternal Morbidity in Sub-Saharan Africa: Trends and Challenges. Chicago: Bruner and Sons Inc.

[6] Chege, J., & Mbilu, T. (2015). Utilization of maternal health care services in Kenya: An analysis of the patterns and determinants of maternal health care use. Retrieved March 19, 2016, from SST: <http://www.sociologyandscience/maternalhealth/Africa>

[7] Chowdhury, A., Bhuiya, A., Chowdhury, M., Rasheed, S., Z, H., & Chen, L. (2013). The Bangladesh paradox: exceptional health achievement despite economic poverty. *The Lancet*, 1734-45.

[8] Deolitte, C. (2011). A Strategic Review of NHIF and Market Assessment of Private Prepaid Health Schemes. Nairobi: Government of Kenya.

[9] Eckersley, R. (2001). Culture, health and well-being. In R. Eckersley, J. Dixon, B. Douglas, & (editors), *The social origins of health and well-being* (pp. 51-70). Cambridge: Cambridge University Press.

[10] Fotso, J., & Mukiira, C. (2012). Perceived quality of and access to care among poor urban women in Kenya and their utilization of delivery care: harnessing the potential of private clinics? *Health Policy and Planning*, 505-515.

[11] Gakuru, R., & Mathenge, N. (2012). Poverty, Growth, and Income Distribution in Kenya: A SAM Perspective. Nairobi: AGRODEP.

[12] Government of Kenya. (2007). *Employment Act, 2007*. Nairobi: Government of Kenya.

[13] Government of Kenya. (2014). *Demographic Health Survey of 2014*. Nairobi: Government Printer.

[14] Government of Kenya. (2015). *Kenya health facilities list with services as at November 13*. Retrieved November 11, 2016, from ehealth: <http://www.ehealth.or.ke/facilities/downloads.aspx>

[15] Griffin, T. (2016). *Costs and benefits of education and training for the economy, business and individuals*. Adelaide: NCVER.

[16] International Labour Organization. (2016). *Minimum Wage Policy Guide*. Retrieved January 19, 2017, from International Labour Organization: <http://www.ilo.org/minimumwage>.

[17] Muennig, P. (2005). *The Health Returns Associated with Education Interventions Targeted at African-American Males. Social Costs of Inadequate Education*. New York: Columbia University.

- [18] Muiya, B., & Kamau, A. (2013). Universal health care in Kenya: Opportunities and challenges for the informal sector workers. *International Journal of Education and Research* 1(11).
- [19] Netherlands Enterprise Agency. (2016). *Kenyan Healthcare Sector: Opportunities for the Dutch Life Sciences & Health Sector*. The Hague: Netherlands Enterprise Agency.
- [20] Nininahazwe, T. (2015). *Determinants of Health Facility Delivery in Rural Rwanda. An Empirical Study*. Kigali: Amakubo.
- [21] Obermeyer, J., Hunt, P., Ahmed, M., Mohammad, S., Fitzpatrick, J., & Pius, P. (2015). Patterns of Utilization of Maternal Health Services in Developing Countries: An Analysis of Sub-Saharan Africa and South Asia. Retrieved March 1, 2016, from *Lancet*: <http://www.thelancet.com>.
- [22] Polomack, A. (2010). Mixity and Territoriality in a rapidly expanding city: How Dar-es-Salaam was shaped by its Suburbs. In B. (.Calas, *From Dar-es-Salaam to Bongoland: Urban Mutations in Tanzania* (pp. 125-236). Dar-es-Salaam: Mbuki na Nyota Publishers.
- [23] Say, L., Chou, D., Gemmill, A., Tuncalp, Ö., Moller, A., Daniels, J., & Gulmezoglu, A. (2014). Global Causes of Maternal Death: A WHO Systematic Analysis. Retrieved January 11, 2016, from *Lancet Glob. Health*: [http://dx.doi.org/10.1016/S2214-109X\(14\)70227-X](http://dx.doi.org/10.1016/S2214-109X(14)70227-X).
- [24] Say, L., Chou, D., Gemmill, A., Tunçalp, Ö., Moller, A., Daniels, J., & Gülmezoglu, A. (2014). Global Causes of Maternal Death: A WHO Systematic Analysis. Retrieved January 11, 2016, from *Lancet Glob. Health*: [http://dx.doi.org/10.1016/S2214-109X\(14\)70227-X](http://dx.doi.org/10.1016/S2214-109X(14)70227-X).
- [25] Shivachi, T. (2013). *The role of ethnomedicine in the provision of primary healthcare: the case of Iguhu Location, Kakamega South District, Kakamega County, Kenya*. Unpublished Thesis.
- [26] UNESCO. (2013). *Education transforms lives*. Paris: UNESCO.
- [27] UNFPA. (2015). *Trends in maternal mortality*. New York: United Nations.
- [28] Vaghella, J., Ahmed, V., Bruce, C., Stephenson, K., Ravindra, K., & Patel, J. (2014). *Reducing Maternal Mortality: Evidence Based Approach*. Mumbai: Raj Press.
- [29] World Economic Forum. (2016). *An African Agenda for Africa's Competitiveness*. Retrieved February 16, 2017, from World Economic Forum: <https://www.weforum.org/reports/anaction-agenda-for-africa-s-competitiveness>.
- [30] World Economic Forum. (2017). *The Inclusive Growth and Development Report 2017*. Geneva: Forum, World Economic.
- [31] World Health Organization. (2015). *Global Strategy for Women's, Children's and Adolescents' Health: 2016-2030*. Geneva: United Nations.
- [32] World Health Organization. (2015 (b)). *Global Strategy for Women's and Adolescents' Health*. New York: United Nations.