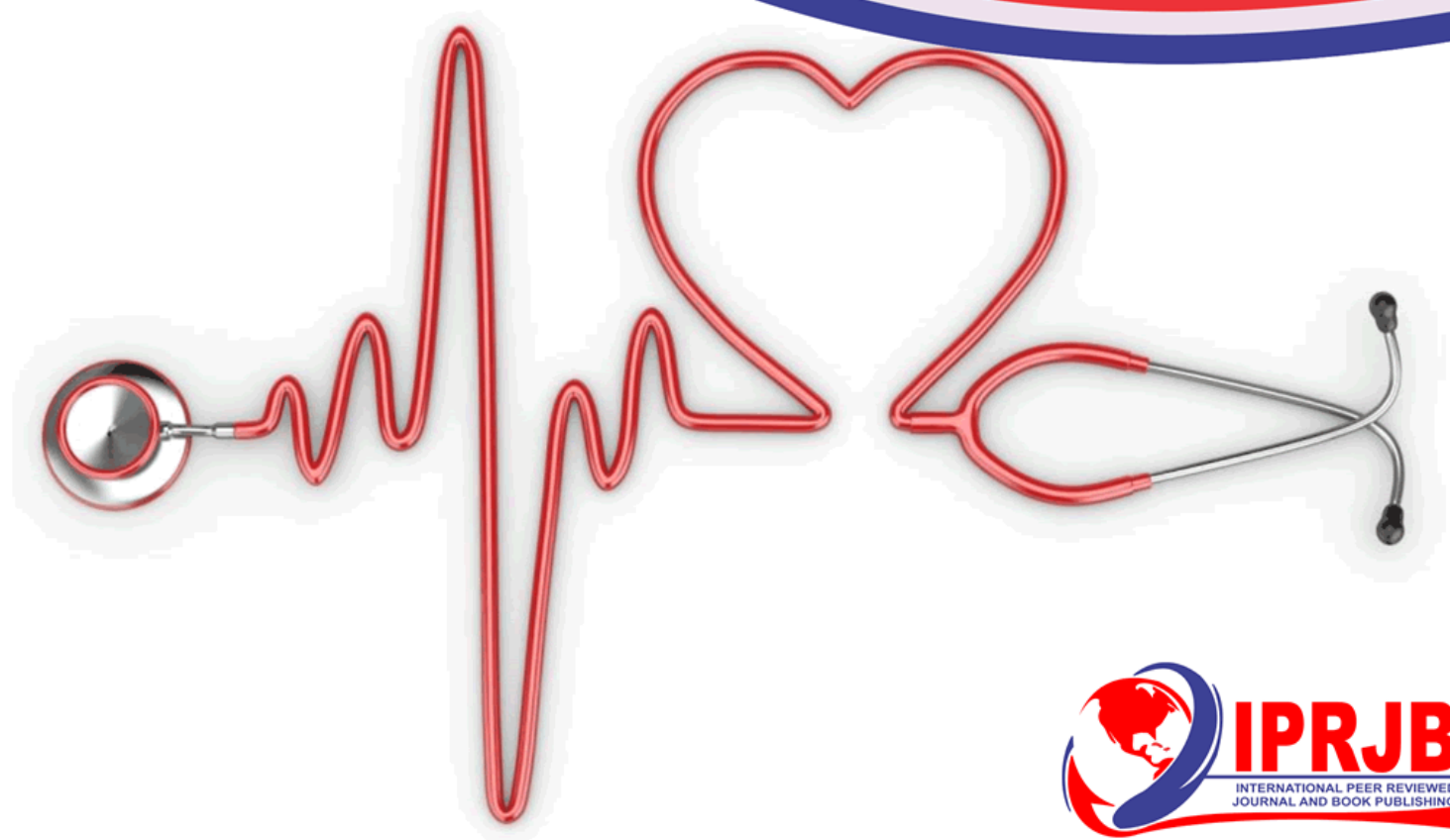


# Journal of Health, Medicine and Nursing (JHMN)

## **THE PERFORMANCE OF TRAINED CLINICAL OFFICERS IN REPRODUCTIVE HEALTH SERVICE DELIVERY THROUGH TASK SHIFTING IN KENYA: OPPORTUNITIES AND CHALLENGES**

Kishasha K. Meshack, Musa Oluoch and Susan Njuguna



## **THE PERFORMANCE OF TRAINED CLINICAL OFFICERS IN REPRODUCTIVE HEALTH SERVICE DELIVERY THROUGH TASK SHIFTING IN KENYA: OPPORTUNITIES AND CHALLENGES**

<sup>1\*</sup>Kishasha K. Meshack

<sup>1</sup>Post Graduate Student: Kenya Methodist University

\*Corresponding Author's Email: [mkishasha@gmail.com](mailto:mkishasha@gmail.com)

<sup>2</sup>Musa Oluoch

Lecturer: Kenya Methodist University, Nairobi, Kenya

<sup>3</sup>Susan Njuguna

Lecturer: Kenya Methodist University, Nairobi, Kenya

### **Abstract**

**Purpose:**The purpose of this study was to determine the performance, challenges and the opportunities in task shifting for the cadre.

**Methods:**This was a cross-sectional study design. Purposive snowballing technique was employed. One hundred and fifty Clinical Officers were targeted for study. A sample of 45 was captured for study calculated as 30% of the target population. Structured questionnaires were administered and triangulated by focus group discussions and key informant interviews. Cross tabulation and chi-square tests were used to compare performance in various reproductive health procedures. Analysis of Variance was employed to test for significance in differences on various responses. Data from focus group discussion was transcribed and analyzed by content analysis. Analysis of the Quantitative data collected was done using SPSS (Version 22). Data collected was analysed using tables, graphs and descriptive statistics

**Results:**The study found out that motivation builds a better, more satisfied and better performing workforce as evidenced by response of further training There was significant statistical evidence of competence in performing task shifted obstetrical and gynecological procedures at p-value 0.05, computed chi-square value of 7.134 against the critical value of 9.488. Analysis of Variance with a computed value of 95.7, p-value 0.05 and critical Value of 2.45 indicated that responses from respondents differed significantly while response for an act of parliament for the practice of new skills was 100%.

**Unique Contribution to Theory, Practice and Policy:** The study recommended for the development of task shifting policy framework the, strengthening of health systems workforce through task shifting for the cadre and sensitization of workforce at health facilities on the concept of task shifting.

**Key Words:** *Clinical Officers, reproductive health service and Performance*

## 1.0 INTRODUCTION

Skilled Human Resource for health is one of the core building blocks of a health system (WHO, 2006). Globally, there is a deficit of about 2.4 million doctors, nurses and midwives (WHO, 2003). In Sub-Saharan Africa, the human health workforce crisis is impacting negatively on the delivery of reproductive health services (GHWA, 2003). To mitigate against the crisis and in order to strengthen the health systems workforce, WHO (2004) recommended, approved task shifting complete with its Guidelines at the International Conference in Addis Ababa in Ethiopia in 2008. Task shifting refers to strengthening of workforce through transfer of skills from highly trained cadres to lower related cadres in order to solve the health workforce crisis. Kenya has equally inadequate number of doctors and nurses to provide reproductive health services (KDHS, 2003). In order to improve maternal access and address the shortage of skilled manpower in the provision of reproductive health services the government of Kenya embarked on task shifting trained Clinical Officers to carry out emergency obstetrical and gynecological procedures in 2008 under the Skill transfer policy.

Many countries across the world have responded pragmatically by adopting a task-shifting approach. This involves redistributing tasks rationally among health workforce teams so that specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications.

A number of studies have been conducted on the need for deployment, processes and evaluating of specialized Clinical Officers in Sub-Saharan Africa in order to commence or sustain Task Shifting of health workforce. Research done by the University of Birmingham and published in the British Medical journal (2011) concluded that the effectiveness and safety of caesarian section carried out by Clinical Officers did not differ significantly compared with doctors (Wilson et al, 2011). Better health outcomes including lower maternal mortality rate were observed where Clinical Officers had completed further specialized training particularly in Anesthesia and reproductive health. In Zambia, a study on strengthening Zambia's health workforce through task shifting carried out a comprehensive review of this cadre in 2011 which acknowledged the success of the project. The Country had opened a career pathway for Clinical Officers by upgrading skills in internal Medicine, gynecology, paediatrics and surgery (Gray, 2013).

Task shifting represents a radical departure from traditional delivery model that depend on specialist worker and could make a major contribution to expanding access to maternal health services. Task shifting has been shown to have the potential to positively contribute to overall health systems strengthening (WHO, 2006). This model tends to provide a strengthened and flexible health workforce that respond to the changing landscape of public health needs as demonstrated in South Africa, Burkina Faso, Mozambique, Zambia and Tanzania (Hounton et al, 2009). In all these countries the cadre of Clinical Officers are trained as complete physician substitutes with advanced skills to even perform major and emergency surgery across specialities thus solving the human workforce crisis in health. Task shifting frees doctors to use their time and expertise for people with more complicated diseases. In addition, task shifting enables many

other people to benefit from receiving treatment in rural health facilities where there are shortages of doctors rather than having to travel to big and far hospitals. In this way, task shifting helps in expanding and improving clinical outcomes for many patients.

Despite the benefits of task shifting, the task shifted clinical officers in Kenya still face challenges attributed to high workload, poor working conditions, weak regulation, and lack of acceptance from the doctors, nurses and midwife cadres, poor supportive supervision which has led to low morale and poor performance of this cadre in providing maternal services. This study provided an opportunity to determine their level of performances, challenges and opportunities they encounter with the view of formulating strategies for optimizing specialized clinical officers in contributing to the change in range, the high trend in the numbers and the outcomes in improving quality maternal health services in health facilities.

## **2.0 RESEARCH METHODOLOGY**

The study was executed as cross-sectional research design and was conducted in seven Counties of Kenya with each county representing the the eight regions of Kenya except for one region due to security concerns. The study population consisted of all trained Clinical Officers in reproductive health working in the seven counties of Mombasa, Machakos, Nairobi, Muranga, Nakuru, Kakamega and Kisii. Purposive sampling technique was employed to capture the selected hospitals for study. Seven regions of Kenya were purposely selected to represent the Country for study. Questionnaires were the main data collection tool. The research questionnaire was pilot tested to determine its reliability and validity before it was used to collect data for the main study. The study generated both qualitative and quantitative data. Cross tabulation and chi-square tests were used to compare performance in various reproductive health procedures. Analysis of Variance was employed to test for significance in differences on various responses. Data from focus group discussion was transcribed and analyzed by content analysis. Analysis of the Quantitative data collected was done using SPSS (Version 22). Data collected was analysed using tables, graphs and descriptive statistics

## **3.0 RESEARCH FINDINGS AND DISCUSSION**

### **3.1. Social demographic- characteristics of participants**

A total of 45 Clinical Officers trained in reproductive health were interviewed. Their ages ranged from 25 to 54 years with a mean age of 37.7 years, a standard deviation of 3.22, Coefficient Variation of 8.54% and a standard error of 0.47. Majority ( 33.33%) work in the Capital city County of Nairobi. Over 53.33% were the majority and had a working experience of 4 - 6years.

### **3.2. Performance**

Table 1 below indicates the key emergency procedures the cadre was allowed to perform in obstetrics. The competency in the procedures was measured on whether the Clinical Officer performed the procedure competently or not. In the case where the procedure was performed in

the absence of the researcher, a theatre check list was used to determine the outcome of the procedure. The study found out that 91.1% of trained Clinical Officers were able to competently perform on their own all emergency obstetrical procedures they were allowed to do under task shifting. On cross tabulation, There was significant relationships in performance competency among the trained officer in task shifting at a P-value of 0.05, calculated chi-square of 7.134 and critical value of 9.488 for 4 degrees of freedom.

### 3.2.1. Competence in task shifted Obstetrical procedures

**Table1: Shows evidence of competence performance in obstetrical procedures, n=45**

Evidence of competence performance	Task shifted procedures					Total	Test of Association
	Caeserian section	Examination under Anaesthesia	Repair burst abdomen	Bilateral Tubal ligation	Mac stitch		
Yes	43	44	39	38	41	<b>205</b>	Chi-square =7.134146 Df=4 P-Value=0.05
No	2	1	6	7	4	<b>20</b>	
<b>Total</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>225</b>	

### 3.2.2. Competence in task- shifted gynecological procedures

**Table.2: Shows evidence of competence performance in gynecological procedures. N=45**

Evidence of competence performance	Task shifted procedures					Total	Test of Association
	MV- aspiration	Ruptured ectopic pregnancy	Marsupialization Bartho-Abscess	Lap for pelvic abscess	Removal of IUCD		
Yes	45	32	43	33	43	<b>196</b>	Chi-square =25.92555 Df=4 P-Value=0.05
No	-	13	1	12	2	<b>29</b>	
<b>Total</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>225</b>	

Table 2 above indicates the key emergency procedures the cadre was allowed to perform in gynecology. The results show that 87.1% of the cadre were able to competently perform on their own all emergency gynecological procedures as allowed in task shifting and under the policy of skill transfer. Chi-square test of association shows that there is a disparity in skill performance

between the cadre members in the area of gynecology and that there is minimal gap in performance among the cadre between the actual and the optimal.

### **3.3 Challenges and opportunities**

In assessing opportunities and challenges, the respondents were required to respond to a specific statement as to whether they strongly disagree, disagree, not sure, agree and strongly agree on a particular variable being examined. This was measured on a 5- likert scale. Five independent variables namely motivation, working environment, policy environment and regulatory and legal mechanisms were identified for examination as explanatory factors for challenges and opportunities.

#### **3.3.1 Motivational challenge**

The response from the majority was that there was average reasonable degree of motivation as evidenced by 66.7% for training opportunities, 53.3% for being housed, 53.3% for witnessing an increase in antenatal care attendance, 80% for indication in increase in the number of deliveries, 93.33% for good outcomes after surgery and 73.3% for adequate remuneration and allowances.

#### **3.3.2 Working environment**

The majority (80%) disagreed that there was adequacy of job equipments in their working environment. The doctor- Clinical officer cooperation at work was found to be wanting with 73.34% of respondents indicating existence of poor cooperation. However, 53.33% of the cadre were dissatisfied with internship supervision. Indeed, 60% were satisfied with the policy on training in reproductive health.

#### **3.3.3 Opportunities**

Many of the Clinical Officers agreed that task shifting provided many opportunities. Over 73.33% agreed that task shifting provided an opportunity for their licensing body to register and confer them with status of reproductive health specialists. Indeed, 100% saw the opportunity for the parliament to amend their licensing Act to cater for their new skills and knowledge.

### 3.4 Analysis of Variance (ANOVA) for Significance

**Table 3: ANOVA for significant differences on responses on motivational challenges**

	Strongly disagree $X_1$	Disagree $X_2$	Not sure $X_3$	Agree $X_4$	Strongly agree $X_5$	ANOVA Findings
	12	3	0	21	9	df between responses=5-1=4 df error=39-4 =35  Sum of squares=1606.5 its mean =401.6  total Sum square =146.875 its mean =4.196  computed ' F ratio=401.6/4.196=95.7  'F value for 4df and 35 df =2.45 (critical Value).
	6	6	9	18	6	
	9	6	0	6	24	
	9	9	3	12	12	
	3	0	3	9	30	
	3	0	6	15	21	
	3	3	0	12	27	
	3	0	0	24	18	
<b>Total</b>	<b>48</b>	<b>27</b>	<b>21</b>	<b>117</b>	<b>147</b>	
<b>Mean X</b>	<b>6</b>	<b>3.4</b>	<b>2.6</b>	<b>14.6</b>	<b>18.4</b>	
$\sum X$	<b>360</b>					
$\sum X^2$	<b>5875</b>					
$\frac{\sum X^2 - \frac{(\sum X)^2}{N}}$	<b>1459.625</b>					
$\frac{(\sum X_1) + (\sum X_2) + \dots}{8}$	<b>1606.5</b>					
<b>Total <math>\sum X^2 - \frac{(\sum X)^2}{N}</math></b>	<b>1459.225</b>					

Since, the computed F-ratio of 97.7 is greater than the critical table value of 2.45 at 5% level of significance, this indicates that the five responses on the 5- likert scale on motivational challenges by trained Clinical Officers differed significantly. This means the five responses testing various variables are not the same.

### 3.4 Discussion

Task shifting is the rational redistribution of tasks among workforce teams where specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of the available human resources for health. This allows a wider range of cadres to offer certain services, when this can be done safely and effectively as a means of rapidly expanding access and improving health. In 2004, WHO recommended the use of task shifting as a means of solving the health workforce crisis world wide especially in Sub-Saharan Africa. The world health body (WHO) approved its implementation in 2008. The WHO (2008) goal of task shifting was to "get the right workers with the right skills in the right places doing the right things" without necessarily abandoning other methods of increasing the number of qualified health workers. In reproductive

health, task shifting was meant accelerate progress towards achieving set millennium goals (MDG'S, 2000), 4,5 and 6 through reduction of maternal mortality ratio and to help scale up of access to effective and evidence-based essential services in the country.

In Kenya, trained Clinical Officers in reproductive health were task shifted in 2004 to provide emergency obstetric and gynaecological services as a stop- gap measure to fill gaps in health service delivery due to shortage of qualified doctors. The new task shifted skills such as performing emergency caesarian section were not covered by their Training, Licensing and Registration Act (1988, 2016). However, in 2008, the Director of Medical services recognized these skills and under the transfer skill policy, allowed the task shifted cadre to perform procedures such as caesarian section, bilateral tubal ligation, macdonald stitch, conducting ward rounds and any other Reproductive Health duties assigned to them by the Obstetrician or gynaecologist. This brought various challenges and opportunities to their task shifted roles and responsibilities.

This study identified various performance competency, challenges and opportunities which interalia included motivation, policy and working environment. A major setback for the cadre was hostile working environment where there was minimal level of cooperation from nurses and doctors coupled with inadequacy of appropriate health facility equipments for their job. Doctors and nurses hostility was seen as trained Clinical officer being competitors taking over their work domain for which they are not licensed to provide. It must be noted that task shifting are temporary measures and are not designed to take away tasks from any professional group, but rather make the best use of the cadres of staff currently employed and deployed to our health facilities. This therefore calls for Kenya to domesticate WHO policy on task shifting in order to prevent misunderstandings among health professional.

Health workforce needs-based shortages and skill mix imbalances are significant health workforce challenges. In this case task shifting becomes an important policy option to help alleviate workforce shortages and skill mix imbalances. The trained Clinical Officer now has an opportunity to competently practise new skills which he has acquired, increase his scope of practice and even have it anchored into law. This is supported by the case of mozambique, South Africa, Malawi and Burkina Faso where Assistant Medical Officers trained in surgery are key providers in district hospitals and produce similar patient outcomes as physician obstetrician and gynecologists. Similarly, the results of this study indicate that 100% of Clinical Officers in Kenya wanted an amendment to their statutory act to provide for such opportunities as in the case of Mozambique.

Motivation is closely linked to job satisfaction. Unmotivated health workers are known to leave their jobs in pursuit of more appealing job opportunities. The study found out that trained Clinical Officers were generally satisfied with the scopes of training (60%) and practice (53.33%).

Amajor challenge therefore to delivering quality health services in Kenya is the growing shortage of trained health workers in a country already burdened with insufficient infrastructure, poor government health-care systems, and extreme poverty. In order to cope up with these human resource challenges, it is essential to address both institutional and individual factors such



as improved workforce management systems that pursue equitable distribution of health workers, staff inclusion in staffing related decision making, clear job descriptions, improved communication between management and staff, supportive supervision, mentoring and coaching. Key response to all these challenges are such that a comprehensive approach is needed to address institutional, facility, and individual factors in a holistic manner taking into consideration the needs and dynamics of entire health-care system such as task shifting.

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

##### **4.1 Conclusions**

The objectives of this study on task shifting in reproductive health were to determine their level of skill competency, motivational level of the trained Clinical Officers, the available regulatory mechanisms in service delivery, policy on their operation and the status of their working environment.

The study concluded that the Clinical Officers level of competency and performance in task shifted skills is reasonably high. There was increased maternal utilization of Antenatal, intranatal and post natal services and attendance at health facilities as a result of introduction of task shifting model. Task shifting in reproductive health for Clinical Officers provided high reasonable levels of motivation for the cadre. There is a wide range of opportunities for Clinical Officers in task shifting that includes recognition for new skills and enactment of new legislation to cater for practice of the skills and that the working environment for the cadre was hostile due to misunderstanding of their new roles, functions and responsibilities.

##### **4.2 Recommendations**

The recommendations are based on the findings of the study and the interpretation of the results and are as follows:

Task shifting in reproductive health by trained Clinical Officers must be anchored in the Ministry of Health National Policy Framework that will address motivation of the cadre, work environment and cooperation with other health workers in their new roles. This is to help spell their clear roles, functions and responsibilities to avoid inter cadre unhealthy competition and suspicion. To avoid competition, conflicts and misinterpretations of each others role in task shifting among cadres, the national government needs to develop a clear cut policy frame work on task shifting in reproductive health and other areas.

There is a need for health managers to mobilize, conduct sensitization programs and advocacy on task shifting among its health workforce to help integrate the Clinical Officers into their new roles and responsibilities.

An act of parliament need to be enacted to provide and cater for the new skills acquired by trained Clinical Officers in providing emergency surgical obstetrical and gynecological procedures in order to motivate the cadre.

##### **5.0 Future research**

Further research needs to be carried out in the following areas of reproductive health and on Clinical Officers as a cadre:

Comparative study on outcomes of caesarian section carried out by task shifted Clinical Officers in reproductive health versus the medical officers in Kenya.

The impact of trained Clinical Officers in providing reproductive health services since their inception and deployment in 2004.

## REFERENCES

- African Union (2004). *New Partnership for African Development: Human Resource and Development in Africa*. AU, Durban.
- AMREF (2012). *Governance Leadership and Management for Health Systems Strengthening in Africa*. Vol 1, Amref, Nairobi.
- AMREF (2014). *Training Manual in Governance Leadership and Management for Health System Strengthening in Africa*, Amref, Nairobi.
- Buchan (2002). *Skill Mix in the HealthCare Workforce: Reviewing the Evidence*. Bulletin WHO 2002; 80:579-50.
- Clinical Officers Council (1988). *Training, Registration and Licensing (1988) Act*. Government of Kenya. Nairobi.
- Clinical officers Council (2013). *Registration, Licensing and Training Act Cap (262) of 1989* Nairobi.
- Hounton S (2009). *A Cost Effectiveness Study of Caesarean Section Deliveries by Clinical Officers, General Practitioner and Obstetricians in Burkina Faso*. Human Resource for Health 2009. 7:34 doi: 10.1186/1478-4491-7-34.
- Kampala Declaration (2008). *Agenda for Global Action of Human Resources for Health*. Kampala, Uganda.
- Kenya Methodist University (2016). *Total Quality Management in Health Care*. Learning material. Unpublished document. KEMU, Nairobi.
- Kenya National Bureau of Statistics (2014). *Kenya Demographic and Health Survey*. Government of Kenya. Nairobi.
- Kruk M et al (2010). *Human Resource and Funding Constrains for Essential Surgery in District Hospitals in Africa. A Retrospective Cross-section Survey*. Plos Medicine:2010 <http://www.plosmedicine.org/article/info%20journal.pmed.1000242>.
- Ministry of Health (2001). *Essential Obstetrics for Safe Motherhood Initiative*, SME(2001). Government of Kenya, Nairobi.
- Ministry of Health (2003). *Kenya Demographic and Health Survey*. Government of Kenya. Nairobi.
- Ministry of Health (2014). *Management and Governance for Health System Managers in Kenya*, 2nd edition. Government of Kenya. Nairobi.
- Nachmias F and Nachmias D (2004). *Research Methods in the Social Sciences*. Arnold Publishers, London.

- Nairobi. Management Services for Health (2014). Health Leadership and Management: Trainers Manual on Health Systems Management in Kenya. Nairobi.
- National Coordinating Agency for Population and Development (2010). Kenya Service Provision Assessment, 2010. Nairobi.
- Ochola P and Mwangi B (2000) Methods in Health Research. Kenyatta University institute of open learning Nairobi
- Odhiambo Otieno G.W (2013). Health Systems Research Methods. Kenya Methodist University Press, Nairobi
- Praxton A, Maine D, Freedman L, Frey D, Lobis S (2004). The Evidence for Emergency Obstetrics coc. Int. J Gynecol Obstetric. 2005; 88(2): 181-193. doi:10.1016/j.ijgo. 2004.11.026
- Ruchner (2007). Introduction to Sociology: The Control Theory. New York City UNICEF (1987): The Bamako Initiative: Providing Essential Drugs and other Health Services for Sub-Saharan Africa. Bamako.
- UNICEF (2010). Multiple Indicator Cluster Survey, Unicef. Paris.
- United Nations (1994). International Conference for Population and Development: Cairo Declaration. New York.
- Wilson et al (2011). A comparison of Clinical Officers with Medical Doctors on Outcomes of Caesarean Section in the Developing World. Meta Analysis of Controlled Studies BMJ 2011; 342 doi: 10.1136/bmjcl 2600 (Published 13 May 2011).
- Wood et al (2008) Community Health African Medical and Research Foundation. Rural Health Series, Nairobi.
- World Health Organization (2006). The World Health Report 2006: Working together for Health. Geneva.
- World Health Organization, WHO (2008): The WHO Global Recommendations and Guidelines on Task Shifting. New York.