Developing Country Studies
ISSN 2224-607X (Paper) ISSN 2225-0565 (Online)
Vol 2, No.11, 2012


# Health Security in Africa and Quality of Health Services

Itam H. Itam[1] Anthonia Adindu[2*]

1. College of Medical Sciences, University of Calabar, Cross River State, Nigeria
2. Department of Public Health, College of Medical Sciences, University of Calabar, Cross River State, Nigeria.

*E-mail: anthonia.adindu@yahoo.com; aadinduobso@unical.edu.ng

**Abstract**

National security and development are inextricable and depend largely on health security that strengthens general health of citizens and productive capacity. Health security reflects quality of governance and commitment of policy makers, and health managers to quality of services. Improving the seemingly intractable poor health situation and fostering health security in Africa require attention to the quality of services at every level. This paper examines health situation in Africa, the concept of quality in health care and efforts toward advancing quality of health services since primary health care. It then provides strategies for establishing national health care quality program in order to advance health security in Africa.

**Keywords:** Quality in Health, Health Security in Africa, National Policy on Quality Health Care, National Health Quality Program.

## 1. Introduction

Human security, protecting, and empowering people at individual and community levels culminate in national and international security. Therefore, national security fundamentally depends on health security reflected in the well-being of citizens. Hence, sustainable development, peace, and security are inextricable, and good health of citizens an indispensable ingredient. Effective health system an indication of good governance is a credit to policy makers, and health managers. The Commission on Human Security (2003) argues good health is essential and an instrument to achieving human security because the very heart of security is protecting human lives, and health security at the vital core. However, health security depends on quality of the health system and services at every level in a country. Understandably, health system quality varies according to economic, technological, political, educational, and socio-cultural factors within a context. These factors also tend to affect health behavior of people, and organizations. Quality is the essence of healthcare service, and the common mission and purpose of health managers and professionals (Chung & Yu 2012). Health care and quality are therefore inseparable, and to provide health services without concern for quality is unprofessional and potentially dangerous (Adindu 2010). Therefore, any effort to strengthen health systems in Africa must incorporate strategy to improve access and quality of services particularly in rural areas ( Bradely, Thompson, et.al. 2011).

## 2. Health Situation in Africa

The Alma-Ata Declaration on Primary Health Care (PHC) and Health for All Strategy pushed for equity, social justice, and health security through effective management, greater accountability and improved quality of services. Prior to this, large populations in rural communities and urban slums in Africa had limited or no access to basic health services. The international conference on PHC declared health a fundamental human right for all citizens, and outlined twenty-two critical areas for achieving the global health that include establishing clear link between health and development; community participation; coordination and effective management of services. Quality of care became important element in transforming health services.

Gradually, health indices improved in many societies. However, achievements among regions were unequal with sub-Sahara Africa lagging behind. The World Health Organization (WHO) recently reported that about 536,000 women died in 2005 due to complications of pregnancy and childbirth, 400 mothers died for every 100,000 live births. The ratio is 9 in developed countries, 450 in developing countries, and 900 in sub-Saharan Africa; suggesting 99% of women who died in pregnancy and childbirth were from developing countries. Globally, maternal mortality ratio fell by 5.4% in the 15 years between 1990 and 2005, an average reduction of 0.4% each year. There was hardly any improvement between 1990 and 2005 in sub-Saharan Africa where most deaths occur. Therefore, health reforms should focus on universal coverage, health equity, social justice, inclusivity, universal access to basic services and social protection; leadership that integrates participatory approaches necessary for effective management of contemporary and complex health system; and strengthening capacities for effective and efficient service delivery (WHO 2008).

The health indices in many African countries are still below expectation, maternal and infant morbidity and mortality rates are high; and life expectancy low, compared with other regions. Life expectancy and infant mortality rates of twenty countries, ten low income and those of ten countries in the high-income group show huge disparity (table 1). Furthermore, from the WHO (2010) report the African Region had the lowest life expectancy at birth of 53 years, and Region of the Americas 76 years (table 2); and looking at life expectancy of ten African countries in agglomeration, life expectancies were generally below 60 years (table 3). Such seemingly intractable poor health indices are due to complex interrelated factors including weak health policy analysis, disconnect between health policy and implementation; poor management of health services and resources; poor quality of services; corruption, and inequities in the distribution of resources and services.

The greatest challenge in most countries is the poor quality of service at every level of health system, which has largely received little attention. Health security in Africa is therefore a serious issue that suggests examining dimensions hitherto ignored in the delivery of health services in the region. Importance of health care and security of lives make quality service critical in the health system at facility and community levels. Generally, addressing and improving quality of health services is vital to health security, changing the abysmal level of health in Africa is essential to promoting human security and sustainable development.

Moreover, Africans are more informed today, increasingly less tolerant to poor performance of governments, and the lack of necessities of life such as health care, education, housing, and food, particularly amidst plenty. The quality of such services is also under intense scrutiny. Quality in the health system reflected in national health indicators must be primary concern of political leaders, health policy makers, health managers, and professionals because of its influence on economic growth, national survival, security, and national pride.

**Table 1: Life expectancy and infant mortality rates of twenty countries.**

| | **Life expectancy at birth** | | | **Infant mortality per 1000 live births** | | |
|---|---|---|---|---|---|---|
| **Country** | **1990** | **2000** | **2006** | **1990** | **2000** | **2006** |
| **Low income countries** | | | | | | |
| Angola | 42 | 42 | 41 | 154 | 154 | 154 |
| Benin | 51 | 53 | 55 | 111 | 95 | 98 |
| Cameroon | 56 | 52 | 51 | 85 | 88 | 87 |
| Ghana | 58 | 58 | 57 | 76 | 72 | 76 |
| Kenya | 61 | 53 | 53 | 64 | 77 | 79 |
| Malawi | 47 | 48 | 50 | 131 | 96 | 76 |
| Nigeria | 46 | 47 | 48 | 120 | 107 | 99 |
| South Africa | 63 | 58 | 51 | 45 | 50 | 56 |
| Uganda | 50 | 48 | 50 | 83 | 85 | 78 |
| Zambia | 52 | 42 | 43 | 101 | 102 | 102 |
| **High income countries** | | | | | | |
| Andorra | 77 | 80 | 82 | 6 | 3 | 3 |
| Australia | 77 | 80 | 82 | 8 | 5 | 5 |
| Barbados | 74 | 75 | 75 | 15 | 12 | 11 |
| Canada | 77 | 79 | 81 | 7 | 5 | 5 |
| Czech Republic | 71 | 75 | 77 | 11 | 4 | 3 |
| Germany | 75 | 78 | 80 | 7 | 4 | 4 |
| Japan | 79 | 81 | 83 | 5 | 3 | 3 |
| Trinidad & Tobago | 69 | 69 | 69 | 30 | 30 | 33 |
| United Kingdom | 76 | 78 | 79 | 8 | 6 | 5 |
| USA | 75 | 77 | 78 | 10 | 7 | 7 |

**Source:** WHO (2008). World Health Statistics 2008, WHO Geneva

 

**Table 2: Life expectancy at birth by WHO region**

| WHO Region | Life expectancy at birth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | | | Female | | | Both sexes | | |
| | 1990 | 2000 | 2008 | 1990 | 2000 | 2008 | 1990 | 2000 | 2008 |
| African | 49 | 49 | 52 | 53 | 52 | 54 | 51 | 50 | 53 |
| The Americas | 68 | 71 | 73 | 75 | 77 | 79 | 71 | 74 | 76 |
| South-East Asia | 58 | 61 | 63 | 59 | 63 | 66 | 58 | 62 | 65 |
| European | 68 | 68 | 71 | 75 | 77 | 79 | 72 | 72 | 75 |
| Eastern Mediterranean | 59 | 62 | 63 | 62 | 65 | 66 | 61 | 63 | 65 |
| Western Pacific | 68 | 70 | 72 | 71 | 74 | 77 | 69 | 72 | 75 |

WHO (2010), World Health Statistics Report, WHO, Geneva

**Table 3: Life expectancy at birth for ten African countries**

| Life expectancy at birth | | | |
|---|---|---|---|
| **Country** | **1990** | **2000** | **2008** |
| Angola | 42 | 44 | 46 |
| Benin | 51 | 55 | 57 |
| Cameroon | 55 | 52 | 53 |
| Ghana | 58 | 58 | 62 |
| Kenya | 60 | 51 | 54 |
| Malawi | 47 | 47 | 53 |
| Nigeria | 46 | 47 | 49 |
| South Africa | 63 | 58 | 53 |
| Uganda | 47 | 45 | 52 |
| Zambia | 52 | 43 | 48 |

WHO (2010). World Health Statistics Report, WHO Geneva

### 3. Defining Quality in Health Care

Defining quality in health care is a challenge due to the multiple disciplines, teams, and professionals responsible for client care, and the diverse clients with infinite needs to be satisfied. Determination of what constitutes quality in health care has posed considerable problem to health professionals and scientists. Berwick and Knapp (1990) argue that new directions in the delivery of services are forcing health care industries to take closer look at how they assess quality and use information about quality to challenge definitions of quality and delivery of services. At personal level, the term quality describes something that satisfied ones expectations, which becomes standard for assessing and measuring future experiences. On the other hand, health care professions have standards for every practice to measure performance and outcome of services.

The Institute of Medicine (1990) defines quality in health care as the degree to which health services for individual or population increase the likelihood of desired health outcomes, and consistent with current professional knowledge. Roemer and Montoya-Anguillan (1988) view quality as the degree to which resources for health care and services correspond to specified standards, application leads to desired results. Quality of care means daily activities in the medical, nursing, and other services benefit patients without causing harm. Quality of care demands attention to the needs of patients and clients, using tested methods that are safe, affordable and reduce deaths, illness, and disability (Offei, Bannerman, and Kyeremeh, 2004). However, Ovretveit (1992) argues quality service satisfies conflicting requirements and interests. A service may satisfy client and professional quality and effective but utilizes more resource than necessary, and health managers often consider legal, ethical, contractual, and political requirement of higher authorities in determining quality of service. Hence, he defines quality of health care as meeting needs of those who need services most, at lowest cost to the organization within limits and directives set by higher authorities. Furthermore, Donabedian (1990) argues that quality comprises two parts,

technical and interpersonal. The scientific component concerns application of science and technology by health professionals, and interpersonal is the social and psychological interactions that prevail during care process between client and practitioner. In essence, defining quality takes client, professional, management, political and economic dimensions into consideration within a country in setting standards and assessing performance.

3.1. Dimensions of Quality

Earlier, scientists identified six dimensions for possible assessment in quality of health care. Accessibility, that is not affected constraints of time and distance; relevance of services to needs of the community, providers and patients; effectiveness that assures services achieve intended benefits to individuals and the general population; equity and fairness in the distribution of services to those who need it. Social acceptability assures that services satisfy expectations of patients, providers and the community; and efficiency in the use of health resources not wasted on an individual or service at the detriment of others (Maxwell, 1984). Similarly, WHO (1983) identified four components, professional performance or technical quality; efficiency in resource use; safety that involves managing risks associated the delivery of services; and client satisfaction with services. Each context examines dimensions of quality most critical at particular time and develops appropriate skills, tools and systems for identifying causes of poor quality in the care process, and takes necessary action to remove defect and improve quality. The Institute of Medicine (2001) argues that effective health care delivery systems in the 21st century value certain important dimensions of quality efficiency, equity, effectiveness, safety, patient centeredness, and timeliness. Safety involves avoiding harm to patients in the process of care; patient centeredness or providing care that is respectful, responsive and values opinion of clients in service delivery; effective care based on scientific knowledge that achieves expected results. Equity assures quality of care is consistent and does not vary because of social and economic characteristics of clients; efficiency ensures the best use of limited resources, avoiding waste and duplication; and timeliness avoids harmful delays and reduces unnecessary waits.

Vuori (1989) argues current concern for quality was extension of past interest because the World Health Organization from the outset believed every individual deserved the best that medicine could provide, quality an inherent attribute of health services. As efforts on quality in health care grew from different perspectives, WHO analyzed the various approaches with common focus and chose quality assurance (QA) to represent all common approaches going by different names. In this context, QA covers:

1. Development and improvement of organization and management of the execution of health care procedures (Classical or Donabedian QA).
2. Development and improvement of local or district health systems' behavior, interaction between intramural and ambulatory services, coordination of care individuals and groups (Total Quality Management or Continuous Quality Improvement).
3. Development and improvement of central levels of national health services, particularly strategic services planning, organization, evaluation, development, and adjustments (WHO 2003).

**4. World Health Organization Advocating Quality in Health Care**

In the early 1980s, advocating for effective primary health care, and related interventions, the WHO encouraged member states to establish systematic quality measures that address effectiveness, safety, security and impact of services, patient acceptability, cost and benefit of services. In addition, countries monitor and evaluate performance of health services and disseminate results (WHO, 1987). Since then methodical approaches for measuring and assuring quality in health care continue to evolve. Accordingly, in 1981 the WHO Regional Office for Europe launched the Model Health Care Program and Quality Assurance (MHPQA). Main objectives were to improve quality of services based on scientific knowledge and experience; eliminate unnecessary diagnostic procedures to reduce cost; reduce waste, and duplication; and reduce irrational use of health services. In 1984, the Regional Committee approved 38 targets toward the global strategy for health for all. Target 31 on quality in health care aimed that by 1990 all member states would have effective mechanisms for assuring quality patient care.

In Africa the Regional Committee Resolution AFR/RC45/R3, passed in 1995 required Member States to implement national quality program supported by WHO. Member States in the African sub region were to:

i. establish a national quality of care program as a component of health sector reforms, given its impact on the outcome expected of other programs;

ii. introduce in the training programs of health workers knowledge, skills and attitudes required to deliver quality care; and

iii. offer incentives to health care institutions at every level to develop internal and external evaluation schemes for the continuous improvement of quality of care.

The same resolution requested the Regional Directors to:

i. draw up and implement plan for the collection and dissemination of information on methods of providing quality of care and the results achieved in the Member States;

ii. direct information to the general public, decision makers, health professionals, finance officials and educators;

iii. provide support to Member States for the establishment and implementation of quality of care programs; and

iv. encourage states to allocate to quality of care activities a percentage of existing budget for technical cooperation (WHO, 2003).

The first francophone inter-country meeting held in 1997 in Niamey, Niger, involved 23 countries, and the second in Abidjan, Côte d'Ivoire in 1999, involving Benin, Burkina Faso, Burundi, Côte d'Ivoire, Guinea, Madagascar, Mauritania, Niger, Sao Tome and Principe, and Togo. A meeting was held in Kampala, Uganda in 2000, sixteen countries Botswana, Eritrea, Ethiopia, the Gambia, Ghana, Kenya, Liberia, Mozambique, Namibia, Nigeria, Sierra Leone, Swaziland, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe participated. The meeting welcomed growing demand for quality programs in Africa (WHO, 2003).

Since then, few countries are at the policy development level; and a few have progressed towards national quality program implementation. Zambia started a national quality assurance program in 1994 ahead of other African countries. The South African National Policy on Quality in Health Care provides means of improving the quality of care in public and private sectors, sets objectives of government to assure quality and continuously improve health care by measuring the gap between standards and actual practice. Areas of focus include under-use and overuse of services; avoidable errors; variation in services; lack of resources; inadequate diagnosis and treatment; inefficient use of resources; poor information, and referral systems; disregard for human dignity; and drug shortages (Mseleku, 2007). Similarly, Ghana has gone beyond policy to implementation of national health quality program because improving the quality of health care is key objective of the Ministry of Health. Offei, Bannerman, and Kyeremeh (2004) assert the main strategy for achieving quality of care was through implementation of quality assurance programs, expected to become integral to routine health service delivery in Ghana. However, in Nigeria, narrowly defined unstructured professional audits are common. A strategic policy direction in the Health Sector Reform is improving access to quality health services by establishing system for quality assurance (Federal Ministry of Health, 2004).

Furthermore, WHO in developing a framework for strengthening health systems identified quality as a strategy for improving health outcomes and greater efficiency in the health sector (WHO, 2007). Several international organizations working with WHO support countries to establish structured quality of care programs. Addressing quality in African health systems even at organizational level is arduous challenge for policy makers, managers, and health professionals due to numerous constraints in the health environment. However, regardless of constraints ministries of health must consider as a matter of urgency establishing national health quality strategies and integrating quality improvement plans in health reforms. This is critical in order to begin changing the intractable abysmal health indices in Africa, and advancing health security. Moreover, every health worker in each country must be involved in the quality activism, aware of what is expected and actions necessary for quality to become culture of health systems.

Today quality in health care is integral to health systems in different parts of the world. Moreover, several models are available for adaptation such as quality assurance (QA), total quality management (TQM), continuous quality improvement (CQI), and lean thinking (LI). Many health systems are using different types of large scale programs to improve quality and performance as one strategy to meet challenges of growing demands and limited resources (Ovretveit and Klazinga 2012).

**5. Strategies for Advancing Quality in Health Systems and Health Security in Africa**

African health systems face many quality issues that are also health security factors, which vary from one country to another, and at organizational level in the structure and process of service delivery. National quality problems may include: inadequate health facilities, services, and resources; inefficient use of resources; reoccurrence of avoidable errors in health organizations; variation in services across the country; poor information, and referral systems. Others are lack of proper planning at strategic, middle and operational levels; poor leadership and management in health organizations; lack of management training for managers; scarcity of drugs; poor attitude of workers; conflict among various health professionals; and poor motivation of health workers, and endemic

corruption. These left unchecked are costly, adversely affect the lives of people, reduce productivity, render health systems dysfunctional, and become health and social security problems. Each country therefore addresses them with National Health Quality Program (**NHQP)** in view of health needs, resources, values, and attitudes, social, economic, and political realities. NHQP is indispensable to improving health situations and assuring health security.

Current reality in many African countries suggests consideration of relevance of services available to the needs of the various populations, accessibility and affordability of such services, and effectiveness of services to solve the people's problems at individual and community levels. Fairness in the distribution of health resources, and services are available to those who need them in the right form. Services satisfy expectations of clients, communities, and professionals. Health managers are adequately trained to manage organizations, lead and supervise health workers. Resources are efficiently utilized, with minimal wastage, and governments take corruption in the health system seriously.

5.1. National Policy on Quality in Health Care

National health policies are useful instrument that direct activities of the health system, but weak in addressing quality issues. The National Health Quality Program starts with National Policy on Quality in Health Care (NPQHC) that covers public and private sectors, large and small organizations in rural and urban settings. NPQHC provides strategic direction for health care quality programs and initiatives in every African country; outlines government's broad goals, objectives and quality improvement strategies. The policy captures priority and critical health care quality issues that have continued to influence poor health situation in each country. It provides mechanisms for establishing standards, monitoring and enforcing adherence to standards in public and private organizations, primary, secondary and tertiary health facilities. It articulates systems required to sustainably promote quality, strengthen capacities of policy maker, health managers and professionals directed at creating quality culture throughout the health system.

The NPQHC addresses government's objectives to quality assessment and assurance in health care; commitment to continuous quality improvement at every level of the health system; and links to other health policies and goals, health security and good governance. The quality assessment component commits government and all stakeholders to measuring gap between standards and actual practice; and the assurance shows actions taken to bridge gap. The national quality policy addresses identified quality problems in each nation with priority attention given to conditions in the health system with greatest chance of improvement and impact on reducing morbidity, mortality, burden of disease, and patient satisfaction. Nations establish standards on which to continuously improve quality of health services with the involvement of stakeholders. The policy creates opportunity of a quality culture in the health system, capacity to deliver quality service, and access to quality health care assured in public and private organizations throughout the country. Introducing NHQP means complete transformation of how people think about their work and carryout responsibilities; it is about instituting standards, quality culture, and accountability at every level and in every health organization, public and private.

5.2. Building Capacity for Quality in Health Care

A national health quality program requires training and reorientation of policy makers to see quality of service, health security, and good governance as linked. Health professionals, managers and other workers to value quality, adhering to standards, continuously learning, and taking responsibility for providing quality service at all times. National strategy for quality improvement is reflected in training programs of health professionals at graduate and undergraduate levels, and allied health workers including community health workers. Management training, and quality management skills are necessary for strategic and operational level managers, essential for leadership needed in national and organizational continuous quality improvement program. Universities and other institutions training health workers must therefore adapt to changing needs of national health systems and societies in order to adequately prepare doctors, nurses, pharmacists, and other health workers by integrating quality concepts and skills in training curricula. Professional competencies, values, and mindsets of health workers directly influence quality of service. Health indices over time suggest quality in health care requires structured program, training, and involvement of public and private sectors.

This also means health organizations (primary, secondary and tertiary) need to adapt and adopt new skills and knowledge needed for quality health service delivery. Health care organizations in developed countries are continuously copying best management and quality practices that worked for other complex systems. Experience shows that every quality improvement program requires organizational change, strong leadership, and continuous learning. African health managers in the 21$^{st}$ century must demonstrate flexibility in learning from different groups and commitment to change, quality culture, and working with human resources for health to build learning

organization where quality service is the norm. National Health Quality Policy and standards must be translated and reflected in the delivery of health services at state and local levels, and within health organizations. At each level and within organizations (public and private) someone or a team is responsible for quality assurance and quality improvement; ensures that standards and processes are established for involving everyone in assuring service quality. The needs of clients, teamwork, good leadership, and decisions based on reliable information require serious attention.

5.3. Public and Private Partnership for Quality in Health Care

The private health sector is extremely strong in many African countries, providing services to large populations. Hence, a national health quality program requires active involvement and accountability of public and private sectors. The private sector and professional regulatory groups among others are involved in policy and strategy articulation at federal, state, and local levels; and actively involved in setting standards, instituting quality programs, monitoring and evaluating performance. Health care quality groups of public and private practitioners are constituted at every level to enhance collaboration and commitment, guided by national health care quality goals.

**6. Conclusion**

NHQP at all levels must address the structure, facilities, equipment, personnel, funds their quality and quantity; the process of service delivery, and outcome of services. It is able to address continuous quality improvement issues at unit, departmental, organizational, community, state, and national levels, with focus on cooperation, client satisfaction, appropriate leadership, and involvement of everyone. Institutionalizing, and sustaining the NHQP require change in health managers' orientation as drivers of the quality process towards commitment to quality, changing mindsets and attitude, promoting participation and collaboration, and devolving decision making to employees to take control of quality. A quality manager increases individual and group effectiveness, directs efforts on teams and people working together to continuously improve quality of service. Sullivan and Wyatt (2006) argue that societies are demanding that supervision of clinical services be improved due to apparent failures to ensure adequate patient care. Days of autonomy, paternalism, and professional parochialism are replaced by rigorous inspection procedures, publication of results, and clinical teams demonstrating highest quality standards. Team work is indispensable in the health sector and in making quality program work.

Finally, national ministries of health work with the WHO to establish the National Health Quality Program. At every level tackling quality requires:

i. skills in management and effective leadership that is accountable, committed to quality and customer satisfaction;
ii. participatory processes, and problem solving teams that are committed to quality;
iii. systems that emphasize co-operation, coordination, participation instead of unhealthy competition and confrontation; and
iv. holistic approach with managers that view departments, units, and health workers (skilled and unskilled) as part of a whole with common goal of meeting health needs of the people.

Quality of services is about good governance and good leadership in the health system that advances health security for all citizens. This means dealing with corruption in health systems; and ensuring health workers have the right skills, resources, leadership and empowered to provide quality service every time.

**References**

Adindu, A. (2010). Assessing and Assuring Quality of Health Care in Africa. African Journal of Medical Sciences 3(1): 31-36.

Berwick, D.M. and Knapp, M.G (1990). Theory and Practice for Measuring Health Care Quality. In Graham, N. (1990), Quality Assurance in Hospitals: Strategies for Assessment and Implementation. Aspen Pub. Inc. Rockville, Maryland.

Bradley, E., Thompson, J. Byam, P. Webster, T. Zerihun, A. Alpem, R. Herrin, J. Abebe, Y. and Curry, L. (2011). Access and Quality of Rural Health Care: Ethiopian Millennium Rural Initiative. International Journal for Quality in Health Care 23(3): 222-230.

Chung, Kuo-Piao and Yu, Tsung-Hsien (2012). Are Quality Improvement Methods a Fashion for Hospitals in Taiwan. International Journal for Quality in Health Care, vol.24, no. 4, 371 -379.

Commission on Human Security (2003). Human Security Now: Protecting and Empowering People. New York

Donabedian, A. (1990). Explorations in quality assessment and monitoring: the definition of quality and approaches to its assessment. Health Administration Press, Ann Arbor, Michigan.

Federal Ministry of Health (2004). Health Sector Reform Program: Strategic Thrusts and Plan of Action, 2004 – 2007, Abuja, Nigeria.

Institute of Medicine (1990). Crossing the Quality Chasm: A New Health System for the 21st Century. National Academy Press, Washington DC. 1990.

Institute of Medicine (2001). Committee on Quality of Health Care in America. Crossing the Chasm: A New Health System for the 21st Century, Washington DC: National Academy Press, xx, 337.

Mseleku, T. (2007). A Policy on Quality In Health Care For South Africa. National Department of Health, Pretoria.

Offei, A., Bannerman, C., and Kyeremeh, K. (2004). Health Care Quality Assurance Manual for Sub-Districts .Ghana Health Service, 2004.

Royal Norwegian Ministry of Foreign Affairs (2007). Health Policy: Oslo Ministerial Declaration on Global Health: A Pressing Foreign Policy Issue of Our Time. Ministers of Foreign Affairs of Brazil, France, Indonesia, Norway, Senegal, South Africa, and Thailand. Lancet, DOI:10.1016/S0140- 6736(07)60498-X.

Sullivan, F, and Wyatt, J. C. 2006, Referral or Follow Up? BMJ West Africa Edition, vol.9, no. 1, pp. 47-49.

Roemer, M.I. and Montoya-Agiullan,C. (1988). Quality Assessment and Assurance in Primary Health Care. WHO Offset Publication no. 105, WHO, Geneva.

Ovretveit, J. (1992). Health Services Quality: An Introduction to Quality Methods for Health Services. Oxford, Blackwell Scientific Pub.

Ovreveit, J. and Klazinga, N. (2012). Learning from Large –scale Quality Improvement through Comparisons. International Journal for Quality in Health Care, 24, 5, 463 -469.

Maxwell, R.J. (1984). Perspectives in the NHS Management: Quality Assessment in Health. British Medical Journal, 288, 12 May, 1470-1472.

Vuori, H. (1989), World Health Organization and Quality Assurance. Quality Assurance in Health Care, Vol. 1, 2/3.

World Health Organization (1982). Quality Assurance in Health Services: Concepts and Methodology. Public Health in Europe no.6. WHO Regional Office for Europe.

World Health Organization (2003). Health Service Provision: Introduction to Quality Assurance and Accreditation of Health Care Services. Viewed 12 January 2003, updated July 2000, http://www.who.int/health.services-delivery/performance/accreditation/

World Health Organization (2003). Quality and Accreditation in Health Care Services: A Global Review. Evidence and Information for Policy. Department of Health Services Provision. WHO/EIP/OSD/2003.1, WHO, Geneva.

World Health Organization (2007). Everybody's Business: Strengthening Health Systems to Improve Health Outcomes. WHO Framework for Action. Geneva.

World Health Organization (2008). The World Health Report: Primary Health Care Now More Than Ever: Geneva.

World Health Organization (2008). World Health Statistics 2008, WHO Geneva.

WHO (2010), World Health Statistics Report, WHO, Geneva.