IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

EYITOPE O. OGUNBODEDE

A thesis submitted in fulfillment of the requirements for the degree of

Doctor of Philosophy

Supervisor: Prof Sudeshni Naidoo PhD

Date: September 2014

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

Eyitope O. Ogunbodede

KEYWORDS

South Africa

Nigeria

Health

Policy

Dental

Oral Health

Dentistry

Planning

Strategy

Implementation

ABSTRACT

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

Eyitope O. Ogunbodede

Ph.D thesis, Department of Community Oral Health, Faculty of Dentistry, University of the Western Cape.

In 1998, the WHO Regional Committee for Africa advised that all countries of the African Region develop national oral health strategies and implementation plans focusing on the district and the community levels by 2008. Although twenty-two countries had developed national oral health policies, strategies and programmes, few have been implemented and all have failed to show any real impact on oral health, even where apparently excellent policy documents have been drafted. This study analyzed the content, context, process, outcomes and implementation strategies of all oral-health-related national policies of the South African and Nigerian governments, from the year 2000. It involved desktop reviews, and epidemiological (qualitative and quantitative) surveys through which relevant data was collected for the analysis of oral health policies. The inductive approach was employed for the analysis of data.

The results indicate that the policy actors were identical for both countries although the impact of the policies and the level of support appear to be slightly different. The universities and research institutions played dominant roles in supporting and facilitating the oral health policy process for South Africa while the Dentistry Division of the Federal Ministry of Health took the leadership and control in Nigeria.

The policies did not achieve the original goals and objectives in both countries. The cause of failure of the oral health policies can be attributed to the disconnection between the positional experts, other interested actors and government on one hand, and the other stakeholders on the other hand. However, the most important barriers were at the levels of dissemination, implementation, monitoring and evaluation, and revision of the policies. A successful national oral health policy process will require among other things visionary leadership from the oral health sector, with a multi-sectoral, common risk factor approach, involving other sectors outside oral health.

National oral health policies, especially in African countries, must be strategically structured to eliminate the usual gap between policy content, programmes and actual implementation. All oral health policies need to be accompanied by detailed, written implementation plans with clearly identified action areas, time frame and implementing agency or responsible body for each policy item. There is an urgent need to build oral health policy analysis capacity in the countries studied. An Oral Health Policy Monitoring, Evaluation and Research (OHPMER) Unit is recommended which will combine expertise in public health, oral epidemiology, health economics and mass communication. A seven-point agenda is also proposed for bridging the gap between oral health policy design and implementation. It is envisaged that this will be applicable not only to South Africa and Nigeria, but also to other African countries.

This study has shown conclusively that the oral health policy processes has not achieved the desired goals in both South Africa and Nigeria, and that greater advocacy for oral health is required in both countries.

September 2014

DECLARATION

I declare that “Implementation of Oral Health Policies in African countries: South Africa and Nigeria as case studies” is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Full name..... Date.....

Signed.....

ACKNOWLEDGEMENTS

I would like to express my profound gratitude to my supervisor, Professor Sudeshni Naidoo. Her ideas, encouragement and illuminative support provided the impetus that made this work possible. It is indeed a privilege working under her guidance.

I also would like to thank all those who contributed ideas and provided support for the research.

I would wish to express my gratitude to colleagues from the Obafemi Awolowo University, Ile-Ife, Nigeria for granting me the required leave and supporting my work during the PhD course. I am particularly grateful to all the respondents who offered valuable time participating in the oral interviews or completing the study instruments.

A significant debt of gratitude goes to the Department of Health, South Africa and the Federal Ministry of Health, Nigeria for support.

I will also like to express my very special thanks to members of my family for their support and perseverance.

TABLE OF CONTENTS

List of Tables

List of Figures

List of Boxes

List of Acronyms and Abbreviations

ADTN	- Association of Dental Technologists of Nigeria
AIDS	- Acquired Immune Deficiency Syndrome
CBO	- Community-based Organisation
CODD	- Committee of Dental Deans
CSO	- Civil Society Organizations
DALE	- Disability Adjusted Life Expectancy
DENTASA	- Dental Technology Association of South Africa
DENTHASA	- Dental Therapy Association of South Africa
DMFT	- Decayed Missing and Filled Teeth
DOH	- Department of Health
DThRBN	- Dental Therapists Registration Board of Nigeria
DTRBN	- Dental Technologists Council of Nigeria
EBM	- Evidence-based Medicine
EBP	- Evidence-based Policy
ENT	- Ear Nose and Throat
FDI	- Federation Dentale Internationale (World Dental Federation)
FMOH	- Federal Ministry of Health
GDP	- Gross Domestic Product
HIV	- Human Immunodeficiency Virus
HMO	- Health Maintenance Organisation
HP	- Health Promotion
HPCSA	- Health Professionals Council of South Africa
HSR	- Health Systems Reform
HST	- Health Systems trust

IADR - International Association for Dental Research

KMTC - Kenya Medical Training College

LGA - Local Government Area

LMIC - Low And Middle Income Countries

M & E - Monitoring and Evaluation

MDCN - Medical and Dental Council of Nigeria

MRC - Medical Research Council of South Africa

NADSA - National Association of Dental Surgery Assistants

NCD - Non-Communicable Disease

NDA - Nigerian Dental Assoiation

NDAs - National Dental Associations

NDTA - Nigerian Dental Therapists Association

NGO - Nongovernmental Organization

NHIS - National Health Insurance Scheme

NHS - National Health Service

NICE - National Institute for Clinical Exvellence

NPHCDA - National Primary Health Care Development Agency

NSHDP - National Strategic Health Development Plan

OHASA - Oral Hygiene Association of South Africa

OHP - Oral Health Promotion

OHPMER - Oral Health Policy Monitoring Evaluation and Research Unit

PAC - Political Action Committee

PHC - Primary Health Care

POHC - Primary Oral Health Care

RTA - Road Traffic Accident

SADA - South African Dental Association

SADTC - South African Dental Technicians Council

SDP	- State Development Plan
SMOH	- State Ministry of Health
SOHPCT	- State Oral Health Plan Comparison Tool
SSHDP	- State Strategic Health Development Plan
TB	- Tuberculosis
TETFund	- Tertiary Education Tax Fund
UWC	- University of the Western Cape
WHA	- World Health Assembly
WHO	- World Health Organization

List of Appendices

CHAPTER 1

1. INTRODUCTION

The World Health Assembly (WHA) has declared that oral diseases are common, preventable and lifestyle-related and should be given priority (WHO, 2007). This decision was based on the assumption that good oral health is an important component of achieving overall health (Petersen *et al*., 2005). Oral diseases cause pain and suffering, lead to changes in people's diet, speech and are a fundamental and integral component of several non-communicable diseases (Petersen, 2008). Achieving Oral health is now considered an important component of general health for any population and comprehensive National oral health policies are crucial for promoting oral health.

Oral health in Africa has been affected by problems that characterise the world's developing regions, and these include poverty, malnutrition, the high incidence of infectious diseases and child mortality, inadequate national budget for oral health, and lack of oral health policy (Hescot *et al*., 2013). Despite this, high quality dentistry is offered in many urban centres, especially through private practices. In addition, the number of dental training institutions is rapidly increasing and so is oral health awareness. The average dentist to population ratio across the continent is 0.4 dentist to 10000 inhabitants but there are wide differences with, for example, the ratio in Egypt being 1:2904; Kenya 1:40631 and Ethiopia 1:1278446 (Hescot *et al*., 2013). There are also huge disparities in research, as illustrated by the number and distribution of publications on oral health from African institutions (Kanoute *et al*., 2012).

Although oral health is an integral part of general health and has a huge impact on well-being and productivity, it is seen as a very low priority in the African Region, where extreme poverty means that the limited resources available to the health sector are directed towards life-threatening conditions

such as HIV/AIDS, tuberculosis, and malaria (Siringi, 2002; Ndiaye, 2005). The health systems of most of the African countries are in a deplorable condition and the basic economic and health indicators are much worse than those in the developed countries. Of the 191 member countries of the World Health Organization, South Africa with a Disability Adjusted Life Expectancy (DALE) of 38.8 years is ranked 160th while Nigeria with 39.3 years is 163rd (WHO, 2000). It is therefore not surprising that in most countries of Africa, an increase in oral diseases, such as dental caries, periodontal diseases, oral cancers and Noma has been observed (Naidoo *et al*., 2001; Hescot *et al* 2013). These are aggravated by poverty, poor living conditions, ignorance concerning health education and a lack of government funding and effective policies.

Globally, there has been an emphasis on ensuring that people achieve good health by promoting the adoption of policies that would effectively promote health. In most African countries, including South Africa and Nigeria, oral health has been a neglected area in the public health policy process. The oral health policy process remains a challenge because of lack of skills, competencies and training (Molete *et al*., 2013). This is further exacerbated by the fact that oral health and disease are influenced by a myriad of factors outside of health. Hence, a multi-sectoral collaboration is required to promote and improve the oral health of any population.

In 1998, the WHO Regional Committee for Africa adopted a ten-year (1999–2008) regional strategy for oral health (WHO, 1998). The strategy set out five priority thrusts: development and implementation of national strategies, integration of oral health into health programmes, service delivery, a regional education and training approach, and development of an oral health management information system. The Committee further advised that all countries of the African Region develop national oral health strategies and implementation plans focusing on the district and the community levels by 2008. It was reported by WHO in 2008, that twenty-two countries had developed and started implementing national oral health policies, strategies and programmes (WHO, 2008a).

Even where apparently excellent policy documents have been drafted, few have been implemented and all have failed to show any real impact on oral health. Nearly all existing policies appear to make assumptions about the central and necessary role of dentistry, dentists and the mainly curative procedures they are currently trained in, organized and remunerated to deliver (WHO, 2005). Uganda, for example, launched an oral health policy in 2009 and the document advocates for prevention of oral diseases through health promotion, integration across disciplines and population-oriented, appropriate and evidence-based interventions. The policy document which is due for review in 2013/2014, has failed to translate into any gain for oral health. Serious challenges currently face the oral health sector in the country and including poor infection control measures, inadequate personnel and faulty or old dental equipment (Katumba, 2011). Singh (2005) and Singh *et al*. (2010) in their studies of oral health promotion in South Africa identified gaps between policy and practice. They lamented that despite the technically strong content of the national oral health policy document, it has not had the impact anticipated. They therefore called for an urgent need to re-examine the process and content of oral health policy-making in the country.

There is a dearth of reports on oral health policy research worldwide and the situation is particularly worse on the African continent. It is necessary to explore the effect of policies (or lack of policies) on oral health care services, delivery and outcomes particularly in African countries, where health is poor and neglected. The present study focused on the content, context, process, outcomes and implementation strategies of oral health policies in South Africa and Nigeria. It was anticipated that the information generated from the study will support evidence-based planning and implementation of oral health reforms in the countries, and contribute to the development of future oral health policies. Furthermore, that it will also contribute to the design of strategies that recognise the importance of the policy process and the role of key actors in the effective implementation of oral health care policies in African countries.

CHAPTER 2

LITERATURE REVIEW

2.1 DEFINING POLICY AND HEALTH POLICY

A policy is a broad statement of goals, objectives and means that creates the framework for activity. They are decisions taken by those with the responsibility for a given policy area. Policies are made in both the private and public sectors. Public policy is often used to refer to government policy, and it has been defined as "whatever governments choose to do or not to do" (Dye, 2001). Dye (2001) opines that failure to decide or act on a particular issue also constitutes policy. Although policies often take the form of explicit written documents, it may also be implicit or unwritten (Buse *et al*., 2008).

Health policy can be viewed as a set of decisions about strategic goals for the health sector and the means for achieving these goals. Health policy embraces courses of action (and inaction) that affect the set of institutions, organizations, services and funding arrangements of the health system. It provides a framework for health-promoting actions covering the social, economic and environmental determinants of health. Policy is expressed in norms, practices, regulations and laws affecting the health of the population which together provide shape, direction and consistency to decisions made over time. It includes policy made in the public sector by government as well as policies in the private sector. Health policy analysts are also interested in actions and intended actions of organizations, external to the health system, which have an impact on health such as the food, tobacco or pharmaceutical industries (Buse *et al*., 2008). Walt (1994) argues that health policy is synonymous with politics and deals with who influences policy making, how they exercise that influence, and under what conditions.

Bonita *et al*. (2006) have outlined seven factors that are necessary for successful health policy formulation and these include: (i) a high-level political mandate to develop a national policy framework, (ii) a core group of scientists who estimate health needs, advocate for action, and develop a national policy and plan, (iii) international collaboration providing political and technical support, (iv) wide consultation when drafting, reviewing and re-drafting the policy until it is endorsed, (v) awareness that the process of consultation may be as important as the content in generating support and ownership, (vi) development and implementation of a consistent communication strategy for all stages of the process and (vii) clarity of vision on a small set of outcome-oriented objectives (Bonita *et al*., 2006).

Walt and Gilson (1994) have proposed a health policy triangle framework (Figure 2.1).

Figure 2.1. Health policy triangle

Although grounded in a political economy perspective, it has been described as a "simplified approach to complex set of inter-relationships", as it may give the impression that the four factors can be considered separately (Buse *et al*., 2008). The policy triangle framework is grounded in a political economy perspective. The framework has influenced health policy research in a diverse array of countries, and has been used to analyze a large number of health issues (Walt *et al*., 2008). Although developed specifically for health, its relevance extends beyond this sector.

Context refers to systemic factors which may have an effect on health policy. These are often multiple, varied and complicated. They include policy legacies, individual behavior, institutions, rules, temporal conditions, electoral preferences, catastrophes, economic conditions, technology and many other variables that are contingent on these. Buse *et al*. (2008) have classified these into situational, structural, cultural and international. Part of the problem definition should be an understanding of the positions and influence of the various individuals, groups and organizations. It is important to know who is concerned about the problem, their stake in the issue, and the power they have to affect policy decisions. Patton *et al*. (1993) have noted that these groups are often many and diverse.

Health policies can be categorized in a variety of ways: according to the issue or targeted group, by period (for example pre- and post-apartheid) or as substantive or procedural. Substantive policies do things like improve health care, protect the environment or regulate employment practices while procedural policies are concerned with how the government performs its functions. Procedural policies may have profound substantive effects (Weissert *et al*., 2006).

Policies can also be described as distributive, regulatory, or redistributive (Lowi, 1979; Heinert, 2007). Distributive policies often concentrate benefits on health centres, clinics, hospitals, medical/dental schools, and other health care beneficiaries while the costs are diffused among taxpayers at large and concentrated on no specific group. Hence, the winners have a big stake in the policy and actively support its passage while the losers do not lose much and pay little attention. A typical example is the Tertiary Education Tax Fund (TETFund) policy of 2011 in Nigeria, which imposes 2% taxation on the assessable profit of all registered companies in Nigeria for the provision of focused and transformative intervention in public tertiary institutions in Nigeria, through funding and effective project management (www.tetfund.gov.ng, Accessed April 2, 2014).

Regulatory policies restrict the behavior of private and government actors, and these may include health centres, clinics, hospitals, laboratories, food processors, waste disposal companies, doctors, dentists, dental therapists, dental nurses, foreign trained graduates wishing to practice in the country, and other groups working in the health field. The policy struggles for the regulation of practice of dental therapists, to separate the procedures they can manage as compared to the dentist, is well known globally (Nash *et al*., 2012). Regulatory policies are typically more controversial than distributive policies because there are usually clear winners and losers. However, many regulatory policies in health care are "self-regulatory". Doctors and dentists set the standards of practice for their profession, hospitals accredit themselves based on the standards set by their own organization while, health training institutions decide what courses will be required of graduating students in order to qualify for the diploma that will enable them to practice as a member of the profession.

Weissert *et al*. (2006) have noted that government often devolves authority to these self-regulating bodies, taking their seal of approval as evidence that minimal standards have been met and removing some of the 'political heat' and the cost of enforcement from government actors. Redistributive policies take money or power from some and give it to others. In health care policy, it translates to taxing those with higher incomes to pay for health services for those with lower incomes. Redistributive policies are usually influenced by politics and such policies are combative, controversial, constantly under attack, hard to obtain, and hard to retain (Weissert *et al*., 2006).

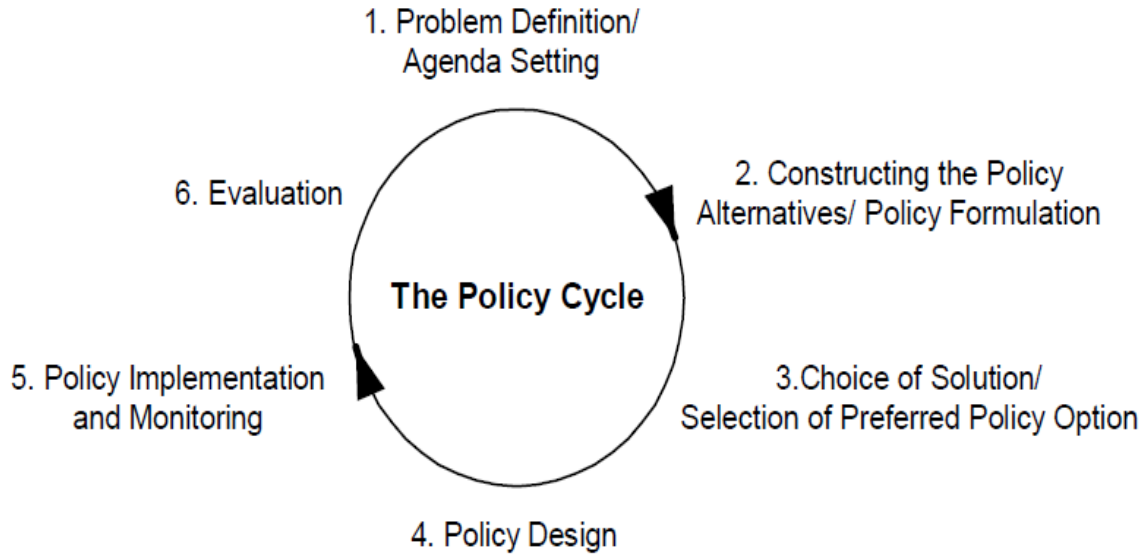
Policies may also be described according to their scope, range and depth as comprehensive or incremental. Comprehensive policies generally reflect a value change in society, often leading to institutional changes and pointing policy in a new direction. Incremental policies build on earlier policies, are implemented by existing agencies and departments, and generally follow the direction of earlier policies (Weissert *et al*., 2006). While most people view health policy as being concerned with content, that is improving health care delivery, Walt (1994) takes on a more explicit outlook and views

health policy as being more concerned with process and power, however, she does concede that health policy is 'concerned with who influences whom in the making of policy, and how that happens'.

2.2 THE POLICY PROCESS

Using the framework approach, Weissert *et al*. (2006) has proposed an elementary framework of the components that make up the policy process: (i) a problem is recognized and defined –agenda setting, (ii) a public policy is developed to deal with the problem, (iii) the public policy becomes law or is otherwise put in place, and (iv) the public policy is implemented. Evaluation which is the process of determining, as systematically and objectively as possible, the relevance, effectiveness, efficiency and impact of activities with respect to the agreed goals (Bonita, 2006), is considered an important and "final" stage in this policy cycle (Figure 2.2). Evaluation also contributes to the first stage in another policy cycle during which a problem is identified (Buse *et al*., 2008).

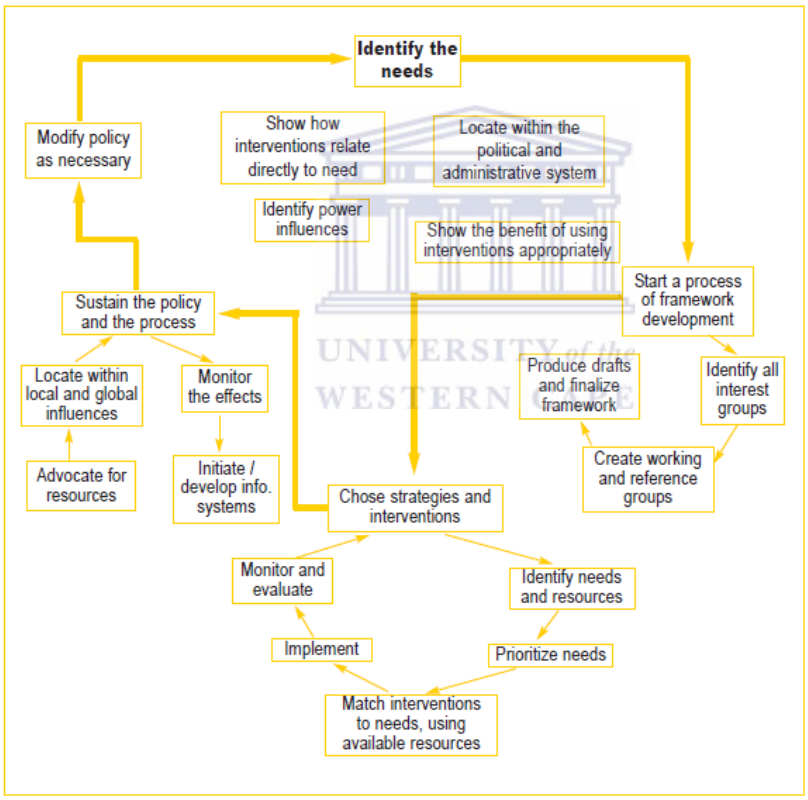
Figure 2.2. The Policy Cycle



Source: Young and Quinn (2002)

Julian (2005) proposed a theory of change-based evaluation with the following five steps: (i) developing logic chains reflecting the relationship between a strategy, desired program outcome and the longer-term community change, (ii) articulating evaluation questions, (iii) stating desired results for outcomes and longer term change using the outcomes template, (iv) updating or collecting data related to the three generic evaluation questions and (v) reviewing evidence and making data informed decisions. The WHO (2005) has also proposed the framework for a dynamic oral health policy process and this is depicted in Figure 2.3.

Figure 2.3. Framework of Dynamic Oral Health Policy Process



Source: WHO, 2005

Davies (2004) has identified various factors influencing the policy process, and these are summarised in Figure 2.4.

Figure 2.4. **Factors influencing policy making in government**

Source: Davies (2004)

The policy process can be understood through a focus on components of the policy environment, rather than the more linear notion of activity. This has prompted Baron (2000) to summarise the policy process by identifying four focal components: issues, institutions, interests, and information. Stages often, but not always, include issue identification, interest-group formation, legislation, administration and enforcement.

2.2.1 Global Changes in the Policy Process

It is increasingly recognized that policy processes are changing globally and they have an effect on all countries whether high, middle or low income (Walt *et al*., 2008). Initially policy analysis focused on the public or government sector with emphasis on politicians, bureaucrats and interest groups (Grindle and Thomas, 1991) but more recently, there has been a shift in the nature of policy and policy-making with the involvement of a much larger array of actors in the policy process (Buse *et al*., 2008). Policy actors are not just those officially tasked with policy development; they also include all those with concern for particular policy issues or likely to be affected by policy developments, including

commercial interests, civil society organizations and beneficiaries (Gilson and Raphaely, 2008). The private sector, both for-profit and not-for-profit organizations also play important roles in health policy. It is being increasingly recognized that the health of populations is not merely a product of health sector activities. It is to a large extent determined by societal and economic factors, and hence by policies and actions that may not be within the remit of the health sector (WHO, 2008b).

Additionally, technological advancements, ease of travel, and globalization have brought about a policy environment that is increasingly being influenced by global decisions. The technological revolution has facilitated communications and relationships, both between and within governments, and also between actors and stakeholders outside government. Policy development, implementation, monitoring and evaluation now involve more expanded networks.

2.2.2 Health Policy Analysis

Policy analysis is a means of understanding the network of interests and influences within a policy environment and by generating an understanding of the factors influencing the experience and results of policy change, such analyses can inform action to strengthen future policy development and implementation. The case for undertaking policy analysis has been made by a number of scholars (Parsons, 1995; Walt and Gilson, 1994) who argued that it is central to health reform. The value of health policy analysis as a viable method of examining service delivery within the health system is being increasingly recognised (Brugha and Varvasovszky 2000; Singh 2005; Singh *et al.*, 2010) and it is now used as a tool to understand past policy failures and successes, and to plan for future policy implementation (Walt *et al*., 2008).

It has been suggested that a better understanding of health policy development could be achieved with policy analysis that examines both the content or substance and processes of policy efforts (Walt and

Gilson 1994; Walt *et al*., 2008; Gilson and Raphaely 2008). This approach to health policy analysis is a departure from the conventional focus on cost-effectiveness and efficiency of health care delivery in relation to economic health gains (Brugha and Varvasovszky 2000; Walt *et al*., 2008). However, there has been much less attention given to how to do policy analysis, and disappointingly little guidance exists concerning low and middle income countries. Health policy environments in low income countries differ from high income nations because there are weaker regulations, regulatory capacity and monitoring systems; lack of purchasing power as a leverage to influence types and quality of services delivered; more patronage in political systems, and more reliance on external donor funds, among many other differences (Walt *et al*., 2008).

Ostrom (1999) has categorized the levels of analysis of health policy into three areas: frameworks, theories, and models. Frameworks are the most general and help to identify the elements and relationships among the variables that should be considered. Theories go a step further to include specification of which elements in the framework are particularly relevant to which questions and to make assumptions about the relationship. Models are the most specific and set forth precise assumptions leading to outcomes in ways that can be tested.

2.3 CHANGE AND THE POLICY PROCESS

The policy process framework is important in understanding the process of policy making but it often fails to answer questions such as why some policies pass and others do not, and why policy change does occur (Weissert *et al*., 2006). Numerous explanations have been posited to explain the policy process. These frameworks include: The Stages Heuristic, The Multiple Streams ("Garbage Can"), the Advocacy Coalition Network, and the Punctuated Equilibrium model.

2.3.1 The Stages Heuristic

This divides the policy process into a series of stages - usually agenda setting, policy formulation and legitimation, implementation, and evaluation, and considers some of the factors affecting the process within each stage. Sabatier (2007) has provided a critique of this framework, and it included the following:

(a) It is not really a causal theory since it never identifies a set of causal drivers that govern the policy process within and across stages;

(b) The proposed sequence of stages is often descriptively inaccurate. For example, evaluations of existing programs affect agenda setting, and policy formulation/legitimation occurs as bureaucrats attempt to implement vague legislation;

(c) The stages heuristic has a very legalistic, top-down bias in which the focus is typically on the passage and implementation of a major piece of legislation and

(d) The assumption that there is a single policy cycle focused on a major piece of legislation oversimplifies the usual process of multiple, interacting cycles involving numerous policy proposals and statutes at multiple levels of government.

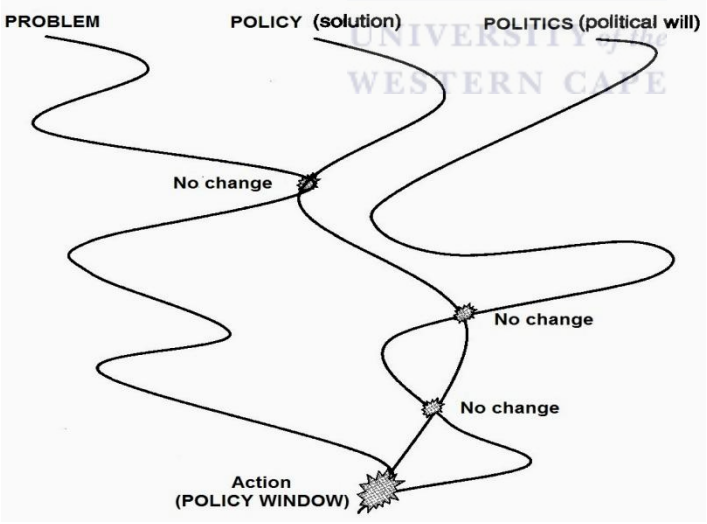
2.3.2. Multiple-Streams Framework

The multiple-streams framework was developed by John Kingdon (1984) based upon the "garbage can" model of organizational behaviour (Sabatier 2007). Kingdon (1984) and Kingdon (1995) argued that policy change occurs in unpredictable ways as separate elements of the policy process intersect, as in a garbage can collecting trash. Kingdon conceives of policy emerging through three separate streams of processes; the 'problem stream', 'policy stream', and 'politics stream'. These streams develop and operate largely independently. Problems are defined and moved to the government agenda; policy solutions are developed, whether or not they respond to a problem; the politics may

change suddenly with the election of a new administration, whether or not the policy community is ready or the problems facing the country have changed. The separate streams come together at critical times: a problem is recognized; a solution is available; the political climate makes the time right for change. This critical time or "opening of the policy window" is an opportunity for advocates to push their proposals since a policy window is usually open for only a short time (Figure 2.5).

The issue suddenly becomes "burning" because things come together at the same time: problems, solutions, policymakers' attention, and the desire to act. Typically this comes at the hands of a policy entrepreneur: an MEC, Minister, legislator, senator or representative, academic, lawyer, journalist, or career bureaucrat who does the brokering to make things happen. "No one type of participant dominates the pool of entrepreneurs" (Kingdon 1995).

Figure 2.5. Kingdon's three streams (Garbage can) model



Source: Adapted from Buse *et al.*, 2008; Kingdon 1984 & 1995

The entrepreneur's job is to push, shape, negotiate, disseminate, and couple the problem to a solution, "highlighting the indicators that so importantly dramatize the problems".

2.3.3 Advocacy Coalition Framework (ACF)

Sabatier and Jenkins-Smith (1993) developed the Advocacy Coalition framework which suggests that analysis of policy change requires a time perspective of a decade or more and should focus on policy subsystems or what they call "advocacy coalitions". Policy change, they posit, occurs as a result of competition within the subsystem and events outside the subsystem. Advocacy coalitions are composed of people who share a particular belief system and who are committed to working toward a policy over time. This framework recognises the long-term nature of policy change and emphasizes that policy change should be viewed over a long time-horizon. Problems are not "solved" and taken off the policy map but once a solution is carried out, it creates new sets of issues, ensuring that the problem never really dies (Wildavsky, 1979). The framework spends a lot of time mapping the belief systems of policy elites and analyzing the conditions under which policy-oriented learning across coalitions can occur (Sabatier, 2007).

2.3.4 Punctuated Equilibrium Framework

This framework argues that policy making is generally characterized by long periods of relative stability (equilibrium) punctuated by occasional major change. Significant policy shifts occur when the balance of forces that generally promote the status quo is disrupted such that the forces protecting the current situation are overwhelmed. One way this can occur is by fashioning a new policy image and exploiting multiple policy venues. Change is most likely when a positive feedback system forms and even those who previously objected to the change conclude that it is inevitable and participate in the change process (Baumgartner and Jones, 1993).

2.3.5 Other policy frameworks

These include *Institutional Rational Choice* which is a family of frameworks focusing on how institutional rules alter the behaviour of expectedly rational individuals motivated by material self-interest (Miller 1992; Sabatier 2007), *Policy Diffusion Framework* and *The Funnel of Causality*. All these frameworks focus on explaining policy change within a given political system or set of institutional arrangements, or sometimes seek to provide explanations of variation across a large number of political systems (Sabatier, 2007).

2.4 ORAL HEALTH, POLITICS AND THE POLICY PROCESS

Politics shapes policies, but policies can also determine politics. The work by Gilson and Raphaely (2008) re-iterated the need to integrate politics, process and power into the study of health policies and the practice of health system development in low and middle income countries. Policy making is political rather than technical, and reliant on argument and persuasion rather than disinterested calculations (Lewis, 2003; Lewis, 2012).

The Kingdon model (discussed earlier) accentuates the link between problems, policy and politics (Kingdon 1984, 1995). It is the view of Hancock (1991) that policy is not simply a matter of collective choice but very much a reflection of political power, and that whoever holds the reins of power has great influence on our choice of a collective lifestyle, which is why "so much of health is about politics". Benzian *et al*. (2011) analysed the political priority of oral health using a modified Political Power Framework by Shiffman and Smith (2007). The study revealed a global lack of political attention to oral health. The reasons were attributed to a set of complex issues deeply rooted in the current global oral health sector, its stakeholders and their remit, the lack of coherence and

coalescence; as well as the lack of agreement on the problem, its portrayal and possible solutions. The authors concluded that the political priority of global oral health can only be improved by addressing the underlying reasons that resulted in the wide disconnection between the international health discourse and the small sector of global oral health. They therefore called for "a broad and candid international analysis of political, social, cultural, communication, financial and other factors related to better prioritization of oral health".

Adeniyi *et al*. (2012a) examined the existing health-related policies of the Nigerian government, determined the position accorded oral health within the policy framework, and assessed the role of these policies in improving the oral health status of Nigerians. The report found an exclusion of oral health from the framework of most of the policies designed by the Nigerian government. The most important barrier identified for excluding oral health was the inability of the oral health workforce to influence the policy process. It was concluded that since policymaking is largely a political issue, oral healthcare professionals in Nigeria need to be actively engaged in the politics of policymaking in order to promote the inclusion of oral health in the health related policies of government.

Similarly, the FDI World Dental Federation at the African Summit held in Cape Town, South Africa in October 2012 defined a strategy for the development of oral health in Africa, and outlined the functional principles of the African strategy as three priorities (Hescot *et al* 2013). These were:

- To establish and reinforce the credibility of National Dental Associations (NDAs)
- To acquire and develop leadership and management skills and
- To enhance effective peer-to-peer exchange of information.

The summit emphasized that NDAs need to acquire and strengthen the necessary skills that will position them to be able to devise and efficiently implement international policies and influence government oral health policy.

The policy agenda rests on relationships between individuals and organizations, and is structured by a confluence of influential actors and their issues. Hence, interested actors need to identify those to engage in the health policy process, building coalitions with those who are important in health, outside of oral health. Lewis (2012) has pointed out, that if oral health is to become an important policy issue in health, it will be necessary to consciously attract influential actors (outside oral health) who are not currently convinced that oral health is important.

2.5 POLICY STRATEGIES

Hill and Hupe (2002) identified seven independent influences over policy implementation: policy characteristics; policy formation; layers in the policy transfer process; the overall characteristics of implementation agencies and organizations; the behaviour of front-line staff; the impact of responses from those affected by policy; and wider macro-environmental factors. Gilson and Raphaely (2008) noted that within Low and Middle Income Countries (LMIC), only three of these are usually given some consideration of which the most popular is the behavior of front-line staff.

Soares (2012) while reflecting on the foundation in which public oral health policies were based in Brazil (a developing country like South Africa and Nigeria) noted that "policies were drawn up and implemented by an authoritarian, bureaucratic and patrimonialist State, and a society witnessing a passive revolution, in which solutions generally came from above, without the participation of the Brazilian people." Despite this, significant progress was noticed in respect to the participation of the State and to the constitution of a normative policy framework, as expressed in the Brazilian National Oral Health policy and the ordinances for its implementation. A significant challenge, however, was the implementation at the local government levels.

Roberts *et al*. (2004) posit that the political feasibility of policy change is determined essentially by four factors; position, power, players and perception. For positional strategies, four types of bargains were identified that can be used to shift the position of actors: (i) making a deal with neutral or opposing actors by altering a particular component of the policy so as to make such players more supportive (ii) deals can be made in which support is sort for one issue in return for concessions on another (iii) promises can be made to compensate for reversal of negative stand and (iv) threats can also be used to change the position of unfavourable actors. In terms of power, a range of strategies can be used to affect the distribution of political assets of the players involved, by strengthening supportive groups and undermining opposition groups. Such strategies include providing supportive groups with funds, personnel and facilities; information to increase expertise; access to decision makers and the media; or public relations which highlights supportive actors' expertise, legitimacy, victim status or heroic nature (Buse *et al*., 2008). Actions can also be taken to limit the resources of opponents by challenging their legitimacy, expertise or motives; characterizing them as self-interested and self-serving, refusing to cooperate or share information with them; and reducing their access to decision makers (Roberts *et al*., 2004).

Player strategies attempt to impact on the number of actors involved in a policy issue, mobilising those that are neutral and attempting to demobilise those groups that are opposed to the policy. Perception strategies include questioning data and arguments of the opposing actors. Buse *et al*. (2008) also suggest that the appropriateness of public or private action can be attacked using economic theory or philosophy to shift perceptions on an issue. Perceptions can also be altered by employing celebrities to endorse new reforms and initiatives as well as "branding" of public health interventions.

2.6 POSITIONALITY OF ANALYSTS AND HEALTH POLICY ANALYSIS

Positionality refers to how health policy analysts are viewed, perceived legitimacy, institutional base, and prior involvement in the policy communities. This has led to the distinctions of "insiders" and "outsiders". Positionality influences the ability to access the policy environment and conduct meaningful research, especially in policy analyses where it is necessary to engage with policy elites (Shiffman *et al*, 2007; Walt *et al*., 2008). Positionality has implications not only for access to data but also for knowledge construction (Walt *et al*., 2008). It affects the issues that researchers focus on and therefore the research agendas created and the research questions asked.

2.7 RESEARCH AND POLICY

Research may affect policy through the introduction of novel views, techniques and approaches or identifying weaknesses and providing reasons for changing existing policies. Research is a systematic process for generating new knowledge and relating it to existing knowledge in order to improve understanding about the natural and social world. Evidence from research can enhance health policy process and development by identifying new issues for the policy agenda, informing decisions about policy content and direction, and evaluating the impact of policy (Campbell *et al*., 2009; Uneke *et al*., 2010).

The full value of epidemiological research is only realized when it is translated into health policy with the subsequent planning and implementation of disease or injury prevention and control programmes. However, Wanless (2004) noted that while epidemiological research has provided a great deal of knowledge and understanding about the risk factors for disease, the effects of wider determinants of health and about health inequalities, it has offered little with regard to the practical implementation of interventions. Also, there are examples where research evidence has a direct influence on health

services policy, and others where factors such as political or economic factors have superseded the scientific evidence (Harris, 2007).

In public policy, research is usually distinguished from "audit" which examines the extent to which a process or activity corresponds to pre-determined standards or criteria of performance. It is also distinguished from "monitoring" which constitutes the continuous, routine collection of data on an activity to ensure that everything is going according to plan. Audit, monitoring and information from other sources such as opinion polls and community consultations are used to inform policy hence, evidence from the point of view of a policy maker, is likely to be a broader concept than knowledge derived from research (Buse *et al*., 2008).

In a review of the published literature on health policy analysis in LMIC from 1994 to 2007, Gilson and Raphaely (2008) found only 164 publications that presented empirical analysis of health policy change processes. They clearly showed that LMIC health policy analysis is still in its infancy, and that the lack of diversity of policy areas, topics and analytical issues that were addressed, across a large number of country settings, resulted in a limited depth of coverage within the body of work. Additionally, the majority of publications were largely descriptive in nature, limiting understanding of policy change processes within or across countries.

Oral health was not included in the 27 health policy areas that were identified, as it was not the focus of any of the publications reviewed, although, there may have been tangential reference to oral health in the policy articles on HIV/AIDS and Primary Health Care. Many other weaknesses were identified including:

(a) Analytical weaknesses. Some of the articles do not persuade the reader of their validity and authority.

(b) Lack of explicit explanatory focus. Only few of the articles focused analyses on explaining why a policy succeeded or failed.

(c) Only very few of the publications draw on policy analysis theory to direct and guide analysis.

(d) Majority of the publications can be categorized as "analyses of policy" rather than "analyses for policy", thereby limiting their usefulness in assisting policy-making or contributing to implementation evaluation.

(e) Only a few applied forms of analysis that recognize that policy is socially constructed.

The key actions recommended for strengthening the field of health policy analysis within LMICs included capacity development and efforts to generate systematic and coherent bodies of work underpinned by both the intent to undertake rigorous analytical work and concern to support policy change.

Although most of the ideas and concepts in public policy come from general policy analysis and mostly from high income countries, Walt *et al*. (2008) has noted that much of the theory from policy analysis in these high income countries has resonance for health and developing countries, and can usefully inform research in those areas. However, the health policy environment must be contextualized since low income countries usually exhibit weaker regulations, regulatory capacity and monitoring systems. They are also characterized by political instability, lack of the purchasing power necessary to leverage and influence the types and quality of services being delivered, and reliance on external donor funds among many other differences.

2.7.1 Challenges to Researching Health Policy

A myriad of challenges face the health policy researcher and some of these have been outlined by Walt *et al*. (2008). A major impediment is that decision-making processes are often opaque, and

obtaining relevant documents and papers can be problematic. Also, there are often many obstacles to accessing the many different geographically widespread, actors, individuals, groups and networks involved in the policy processes. A major conceptual challenge and difficulty in policy analysis is capturing and measuring levels of resources, values, beliefs and power of the diverse actors. Another factor identified is that the imperatives of quick policy fixes and the demand for quick remedies may lead to reductionism.

2.7.2 Public Policy and Academic Scholarly Activity

Brock (2006) reflecting on his experiences in policy-making and advisory functions at both state and national levels in the USA identified a deep conflict between the goals and constraints of public policy process and the aims of academic scholarly activity in general. He recognized that truth is the central virtue of scholarly work and that scholars are taught to follow arguments and evidence where they lead without regard for the social consequences of doing so, whether the results are unpopular or in conflict with conventional or authoritative views. The goal of academics is to determine the truth to the best of one's ability. He concluded that the different goals of academic scholarship and public policy necessitate different virtues and behavior in their practitioners.

Several models have been proposed to explain how research may influence policy. The *Engineering or problem-solving model* views the relationship between research and policy as rational and sequential. The rational or linear model assumes that research precedes the policy solution to a predetermined problem.

This however may not be the reality in practice and as Lomas (2000) has scathingly remarked "The research-policy arena is assumed to be a retail store in which researchers are busy filling shelves of a shop front with a comprehensive set of all possible relevant studies that a decision maker might one day drop by to purchase."

The *Enlightenment model* sees the relationship as indirect and not necessarily logical or neat (Buse *et al*., 2008). This model purports that the way research influences policy is complex and hidden and that there may be considerable period of time between research and its impact on policy. A *Strategic model* has also been described in which research is used in entirely political terms by government and interest groups, as an instrument to promote their causes. Research is viewed as ammunition to support pre-determined positions or to delay or obstruct politically uncomfortable decisions (Weiss, 1979).

The *Elective affinity* model proposes that a policy community is more likely to react positively to research findings and insights if its members have participated in the research process in some way, if the findings are disseminated at the right time in relation to the decision making process, and if the implications of the findings coincide with the values and beliefs of the policy audience (Short, 1997). All these models, except the engineering model, support the notion that researchers and policy makers are relatively homogenous groups with similar views but relatively distinct approaches. A model of "two communities living in different cultures based on different assumptions about what is important and how the world works" has therefore been proposed (Buse *et al*., 2008) (Table 2.1).

There is little interest and no activities in the transfer and uptake of research into policy and practice in African countries such as South Africa and Nigeria, and a major factor contributing to this situation is the lack of recognition of the importance of Health Policy and Systems Research (Uneke *et al*., 2009). In these countries, the use of research has occurred mainly in clinical decision-making (evidence-based medicine) and in tertiary health institutions (Kanoute *et al*., 2012). Several factors may act as barriers to the process of translating research into policy. Some of these are political and ideological factors, social, economic and cultural factors, different conceptions of risk, generalisability of the findings, perceived utility of research, timing, ease of communication, and the reputation of the researchers and research institution (Buse *et al*., 2008).

Table 2.1 Comparison of Researchers & Policy-makers based on 'two communities' model

Domain	University researchers	Government Officials/Policy makers
Work	Discrete, planned research projects using explicit, scientific methods designed to produce unambiguous, generalisable results (knowledge focused); usually highly specialized in research areas and knowledge.	Continuous, unplanned flow of tasks involving negotiation and compromise between interests and goals, assessment of practical feasibility of policies and advice on specific decisions (decision focused0. Often required to work on a range of different issues simultaneously.
Attitudes to research	Justified by its contributions to valid knowledge; research findings lead to need for further investigation.	Only one of many inputs to their work; justified by its relevance and practical utility (e.g. in decision making); some skepticism of findings versus their own experience.
Accountability	To scientific peers primarily, but also to funders.	To politicians primarily, but also the public, indirectly.
Priorities	Expansion of research opportunities and influence of experts in the world.	Maintaining a system of good governance and satisfying politicians.
Careers/rewards	Built largely on publications in peer-reviewed scientific journals and peer recognition rather than practical impact.	Built on successful management of complex political processes rather than use of research findings for policy.
Training and knowledge base	High level of training, usually specialized within a single discipline; little knowledge about policy making.	Often, though not always, generalists expected to be flexible; little or no scientific training.
Organizational constraints	Relatively few (except resources); high level of discretion, e.g. in choice of research focus.	Embedded in large, interdependent bureaucracies and working within political limits, often to short time scales.
Values/orientation	Place high value on independence of thought and action; belief in unbiased search for generalisable knowledge.	Oriented to providing high quality advice, but attuned to a particular context and specific decisions.

Source: Buse *et al*., 2008

Table 2.2 shows some practical steps that have been suggested to reduce the gap between research and policy.

Table 2.2 Practical steps advocated to reduce the 'gap' between research and policy

	Steps to be taken by researchers	**Steps to be taken by policy makers**
1.	Provide a range of different types of research reports including newsletters, executive summaries, short policy papers, etc. all written in an accessible, jargon-free style and easily available (e.g. by hiring a scientific journalist to translate research reports into lay terms or training researchers in accessible writing style).	Set up formal communication channels and advisory mechanisms involving researchers and policy makers to identify researchable questions, develop research designs plan dissemination and use of findings jointly.
2.	Put on conferences, seminars, briefings and practical workshops to disseminate research findings and educate policy makers about research.	
3.	Produce interim reports to ensure that findings are timely	
4.	Include specific policy implications in research reports	Ensure that all major policies and programmes have evaluations built into their budgets and implementation plans rather than seeing evaluation as an optional extra
5.	Undertake systematic reviews of research findings on policy-relevant questions to enable policy makers to access information more easily	Publish the findings of all public programme evaluations and view evaluation as an opportunity for policy learning
6.	Keep in close contact with potential policy makers throughout the research process	Commission research and evaluation directly and consider having additional in-house research capacity.
7.	Design studies to maximize their policy relevance and utility (e.g. ensure that trials are of interventions feasible in a wide range of settings)	Establish intermediate institutions designed to review research and determine its policy and management implications (e.g. the National Institute for Clinical Excellence in England and Wales which advises patients, health professionals and the NHS on current 'best practice' derived from robust evidence syntheses)
8.	Use a range of research methods, including 'action-research' (i.e. participative, practically-oriented, non-exploitative research which directly involves the subjects of research at all stages with a view to producing new knowledge that empowers people to improve their situation) and other innovative methods	Provide more opportunities for the public and civil society organizations to learn about the nature of research, to be able to ask questions of researchers and policy makers concerning the use of research and to participate more actively in the policy process from an informed position.
9.	Choose research topics that are important for future policy	Encourage the mass media to improve the quality of their reporting and interpretation of research findings and their policy implications through devoting more time and effort to media briefing.

Source: Buse *et al*., 2008

Choi *et al* (2009) have also emphasized the need for more incentives and opportunities to collaborate as a means of helping scientists and policy makers appreciate their different goals, career paths, attitude towards information, and perception of time. They therefore outlined six ways to bridge the gap between scientists and policy makers (Table 2.3).

Table 2.3 Six ways to bridge the gap between scientists and policy makers

	Content	**People**
Scientists	1. Convey science contents to policy makers	2. Expose scientists to the policy process
Policy makers	3. Convey policy contents to scientists	4. Expose policy makers to the research process
Knowledge brokers	5. Knowledge brokers bring science contents to policy makers and policy contents to scientists	6. Knowledge brokers go between scientists and policy makers and manage the organisation's knowledge.

Source: Choi *et al*. (2009)

2.7.3 Evidence-Based Health Policies

Evidence-based medicine (EBM), first introduced in the 1980s, is an approach to clinical problem solving that applies the best, relevant evidence from research to answer clinical questions (Sweeney, 1996). The principle of basing clinical practice on scientific research evidence was initially advocated by Archie Cochrane in his pivotal work "Efficiency and effectiveness" originally published in 1972 (Harris, 2007). The development of evidence-based medicine has prompted a wider emphasis for evidence-based decision making, and at all levels of health care system there is a hunger for better

knowledge to inform health policy and practice (Hunter, 2003). The concept of evidence-based policy has gained ground, and a journal (Journal of Evidence Based Health Policy and Management) has been launched devoted to this challenge (Harris, 2007).

Evidence-based policy (EBP) has been defined as an approach that helps policy makers make well informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation (Davies, 2004). It involves the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver services. An important element of EBP is the use of methodically sound studies to identify programs and practices which are helpful for improving policy relevant outcomes. EBP approach can be contrasted with opinion-based policy which relies on the views and lobbying of individuals or groups or with policy-based evidence, which relies on the selective use of evidence to justify predetermined policy choices.

Davies and Nutley (2001) identified four key requirements that are necessary before evidence can have greater impact on policy and practice:

(1) Agreement as to the nature of evidence
(2) A strategic approach to the creation of evidence, together with the development of a cumulative knowledge base
(3) Effective dissemination of knowledge, together with development of effective means of access to knowledge, and
(4) Initiatives to increase the update of evidence in both policy and practice.

Gilson and Raphaely (2008) have cautioned that effective policy change does not simply require good technical design or using evidence to generate policy. This is because policy is socially constructed, and influenced by the meanings different actors attribute to policy content or goals. Singh (2002) has

recommended that evidence-based decision making in health services management and planning should be seen as a developmental tool and that this new approach to health care should be supported by health planners, health services providers and all other stakeholders.

2. 8 ORAL HEALTH AND ORAL HEALTH POLICY

Oral health is influenced by a broad range of factors and not just those in the health field. Hence, oral health policies should provide a framework for health promoting actions covering the social, economic and environmental determinants of oral health. Oral health policy (like other health policies) is not the responsibility of health departments alone but involves multiple sectors and actors (Buse *et al*., 2008).

2.8.1 ORAL HEALTH POLICY ON THE AFRICAN CONTINENT

Poverty and underdevelopment have been identified as major barriers to implementing health policy in Africa (Thorpe, 1995; Fraser-Moleketi, 1995). Oral health care systems on the African continent range from poor to fair in terms of adequacy, relevance, efficiency, effectiveness and impact (Thorpe, 1995). This poor state of oral health in many African countries has been attributed to several factors including the meagre resources allocated to oral health services in national health programmes, poor planning and evaluation of services, inappropriate oral health personnel training and usage, lack of multi-sectoral collaboration in relation to food policy, health education and promotion, and failure to integrate oral health into the primary health care system in almost all the countries. It has been recommended that the dental profession must play the significant role of health advocates and participate in educating and influencing decision makers, including senior government officials, national and international agencies, community leaders and the public (Hescot *et al*., 2013). Thorpe (1995) has predicted that should the profession shirk its responsibility in taking the lead, other parties lacking the necessary professional knowledge and expertise in dentistry will exploit the vacuum.

In line with the principles of the Adelaide Statement on Health, the World Dental Federation (FDI) has advocated for the inclusion of oral health in all policies; and for the engagement of oral healthcare professionals with leaders and policy-makers at all levels of government and NGOs (Glick *et al*., 2012; Hescot *et al*., 2013). The FDI rationalized that government objectives are best achieved when all sectors include health and wellbeing as key components of policy development, and stressed that advocacy will help to increase oral health literacy and awareness among the public, thereby supporting a community-driven demand to governments for better access to oral healthcare services.

2.8.2 Countries in the WHO African Region with Documented Oral Health Policies

Only 18 of the 54 countries in the WHO African region have a national oral health policy (Table 2.4). This is despite the fact that the WHO in 2005 advised that by 2008, all countries of the African Region should have national oral health strategies and implementation plans focusing on the district and the community levels (Ndiaye, 2005).

Many of these oral health policies or strategy documents never went beyond the draft stage as they were never approved at the appropriate levels of government. Nigeria, for example, had earlier produced four "draft" oral health policies in 1994, 1999, 2005 and 2009 but none received the necessary approval of the Federal cabinet. A fifth attempt was recently approved by the Ministerial Council on Health and the Federal Executive Council (FMOH, 2012; FMOH, 2013). Similarly, Zimbabwe had been listed as having a documented oral health plan as far back as April 1993 (Thorpe, 1995) but, the need for an oral health policy for the country was highlighted again in the "National Health Strategy for Zimbabwe (2009-2013)" (MOHCW, 2009). It was noted that "little attention has been given to oral health outside the school health programme" and that efforts to meet the oral health care needs of all Zimbabweans have included "initiating the process to develop the oral health policy

and strategy for Zimbabwe". This is an indication that the 1993 document was no longer on the government agenda.

Table 2.4 African countries (WHO Region) with documented National Oral Health Policies

	COUNTRY	POPULATION	NUMBER OF DENTISTS	YEAR NATIONAL ORAL HEALTH POLICY WAS DEVELOPED	YEAR DUE FOR REVIEW
1	Botswana	2,155,784	60	N/A	N/A
2	Burkina Faso	18,365,123	80	N/A	N/A
3	Gambia	1,925,527	20	N/A	N/A
4	Ghana	25,758,108	100	2002	N/A
5	Kenya	45,010,056	250	2002	2012
6	Lesotho	1,942,008	16	2002	N/A
7	Madagascar	23,201,926	410	N/A	N/A
8	Malawi	17,377,468	19	N/A	N/A
9	Mozambique	24,692,144	159	N/A	N/A
10	Nigeria	177,155,754	3853	2012	N/A
11	Rwanda	12,337,138	11	2005	2010
12	Sao Tome & Principe	190,428	11	N/A	N/A
13	Sierra Leone	5,743,725	14	2008	N/A
14	South Africa	48,576,132	3348	2001,2004[#]	N/A
15	Swaziland	1,419,623	32	N/A	N/A
16	Tanzania	49,639,138	450	2005	N/A
17	Uganda	35,918,915	170	2007	2014
18	Zimbabwe	13,771,721	120	N/A	N/A

Sources: Thorpe (1995); Beaglehole *et al*., (2009); Katumba, 2011; FMOH (2012); CIA, (2014)

Key: **N/A =** Not Available

#=South African National Oral Health Strategy (DOH, 2004)

Although, most of the National Oral Health Policy documents advocate for prevention, health promotion, integration across disciplines and evidence-based interventions (Katumba, 2011), there is hardly any in-country data to support implementation (Kanoute *et al*., 2012; Hescot *et al*., 2013). It is a matter for concern that only very few African countries have made progress towards implementation, and none has evaluated what has been done (Thorpe, 2006; WHO, 2008a; FMOH, 2012).

CHAPTER 3

OVERVIEW OF ORAL HEALTH IN SOUTH AFRICA

3.1 BACKGROUND

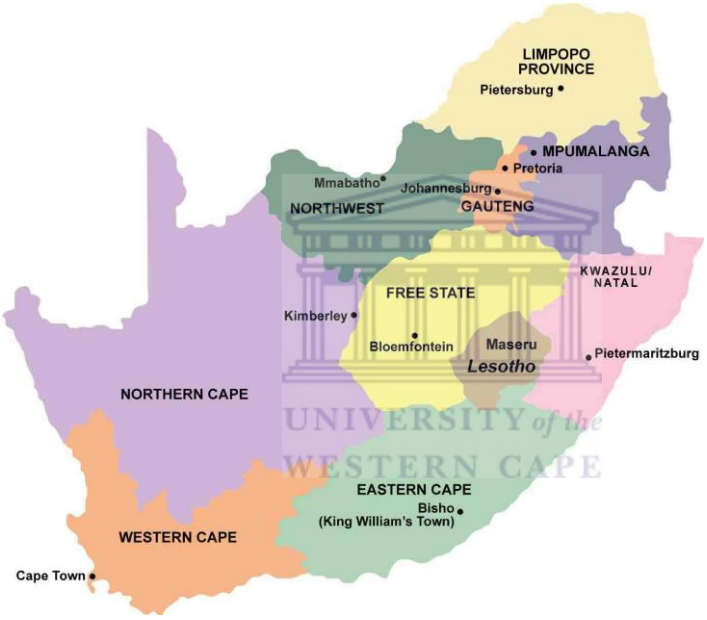
South Africa is a large country with a surface area of over 1.2 square kilometres situated at the southern tip of Africa. It is a middle-income, emerging market with an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; a stock exchange that is the 18th largest in the world; and modern infrastructure supporting a relatively efficient distribution of goods to major urban centres throughout the region. However, unemployment remains high and outdated infrastructure has constrained growth. The population of the country is estimated to be 51,770,560 and comprises of four main population groups: Asians, 2.5% (mainly people of Indian descent); Blacks, 79% (descendants of African peoples who migrated in a southerly direction from central Africa); Coloureds, 8.9% (people of mixed parentage, mainly descendants of the indigenous Khoikhoin people, the Malayan slaves); and the Whites, 9.5% (descendants of the European settlers, mainly Dutch, British, German, French, Portuguese, etc. (van Wyk and van Wyk, 2004).

The country has 11 official languages; IsiZulu 22.7%, IsiXhosa 16.0%, Afrikaans 13.5%, Sepedi 9.1%, English 9.6%, Setswana 8.0%, Sesotho 7.6%, Xitsonga 4.5%, siSwati 2.5%, Tshivenda 2.4%, isiNdebele 2.1%, and others 2.1% (CIA, 2014). Prior to 1994 (during the apartheid era) South Africa was divided along racial lines into four “independent states”, six “self-governing territories”, and four provinces of “white South Africa”. Currently, South Africa has nine administrative provinces; Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North-West, and Western Cape (Figure 3.1). Each province is governed by a unicameral legislature with proportional representation depending on the population of the province. The provincial legislature elects, from

amongst its members, a Premier who chooses an executive of between 5 and 10 members to form the cabinet of the provincial government.

There are considerable differences between South Africa's nine provinces: Northern Cape which covers the largest territory has a population of less than 1.2 million while Gauteng the smallest is inhabited by over 12 million people (Table 3.1).

Figure 3.1 Map of South Africa showing the nine provinces



Source: www.towns.bookingsouthafrica.com

These provinces are sub-divided into 53 Districts. The first multi-racial elections in 1994 brought an end to apartheid and ushered in majority rule. South Africa since then has struggled to address apartheid-era imbalances in decent housing, education, and health care.

3.2 ORAL HEALTH IN SOUTH AFRICA

Oral diseases are widespread in South Africa and affect large numbers of people in terms of pain, tooth loss, disfigurement, loss of function and even death (Naidoo *et al*., 2001). Despite technological advancements in oral health care and a significant decline in dental caries rates, oral diseases continue to be a major public health concern in South Africa (DOH, 2001, 2002, 2010). The Decayed, Missing and Filled Teeth (DMFT) in 12 year olds was 1.1 in 2002 and the percentage of 6-19 year-olds affected by dental caries was 60.3%. Edentulousness in people aged 65 or more years is 26%. The age standardized incidence per 100,000 for oral cancer was 11.2 for men and 2.9 for women in 2002 (Beaglehole *et al*., 2009).

Historical imbalances in oral health care have created a legacy of diverse unmet oral health needs despite universal knowledge on preventive and cost-effective measures (Myburgh *et al*., 2005; Singh 2005). The delivery of health care in South Africa is based on the Primary Health Care approach which uses the District Health System as the administrative vehicle (van Wyk and van Wyk, 2004). Oral health services are provided by dentists, dental therapists, oral hygienists and dental technicians, with the latter rendering services to dentists (van Wyk and van Wyk, 2004) (Table 3.1).

Table 3.1. The population and distribution of oral health personnel in South Africa.

	PROVINCE	POPULATION (YEAR 2011 ESTIMATE)	AREA (KM^2)	NO. OF DOCTORS	NO. OF DENTISTS	NO. OF DENTAL THERAPISTS	NO. OF ORAL HYGIENISTS	NO. OF DENTAL ASSISTANTS
1	Eastern cape	6,652,053	168,966	2379	334	15	53	120
2	Free State	2,745,590	129,825	1516	210	22	69	205
3	Gauteng	12,272,263	18,178	8928	2661	203	595	1854
4	Kwazulu-Natal	10,267,300	94,361	5532	824	194	132	686
5	Limpopo	5,404,868	125,754	1352	140	62	35	115
6	Mpumalanga	4,039,939	76,495	1139	417	94	97	399
7	Northern Cape	1,145,861	372,889	448	80	8	15	91
8	North West	3,509,953	104,882	1123	114	17	23	137
9	Western cape	5,822,734	129,462	5365	1477	4	476	784
	Total	**51,770,560**	**1,220,813**	**27782**	**6257**	**619**	**1495**	**4391**

Data Sources: HPCSA Website (http://www.hpcsa.co.za); Strachan *et al*., (2011); Statistics South Africa (2011).

Although more than 80% of the oral health workforce works in the private sector, the majority of South Africans have no access to private dental services and are dependent on the government for oral health care services (DOH/HST, 2013). There is gross underutilization of public oral health services due to limited resources and inaccessibility (Naidoo *et al*., 2001). There is also maldistribution of available oral health personnel (Table 3.1). Singh (2005) found that oral health promotion was almost entirely absent from policy statements except in four programmes: Policy Guidelines on Youth and Adolescent Health (2001), the draft National School Health Policy and Implementation Guidelines (2002), the Health Promotion Draft Policy (1999) and the national guidelines on the management and treatment of HIV/AIDS (2000-2001).

Furthermore, though policy makers at the national level recognized the link between oral health and their respective health units, the onus is left upon the National Oral Health Directorate to motivate for inclusion in other health policy efforts. The process of integrating health policy initiatives was inconsistent and fragmented. In particular that the South African National Oral Health Strategy (DOH, 2010) has clear rhetoric on oral health promotion but lacked the technical strength to reach other levels of the health system or key decision makers in other health programmes or directorates - "a classic example of rhetoric and reality not connecting in health policy". Contradictions in oral health promotion-related policy statements and decision-making were found in all of the areas examined.

A national baseline audit of the health care facilities in South Africa revealed that at the PHC level, dental services are lacking and are offered by only 31% of facilities (Table 3.2) (DOH/HST, 2013). Over half of the Community Health Centres/Community Dental Centres (52%) cannot offer proper dental services due to the absence of dental practitioners or dental therapists. These staffing gaps raise serious concerns about the quality of services provided, efficiency and limitations in the scope of services rendered. Dental services were also not available in 59% of central/tertiary hospitals, 50% of

regional hospitals, and 42% of district hospitals (Table 3.2). The study noted that it was extremely costly for the patients to access oral health services through the private sector.

Table 3.2 Audited PHC clinical services: Out-patient for year 2011

Primary Health Care Services	% of facilities
Immunization	93
TB treatment	93
HIV counseling and testing (HCT)	95
Antiretroviral therapy	75
Contraceptive	95
TOP counseling	76
Post-exposure prophylaxis (PEP)	80
Cervical screening	92
Syndromic management STIs	94
Dental	31
Mental Health	80

Source: DoH/HST (2013)

Table 3.3 Categories of hospitals (Public health facilities) by Province in South Africa

Province	District Hospital (Level 1)	Regional Hospital (Level 2)	Provincial Hospital (Level 3)	National Central Hospital	Specialised Hospital	Total Hospitals
Eastern Cape	47	9	0	0	16	72
Free State	24	5	2	0	3	34
Gauteng	8	11	0	4	6	29
Kwazulu-Natal	37	14	1	1	9	62
Limpopo	37	5	2	0	3	47
Mpumalanga	20	5	1	0	1	27
Northern Cape	22	1	0	0	3	26
North West	24	4	0	0	2	30
Western Cape	28	9	0	3	21	61
South Africa	**247**	**63**	**6**	**8**	**64**	**388**

Source: Cullinan (2006)

3.2.1 Evidence-based oral health policy in South Africa

Singh (2005) found almost exclusive reliance on outdated national oral health surveys as the primary source of epidemiological data to guide policy development in South Africa, despite the limitation of

these surveys. Epidemiological data on oral conditions, such as oral manifestations of HIV/AIDS, oral cancer and trauma was reported to be scant. This suggests that actual policy formulation, decision-making and oral health care resource allocation is conducted without sound epidemiological information or community needs assessment.

3.3 THE HEALTH POLICY PROCESS

Despite the development of a South African National Oral Health Strategy (Department of Health, 2004), most discussion on policy has focused on content rather than the process. Policy assessment appears to lack critical appraisal of the processes that influence implementation and sustainability (Singh, 2005). There are gaps in communication between national and provincial health directorates. The health policy process in South Africa appears to be dominated by power, protection of professional interests and maintenance of autonomy (Singh, 2005). Where there was evidence of policy or programme commitment, there was usually no evidence of its implementation (Thorpe, 2006).

Singh (2005) found that the policy on community water fluoridation as an example of a policy that has been legislated but has yet to be implemented. She opined that even technically strong national oral health policy documents may not have the kind of impact hoped for. Even the most rationale and technically accurate policy document requires a carefully thought out implementation process, if the goals and objectives are to be achieved. To successfully influence the processes of oral health promotion requires more than simple, document-based policy reforms that are strong on rhetoric and good ideas, but have not achieved the widespread stakeholder support necessary to carry them through to funding and implementation.

Similarly, Owen (1995) in a critique of recommendations for South African oral health policy noted that a flaw common to all these documents was the startling amount of rhetoric and a "profusion of wishful thinking, of motherhood-and-apple-pie statements". He noted that "about 97% of the statements in the 1994 report fell into the definition of rhetoric, as defined by Chambers dictionary". He further identified the omission from all the policy documents of proposals for effective provider payment mechanisms and the establishment of reliable and adequate sources of finance for Primary Oral Health Care (POHC). He regretted the lack of attention in these documents to the balance of power operating within the environment in which these policy development and implementation initiatives are taking place, and opined that "the lack of analysis and understanding of the processes necessary to ensure the implementation of the ideas in these documents may condemn even the most effective and attractive policy options to failure".

This situation is not peculiar to Africa but appear to be the general observation in other developing countries. Although India's oral health policy was drafted in 1985 and recommended that dentists be appointed at primary and community health centres, this policy has not been implemented (Singh, 2010). While health policy making is important especially to achieve sustainable health improvements and equity, far greater attention must be given to understanding the real and perceived hierarchies of power among interest groups with the potential to influence the process (Myburgh, 1995).

Myburgh (1995) while summarizing the proceedings of a workshop on oral health policy in South Africa noted that neither the documents presented nor the discussions adequately addressed solutions to the many important oral health challenges facing the country. He considered this a "serious deficiency of the policy process and of the workshop itself". He however suggested that the health policy development efforts should persist but that these should be supported with thorough policy analysis. He further recommended the examination of some of the success stories of the oral health policy process in order to understand what characteristics make some succeed while others fail.

3.4 SOUTH AFRICAN ORAL HEALTH POLICIES

One of the goals of oral health policy in South Africa is the provision of equitable oral health services and the reduction of the incidence of common oral diseases through promotion of health, prevention of oral diseases and provision of basic curative and rehabilitative oral health services (DOH, 1997).

The South African National Dental Health Policy was approved by the Cabinet in 1975. It was revised in 2002 to produce the National Policy for Oral Health in South Africa (DOH, 2001, 2002, Undated). The underlying philosophy of the 2002 policy was based on the Primary Health Care approach. A National Oral Health Strategy came into effect in 2010, the aim of which is to improve the oral health of the South African population by promoting oral health and preventing, appropriately treating, monitoring and evaluating oral diseases (DOH, 2010). It assigned specific functions to each level of the health care system (National, Provincial and District). The overall national goals are:

- Increase PHC-facilities, through the provinces, delivering oral health care services by ensuring that these services are being (made) available in the following order of priority:
    - District Hospitals
    - Community Health Centres, and
    - Clinics or Mobile Dental Units or Portable Dental Units
- Increase the percentage of children at age 6 years who are caries free to 50% (in line with WHO 2010 goals).
- Reduce the mean number of Decayed, Missing and Filled Teeth (DMFT) at age 12, to 1.0 (in line with WHO 2010 goals).
- That 60% of the population on piped water systems receive optimally fluoridated water.
- That 100% of clinics offer the primary oral health care package.

The National Oral Health Policy document concluded that the national Department of Health convene a strategy review panel annually, to assess the implementation and outcomes of the strategy, and make

recommendations accordingly (DOH, 2010). It further indicated that the National Department of Health should be responsible for collating the information provided by provincial health authorities and the regular dissemination of summary data and reports on the review process.

The oral health policies and plan for South Africa embraces the principles of the primary health care approach but provides little if no direction on how these policies are to be translated to a programmatic level, focusing on the content rather than the processes of health policy formulation (Singh, 2005; Singh *et al*., 2010).

CHAPTER 4

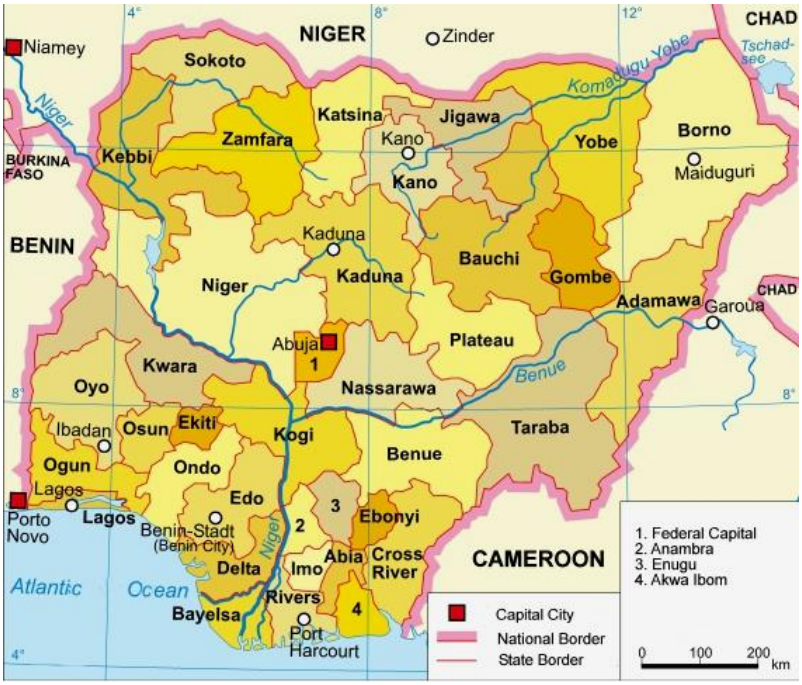
OVERVIEW OF ORAL HEALTH IN NIGERIA

4.1 BACKGROUND

Nigeria, a developing country, is the most populous country in Africa.. It has an estimated population of 177155754 (CIA, 2014). It is a heterogeneous state with more than 250 ethnic groups. Although English is the official language, Hausa, Yoruba and Ibo languages are spoken widely. Muslims constitute 50% of the population, Christians 40% and indigenous religions 10%. The literacy rate is 42%, the average life expectancy at birth is 51 years, and the infant mortality rate is 100 deaths per 1000 births. Only 0.8% of the National budget is allocated to health.

Nigeria is presently divided into 36 States and the Federal Capital Territory (Figure 4.1).

Figure 4.1 Map of Nigeria showing the 36 States and Federal Capital Territory



Source: CIA Fact Book, 2012

For administrative purposes, the country is divided into six geo-political zones: North-Central, North-East, North-West, South-East, South-West and South-South. There are presently 774 Local Government (District) Areas (LGA) with each State having between 10 and 30 LGA's. Each LGA has a population of between 200 and 500 thousand and is served by at least one Primary Health Care centre. States are served by at least five secondary health care facilities, including dental centres. Each State is also served by at least one tertiary health facility usually located in the State capitals. Private dental hospitals are distributed according to population density and local economy but, usually in the urban centres.

4.2 ORAL HEALTH IN NIGERIA

4.2.1 Oral Disease Prevalence

The mean DMFT for 12-year-olds was 0.72, 1.3 for 15-year-olds, and 2.5 for 35 to 44-year-olds. The prevalence ranged between 15.7% and 26.6% for all age groups (Adeleke, 2006). Edentulousness in people aged 65 or more years was 1% (in 1999) and the age standardized incidence per 100,000 for oral cancer is 2.6 for men and 1.0 for women (Beaglehole *et al.*, 2009). Noma is an urgent public health problem in the country (Adeleke, 2006) .

4.2.2 Organization and Management of Oral Health in Nigeria

The Medical and Dental Council of Nigeria (MDCN) records as at 2013 show that there were 2733 registered dentists and 221 of them have additional qualifications in various fields (Adenubi, 2013). There are nine dental schools with a total annual intake of 185 (Table 4.1). Hence, approximately 160 additional dentists are produced per year, after adjusting for the drop-out rate of entrants.

Table 4.1 Dental Schools in Nigeria and their student admission quota

	DENTAL SCHOOL	STUDENT QUOTA (ANNUAL INTAKE)
1	University of Lagos, Lagos	40
2	Obafemi Awolowo University, Ile-Ife	25
3	University of Ibadan, Ibadan	30
4	University of Benin, Benin City	25
5	University of Nigeria, Enugu Campus, Enugu	15
6	University of Port Harcourt, Port Harcourt	15
7	University of Maiduguri, Maiduguri	15
8	Lagos State University, Ikeja	10
9	Bayero University, Kano	10
	Total	**185**
	OTHERS	
1	Dental Therapists (6 Institutions)	47
2	Dental Technicians (4 Institutions)	100

The distribution of dentists in the country is presented in Table 4.2.

Table 4.2 Distribution of dentists in the six geo-political zones of Nigeria

	ZONE/STATE	POPULATION	NO. OF DOCTORS	NO. OF DENTISTS
	NORTH CENTRAL			
FCT	Federal Capital Territory	1,405,201	1,006	50
1	Nassarawa	1,869,377	136	6
2	Benue	4,253,641	486	14
3	Plateau	3,206,531	1,006	30
4	Niger	3,954,772	388	18
5	Kwara	2,365,353	1,174	22
6	Kogi	3,314,043	345	6
	Subtotal	**20,368,918**	**4,541**	**146**
	NORTH EAST			
8	Adamawa	3.178,950	245	0
9	Taraba	2,294,800	123	3
10	Gombe	2,365,040	159	6
11	Yobe	2,321,339	92	3
12	Borno	4,171,104	590	15
13	Bauchi	4,653,066	247	7
	Subtotal	**18,984,299**	**1,456**	**34**
	NORTH WEST			
14	Kebbi	3,256,541	106	1
15	Jigawa	4,361,002	90	1
16	Kaduna	6,113,503	1,501	59
17	Kano	9,401,288	954	33
18	Katsina	5,801,584	189	2
19	Zamfara	3,278,873	88	1
20	Sokoto	3,702,676	410	15
	Subtotal	**35,915,467**	**3,338**	**112**

	ZONE/STATE	POPULATION	NO. OF DOCTORS	NO. OF DENTISTS
	SOUTH EAST			
21	Ebonyi	2,176,947	323	5
22	Imo	3,927,563	1,312	29
23	Anambra	4,177,828	1,690	42
24	Abia	2,845,370	1,173	17
25	Enugu	3,267,837	2,239	44
	Subtotal	**16,395,545**	**6,737**	**137**
	SOUTH SOUTH			
26	Cross River	2,882,988	819	8
27	Bayelsa	1,704,515	135	4
28	Akwa Ibom	3,902,051	492	5
29	Rivers	5,198,716	1,829	46
30	Delta	4,112,445	1,274	84
31	Edo	3,233,366	2,129	195
	Subtotal	**21,034,081**	**6678**	**342**
	SOUTH WEST			
32	Ondo	3,460,877	813	43
33	Lagos	9.113,605	11,791	885
34	Osun	3,416,959	1,256	96
35	Ekiti	2,398,357	335	22
36	Oyo	5,580,894	2,669	202
36	Ogun	3,751,140	1,224	58
	Subtotal	**27,721,832**	**18,088**	**1306**
	GRAND TOTAL	**140,420,142**	**40,838**	**2077**

Data sources: Akinosi (2011); Nigerian Census Bureau (www.population.gov.ng Accessed April 12, 2014)

Table 4.3 Percentage distribution of Dentists, Dental Technologists and Dental Therapists in the six geo-political zones of Nigeria.

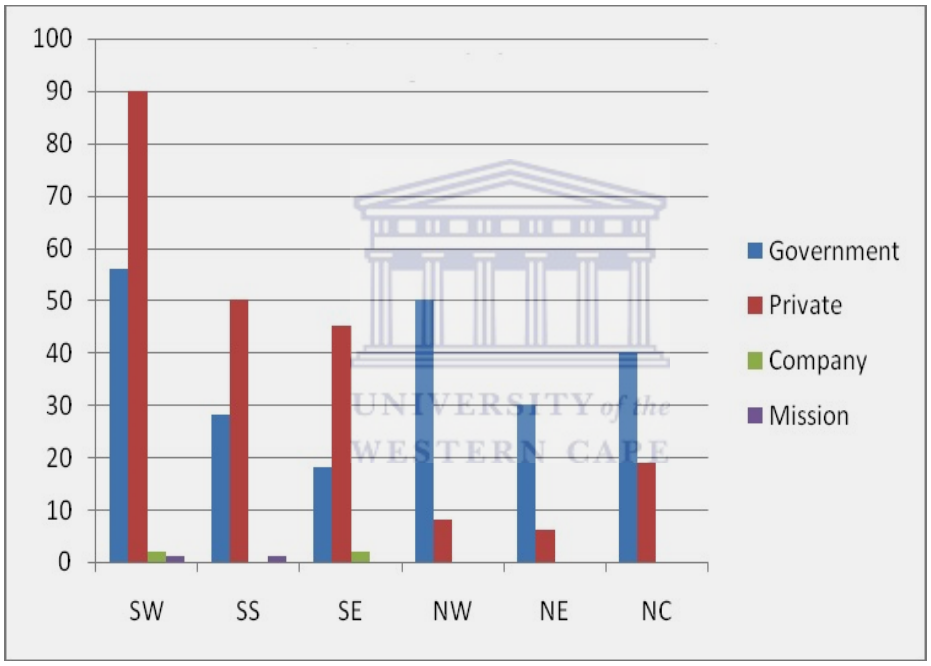
S/No	Category	Total	North Central (%)	North East (%)	North West (%)	South East (%)	South South (%)	South West (%)
1	Dentists	2077	7.02	1.64	5.39	6.60	16.47	62.88
2	Dental Technologists	505	14.08	5.92	5.92	12.96	16.62	44.50
3	Dental Therapists	1102	13.19	10.29	21.88	10.19	12.99	31.50

Data Sources: Labiran *et al*., (2008); Akinosi (2011)

Presently the provision of oral health in Nigeria is predominantly curative and the distribution of treatment facilities skewed towards the Southern zones of the country (62.6%) with the three northern

zones having only 37.4% of the clinics. Adeleke (2006) recorded a total of 446 dental clinics all over the country. The distribution of dental clinics in the six geo-political zones was as follows: SW (33.4%), SS (14.6%), SE (14.6%), NW (13%), NE (8.1%) and NC (13.2%). According to ownership, Government-owned clinics constituted 49.8% of all dental clinics in Nigeria, Private clinics (48.9%), Corporate clinics (0.9%) and Mission clinics (0.4%); with the government clinics predominating in Northern Nigeria, while private clinics in Southern Nigeria (Adeleke *et al*., 2006) (Figure 4.2).

Figure 4.2 The distribution of dental clinics in the six geo-political zones of Nigeria



4.3 THE NATIONAL HEALTH POLICY AND STRATEGY TO ACHIEVE HEALTH FOR ALL NIGERIANS

The goal of the National Policy on Health is a level of health that will enable all Nigerians to achieve socially and economically productive lives. It is based on the Primary Health Care philosophy (FMOH, 1988; FMOH, 2010). In none of the policy documents, was there a mention of oral health and oral health was not among the priority areas identified for training. A study among health care

professionals and managers in Nigeria found low perception of the infrastructure available in major hospitals for the support of the health sector reform programme in the country. The major infrastructural issues were inadequacy and poor maintenance of facilities and equipment in the hospitals. The key human and financial resources issues were the lack of adequate staff, poor compensation and lack of resources to meet major recurrent and capital expenditures (Olukoga *et al*., 2011).

4.3.1 The National Strategic Health Development Plan (NSHDP) 2010-2015

The NSHDP was developed to serve the overarching framework for health development in Nigeria. It was developed in a participatory manner, drawing inspiration from the State Strategic Health Development Plans (SSHDP) of the 36 States and the Federal Capital Territory (FCT). It has eight strategic priority areas: Leadership and Governance for Health, Health Service Delivery, Human Resources for Health, National Health Management Information System, Partnership for Health, Community Participation and Ownership and Research for Health. Although health policy is supposed to be based on adequate and consistent information on the health care needs of the population for whom the services are being planned, as well as available resources, none of these elements seem to significantly influence the health policies in Nigeria (Shehu, 1998).

4.3.2 Health Sector Reform Programme in Nigeria

Nigeria is presently undertaking a Health Sector Reform (HSR) Programme aimed at establishing a framework, including goals, targets and priorities that should guide the action and work of the Ministries of Health and health development partners. The programme is expected to set the tempo and direction for strategic reforms and investment in key areas of the national health system, within

the context of the overall Government macroeconomic framework. The proposed strategies of the reform process include:

- The revision of existing health policies and plans
- Producing new policies where they are non-existent such as the National Oral Health policy
- Forging collaboration between the public and private sectors
- Dissemination of relevant information that will facilitate the implementation of the reforms and actualisation of the reform objectives
- Monitoring and Evaluation of the health system and activities

4.3.3 The Nigerian National Oral Health Policy

Nigeria produced four "draft" oral health policies in 1994, 1999, 2005 and 2009 none of which got the necessary approval of the Federal cabinet. The current National Oral Health Policy for Nigeria was approved in May 2011 by the National Council on Health (made up of the Honourable Commissioners of Health in the 36 States and the Federal Capital Territory with the Honourable Minister of Health as Chairman). The policy document was also approved by the Federal Executive Council (October 2011) and endorsed by the National Economic Council (made up the Governors of the 36 States and the Vice President as Chairman) in August 2012. It was formally launched by Senator, David Mark, the President of the Senate of the Federal Republic of Nigeria on 12th November 2012 on the occasion of the 2nd National oral health week.

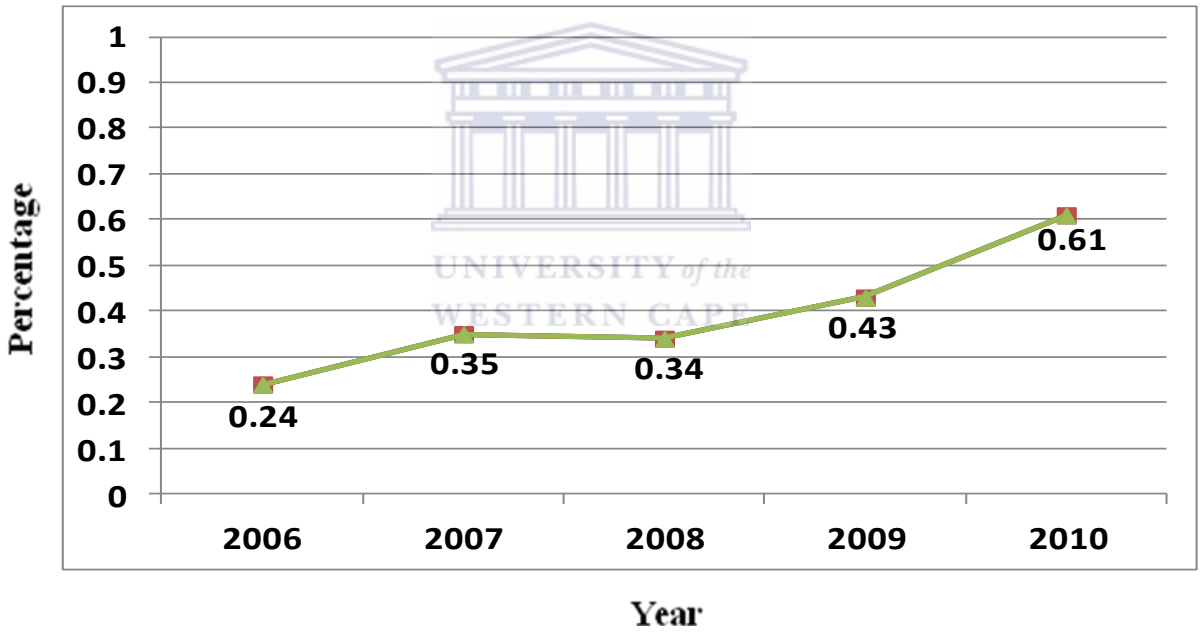
The latest attempt developed through multi-stakeholder participation which included the Federal Ministry of Health, the National Primary Health Care Development Agency, Inter-country Centre for Oral Health, Deans of Faculties of Dentistry, Medical and Dental Council of Nigeria, Dental Therapists and Technologists Registration Boards and Associations, Development Partners (such as the WHO), and Manufacturers of Oral Health Products and others.

The Minister of Health in his foreword to the policy document stated that "For the first time ever, Nigeria can now boast of a comprehensive National Oral Health Policy" (FMOH, 2012). The policy identified six priority areas and mapped out targets and strategies. These priority areas are: oral health promotion; training and human resource development; service delivery, standards and levels of care; oral health financing; research, monitoring and evaluation and oral health information systems.

4.4 FUNDING OF ORAL HEALTH

The oral health sector presently receives less than 1% of the monetary allocation to the Federal Ministry of Health (FMOH, 2011) (Figure 4.3).

Figure 4.3 Percentage of national health budget allocated to oral healthcare (2006-2010)



Most of the funding received is utilized in sustaining the clinics managed by the federal government. Adeniyi *et al*., (2012b) has attributed the very few national programmes on oral health and the reliance of most of the programmes in existence on external donors to this poor allocation. They therefore called for an immediate review of the current allocation formula, and an increase of the allocation to oral health to at least 5% of the total allocation to health.

CHAPTER 5

RESEARCH HYPOTHESIS, AIMS AND OBJECTIVES

5.1. AIM AND OBJECTIVES

The aim of the study was to collate and analyze the content, context, process, outcomes and implementation strategies of all oral-health-related policies of the South African and Nigerian governments, from the year 2000 till date.

5.2. THE RESEARCH HYPOTHESIS

The research hypothesis is that South Africa and Nigeria have National oral health policies and strategies developed by experts, supported by dental professionals and disseminated to stakeholders for implementation, and these are being effectively and efficiently implemented, monitored and evaluated, with full government support, for the overall benefit of the population.

The study set out to test this hypothesis and make appropriate recommendations based on the findings.

5.3 THE SPECIFIC OBJECTIVES WERE TO:

(a) Determine how oral health policies were initiated, developed (formulated), negotiated, and communicated.

(b) Identify the range of stakeholders involved in the implementation of existing oral health policies and strategies from District (Local or Primary Health Care) to National government levels.

(c) Engage with policy makers and other stake holders in the health sector of both countries to determine the factors influencing the decision making process and their roles in the policy development and implementation process.

(d) Determine the process and adequacy of policy outcome, monitoring and evaluations

(e) Provide insight into some of the issues influencing the use of policy in achieving good oral health in the South African and Nigerian populations, and

(f) Proffer guidance for future actions in the deployment of policy for the strengthening of oral health service delivery systems in the study countries, and other African countries with similar characteristics.

5.4. JUSTIFICATION FOR THE STUDY

The Nairobi Conference (Thorpe, 2004) and the regional strategy for oral health in the African region (WHO, 2000) clearly identified the need for effective and efficient National Oral Health Policies in all African countries. African governments are committed to improving the health status of their citizens; however, not enough attention is given to oral health. Even where oral health policies do exist, its implementation is inefficient. Despite the promise of improved oral health care by Governments in several African countries, many continue to experience a lack of access to oral health care services, particularly in rural areas.

Health sector reform (HSR) is one of the topical issues on the policy agenda of many African countries (Horsburgh *et al*., 2006, Aniekwu, 2006; National Planning Commission, 2004; Oloriegbe, 2006). There have been reports of failed HSR even in the developed countries (Feder, 2004; Oberlander, 2003). The adoption and implementation of health sector reform programmes in many African countries is based on a number of fundamental assumptions, most of which have never been investigated. This is particularly important considering that only 18 of the 54 countries in the WHO Afro region have a national oral health policy.

In Nigeria, despite the commencement of the Health Sector Reform Programme since 2004, many communities still lack access to health care. Particularly worrying is the fact that over the past decade, there have also been major reversals on the gains of the health sector (FMOH, 2010b). The neglect of the oral health has not received the desired attention and health sector reforms have very limited impact on oral health.

Most studies have focused on the effect of policies on the improvement of equity and access, rather than on the factors influencing implementation experiences, barriers to implementation and the impacts achieved. Additionally, while a few studies have been conducted to compare general public health policies, none has focused specifically on oral health policies on the African continent (Gilson and Raphaely, 2008).

While the uniqueness of each African country will make the wholesale adoption of the policies from other countries impracticable, African countries have a lot in common and stand to benefit from the experiences of each other. This has prompted the WHO to produce a guide for writing oral health policy for oral health managers in the African region (WHO, 2005). A policy comparison will lead to the identification of best practices that can be adopted.

It was therefore anticipated that the findings of the present study will enhance oral health policy processes and contribute to the search for efficient, effective and beneficial delivery of oral health care and services in the study countries and other African countries with similar demographic, political and social features. Furthermore, that it would provide insights into the challenges of formulating and implementing national oral health policies in two African countries, South Africa and Nigeria.

CHAPTER 6

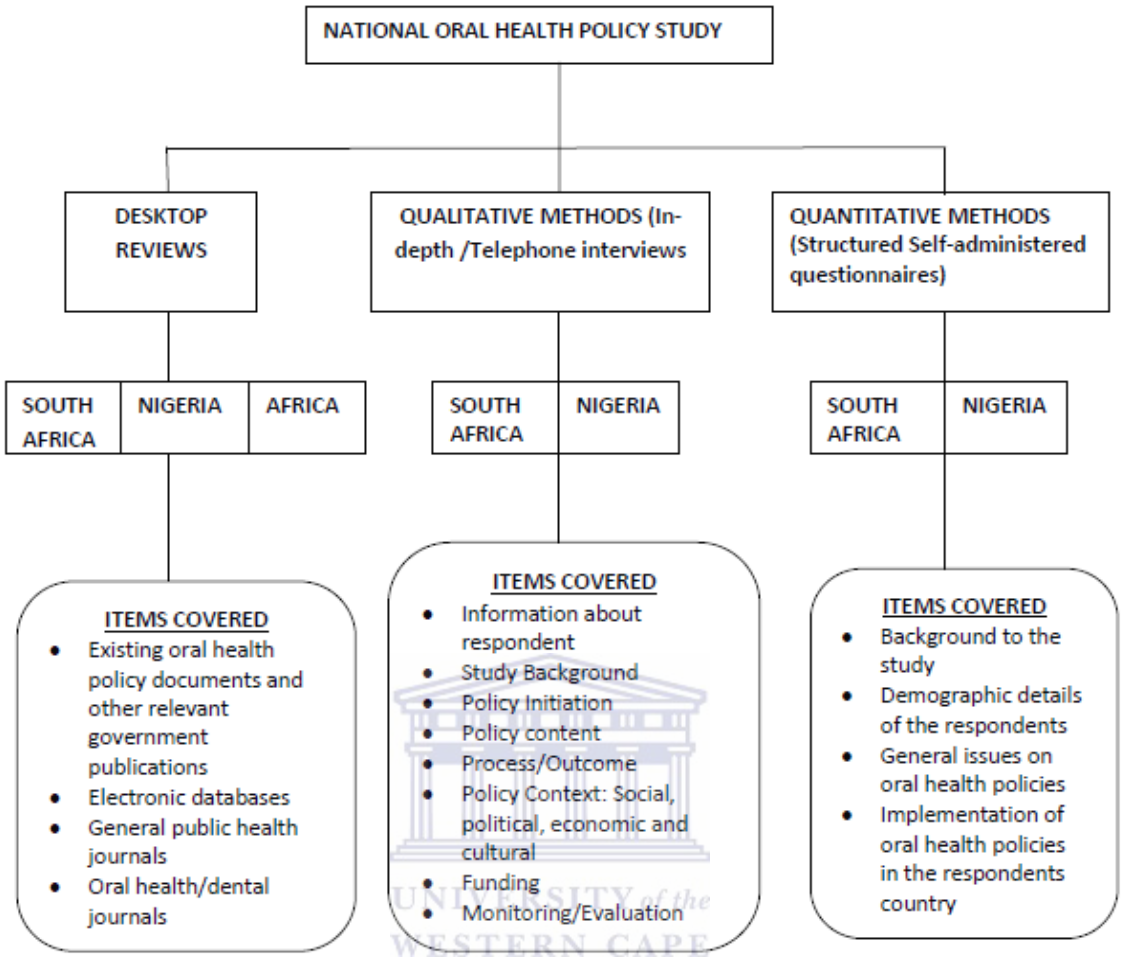
RESEARCH DESIGN AND METHODOLOGY

This chapter presents the methodology used in the present study that investigated the content, context, process, outcomes and implementation strategies of oral-health-related policies of the South African and Nigerian governments. It describes the study design, the data collection methods and strategies, and the analytical procedures and underscores the advantages of utilizing both qualitative and quantitative methodological approaches in the investigation.

6.1 STUDY DESIGN

The study involved desktop reviews, key informant interviews, and a survey through which relevant data was collected for the analysis of oral health policies in South Africa and Nigeria. South Africa, located in Southern Africa, is the leading economy on the continent while Nigeria in West Africa, is the most populous African country. Both are English speaking countries and documents were easily available in English, thereby requiring no translation. The methodological strategy of using more than one research approach and comparing two countries provided a more comprehensive and robust approach to the subject of policy analysis. Figure 6.1 summarizes the main features of the study design. The study leans also on the investigators first hand involvement and participation in the development of the 2012 national health policy of Nigeria.

Figure 6.1 The key features of the study design



6.2 DESKTOP REVIEW

The review of literature covered government publications at National, Provincial (State) and District (Local government) levels in both countries. Electronic databases such as Pubmed (http://www.ncbi.nlm.nih.gov/pubmed/) and Web of Knowledge (http://apps.webofknowledge.com/) were searched to obtain relevant scientific literature and to identify key authors of publications on health policy and oral health policy. General public health and Oral health/dental journals published in the two selected countries within the last 10 years were also manually searched for information related to oral health policies. A review of

existing oral health policy documents published by government sources in the two countries was also conducted.

6.3 SAMPLING METHODS

6.3.1 Sampling

The objectives, hypothesis, and research design in this study did not allow for a strictly random sample method to be used; hence, the required sample was drawn in a series of stages. The sample size for the qualitative data collection was determined by information considerations and was dependent on the aim and objectives of the study and the proposed depth of analysis (Moysés 2000). The selections that were made were based on relevance and not necessarily representativeness.

Health decision-makers involved in oral health policy development were identified using existing government databases, documents and websites. Oral health managers were also identified as they were considered to be in better positions to comment on the intricate details of programme strategies, perceptions and expectations on oral health. The research built on the assumption there could be decision makers in health management who may not have explicit interest in oral health policy but who are very influential in determining the design and implementation of oral health policies (Singh, 2005; WHO, 2005).

The optimum sample size for the interviews was considered to have been achieved when the same themes emerged and when new cases ceased to add new information or insights (Bowling, 2010).

6.3.2 Qualitative Data Collection Methods

Qualitative research is a method of naturalistic enquiry which is usually less obtrusive than quantitative investigations. It aims to study people in their natural, social setting and to collect naturally occurring data. It allows for an understanding of the individual's view without making any value judgments during the data collection (Carter and Henderson 2005; Bowling, 2010).

Its strength is the ability to study people in their natural settings. Qualitative research describes in words, rather than numbers, the qualities of social phenomena, which in the present study was through unstructured in-depth or telephonic interviews. Qualitative techniques have a wide range of applications in health care research and have been commonly used in research documenting the functioning of organizations (Bowling, 2010). Qualitative methods can enhance the quantitative research approach by placing quantitative data in meaningful social context.

6.3.2.1 In-depth and Telephonic Interviews

The qualitative aspect of the present study involved in-depth telephonic interviews and face-to-face interviews where possible, with officials of the Department of Health in South Africa and the Ministry of Health Nigeria, and oral health experts and other key stakeholders in the two countries. These were undertaken by one interviewer to ensure a comprehensive investigation of oral health policy documents and to accurately document the implementation status of the policies. In-depth interviewing is a qualitative research technique that involves conducting intense individual interviews with a small number of respondents to explore their perspectives on a particular idea, programme, or situation. The primary advantage of in-depth interviews is that they provide much more detailed information than what is available through other data collection methods such as surveys (Boyce and Neale, 2006). In the present study, a structured guide was used to steer the interview (Appendix 1), but participants were encouraged to develop and provide their own thoughts, observations and reflection.

The interviews were digitally recorded and then transcribed before analysis. The transcripts were analyzed using thematic analysis. This approach involved five stages of data analysis: familiarization, identifying a thematic framework, indexing, charting followed by mapping and interpretation (Molete *et al*., 2013).

The interviews were limited to a maximum of 30 from each of the two countries and were ceased when repeated interviews no longer yield any new information or data. The interview guide focused on the initiation, development, targets, implementation and evaluation of oral health policies. The issues explored included adequacy of the infrastructure, human resources, financial resources and evaluation processes for any existing policies. The Walt and Gilson framework provided a guide to the range of influences that were explored, concentrating on the Context (political, economic, social and cultural), Process (initiation, development, negotiation, communication, implementation, monitoring and evaluation) and Actors (individuals, groups, organisations and governments at local, provincial, national and international levels) (Walt *et al*., 1994; Buse *et al*., 2008).

In this type of interview technique, there is a check list of questions worked out in advance, but the interviewer is free to modify their order based upon perception of what seems most appropriate in the context of the conversation, to make changes in their exact wording, and in the amount of time and attention given to different topics (Turner, 2010; Bowling, 2010). A major advantage of using interviews was that it was possible to follow up ideas, probe responses and investigate motives and feelings of respondents, which would be difficult with a quantitative technique. Also, the respondents had freedom to talk about what they consider to be of significance to them.

The advantages of unstructured interviews are that more complex issues can be probed, answers can be clarified and a more relaxed research atmosphere may obtain more in-depth as well as sensitive information. The disadvantages are that the data are time-consuming and difficult to collect and

analyze, there are greater opportunities of interviewer bias to intervene, it is a time-consuming method and consequently expensive and only feasible with small samples (Bowling, 2010).

6.3.2.2 Content Analysis

Content analysis is defined as a systematic method to identify specific characters or themes and to draw logical conclusions from the presentation (Bowling, 2010). This method of analysis relates only to the content of the documents and not the process by which the document was produced. Content analysis of health policy documents focused on identifying priorities issues and strategies for oral health including integration into other relevant programmes. Content analysis also identified policy aspects that are important for oral health development but not included in oral health policy.

Thus this analysis focused on the underlying philosophical approach that each policy document adopted. The inclusion of broad-based philosophical statements provided evidence for whether these statements were preventive or curative driven, and could also indicate whether health policies focused on health integration or vertical programme delivery. In this study, the verbatim description of respondents was also used to illustrate the content analysis.

6.3.3 Quantitative Data Collection Methods

This followed the qualitative data collection. Quantitative data was used to improve the reliability and validity of the information collected in the qualitative approach.

6.3.3.1 Sampling

All the oral health professionals in related departments, in the dental training institutions of both countries were included in the study. These departments were Community Oral Health (or Community Dentistry), Preventive Dentistry, Oral Hygiene, Dental Management Sciences and General Dental Practice

6.3.3.2 Data Collection Method

The quantitative data was collected using a structured questionnaire sub-divided into three sections: Demographic details (11 items), General issues on oral health policies (10 items); and Implementation of oral health policies (21 items) (Appendix 2). The structured self-administered questionnaire was designed to assess the awareness and contributions of selected key decision-makers and actors in oral health policy process to the implementation of the existing oral health policies.

6.4 PILOTING THE DATA COLLECTION INSTRUMENTS

The data collection instruments were piloted to:

i. Test the suitability of the data collection methods
ii. Ensure that all questions are clear and unambiguous
iii. Check the adequacy of the instruments and
iv. Identify and remove any items that did not yield usable data

The interviews were piloted in both countries of the study. Two dentists who are involved in policy issues were interviewed in each country. The time spent on interviewing ranged from 25 to 40 minutes due to the flexibility of the interview process. No modification to the interview guide was necessary.

6.5. DATA PROCESSING AND ANALYSIS

6.5.1 Qualitative Data

6.5.1.1 The Inductive Approach

The inductive approach was employed in which the categories for coding the data were developed during and after the data collection phases. The concepts and themes were searched for and categorized in a systematic way. This approach is based on the "grounded theory", described as a process of discovering theory from the data that have been systematically gathered and analyzed (Bowling, 2009). It is a theory that is inductively derived from the set of propositions arising out of the particular setting under study, and explaining the totality of the phenomenon. It involves collection of data, formulation of hypothesis based on the data, testing the hypothesis using the data, and attempting to develop a theory. In 'grounded theory', observations may also be used to refuse, reject, and reformulate hypothesis throughout the research process (Frankfort-Nachmias *et al*., 1996).

6.5.1.2 WHO Framework for Oral Health Policy

The Process, Context and Content of the national oral health policies for both countries under study were analyzed using the Framework for oral health policy developed by the World Health Organization for the African region (WHO, 2005). The WHO Framework identified certain fundamental requirements for effective oral health policy on the continent, emphasizing a systematic approach to the identification and selection of oral health policy priorities that are evidence-based and appropriate to local community settings (Myburgh *et al*., 2005; WHO, 2005; WHO, 2008; FDI/WHO, 2004). It called for integration of oral health with other development sectors; functional separation of

national, provincial, and district responsibilities for oral health; explicit mechanisms for implementation, monitoring and evaluation; and identification of urgent or important matters that need to receive emphasis as a consequence of the policy recommendations. The framework requires that the content should include preamble, vision for oral health in the country, what is to be achieved through the implementation of the policy, and also agreed principles governing oral health such as emphasis on prevention, appropriate mix of PHC services and others. The framework is incorporated in a manual developed for oral health managers in the African Region to assist in the writing of oral health policies (WHO, 2005).

6.5.1.3 The State Oral Health Policy Comparison Tool (SOHPCT) Framework

The content of the oral health policies was also analyzed using a modified version of the State Oral Health Plan Comparison Tool (Pekruhn *et al*., 2011). The State Oral Health Plan Comparison Tool is a relational database with the latest information on state oral health plans for all states in the United States of America (USA). The SOHPCT was originally developed in 2005-06 to provide an overview of the state of state oral health plans and to facilitate cross-state comparisons.

The Comparison Tool includes web links to every original state oral health plan for easy access to the original source material. It contains the summary analysis with each state plan analyzed and their components categorized into 22 distinct content areas (and a section for miscellaneous) to allow for simple evaluations and easy interstate comparisons.

These 22 categories are: leadership; surveillance/data collecting and reporting; coalitions/partnerships; programme/policy evaluations; fluoridation; sealants; increasing public awareness; workforce issues; dental professional education; non-dental professional education; integration of health services; school-based programmes; access to care; safety net/underserved areas; cultural competence of care; pregnant women; early childhood; seniors; tobacco and alcohol control/cancer prevention;

disabled/special needs population; medicaid/medicaid equivalent financing and care; and general funding. In using this framework for comparison of the two countries under study, the 22 categories were adopted and adapted while three additional categories oral and facial safety/contact sports, food and nutrition and infection control were added.

6.5.1.4 The Kingdon's three streams (Garbage Can) Framework

The Kingdon model (Kingdon, 1984) was also used to assess why oral health issues may not usually get into the 'policy agenda'. The model proposes that only when an issue and the likely response are high in terms of their legitimacy, feasibility and support do they get unto a government agenda. The framework is a simple, quick-to-apply method for analyzing which issues might be taken up by government. It focuses on the role of policy entrepreneurs inside and outside government who take advantage of policy windows to move items into the government's formal agenda. The model conceives of policy emerging through three separate streams of processes; the *problem stream*, the *politics stream* and the *policy stream*.

6.5.2 Quantitative Data Analysis

The quantitative data, obtained from the questionnaire, was analyzed using simple proportions, chi-square and Mann-Whitney's U-tests for comparisons, as appropriate. All statistical analysis were two-tailed and differences were taken as significant at $p<0.05$. The analysis was done on a microcomputer using the SPSS Statistical Package (SPSS for Windows) Version 16.0 (SPSS Inc., 1989-1999).

6.5.3 Triangulation

Triangulation is a process of using multiple perceptions of an observation or interpretation, in recognition that no observations or interpretations are perfectly repeatable. It serves to clarify meaning by identifying different ways the phenomenon is being seen, recognizing the partiality of any one context of data collection (Bradley, 1995; Bowling, 2010). The logic of this approach is that the more consistent the direction of the evidence produced from different sources, the more reasonable it is to assume that the investigated process had produced the observed effects (Moysés, 2000; Bowling, 2010). Triangulation of data involves using a variety of data sources, and triangulation of investigator involves using different researchers in the data collection process.

This study used data source triangulation to construct a multilevel conceptual framework for data collection and analysis, collecting a combination of quantitative data and qualitative information on oral health policy and decision-making. Information for each level was obtained variously from health policy documents, health policy makers, and oral health care service statistics. The relevance of the themes emerging was compared to the guiding principles of the conceptual framework.

6.6 DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK

The review of the literature on health policies uncovered critical issues that had to be considered when investigating the processes and outcomes that influence policy. The rationale for selecting specific research methods is based on the need to provide the best possible strategies that would have the most potential in answering the research question (Singh, 2005; Bowling, 2010). The theoretical basis for the conceptual framework was strongly supported with an extensive literature review.

The main requirement for the conceptual framework was that it should help to explain how health decisions relating to the oral health policy process are made, and also help to define the various external and internal influences that impact on these decisions. The framework also provides insight into the intra- and inter-personal dynamics that influence oral health decision-making (Tones and Green, 2004; Bowling, 2010).

A systematic approach was adopted in implementing the conceptual framework. It consisted of the following sequential stages:

1) Review of the literature and collation of the oral health policy process reports and recommendations within and outside Africa.
2) Collection of oral health policy and oral health policy related documents and resources for South Africa, Nigeria and the WHO African region.
3) Collection of qualitative data using in-depth and telephonic interviews; and quantitative data using structured self administered questionnaire. The latter was administered electronically via emails using the Google Drive feature of Google (http://www.google.com/drive/apps.html).
4) Qualitative and quantitative analysis of the data collected.

6.7 ETHICAL CONSIDERATIONS

The study protocol was subjected to ethical review and approval to conduct the study was obtained from the Senate Research Committee of the University of the Western Cape (UWC) (Approval number 12/6/37, Appendix 3).

Participants were telephoned and emailed with information about the study and were invited to participate in the research. Only those that agreed to participate were interviewed. Consent for the interview and the recording was obtained from all participants (Appendix 4). Participants

were assured that they would remain anonymous in any reports or documents written. Participation in the study was voluntary. Study subjects were only included in the study after informed consent was obtained (Appendix 5).

The guidelines on ethics for health research by the Medical Research Council, South Africa (MRC, 2002); the Department of Health, South Africa (DOH, 2004) and the National Ethics Board, Nigeria (NEC, 2005) were also used to further guide the research process.

The research methodology ensured that:

(a) freely given, informed consent was obtained from all subjects of the research,

(b) the rights, and welfare of the subjects involved in the research were adequately considered and protected at all stages of the research,

(c) storage and retrieval of information was the sole responsibility of the researcher,

(d) the research complied with the requirements of the Senate Research Ethics Committee of the University of the Western Cape, South Africa and the National Research Ethics Committee of Nigeria and that

(e) the research followed the principles outlined in the Helsinki Declaration.

6.8. LIMITATIONS OF THE STUDY

(1) Since health policy studies are context specific (Brugha and Varvasovszky, 2000; Badura and Kickbusch, 1991), it may not be feasible to generalize the findings.

(2) The study did not cover national policies emanating from oral health-related Associations and interest groups such as the South African Dental Association (SADA), Committee of Dental Deans (CODD), the Dental Technology Association of South Africa (DENTASA),

the Oral Hygiene Association of South Africa (OHASA) and the Dental Therapy Association of South Africa (DENTHASA) for South Africa; and the Nigerian Dental Association (NDA), the Nigerian Dental Therapists Association (NDTA), Association of Dental Technologists of Nigeria (ADTN), and the National Association of Dental Surgery Assistants (NADSA). These documents often address the specific interests of their professions, the possibility of expanding the scope of their work, their future roles and relationship with related bodies working to improve oral health.

(3) The study also did not cover the policies emanating from the regulatory bodies such as the Health Professionals Council of South Africa (HPCSA), the South African Dental Technicians Council (SADTC), the Medical and Dental Council of Nigeria (MDCN), the Dental Therapists Registration Board of Nigeria (DThRBN), and the Dental Technologists Council of Nigeria (DTRBN).

(4) The qualitative interviews combined both telephonic and face-to-face interviews. These two approaches could result in different levels of comfort for the interviewees and thus a mode effect on the response patterns (Szolnoki *et al.*, 2013). Such differences have been shown to be minimal (Vogl, 2013).

(5) There was relatively small number of respondents in the quantitative data collection which threatens the reliability of the interpretations of the data generated. However, this observation is not peculiar to the present study as it has been observed that response to postal and electronic questionnaires is usually poor (Edwards *et al*., 2009).

6.9 DISSEMINATION OF FINDINGS

(1) A summary of the study results and recommendations will be disseminated to the Departments of Health in all African countries, the WHO African Regional Office, WHO Collaborating Centres, health policy makers, oral health decision makers and other stake holders. It is hoped that they will be useful in supporting evidence-based policy planning, formulation, implementation and evaluation.

(2) At least three, peer-reviewed scientific journal publications will be produced:

- A comparative analysis of the content and context of oral health policies in South Africa and Nigeria
- Factors influencing the process, outcome and effective implementation of oral health policies in Africa: South Africa and Nigeria as case studies
- Oral health workers awareness of the national oral health policy: A study conducted in Nigeria and South Africa.

(3) In addition, efforts will be made to have the research findings published in the internal newsletters of the Department of Health, South Africa and the Federal Ministry of Health, Nigeria.

CHAPTER 7

RESULTS

7.1 GENERAL FINDINGS

7.1.1 The policy actors and stakeholders

The actors and stakeholders in the oral health policy process were similar for both South Africa and Nigeria. Figure 7.1

Figure 7.1 Actors and stakeholders in the oral health policy process

The actors in the oral health policy processes and their levels of support are presented below for South Africa (Table 7.1) and Nigeria (Table 7.2).

Table 7.1 Actors in the South African oral health policy process

High Opposition	Medium Opposition	Low Opposition	Neutral	Low Support	Medium Support	High Support
			Mass Media	Non-dental units in the Department of Health	Departments of Health	Universities & Research Institutions
			Political Leaders	Line Ministries/ Parastatals	Development agencies	WHO
			Faith-based Organizations	Donor Agencies	Regulatory Agencies	Dental Professional Associations
			Teachers			Dental Industries
			Non-governmental organizations			

Table 7.2 Actors in the Nigerian national oral health policy process

High Opposition	Medium Opposition	Low Opposition	Neutral	Low Support	Medium Support	High Support
		Nigerian Medical Association	Faith-based organizations	Line Ministries/ Parastatals	Other units of the Ministry of Health	Dentistry Division, Federal Ministry of Health
			Press	Donor Agencies	Universities and Research Institutions	WHO
			Community Leaders		Political Leaders	Dental Industries
			Teachers		Dental Professional Associations	National Primary Health Care Development Agency
						Regulatory Agencies
						Inter-country Centre for Oral Health

The assessment of the commitment of South Africa and Nigeria to national responsibilities for oral health, as recommended by the WHO (2005) is presented in Table 7.3.

Table 7.3 Assessment of commitment to national responsibilities for oral health: South Africa and Nigeria

	Assessment Item*	South Africa	Nigeria	Comments
1	Formulate national policy as a framework for regional and more local policy development	Yes	Yes	Both countries have National Oral health policies that emphasize regional and local policy development
2	Support the regions in their activities	No	Yes	Supply of dental equipment and materials to the regions
3	Establish simple effective methodologies to assist regions in their tasks	No	No	This has been neglected by both countries
4	Manage certain specifically national programmes or interventions	Yes	Yes	South Africa: Regulation of dental personnel; Nigeria: Regulation of dental personnel; World Oral Health Day
5	Address the oral health tasks that require regulation or legislation	Yes	Yes	In South Africa community water fluoridation has legislative approval but has still not been implemented
6	Monitor the implementation of national inter-sectoral, promotive, oral health programmes	No	No	Adequate attention not given to monitoring and evaluation of oral health programmes
7	Ensure that the determinants of oral health are addressed in all policy matters	No	No	*See* Singh 2005 and Singh *et al* 2010 for South Africa; Adeniyi *et al* 2012a, 2012b for Nigeria
8	Develop clinical practice guidelines through the application of evidence-based research findings and through commissioning research	No	No	Although Evidence-Based Dentistry is better established in South Africa and rudimentary in Nigeria, its use is mostly limited to the Academic teaching hospitals.
9	Ensure the provision of dedicated national funding for the education and training of appropriately skilled oral health personnel	No	No	The National oral health policies of both countries failed to indicate any specific budget recommendation for oral health.
10	Coordinate oral health information collection and dissemination from districts and provinces for planning, monitoring, evaluation and resource allocation	No	No	South Africa has a WHO Collaborating Centre for Oral Health located at the Faculty of Dentistry, University of the Western Cape, Cape Town; Nigeria has an Inter-country Centre for Oral Health located in Jos. Both Centres serve interests that are divergent and well beyond the national focus.

*Assessment items based on WHO (2005)

7.1.2 The oral health policy process

The oral health policy processes for both South Africa and Nigeria were assessed using the Dynamic Oral Health Policy Framework (WHO, 2005). The result is presented in Table 7.4.

Table 7.4 Assessment of the oral health policy processes for South Africa and Nigeria

	Item*	South African National Oral Health Policy Process	Nigerian National Oral Health Policy Process	Comments
1	Identification of the oral health needs	Yes	Yes	
2	Identification of all interest groups	No	Yes	The recent national oral health policy for Nigeria (FMOH 2012) identified and involved all interest groups.
3	Creation of working and reference groups	Yes	Yes	
4	Production of draft and final framework	Yes	Yes	
5	Policy implementation	No	No	There was no tangible evidence of successful implementation in both countries.
6	Monitoring and Evaluation	No	No	
7	Modification of the policy as necessary	No	No	The South African National Oral Health policy has not been modified since the 1999 draft was revised in 2001, although a national oral health strategy was produced in 2004. The Nigerian National Oral Health policy has 1995, 1999, 2009 versions which were never approved by the Federal Executive Council. The current version was approved in 2012.
8	Sustaining the policy process	No	No	There are no follow-up strategies that are being implemented to ensure that the policies are sustained.

*Items adapted from the Dynamic Oral Health Policy Framework (WHO 2005)

7.2 THE POLICY CONTENT AND POLICY ENVIRONMENT

7.2.1 The policy content

A comparative assessment of the contents of current national oral health policies of South Africa and Nigeria was done using a modified version of the State Oral Health Comparison Tool (Pekruhn *et al*., 2011). The result is presented in Table 7.5

Table 7.5 Comparative assessment of the contents of current national oral health policies of South Africa and Nigeria

	Assessment Item*	South African National Oral Health Policy & Strategy	Nigerian National Oral Health Policy	Comments
1	Leadership	No	Yes	
2	Surveillance/Data Collecting and Reporting	Yes	Yes	
3	Partnerships/Coalitions	Yes	Yes	
4	Programme/Policy Evaluation	Yes	Yes	The South African policy stipulates that "the National Department of Health is required to convene a policy review panel annually", the Nigerian policy was not specific on process.
5	Fluoridation	Yes	No	The Nigerian policy only contains statements advising that the Water and Sanitation unit should conduct assessments to determine fluoride levels in public water supply, to ensure that the levels does not exceed the optimum.
6	Sealants	No	No	
7	Increasing policy makers' and public awareness oral health	Yes	Yes	
8	Workforce (Recruitment, Retention and Licensure)	No	Yes	The South African national oral health strategy only had an omnibus statement that "Oral health human resources will form part of an integrated health human resource plan".
9	Dental Professional Education	No	Yes	(See comment in item 8)

	Assessment Item*	South African National Oral Health Policy & Strategy	Nigerian National Oral Health Policy	Comments
10	Non-dental professional education relevant to Oral Health (Medical doctors, PHC workers etc)	No	No	(See comment in item 8)
11	Integration of oral health into PHC and other health promotion programmes	Yes	Yes	
12	School/Community based programmes	Yes	Yes	
13	Access to care	Yes	Yes	
14	Safety net/Underserved areas	Yes	Yes	
15	Cultural competence of care	Yes	Yes	
16	Pregnant Women/MCHC services	Yes	Yes	
17	Early childhood	Yes	No	
18	The Elderly (Seniors)	Yes	No	
19	Tobacco and Alcohol control/Cancer prevention	Yes	No	
20	Disabled/Special Needs population	Yes	Yes	
21	Medicaid/National Health Insurance/Other Social Security Schemes	No	Yes	
22	Funding for Oral Health	Yes	Yes	
23	Oral and facial Safety/Contact Sports	No	No	
24	Food and Nutrition	No	No	
25	Infection Control	No	No	Although no specific mention of infection control, both policies alluded to the need for quality care.
26	Costing	No	No	There were no cost estimates for both the South African and Nigerian National Oral Health policies.

*Items modified from the State Oral Health Comparison Tool (Pekruhn *et al*., 2011).

7.2.2 Oral health policy environment

The dynamics of the oral health policy environment for both South Africa and Nigeria, as found in the study is presented in Figure 7.2. The essential factors for a successful oral health policy uncovered in this study is presented in Table 7.6

Figure 7.2 The oral health policy environment and process

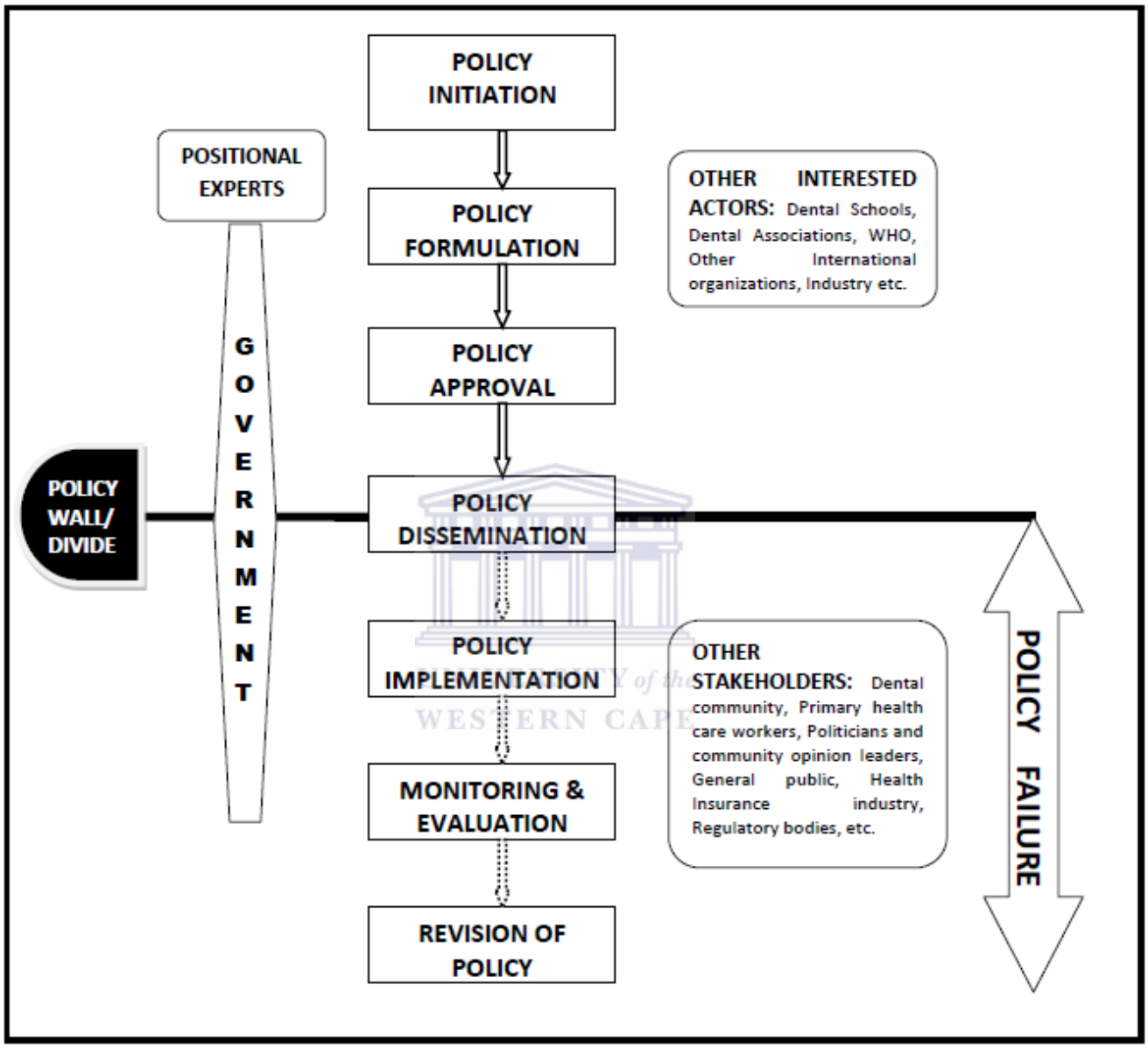


Table 7.6 Essential factors for a successful national oral health policy

PROBLEM RECOGNITION/ AGENDA SETTING	POLICY CONSTRUCTION AND APPROVAL
• Visionary Leadership from the oral health sector • Multi-sectoral approach, involving other sectors outside oral health • Involvement of professional bodies, regulatory agencies, line ministries, development agencies, non-governmental organisations, faith-based organisations, the industries and private sector • Involvement of political leaders, community leaders, traditional rulers, organised media, and other influential opinion leaders	• Availability of local capacity in health policy construction • Collaboration between different tiers of government • Liaison/linkage with others, including international agencies and organizations, for the sharing of experience on oral health policies • Integration of oral health into all relevant existing national health programmes (Primary Health Care, Health promotion, National Health Insurance Scheme etc)
POLICY IMPLEMENTATION	**MONITORING AND EVALUATION**
• Financial support and dedicated budget Collaboration between different tiers of government, and national and international agencies and Non-governmental organisations on oral health matters • Distribution of policy materials to all stakeholders • Coordination of oral health activities of different agencies to ensure integration, consistency, and collaboration • Development and distribution of materials on oral health to keep the policy on the agenda and sustain the implementation process • Provision of technical assistance for implementation of oral health promotion activities • Production and wide distribution of annual report on oral health activities	• Dedicated monitoring unit, committee or 'task force'. • Development of indicators for oral health awareness, oral health status, service utilisation, human resource development, and oral health research activities among others. It is advisable to incorporate these into existing, functional, data collection mechanisms. • Regular update of oral health data through periodic national oral health surveys and other epidemiologic methods. • Establishment of a reporting mechanism • Accessibility of oral health data to the profession and general public.

Box 1 presents an example of the effect of bureaucracy and lack of cohesion between the different levels of government, in the implementation of the Nigerian national oral health policy.

BOX 1. Scheme of service for dental personnel as an example of bureaucratic bottleneck

Background

In the course of this study, it was found that although the Nigerian National Oral Health Policy, recommended that "at least 50% of all PHC centres should have oral health personnel by 2015"; and that "at least 50% of the Local governments should have a dental clinic manned by a dental surgeon and other oral health personnel by 2015", there was no existing Scheme of Service for oral health personnel at the Local Government level in Nigeria. This in effect means that though the policy designated this expansion of dental services through local governments as one of the priority actions, no local government in Nigeria can legally employ any oral health personnel.

The Scenario

In 2003, a project sponsored by the Carnegie Corporation of New York under a grant to Obafemi Awolowo University, led to the establishment of the first dental facility to be administered by a Local Government Area (LGA) Administration in Nigeria - the Ife North Local Government Council of Osun State. The project although funded initially by the Carnegie Corporation of New York was handed over fully to the Ife North Local Government in 2009. The Ife North Local Government from inception provided all staff, except the dentists, which came from Obafemi Awolowo University. Specifically, The Local Government employed, for the clinic, two Dental Surgery Assistants/Technicians and a retired Dental Therapist on contract (the retired therapist was employed because it was difficult finding a therapist). Other relevant staff (Record Officers, Community Health Officer, Cleaners were redeployed from existing staff of the LGA. The Local Government also selected and sponsored a member of its staff (Mr. X) for training at the School of Dental Therapy, Enugu. He completed his training and was fully registered with the Dental Therapist Registration Board of Nigeria in April 2012. The Ife North Local Government then found he could not be re-graded to the salary level of a Dental Therapist because Dental personnel were not included in the Local Government Scheme of Service in Nigeria. The employed Dental Surgery Technicians could also not be promoted for the same reason.

This information was conveyed to the National Primary Health Care Development Agency (NPHCDA) through a letter dated May 9, 2012 and copied to the Office of the Head of Civil Service of the Federation and the Federal Ministry of Health. While the office of the Head of Service of the Federation in a letter dated 10th August, 2012, advised that the request be channeled to "the Office of the Vice-President of Nigeria, through the NPHCDA for appropriate action on this matter" (Appendix 6), the Federal Ministry of Health in another response dated 6th September, 2012 "advised that the Local Governments adopt the existing Scheme of Service for dental Therapist as approved by the Office of the Head of the Civil Service of the Federation in Circular Ref. No. B. 63279/T5/248 of 20th June, 2001 and the Schemes of service for use in the Public Service of the Federation revised to 2003 pending when a scheme of Service for dental Therapist would be approved for Local Government Administration" (Appendix 7).

Final Outcome

The Ife North Local Government has not accepted the advice to use Service Schemes outside the one approved for Local governments. The alternative for the trained dental therapist was to either transfer to the State service or seek employment elsewhere. He therefore applied for the transfer of his service to the State level in August 2013.

7. 3 QUALITATIVE STUDY RESULTS

Twenty-six respondents were interviewed from Nigeria and 10 from South Africa. These consisted of health policy makers, government decision makers, dental public health specialists, heads of dental professional organizations and regulatory agencies, and deans of dental schools.

7.3.1 Is oral health a major problem?

All the respondents considered oral health to be a major problem in their countries and gave various reasons for their assertion. It was also the unanimous impression of respondents that oral health has not been given the desired attention and that the level of awareness is abysmally low. Some of the responses will further illustrate the contentions of those interviewed:

> *"Yes, oral health is a major problem for a number of reasons. Firstly there is a very high level of untreated disease, vast majority of people in the country do not have access to available technology and basic PHC services. I think that oral health is still very much marginalized in government general policy and therefore oral health is often neglected in terms of budget and adequate resources, and I think that there is a general lack of awareness amongst the population about the threat to live that can result from oral diseases……."* (Respondent 5, South Africa)

> *".....from information we have from statistics and what we have done with several dentists in Nigeria, we have the understanding that over 70% of Nigerians have something to do with their oral health"* (Interviewee 26, Nigeria).

> *"I have moved round the country and I have noticed lopsidedness in the distribution of oral health professionals. Majority of those in the rural areas, even communities that may not even be remote, do not have access to good oral health facilities and care. Last December, I was in*

the North and I saw cases that I have never seen in the South. I saw fresh cases of cancrum oris…." (Interviewee 25, Nigeria).

Most of the interviewees linked the problem of oral health with low levels of oral health awareness. Further response in this direction included:

"The awareness is so poor that people at the helm of affairs do not know what oral health is all about. Patients report very late and all those who come are always for extraction, extraction and extraction." (Interviewee 1, Nigeria).

The possible divergence of views between the dental professionals and the general public, as to whether oral health is a major problem, is highlighted in the statement made by one of the respondents:

"From the perspective of the dentist, the answer will be yes but from the population that we are dealing with the obvious answer is no, and this is because the awareness is very very low" (Interviewee 9, Nigeria).

Almost all respondents from both South Africa and Nigeria alluded to the low level of oral health awareness cutting across the population.

"A lot of people have oral issues and whether they realize it or not is another matter" (Interviewee 6, Nigeria).

"……because studies show that Nigerians despite the fact that they have a lot of issues with their oral health, have the perception that they are fine, and this makes it quite a big issue for Nigeria" (Interviewee 26, Nigeria).

"Oral health is not engrossed in the population as one would have loved it to be, and my explanation is that I don't think there is enough awareness in the population, and where there is awareness my impression is that the awareness is not as broad as it should be" (Interviewee 4, Nigeria).

An average South African will tell you I don't need dental care because I don't have problems with my teeth ……" (Interviewee 4, South Africa).

"I think there is slight increase in oral health awareness maybe as a result of the fact that these days there are a number of us taking it upon ourselves whether as association or individually that we go into the communities to educate them on oral health care. On the government side, I don't think there is so much that has been done in that regard. May be with the recent launch of the national oral health policy, things may change" (Interviewee 10, Nigeria).

7.3.2 Recent noticeable changes in oral health

For both South African and Nigerian respondents, the common agreement was that there had not been any major changes in oral health in recent years. Respondents also felt that significant impact had not been made in oral health when compared with other sectors of the health care system.

"In the last 5 years, l am not aware of any major changes but prior to that there was an emphasis in terms of including oral health in primary health care……..but oral health has remained isolated from the wider community. (Respondent 7, South Africa)

"I have never seen any significant change in oral health between the time I was in school and now. We have seen a few dental clinics being opened here and there but there has not been any significant impact" (Interviewee 25, Nigeria).

7.3.3 The policy content

All the respondents found the policy content to be adequate. While majority of the respondents from South Africa felt the South African policy was comprehensive, three of the Nigerian respondents felt the Nigerian policy did not sufficiently cover the national Health Insurance Scheme as it pertains to dental procedures.

"In terms of the way the policy is written, I don't think that in itself requires any change in terms of approach, PHC approach, but I think it is a question of advocacy, of ensuring that it is higher on the agenda, and of linking oral health with key directors who have the ability to include that in the budget. And again in my short span in the Department of Health, I had the connections with people in general health promotion and the integrated school programme, I mentioned it but I wasn't there long enough to influence their decisions….." (Interviewee 5, South Africa).

"The policy is comprehensive enough, with expected targets". (Interviewee 1, Nigeria).

"The policy places a lot of attention on prevention and oral health promotion. One other major policy thrust is to promote oral health through the primary health care concept….." (Interviewee 26, Nigeria).

"I think to a very large extent, the policy addresses the key oral health issues in the country. It is actually targeted at prevention which gives room for awareness creation and early detection of dental conditions. It also tackles the manpower issues…." (Interviewee 19, Nigeria).

"It covered a lot but there are some critical issues that were omitted. The policy did not sufficiently cover the National Health Insurance Scheme as it pertains to dental procedures. Currently, dental diseases are regarded as secondary care and dental patients have to be referred by medical doctors. In which case, their dental treatment is already compromised from the onset. The private sector dentistry is also not adequately covered by the policy" (Interviewee 21, Nigeria).

7.3.4 The Roles of Actors and Stake Holders

7.3.4.1 The role of actors

All respondents recognised the importance of involving actors from the early stage of the policy development process, as opposed to bringing them in at the final stage to ratify what had already been drafted. It is also possible that non-participation in the processes may be responsible for the reluctance of some respondents to embrace the policy.

"I was privileged to be involved in the national oral health policy. A committee was set up and we had two or three meetings in Pretoria. I served on the fluoride committee. Others who were actively involved included Phillip Van Wyk, Neil Myburgh, Peter Owen and others, I am not particularly good at names….." (Interviewee 5, South Africa).

"We were involved at the last minute when we went for the stakeholders meeting to see what was drafted and how it can be applicable too. Then we were divided into different committees

and my group was just about the training and regulatory bodies. The involvement of stakeholders should have been more comprehensive instead of bringing us in at the final stage" (Interviewee 1, Nigeria).

7.3.4.2 Role of Stakeholders

One of the respondents from Nigeria believed inadequate involvement and participation of stakeholders could lead to lack of support and a resultant inadequate funding and implementation.

"……If all stakeholders are allowed to participate and align with the priority it helps to assure robust system of funding and implementation. Already I see a scenario that allow involvement of key stakeholders at all levels and that has implications for continuous funding and support for the policy" (Interviewee 26, Nigeria).

The necessity to continuously create platforms and opportunities for other stakeholders (outside dentistry) to connect and support the policy was emphasized by some of the respondents.

"Even in the Ministry of Health, it is not just the dentistry division that should be involved, even division like nutrition also handle issues that affect oral health. It is also nice to involve the Ministry of Education, Finance, National Planning Commission in issues like this. In addition to other parastatals like the National Primary Health Care Development Agency….." (Interviewee 26, Nigeria).

This is standpoint is further supported by the observation of one of the respondents:

"The commissioner for health in Jigawa State came to me, and said he was asked to send somebody for the stakeholders meeting in Abuja but there was nobody in oral health to send" (Interviewee 1, Nigeria).

7.3.4.3 The expected role of national dental associations

The strength and power that professional groups can exercise through advocacy, lobbying and education of members of the wider community was highlighted.

The role of the NDA is to continuously mount pressure on the governments to ensure the proper implementation. There are different ways we can mount pressure either by advocacy, lobbying or education (Interviewee 10, Nigeria)

"Other than the association level, I don't know how else we can get the government to wake up and realize that oral health is an integral and important part of general health" (Interviewee 10, Nigeria).

One setback to successful lobbying and advocacy by professional dental associations was identified by a respondent:

"As oral health care workers, do we have any ideas that we want to share with the political parties, and what are we doing to get the message across? We need to form ourselves into lobby groups to ensure that we get the benefits for our profession" (Interviewee 25, Nigeria).

7. 3.5 Policy dissemination

The policy dissemination was found to be very poor in both South Africa and Nigeria as illustrated by the views of respondents:

"Even hard or soft copy, I have never had the opportunity to read it. The policy needs to be launched in each of the states and Local Governments and not just in Abuja. There are so many people who do not even know that an oral health policy exists" (Interviewee 25, Nigeria).

"I am not aware of it, in fact, I am not aware of it ....." (Interviewee 20, Nigeria).

"I have not heard of it (national policy) at all. If there is something like that I think I am the only person at that level that should be involved. The other person who is junior to me has also not told me anything about it. If he is aware, he would have informed me" (Interviewee 12, Nigeria).

Some of those who have heard about it still felt the dissemination was inadequate or even misplaced:

"I have never heard about the oral health policy from someone who is not a dentist and I have also never had a copy". Like you know, in this part of the world, there is a lot of noise so to speak, you know what l mean? Government officials do a lot of things which never got to the common man. If I as a Consultant ordinarily would never have gotten to know about it, then you can imagine how bad the situation is……" (Interviewee 6, Nigeria).

"……He (Senate President) was invited to the best hotel in Nigeria to be conferred with this award. May be it would have been more effective had they gone to the lowest slum of Abuja to confer this award or carry out more dissemination. Yes, it is a nice idea to bring in the senate president but a big show in an Abuja slum would cost less than the hotel conferment and achieve more for oral health. The money would have been put to better use by using it to buy tooth pastes and tooth brushes for the poor people" (Interviewee 6, Nigeria).

"It is all paper work, nothing! You will be surprised that even this last one that was recently launched……. we were invited to review the draft. I went to Abuja, we participated, even the therapists and some other bodies who came, and we actually put all our facts together, and they said they would make the final copy. I have not received a copy" (Interviewee 7, Nigeria).

"The dissemination was better many years back but it seems the tempo has faded over the years……." (Interviewee 6, South Africa).

It was felt that the Ministries of Health could do better in ensuring the implementation of the policies:

"What they had in times past was a Chief Dental Surgeon, even at that it was just practically on paper. The ministry does its own thing. ……." (Interviewee 10, Nigeria).

"I don't know the politics at the Ministry that is working against the implementation of the oral health policy….." (Interviewee 7, Nigeria).

"The earlier policies did not come down to end-users who can implement them. They were not even approved by any government department. After launching, the follow ups are never seriously done" (Interviewee 13, Nigeria)

7.3.6 Policy implementation

7.3.6.1 Official implementation plan

There was no official implementation plan for both Nigeria and South Africa, and even if available, it was not known to the respondents:

"I don't think there is an official implementation plan but rather dealing with day to day crisis" (Interviewee 5, South Africa).

"The first thing is that people who are supposed to be implementing the policy should be aware of it, and be well informed about the roles they are expected to play. Then we should have baseline data for monitoring and also for comparing progress among states and local governments" (Interviewee 16, Nigeria).

"There are oral health programmes which are being implemented, and not based on the policy content or related to it in anyway….." (Interviewee 3, South Africa).

"I am not aware. Apart from myself, I am also not aware of any other person from this State that was in Abuja for the launching of the policy. So nobody from the State Ministry of Health was involved in the post-launching meeting where the implementation may have been discussed" (Interviewee 21, Nigeria).

7.3.6.2 Barriers to implementation

Several barriers to the effective implementation of the policies were identified by respondents. These included lack of focal persons for oral health in some States, paucity of data with which to convince stakeholders, political leaders with poor knowledge of oral health, and general lack of interest in oral health.

"Even if my state has the policy, they don't have a focal person that can handle it. Even if the offices are created, they don't have the personnel that can occupy the posts (Interviewee 1, Nigeria).

"When you want to implement something that people are not aware of, you need to have evidence to convince people. If it is something that is popular, the approach may be different. Oral health is something that requires that you sway people to your own side, and that can only be done if you have convincing evidence. It is easier to lobby with evidence……" (Interviewee 1, Nigeria).

"……when we have political leaders who have little or no interest in oral health, and who do not perceive oral health as important, it will definitely slow things down" (Interviewee 2, Nigeria).

Further reasons why oral the health policies fail to attain the support for implementation is explained in the following statement:

"We need something that should work for the people and something that people will be part of. If you don't get people's buy-in, if they are not part of it, if they are not informed, nobody is going to carry it out because there is no awareness" (Interviewee 4, Nigeria).

"People come to see the dentist mostly for pain relief. In my 20 years of practicing in ……state I can say that I have seen just about three patients that came in to say that they needed routine oral examination. The first one I saw was in 1994, I was very surprised to see someone walk in for routine checkup……" (Interviewee 9, Nigeria).

"As for implementation, I can't comment on it because as it is now I know there was a launch but after the launch we have not heard much. So I wouldn't say there is anything yet on implementation. The document is not really in the hands of many oral health practitioners who should be the ones that would be involved in carrying out this eventually. Most people are not even aware of the existence of this policy and the document is still staying in their office in Abuja. That is my idea of it" (Interviewee 16, Nigeria).

"The availability of the policy document itself has been a problem. I got a copy because I know this interview will be coming up….." (Interviewee 16, Nigeria).

7.3.6.3 Failure of Previous Policies

The four previous policies in Nigeria (1994, 1999, 2005, 2009) were so poorly disseminated that most practitioners and even Deans of dental schools did not know of their existence, as explained in the statement below:

"The impression we have been given is that there had never been an oral health policy and that we are having one for the first time in 2012" (Interviewee 16, Nigeria).

Another insight offered by those interviewed in both countries is that those involved in the policy process are satisfied with the production of a document and never really see the futility of having a policy that is not implemented. The important issue is that they were given the task of producing a policy document and they feel the assignment is completed with the compilation of the document.

> *The most important thing is that the policy is now there. It would have been worse, if there is no policy"* (Interviewee 15, Nigeria).

7.3.7 Data collection, monitoring and evaluation

The paucity of data with which to monitor progress was emphasized by respondents from both South Africa and Nigeria. One respondent attributed this to the value system for record keeping, noting that records are not normally kept.

> *"I am not aware of any monitoring being done, I am not aware"* (Interviewee 10, South Africa)

> *"I believe the government, the ministry of health, and the oral health professionals have a whole lot of role to play in making sure that the policy is not only implemented but monitored and evaluated, with possible feedback, so that we have a complete cycle"* (Interviewee 25, Nigeria).

> *"Our value system for record keeping will have to be improved. We do not keep records and often have nothing with which to compare. We need to look for evidence from epidemiology and have some data to work with. A national oral health survey can act as the baseline for further data collection"* (Interviewee 4, Nigeria).

"We currently cannot get reliable data on how many patients or how many procedures. A few provinces reported this for some time but I don't think it is still being done. If it is still being done, it is not standardized and it will be difficult to compare activities in one province with another" (Interviewee 3, South Africa).

I don't think we have any structures on ground to effectively monitor the implementation of the National oral health policy. In order to audit the programme, we would need people who are versed in management. We also need to carry our medical colleagues along. We need to incorporate them to gain their support" (Interviewee 10, Nigeria).

"We need baseline data before we can start talking about monitoring and evaluation. This is currently not available for almost all parts of the country. The first step therefore should be to collect the necessary baseline data with which the implementation can be monitored" (Interviewee 20, Nigeria).

"Dental caries and periodontal disease should be the ideal measures for monitoring implementation. However, how can genuine monitoring take place when there is no baseline data for dental diseases? In Edo state, we only have data for the Local government where the university is located. It is not available for other areas" (Interviewee 21, Nigeria).

7.3.8 Policy implementation and the oral health workforce

7.3.8.1 Leadership and oral health policy implementation

It was the common opinion of respondents from both South Africa and Nigeria that dentistry should be represented at the Ministry/Department of health by very senior people whose opinions can be respected at the policy level.

"The people that are in charge are not senior enough, when they make suggestions it is ignored. We need to have specialists as leaders so that they will have the capacity to defend their suggestions and face emerging challenges" (Interviewee 10, South Africa).

"The medical leaders have postgraduate qualifications, Masters or Fellowship and so have an edge over the dentists who just have the BDS and attained their positions on promotion. Dentists with postgraduate qualifications do not work in the state but prefer the teaching hospitals, and that is the problem" (Interviewee 7, Nigeria).

"In the Universities because we have equal qualifications we rob shoulders with our medical counterparts but the situation in the Ministries is that the dentists are not well qualified compared to their medical counterparts. So in a case where your chief Dental Surgeon is not even well qualified, what do you expect?" (Interviewee 7, Nigeria).

"In ……. State the Chief Dental Surgeon retired and things changed when a dental consultant was appointed into the Ministry to head dentistry. New clinics were opened and funding improved mostly due to the respect that they had for the new Consultant dentist" (Interviewee 14, Nigeria).

The interviewee went further to say:

"Now we have a Deputy Director for Dentistry in the Ministry. Before now, there was nothing like that. It was created last year……" (Interviewee 14, Nigeria).

The issue of seniority was also linked to postgraduate qualifications and to authority and power by many of the respondents:

"Some of the leaders in dentistry are subdued by their medical colleagues because they are not specialists, they are not Consultants, that is the way I see it. In ..... State, …….used to be the Chief Dental Surgeon he had only BDS, the one there now also has only BDS, and in the medical line they have consultants. Definitely, their medical counterparts are senior, so they lack the power to move things or make things happen" (Interviewee 7, Nigeria).

"Definitely we need a senior dentist. The highest level that a dentist has reached in the State service is Deputy Director of Medical Services" (Interviewee 4, Nigeria).

There are also cases of dentists who work in the Ministry of Health and have moved to areas that are 'medical, and almost completely outside dentistry. One of the respondents said:

"We have a dentist in the Ministry with postgraduate qualification who is in charge of Avian Flu and works mostly outside dentistry. We can therefore say that dentistry has no representation or leadership in the Ministry of Health" (Interviewee 9, Nigeria).

There was consensus among both South African and Nigerian respondents that leadership is a crucial issue in the oral health policy process. One respondent put this succinctly:

Identification of the leadership that will drive the policy is a major issue (Interviewee 7, Nigeria).

Another respondent had this to say on the issue:

"I have not seen any sign of effectiveness of oral health policy in this country. How do you implement policy when you don't have the personnel to make it go down the system?" (Interviewee 12, Nigeria).

7.3.8.2 Employment policy

Some of the respondents from Nigeria also offered insight into the discriminatory employment policies of some State governments which has made it impossible for employed dentists who are not indigenes of the State to play any role in policy implementation.

> *"We don't have dental surgeon in the Ministry, only in the hospitals. None of us are indigenes, so they want us only in the hospitals. If they move you to the Ministry, you become an administrator and part of decision-making process, which they don't want"* (Interviewee 12, Nigeria).

> "*Dentists are roaming the streets and are not employed there are no spaces for residency training. Some are in private hospitals where they are paid pittance. The state governments and local governments are not doing what is expected of them"* (Interviewee 7, Nigeria).

7.3.8.3 Training of Oral Health Personnel

One interviewee from Nigeria noted the discrepancy between theory and practice, and portrayed the levity and insincerity with which oral health matters are handled by some administrators:

> *"They used to have a training programme for dental surgery assistants, but the last set they trained are now 28 years in service. They still put it on paper that the training programme exists. There was a time I had to go to the Ministry, met the permanent secretary Ministry of Health, I was planning to paint the scary picture of oral health in the state. The man was not interested. He just told me 'My friend, go and do your work. The State is aware of what you are saying'. This was about 20 years ago and the situation has not changed. When they say they are launching a programme, it is just for the international community and not for us here….."* (Interviewee 12, Nigeria).

7.3.8.4 Maldistribution of Oral Health Workforce

One of the interviewees noted the maldistribution of dentists and other oral health care professionals in the different regions of Nigeria.

> *"Most of the dentists are in the Southwest and is nice we now have dental schools in the Northeast. That affects awareness, engagement, availability of services, access to services and others, and I think some deliberate measures have to be taken to ensure that we have better distribution"* (Interviewee 26, Nigeria).

One of the solutions recommended was the training of ancillary oral health staff:

> *"…….Another thing is that while we work with dentists we also need to work with low cadre oral health staff that are easier to train as a means of reducing the maldistribution in the country"* (Interviewee 26, Nigeria).

7.3.8.5 Urban-Rural Challenges

Among the urban-rural challenges identified were lack of good roads, electricity and water which discourages dentists from working in the rural communities. Some States in Nigeria were also said to be reluctant to employ oral health staff who are non-indigenes of the State.

> *We have serious challenges because some of the centres that the State wants us to take on have no roads linking them, not to talk of electricity or water. If we post any dentist there it is unlikely that he or she will stay or even visit regularly"* (Interviewee 14, Nigeria).

> *"We have 18 General Hospitals and out of these 7 of them have dental units under them but there has never been any dentist to man them for the past 5 years. So we only have dentist in the Specialist Hospital, (Lafia) and Federal Medical Centre. Whenever you try to push across*

the issue of adapting the national oral health policy in the State and implementing it, they don't do anything about it, probably because there is no dentist in the State who is an indigene to work with the administration. That is what I assume. They are not comfortable with giving the position of Head of Dental Services, in the State Ministry, to a dentist who is not an indigene of the state." (Interviewee 15, Nigeria).

7.3.8.6 Need for teamwork

The need for teamwork was emphasized:

"We need all the other para-dental professions. I don't know what the right terminology should be and I don't want to offend anybody. The professions within dentistry should work together….." (Interviewee 4, Nigeria).

Some respondents also hinted that dentists in the Ministries may not invite those in the hospitals who may be better qualified to offer support:

"One thing I know is that you may be a consultant in the clinic and not have a voice in administration because you are not invited for support by the Ministry of Health" (Interviewee 19, Nigeria).

7.3.9 Overall support for the policy

There was variation in response between the two countries to the issue of overall support for the national oral health policy. While all the respondents from South Africa considered the support for the national oral health policy to be very weak, opinion was divided among the Nigerian respondents. Some considered the support as very strong while others think it is weak and inadequate.

7.3.9.1 South African national oral health policy

Many reasons were adduced for the weak support for the South African national oral health policy. One of these is that the policy was generated without an extensive participatory process, and also that it was not keyed into the general health implementation plan.

> *"I don't think so but I can think of some reasons. One of the problems is that it was generated without a really extensive participatory process. ……..there is not much support for it which comes back to the fact that oral health is not part of the general health implementation plan"* (Interviewee 8, South Africa).

7.3.9.2 Nigerian national oral health policy

The situation in Nigeria appears to be similar to that of South Africa in terms of integration into PHC, and as one interviewee stated:

> *"We need to reach out to other health professionals for support and the PHC agency should be in the centre of the policy implementation. The Ministry of Health should liaise with the dental schools to see how evidence can be generated, assist in lobbying and advocacy"* (Interviewer 1, Nigeria).

7.3.9.3 Ownership of Policy

Some interviewees did not have a sense of ownership of the policy and one of the interviewees put it succinctly:

> *"The oral health policy that we are talking about is to the best of my knowledge a federal government issue. I was not invited to the launching". I got a copy this week but I have not had time to scrutinize it"* (Interviewee 10, Nigeria).

7.3.9.4 Apathy from Dental Professionals

The feeling of apathy was easily discernible from some of the responses. There was also suspicion one interviewee who felt that the development of the policy was a gimmick to collect money from the WHO.

> *"Are they doing anything? They are using it to collect money from World Health (WHO) and not for the country"* (Interviewee 12, Nigeria).

> *"I am not aware of anything. I heard about the launching of the national policy but I knew that is just on paper…."* (Interviewee 20, Nigeria).

7.3.9.5 Opposition to the policies

> *"While we may not have groups that openly oppose the oral health policy, there may be lethargy to implementation because there are so many competing interests for limited resources"* (Interviewee 2, Nigeria).

7.3.10 Funding the policy

7.3.10.1 Evidence of Inadequate Funding

The general consensus of the interviewees from both South Africa and Nigeria was that oral health is underfunded.

> *"The funding is ridiculous and it is obvious in what the dentists, therapists, and technologists use for their day to day services. Instruments are in short supply and all the materials are limited. Dentistry in any of the States is grossly underfunded. The equipments are just obsolete".* (Interviewee 4, Nigeria).

"Funding is grossly inadequate, the clinics are still running on very old and archaic equipment, and the patients are paying out of their purse, 100%, even in government hospitals" (Interviewee 18, Nigeria).

7.3.10.2 Reasons for Poor Funding

Many reasons were adduced for the poor funding of oral health and some of these are illustrated by the following responses from the interviewees:

……. I just feel that oral health is hugely marginalized because there are no people with strong etiquettes or they do not have the credibility to position oral health where it should be within the overall health system. There are incredible opportunities for oral health to be linked to the policies or implementation plans that enjoy adequate funding, whether it be non-communicable diseases or HIV. I don't believe the issues are brought to the attention of senior executives of the Department of Health, and I think we should consider that" (Interviewee 5, South Africa).

"The first thing is funding and the second thing is the political leadership. Without leadership, oral health will not receive priority funding because of the other competing programmes. They will rather take it to ENT, or Vaccines or TB…." (Interviewee 3, South Africa).

We have to get the opinion leaders to first realize that oral health is important before they can support the funding. When they are convinced that oral health is paramount, the funding and support will be easier (Interviewee 10, Nigeria).

7.3.10.3 Paying for Oral Health Care

Some of the measures suggested for reducing the burden of payment for oral health include; incorporating oral health into the National Health Insurance Scheme at the primary level, integrating

oral health into PHC services and ensuring that all Local governments/Districts are committed to funding oral health.

> *"National Health Insurance Scheme for now is for the HMO's (Health Maintenance Organizations) and they are the one making all the money from the scheme. Seven out of ten people will tell you they want their teeth removed because that is the cheapest option. With the NHIS, we need to incorporate oral health so that people will be able to afford better care. When anybody calls me to see any patient on NHIS, I tell them I am not interested. The reason is, I am a professional, I have to be appropriately remunerated. The HMO's need to do something realistic and shouldn't ask for a service only to pay pittance"* (Interviewee 25, Nigeria).

> *The directive should come from the National level that States and local Governments should have autonomous fully funded units for oral health. In the Ministry, we have Infection Diseases Unit, NCD unit etc. but oral health is usually subsumed under another unit* (Interviewee 7, Nigeria).

> *"If all the 774 local governments in Nigeria are committed to funding dentistry, it will make a lot of difference".* (Interviewee 11, Nigeria).

A general agreement among respondents was that the ability of patients to pay for dental services will affect the implementation of the policies.

> *"High level of poverty and unemployment will have a strong effect on the implementation of the policy. Somebody who is hungry cannot be thinking of oral health"* (Interviewee 17, Nigeria).

This assertion was corroborated by the observation of another respondent:

"It has always been extraction and extractions. In the general hospital where I work, and even in private hospitals, 9 out of every 10 patients can only afford to pay for their teeth to be extracted. It is the only option they can afford" (Interviewee 18, Nigeria).

7.3.10.4 Separate Budget Line for Dentistry

Majority of the respondents from both South Africa and Nigeria advocated a separate budget line for dentistry as a way of ameliorating the poor funding that has characterised the oral health.

".....while we need to ensure that oral health is integrated into other relevant programmes, it must have its own separate budget line" (Interviewee 8, South Africa).

"I am afraid this will be a major problem for the policy (That is absence of a separate budget line). *The document is robust on paper but usually the budget is not good enough for the framework of the policy"* (Interviewee 21, Nigeria).

Some respondents also think the launch of the new oral health policy in Nigeria has started to show positive effects in terms of funding:

"A key thing that has happened to this policy which has not happened to other National policies is that for the first time, in 2012, the National Assembly created a budget line for the national oral health policy and so is a landmark achievement for a budget line to be created with some budget allocation for the policy. That in itself ensures continuous institutional support. That is a big one at that……" (Interviewee 26, Nigeria).

This view was confirmed by another respondent:

"There has been a tremendous improvement in the funding of oral health compared to the previous financial allocations for oral health before the policy formulation" (Interviewee 8, Nigeria)

7.3. 11 Views on links between oral and general health

7.3.11.1 Link to General Health

Oral health was seen as inextricably linked to general health, and the mouth as the gateway to the body.

> *"We also see the importance of oral health to other aspects of health. I mean the centrality of oral health to the total health is also what we appreciate. The mouth as gateway..... If you don't get it right with the mouth, you might not be able to get it right with other aspects of the body. Oral health is linked to the NCD's and can also link to other degenerative diseases, talk about diabetes and all that……"* (Interviewee 26, Nigeria).

> *"Majority but not all of the population still go first to their medical doctor for oral problem before being referred to the dentist or dental hospital. Many don't know that there are people who specialize in taking care of the oral cavity until they are referred by the medical doctor to the dental hospital"* (Interviewee 9, Nigeria).

Another respondent had similar reasoning and offered a possible solution:

> *"The issue is not getting the medical doctors to play a role but it is about getting them to allow the dentists play their roles. Medical students need to have some exposure in oral health so that they have some appreciation of dentistry before graduating. If we plan to have within the next 5 to 10 years more medical doctors who are aware of dental issues, then these doctors will be better positioned to appropriately refer patients who have dental problems"* (Interviewee 16, Nigeria).

The link between oral health and other health areas was identified in the interviews:

> *"Yes. Like we see many cases of oral manifestations of HIV/AIDS. My State ranks second in the country in terms of prevalence of HIV/AIDS. We also have a lot of RTA (Road Traffic*

Accident) cases. There is a lot of Okada vehicles (Motorbikes), the roads are bad….. and they are like death traps" (Interviewee 15, Nigeria).

7.3.11.2 Schools Oral Health Programme

Although the School Oral Health programme is a major thrust of both the South African and Nigerian national oral health policies, respondents did not see any impact of the policies. Some respondents felt the situation was better before the oral health policies came into effect:

"I schooled in Lagos in my early years. I remember that we had school inspectors that go around schools. They look at our uniforms, our teeth and tell us why we should brush, what we should eat and so on. That system no longer exists today" (Interviewee 13, Nigeria).

7.3.12 Adapting the policies at provincial/state and district or local levels

None of the 36 States in Nigeria including the Federal Capital Territory has any existing oral health policy. Although the national oral health policy for Nigeria expected that Oral health units should be established at the Local Government level comprising a Dental surgeon, Dental therapist and Dental nurse, none of the 774 local governments has established such a unit. Similarly, Oral Health Units are to be established at the State level headed by a Chief Dental Surgeon and a full complement of oral health personnel. The responses from the Nigerian interviewees did not reflect any indication or readiness on the part of the States or Local governments to comply. The responses include:

"The present government of the State does not have any plan to formulate any policy for oral health" (Interviewee 9, Nigeria).

"The issue is political; Lagos state ministry of health for now has no clean-cut division or department for dentistry that can coordinate the formulation or implementation of any State oral health policy" (Interviewee 10, Nigeria).

"I got a copy of the NOHP and submitted to the Commissioner of Health, it is with them. The political will is not there in the State and nobody in the Ministry seems to be interested, in spite of our advocacy" (Interviewee 15, Nigeria).

"There is no plan for an oral health policy for Lagos state because there is no forum where the dentists in Lagos state will come together and have an input into oral health policy for the State. The Nigerian Dental Association at the State level seems to exist in isolation with little or no influence on the state governments" (Interviewee 18, Nigeria).

Three of the nine provinces in South Africa have written oral health policies.

7.3.13.1 Political leadership and oral health

The support and commitment of the political leadership, when obtained, can greatly enhance the funding of oral health and the quality of oral health services that will be available to the population.

"The former governor had a dentist who was from this state but had his practice in Lagos. The dentist suggested to him that he should improve dentistry in the State and have his treatments within the State instead of travelling to Lagos regularly for dental treatment. The governor took the advice and changed the status of dentistry in the State by committing a lot of funds into oral health. All the old and archaic dental Chairs, equipment and instruments were changed for modern ones, and dentistry was granted autonomy in the control of its generated funds……" (Interviewee 9, Nigeria)

Another political leader in the same State did not extend the same support to dentistry:

"The current governor ……he was commissioner and did not support dentistry. ……..nothing is really forthcoming because I don't think he has any interest in dentistry….. He has never shown any interest since I knew him over 20 years ago" (Interviewee 9, Nigeria).

7.3.13.2 The concept of Oral Health Champions and Oral Health Ambassadors

This was recently introduced in Nigeria to ensure political support for oral health and most of the interviewees felt it was a positive move for dentistry.

> *"We have the political will and support with the acceptance of the president of the Senate to be the oral health champion for the country. We also saw the highest level of political support with approval at all levels in government up to the Federal executive council. The support for this policy is excellent because it took on board all the stakeholders"* (Interviewee 26, Nigeria).

> *"That is one of the things that can help us if we are able to get such point people and we are able to convince them, then we can be able to use their influence and their clout to spread the gospel about oral health"* (Interviewee 15, Nigeria).

> *"The involvement of the Legislature is paramount because of the issue of Allocation of Resources for implementation of the policy. Meanwhile, the designation of the President of the Senate as the National Oral Champion and some of the Senators as Oral Health Ambassadors of their respective States have expanded the frontiers of Oral Health promotion in Nigeria and this will certainly enhance effective implementation of the policy"* (Interviewee 8, Nigeria).

While the support of the Senate President was considered positive for dentistry, some interviewees expressed their reservation:

> *"The level of involvement of the politicians is very important. But, looking at the way things happen in Nigeria, political factors can either accelerate or delay implementation"* (Interviewee 22, Nigeria).

"My prayer is that the policy will not be abandoned as it had been done in the past, and that this one will enjoy the support of all stakeholders. The number 3 man, that is the Senate president, throwing his weight behind it as Oral Health Champion would give it enough success that is required, but my prayer is that when he leaves office it will not just end with the Senate President's tenure" (Interviewee 17, Nigeria).

7.3.14 Recommended future actions

The recommendations for future actions included setting up a task team to ensure that oral health is put on the agenda; strengthening the implementing Ministries, Departments and Units; and government taking the lead.

"I would recommend that a task team be set aside to ensure that it (oral health) is put on the agenda, and that what is on the policy document is implemented" (Interviewee 5, South Africa).

"Strengthen the implementing ministry in terms of manpower, and mobilize at the different levels of government to get a lot more attention for oral health, so that those sitting on the fence or against will come on board and support oral health" (Interviewee 2, Nigeria).

"The policy is the instrument of government and government must take the lead" (Interviewee 25, Nigeria).

"*We must have within the ministries of heath in each state funded department that should handle issues relating to dentistry. That way it will be a lot easier to control activities relating to dentistry"* (Interviewee 10, Nigeria).

7.4 QUANTITATIVE STUDY RESULTS

7.4.1 SOUTH AFRICA

Of the 35 questionnaires administered, only 15 were returned giving a response rate of 42.9%.

7.4.1.1 Demographic details

The mean age (±SD) of the respondents was 44.6±10.0 years (range 28 to 56 years). Six (40.0%) were females and 9 (60.0%) were males. The official positions were Professor 1 (6.7%), Head of clinical unit 2 (13.3%), Community Dentistry Specialists 4 (26.6%), Dental Therapist 1 (6.7%) and Dentist 6 (40.0%). All the respondents worked in Dental School/Oral health centre (100.0%) and were all involved in dental public health. The places of primary practice were rural 1 (6.7%) and urban 14 (93.3%). The years since graduation ranged from 7 to 32 years and the mean number of years of active practice (±standard deviation) was 19.9 (±10.3) years. The highest qualifications were Bachelor's degree 1 (6.7%), Dental degree 8 (53.3%), Master's degree 4 (26.7%) and Doctoral 2 (13.3%).

7.4.1.2 General issues on oral health policies

Only 2 (13.3%) of the respondents had played any role in the development and implementation of the current national oral health policy/strategy document for South Africa. Thirteen (86.7%) had never participated in continuing education courses, seminars or workshop on oral health policy. Three (20.0%) said they were highly enthusiastic in supporting the national oral health policy, 6 (40.0%) were enthusiastic, 4 (26.7%) were not enthusiastic while 2 (13.3%) were undecided.

The findings on other general issues are presented in Tables 7.7 (South Africa)

Table 7.7 General issues on South African oral health policy/strategy

	QUESTION	YES		NO	
		n	%	n	%
1	Are you familiar with the South African Oral Health Policy document?	12	80.0	3	20.0
2	Do you have a copy of the South African Oral Health Policy document?	9	60.0	6	40.0
3	Are you familiar with the South African National Oral Health Strategy document?	12	80.0	3	20.0
4	Do you have a copy of the National Oral Health Strategy document? (n=12)	6	50.0	6	50.0
5	Have you ever participated in the process of formulating an oral health policy either at the National/Provincial/ State/District or Local government level?	2	13.3	13	86.7
6*	Have you ever participated in the monitoring and evaluation of the National Oral Health Policy either through meetings, periodic reports, site visits, service statistics or satisfaction surveys?	6	40.0	9	60.0
7	Are you currently implementing an Oral Health policy in your Province/State/District/Local Government/Establishment?	3	20.0	12	80.0

*****For Question 6, the 'No' and 'Don't know' answers were merged.

Responses to other questions relating to the implementation of the South African oral health policy and strategy is presented in Table 7.8

Table7.8 Implementation of South African oral health policy and strategy

S/ No	Question	Strongly Disagree		Disagree		Un-decided		Agree		Strongly Agree	
		n	%	n	%	n	%	n	%	n	%
1	Oral health is a major problem in South Africa	0	0.0	0	0.0	0	0.0		0.0	15	100
2	There have been major improvements in oral health delivery in South Africa over the past few years	0	0.0	6	40.0	0	0.0	6	40.0	3	20.0
3	The budgetary provision for oral health is generally poor in South Africa.	0	0.0	3	20.0	0	0.0	6	40.0	6	40.0
4	Oral health is fully integrated into Primary Health Care (PHC) in the country	0		9	60.0	3	20.0	3	20.0	0	0.0
5	Having a National Oral Health policy/Strategy is very important for the improvement of oral health in South Africa.	0	0.0	0	0.0	2	13.3	0	0.0	13	86.7
6	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy in South Africa	3	20.0	6	40.0	0	0.0	6	40.0	0	0.0
7	Lack of capacity at an individual level is a major challenge in implementing oral health policies in South Africa	0	0.0	0	0.0	0	0.0	8	53.3	7	46.7
8	Lack of capacity at local government, district or sub-district levels is a major challenge in implementing oral health policies in South Africa	0	0.0	0	0.0	0	53.3	8	53.3	7	46.7
9	Lack of communication and poor networking between policy makers and implementers is a major drawback for the National Oral Health Policy/Strategy	0	0.0	0	0.0	0	0.0	6	40.0	9	60.0
10	Non-involvement of oral healthcare recipients in the development of policies and planning of oral health care delivery is a major issue in South Africa	0	0.0	0	0.0	6	40.0	7	46.7	2	13.3
11	There is failure to integrate research findings into the oral health policy development process	3	20.0	6	40.0	0	0.0	3	20.0	3	20.0
12	The implementation of the National Oral Health Policy/Strategy has been very effective and efficient	6	40.0	6	40.0	3	20.0	0	0.0	0	0.0
13	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy	3	20.0	7	46.7	2	13.3	3	20.0	0	0.0
14	Additional policy action, such as operational guidelines, will enhance the implementation of the National Oral Health Policy/Strategy	0	0.0	0	0.0	2	13.3	9	60.0	4	26.7
15	Administrators in hospitals and Departments/Ministries of Health have been very enthusiastic in supporting the National Oral Health Policy/Strategy	6	40.0	3	20.0	6	40.0	0	0.0	0	0.0
16	Deans of Dental Schools/Dental educators have been very enthusiastic in supporting the National Oral Health Strategy	3	20.0	8	53.3	1	6.7	3	20.0	0	0.0
17	Medical (non-dental) colleagues have been very enthusiastic in supporting the National Oral Health Strategy	4	26.7	9	60.0	2	13.3	0	0.0	0	0.0
18	The prospect of developing a stronger oral health policy/strategy for South Africa within the next 5 years is very strong.	4	26.7	7	46.7	1	6.7	3	20.0	0	0.0
19	Dental professional interest groups in the country have effective lobbying mechanisms, through which they make tangible contributions to Oral Health.	3	20.0	7	46.7	3	20.0	2	13.3	0	0.0
20	Information and data provided by dental professional interest groups in the country have helped in formulating and defending Oral Health Policies	6	40.0	5	33.3	1	6.7	3	20.0	0	0.0
21	National and international health goals have contributed to the development and sustenance of oral health policies in South Africa.	3	20.0	0	0.0	6	40.0	4	26.7	2	13.3

7.4.2 NIGERIA

Of the 42 questionnaires administered, only 28 were returned giving a response rate of 66.7%.

7.4.2.1 Demographic details

The mean age of the respondents (±standard deviation) was 46.1 (±7.6) years (range 28 to 56 years). Eighteen (64.3%) were females while 10 (35.7%) were males. The official positions were Professor 4 (14.3%), Lecturer 14 (50.0%), Consultants 4 (14.3%) and Dentists 10 (35.7%). The places of work were University 14 (50.0%), Teaching hospital 12 (42.9%), general hospital 4 (14.3%) and Research centre 2 (7.1%); (Some respondents work in two places hence percentage more than 100). The places of primary practice were Suburban 6 (21.4%) and urban 22 (78.6%). The years since graduation ranged from 15 to 31 years and the mean number of years of active practice (±standard deviation) was 23.0 (±5.3) years. The highest qualifications were Bachelor's degree 2 (7.1%), Master's degree 4 (14.3%) and postgraduate fellowship 22 (78.6%). The types of practice setting were Dental education 10 (35.7%), Hospital 12 (42.8%), Ministry/Non-hospital setting 2 (7.1%), Private 2 (7.1%) and others 2 (7.1%).

7.4.2.2 General issues on oral health policies

Twenty-two (78.6%) of the respondents admitted they had never played any role in the development and implementation of the current national oral health policy document for Nigeria. Four (14.3%) were workshop participants and 2 (7.1%) were facilitators at a workshop. Twenty-five (89.3%) had never participated in continuing education course, seminar or workshop on oral health policy. Twelve (42.9%%) were highly enthusiastic in supporting the national oral health policy, 10 (35.7%) were enthusiastic, 6 (21.4%) were undecided.

The findings on other general issues are presented in Table 7.9.

Table 7.9 General issues on Nigerian oral health policy

	QUESTION	YES		NO	
		n	%	N	%
1	Are you familiar with the Nigerian Oral Health Policy document?	8	28.6	20	71.4
2	Do you have a copy of the Nigerian Oral Health Policy document?	6	21.4	22	78.6
3	Are you familiar with the Nigerian National Health Strategy document?	4	14.3	24	85.7
4	Do you have a copy of the National Health Strategy document?	2	7.1	26	92.9
5	Have you ever participated in the process of formulating an oral health policy either at the National/Provincial/State/District or Local government level?	6	21.4	22	78.6
6	Have you ever participated in the monitoring and evaluation of the National Oral Health Policy either through meetings, periodic reports, site visits, service statistics or satisfaction surveys?	0	0.0	28	100.0
7	Are you currently implementing an Oral Health policy in your Province/State/District/Local Government/Establishment?	2	7.1	26	92.9

*For Question 6, the 'No' and 'Don't know' answers were merged.

The response to questions on oral health and the implementation of the Nigerian policy is presented in Table 7.10.

Table 7.10 Implementation of Nigerian oral health policy

S/ No	Question	Strongly Disagree		Disagree		Un-decided		Agree		Strongly Agree	
		N	%	n	%	n	%	n	%	n	%
1	Oral health is a major problem in Nigeria	2	7.1	0	0.0	0	0.0	10	35.7	16	64.0
2	There have been major improvements in oral health delivery in Nigeria over the past few years	2	7.1	14	50.0	6	21.4	4	14.3	2	7.1
3	The budgetary provision for oral health is generally poor in Nigeria.	2	7.1	0	0.0	4	14.3	4	14.3	18	64.3
4	Oral health is fully integrated into Primary Health Care (PHC) in the country	16	57.1	10	35.7	0	0.0	2	7.1	0	0.0
5	Having a National Oral Health policy/Strategy is very important for the improvement of oral health in Nigeria.	0	0.0	0	0.0	0	0.0	4	14.3	24	85.7
6	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy in Nigeria	6	21.4	2	7.1	16	57.1	2	7.1	2	7.1
7	Lack of capacity at an individual level is a major challenge in implementing oral health policies in Nigeria	4	14.3	2	7.1	4	14.3	12	42.9	6	21.4
8	Lack of capacity at local government, district or sub-district levels is a major challenge in implementing oral health policies in Nigeria	2	7.1	0	0.0	2	7.1	10	35.7	14	50.0
9	Lack of communication and poor networking between policy makers and implementers is a major drawback for the National Oral Health Policy/Strategy	0	0.0	0	0.0	0	0.0	4	14.3	24	85.7
10	Non-involvement of oral healthcare recipients in the development of policies and planning of oral health care delivery is a major issue in Nigeria	0	0.0	2	7.1	0	0.0	10	35.7	16	57.1
11	There is failure to integrate research findings into the oral health policy development process	2	7.1	0	0.0	0	0.0	10	35.7	16	57.1
12	The implementation of the National Oral Health Policy/Strategy has been very effective and efficient	12	42.9	12	42.9	4	14.3	0	0.0	0	0.0
13	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy	8	28.6	10	35.7	8	28.6	2	7.1	0	0.0
14	Additional policy action, such as operational guidelines, will enhance the implementation of the National Oral Health Policy/Strategy	0	0.0	2	7.1	4	14.3	12	42.9	10	35.7
15	Administrators in hospitals and Departments/Ministries of Health have been very enthusiastic in supporting the National Oral Health Policy/Strategy	2	7.1	4	14.3	21	75.0	1	3.6	0	0.0
16	Deans of Dental Schools/Dental educators have been very enthusiastic in supporting the National Oral Health Strategy	2	7.1	4	14.3	18	64.3	2	7.1	2	7.1
17	Medical (non-dental) colleagues have been very enthusiastic in supporting the National Oral Health Strategy	6	21.4	8	28.6	10	35.7	2	7.1	2	7.1
18	The prospect of developing a stronger oral health policy/strategy for Nigeria within the next 5 years is very strong.	0	0.0	4	14.3	20	71.4	2	7.1	2	7.1
19	Dental professional interest groups in the country have effective lobbying mechanisms, through which they make tangible contributions to Oral Health.	12	42.9	6	21.4	8	28.6	2	7.1	0	0.0
20	Information and data provided by dental professional interest groups in the country have helped in formulating and defending Oral Health Policies	6	21.4	4	14.3	14	50.0	4	14.3	0	0.0
21	National and international health goals have contributed to the development and sustenance of oral health policies in Nigeria.	4	14.3	0	0.0	16	57.1	8	28.6	0	0.0

7.4.3 COMPARISON OF RESPONSES TO QUESTIONS ON THE IMPLEMENTATION OF ORAL HEALTH POLICIES IN SOUTH AFRICA AND NIGERIA

Table 7.11 compares the responses of the South African and Nigerian respondents to 21-items evaluating the implementation of the national oral health policies. All respondents from South Africa (100%) and 92.8% from Nigeria agreed that oral health was a major problem in their countries. However, there was significant difference in response to the question whether there had been major improvements in oral health delivery in their countries over the past few years. While 60.0% of the South African respondents agreed, only 21.4% of the Nigerian respondents felt there had been major improvements. Only 40.0% of South African and 14.3% of Nigerian respondents agreed there had been positive changes as a result of implementing the national oral health policy/strategy. Although all the South African respondents agreed that lack of capacity at an individual level was a major challenge in implementing oral health policies in South Africa, only 18 of the 28 (64.3%) Nigerian respondents agreed with the difference being significantly different (p=0.008).

None of the respondents from South Africa (100%) and Nigeria (100%) agreed with the view that implementation of the National Oral Health Policy/Strategy had been very effective and efficient. Similarly, all the respondents (100%) from both countries agreed that that lack of communication and poor networking between policy makers and implementers was a major drawback for the national oral health policies and strategies. A significant difference was noted in the views of South African and Nigerian respondents with regards to whether there is failure to integrate research findings into the oral health policy development process (p=0.00). While only 40% of South African respondents agreed, a greater percentage of Nigerian respondents (92.8%) agreed. Majority of the respondents from both countries (South Africa 100% and Nigeria 96.4%) also disagreed with the view that administrators in hospitals and departments/Ministries of Health had been very enthusiastic in supporting the National oral health policies.

Table 7.11 Comparison of South African and Nigerian Oral Health Policies

S/ No	Question	SOUTH AFRICA				NIGERIA				P-value
		Agree		Others		Agree		Others		
		n	%	N	%	n	%	n	%	
1	Oral health is a major problem in country	15	100	0	0.0	26	92.8	2	7.2	0.53
2	There have been major improvements in oral health delivery in the country over the past few years	9	60.0	6	40.0	6	21.4	22	78.6	0.03*
3	The budgetary provision for oral health is generally poor in the country.	12	80.0	3	20.0	22	78.6	6	21.4	1.0
4	Oral health is fully integrated into Primary Health Care (PHC) in the country	3	20.0	12	80.0	2	7.1	26	92.8	0.32
5	Having a National Oral Health policy/Strategy is very important for the improvement of oral health in the country	13	86.7	2	13.3	28	100	0	0.0	0.12
6	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy	6	40.0	9	60	4	14.3	24	85.7	0.07
7	Lack of capacity at an individual level is a major challenge in implementing oral health policies in the country	15	100	0	0.0	18	64.3	10	35.7	0.01*
8	Lack of capacity at local government, district or sub-district levels is a major challenge in implementing oral health policies in the country	15	100	0	0.0	24	85.7	4	14.3	0.28
9	Lack of communication and poor networking between policy makers and implementers is a major drawback for the National Oral Health Policy/Strategy	15	100	0	0.0	28	100	0	0.0	**
10	Non-involvement of oral healthcare recipients in the development of policies and planning of oral health care delivery is a major issue in the country	9	60.0	6	40.0	26	92.8	2	7.1	0.01*
11	There is failure to integrate research findings into the oral health policy development process	6	40.0	9	60.0	26	92.8	2	7.1	0.00*
12	The implementation of the National Oral Health Policy/Strategy has been very effective and efficient	0	0.0	15	100	0	0.0	28	100	**
13	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy	3	20.0	12	80.0	2	7.1	26	92.8	0.32
14	Additional policy action, such as operational guidelines, will enhance the implementation of the National Oral Health Policy/Strategy	13	86.7	2	13.3	22	78.6	4	14.3	1.00
15	Administrators in hospitals and Departments/Ministries of Health have been very enthusiastic in supporting the National Oral Health Policy/Strategy	0	0.0	15	100	1	3.6	27	96.4	1.00
16	Deans of Dental Schools/Dental educators have been very enthusiastic in supporting the National Oral Health Strategy	3	20.0	12	80.0	4	14.3	24	85.7	0.68
17	Medical (non-dental) colleagues have been very enthusiastic in supporting the National Oral Health Strategy	0	0.0	15	100	4	14.3	24	85.7	0.28
18	The prospect of developing a stronger oral health policy/strategy for the country within the next 5 years is very strong.	3	20.0	12	80.0	4	14.3	24	85.7	0.68

S/ No	Question	SOUTH AFRICA				NIGERIA				P-value
		Agree		Others		Agree		Others		
		n	%	N	%	n	%	n	%	
19	Dental professional interest groups in the country have effective lobbying mechanisms, through which they make tangible contributions to Oral Health.	2	13.3	13	86.7	2	7.1	26	92.9	0.60
20	Information and data provided by dental professional interest groups in the country have helped in formulating and defending Oral Health Policies	3	20.0	12	80.0	4	14.3	24	85.7	0.68
21	National and international health goals have contributed to the development and sustenance of oral health policies in the country..	6	40.0	9	60.0	8	28.6	20	72.8	0.51

* Significant at $p<0.05$

** P-value not computed due to row or column total being equal to zero.

For the purpose of analysis "Strongly Agree" and "Agree" were merged as 'Agree'; and "Strongly disagree", "Disagree", and 'Undecided" as "Others".

All p-values are based on Fishers Exact test

CHAPTER 8

DISCUSSION

8.1 ACTORS AND STAKEHOLDERS

This study set out to collate and analyze the content, context, process, outcomes and implementation strategies of all national oral-health-related policies of the South African and Nigerian governments, over the last decade. One specific objective was to identify the range of policy actors and stakeholders involved in the implementation of existing oral health policies from District (Local or Primary Health Care) to National government levels. The policy actors for oral health were found to be identical for both countries (Figure 7.1), although their impact and level of support appear to be slightly different (Tables 7.1 and 7.2). The universities and research institutions played dominant roles in supporting and facilitating the oral health policy process for South Africa while the Dentistry Division of the Federal Ministry of Health took the leadership and control in Nigeria.

It is important for all stakeholders to be represented at all stages of the policy cycle and most especially at the policy design, dissemination, and implementation stages. One of the priority actions of the Nigerian national oral health policy was the target of establishing dental clinics in 50% of all PHC centres, and ensuring that 50% of the LGAs have a dental clinic manned by a dental surgeon and other oral health personnel by 2015. Less than one year to the target date, there is still no Scheme of Service at the local government level through which oral health personnel could be employed (Box 7.1). This may not have happened if the Local government had been represented at the policy formulation stage. As it is, this aspect of the policy could be said to have been a ‘still birth’ as the objective would never be achieved in the absence of an approved Scheme of service for oral health Personnel at the Local Government Level.

This is especially because PHC centres are under the Local Governments in Nigeria. In addition to ensuring that all major actors are represented at all stages, it is further suggested that those who are strategically positioned to wield the 'power' of decision making, that could affect oral health, should also be invited to oral health functions outside the policy process. This would be a means of 'informally' increasing their awareness and support for oral health.

8.2 THE POLICY PROCESS

An assessment of the commitment of South Africa and Nigeria to national responsibilities for oral health was done and reported in Table 7.3. None of the two countries had established simple effective methodologies to assist their regions in their tasks, as advised by the WHO (2005). They had also not been able to ensure that the determinants of oral health are addressed in all policy matters (Singh, 2005, Adeniyi *et al*., 2012a). More importantly, both countries failed to coordinate oral health information, collection and dissemination from districts and provinces for planning, monitoring, evaluation and resource allocation. They have also not effectively addressed the oral health tasks that require regulation or legislation. There was also no tangible evidence of successful implementation in both countries (See Tables 7.3 and 7.4). As one interviewee puts it, *"I don't think there is an official implementation plan but rather dealing with day to day crisis"* (See Chapter 7, Section 7.3.6.1). There was also no evidence of monitoring and evaluation in both countries, which means that any modifications of the policy now or in future may not be backed up by the required evidence.

8.3 CONTENT OF THE POLICY PROCESS

It has been noted that the oral health plans existing in Sub-Saharan Africa today owe much to a strongly eurocentric history of planning oral health services, and that most remain simply as plans and not as implemented changes in oral health care practices or oral health promotion activities (WHO,

1999). The finding of the present study is in agreement with this observation. It however, did not find the failure to be the result of a narrow focus of the policies "on dental caries and periodontal diseases, to the exclusion of other serious oral health problems such as noma, oral cancer, HIV infection and trauma" or of their "focus on a single vertical dental programme approach, without integration into other public health programmes", as suggested by the WHO (1999). Rather, the policies failed to achieve the desired goals and objectives because they could not successfully navigate the formulation and approval stages or surmount the financial encumberance of dissemination (Figure 7.2).

In the present study, the contents of the policies of both countries were realistic and did not appear to contribute to the failure of the oral health policies in any significant way. In both countries, the policy dissemination was very poor, making effective implementation impossible. The findings should be applicable in other African countries although the identified factors may vary in their relative strengths and effect. The Zimbabwe Health policy, for example, considers that "the major challenges in oral health are the shortage of dental equipment and supplies" (MOHCW 2009). This typifies the way dentistry is perceived in most African countries. The country which has a population per dentist of 111,242 (2007 estimate) (Beaglehole *et al*., 2009), is yet to finalize its national oral health policy which commenced in 1993 (MOHCW, 2009).

It is very unveiling that much emphasis was laid on the contents of the policies with less attention to the context and process. This approach should change and all stages of the policy process should be considered important and critical for oral health policies to achieve the desired goal which is usually the improvement of the oral health of the population.

8.4 THE BARRIERS TO SUCCESSFUL ORAL HEALTH POLICIES

Nigeria produced four national oral health policy drafts in 1994, 1999, 2005 and 2009 but none of these was ever approved by the Federal cabinet. They were therefore neither disseminated to stakeholders nor fervently implemented at any level of government. One reason that may partly account for this was the frequent change in the leadership of dentistry at the Ministry of health with each new head starting the process '*de novo*" as opposed to continuation of the earlier "draft". Eighteen African countries have documented national oral health policy or strategy documents but many of these never went beyond the draft stage because they were never approved at the appropriate levels of government (Table 2.4). A forceful, non-persuasive change in policy leadership could endanger or even truncate the policy process in some African countries. This is because in many of these countries expertise in oral health policy is very rare, and cooperation among the few dental actors needs to be very strong to persuade health policy makers, government decision makers and even medical counterparts, and thereby reduce the barrier of low awareness of oral health issues among them. They are a myriad of other barriers.

The present South African national oral health policy came into effect in 2002 (DOH, 2002) and the South African national oral health strategy in 2004 (DOH, 2004). These documents have not been able to make the significant impact that was envisaged at the policy formulation stages. For Nigeria, a fifth attempt was recently approved by the Ministerial Council on Health and the Federal Executive Council (FMOH, 2012). Major obstacles to the effective implementation of the oral health policies included inadequate funding for planned oral health care activities because of limited resources, inadequate number of oral health personnel to provide services at all levels, lack of integration of oral health into existing health programmes, poor and inadequate facilities, and the reluctance of oral health care professionals to work in the rural areas where majority of the people reside, and poor dissemination of the oral health policy and failure to monitor or evaluate the policy process.

Similar issues have been uncovered as working against the effective implementation of documented national oral health policies in other African countries including Tanzania (Mwaffisi, Undated), Kenya (Kaimenyi, 2006), and Zimbabwe (MOHCW 2009). Kenya, another African country, stands as a good example.

The drafting of the Kenyan national oral health policy (MOH, 2002) was done by a task force composed of only 6 members of whom only one, the Secretary who represented the Kenya Medical Training College (KMTC), was not a dentist. The Chief of Oral Health at the WHO African Region was technical advisor (Kaimenyi, 2006). It could therefore be said that the drafting of the policy was an "all dental" affair, although the exercise was sponsored by the Kenyan Ministry of Health, the WHO and Colgate Palmolive East Africa Limited. The mission statement of the policy read "The national oral health policy shall, within the next 10 years lead to the establishment of a comprehensive oral health care system fully integrated in the general health, and based on primary health care, with emphasis on promotion of oral health and prevention of oral diseases". The general objective of the policy was "to ensure that Kenyans enjoy improved levels of oral health and function by significant lowering of oral diseases burden, equitable cost-effective quality oral health care and adoption of healthy lifestyles through promotion of public, private and community partnerships" (MOH, 2002).

The chairman of the Taskforce while delivering his inaugural lecture in 2006 lamented that "one can have a great strategic plan and yet achieve very little of what is stated in the mission". He observed that most of the objectives and strategies in the national oral health policy were yet to be actualized. He gave a multiplicity of reasons such as: inadequate finances, lack of goodwill from stakeholders, inadequate resources especially the requisite human resource, unrealistic or over-ambitious arrangements/plans, and lack of commitment and passion for the change by the key implementation personnel within a given government department" (Kaimenyi, 2006).

He noted further: “to mobilize other people and to be a good advocate for a worthy course requires one to have certain skills. Do dentists have such skills? I am not sure the majority have them. Why? Most dental syllabi don’t cover these skills”. He therefore concluded that “the dream of achieving oral health for Kenyans is unlikely to be realized because no serious inroad has been made in the implementation of the national oral health policy”.

8.5 NEED TO DISSEMINATE POLICIES

Oral health policies need to be widely disseminated, especially when it has been approved. A major finding of this study is that the national policies suffered serious setbacks at the dissemination stages. Nigeria had four previous draft national oral health policies (1994, 1999, 2005 and 2009 before the present policy which was approved in 2012. None of these went beyond the formulation stage. In addition to the dissemination of the policies, outcomes, findings and recommendations of policy studies should be packaged and disseminated to health policy makers, oral health decision makers and other stake holders. This will support and enhance evidence-based policy planning, formulation, implementation and evaluation. It should also be published in widely-read peer-reviewed scientific journals.

8.6 POLICY IMPLEMENTATION

In this study none of the two countries had a robust implementation plan with specific time-lines. Once a policy is developed, it must not be assumed that it will be self-executing. It often requires the issuance of implementation plans and regulations, setting up oversight committees, and collecting data on the process and its impact. In cases where the Provinces/States or local governments and hospitals are the implementers, they must designate or hire staff, develop procedures, and collect data among other tasks.

It must be realized that implementation is not the end product of public health policy but rather the beginning of feedback to policy makers about the progress of the programme, its successes and failures, and any unintended consequences (Weissert *et al*., 2006). Policies and programmes should be monitored during the implementation to ensure that they do not change form unintentionally, measure the impact they are having, determine whether they are having the impact that was intended, and to decide whether they should be continued, modified or terminated (Patton *et al*., 1993).

The capacity to implement oral health policies may not readily be available in all countries and regions. Some of the States in Nigeria lack the human and material capacity to move oral health policies to implementation stages. Even if funds are allocated to oral health, they may not have the infrastructure that will enable them utilise the funds effectively and efficiently. Adamawa State with a population of 3.17 million has no single dentist, while Jigawa, Kebbi and Zamfara States with populations of 4.35, 3.24 and 3.26 millions respectively has only one dentist each (Table 4.2). In some States such as Nassarawa with 6 dentists to a population of 1.86 million, which appears on face value to be comparatively fair, the dentists are not involved in policy formulation as they are excluded from administration once they are not indigenes and are employed as "contract staff". They are confined to the clinics and do not have the mandate to lead the formulation or implementation of any oral health policy (Chapter 7, Section 7.3.8.2).

8.7 ORAL HEALTH INFORMATION SYSTEMS AND POLICY MONITORING

The burden of oral disease and the needs of populations are in transition and oral health systems and scientific knowledge are changing rapidly. In order to meet these challenges effectively, decision-makers need the tools, capacity and information to assess and monitor health needs, choose intervention strategies, design policy options appropriate to their own circumstances, and improve the performance of the oral health system.

The WHO/FDI has urged Member States to establish oral health information systems, and this remains a challenge for most countries of the world (WHO, 2014). The WHO Oral Health Programme is prepared to assist countries in their efforts to develop oral health information systems which include data additional to epidemiological indicators. Adeniyi *et al* (2012b) in an appraisal of the oral health care system in Nigeria supported this recommendation for a national oral health information system that would collect and collate data on oral health in the country. It was suggested that information obtained would be vital for policy and planning action, as well as for monitoring and evaluation of the oral health system.

8.8 ORAL HEALTH COMMUNITY

The oral health community lacks the appropriate tools to affect legislative decisions and make direct contact with legislators, influence political party agenda, use the mass and electronic media, and influence consumers. It is therefore not surprising that oral health is relegated on the background on the public policy agenda when compared with other areas of health in which there are strong advocacy groups.

The oral health community must make deliberate efforts to create linkages and foster cooperation with other units in health sector, other government departments and the private sector in order to achieve good oral health for Nigerians. They need to identify and engage the various interest groups who are presently actively involved in the policy process with a view to getting oral health into national policy reckoning. This is a method that has yielded positive results in developed countries such as Australia and the United Kingdom (Adeniyi *et al*., 2012a) and should be considered appropriate for African and other developing countries.

8.9 LOBBYING AND ADVOCACY

Political Action Committees (PACs) are now the major instrument for health care lobbying in the United States. According to Weissert *et al*. (2006), groups without PAC needed them; those with them needed bigger ones and those in a PAC representing interests that might be a bit too broad for their particular concerns splintered off, forming their own PACs. While the two countries under study may not benefit maximally from PACs, lobby groups will go a long way to mobilise support for the development and effective implementation of oral health policies. Such lobby groups were suggested by respondents under varying names such as "Task group", "Oral Health Unit" and others. An oral health policy in itself will not achieve the desired goal without knowing how to mobilise, having access to information, and making the right moves at the right time (Weissert *et al*., 2006). Interest groups are powerful actors in health policy making in the developed countries where they use several strategies to influence policy such as direct lobbying, grass root mobilisation, political campaign contributions through PACs, and using the courts as a final avenue for action when other means appear ineffective.

Essentially, the national and local dental associations and other interest groups should make the case for oral health before government and as described by Weissert *et al* (2006) "plying the halls of congress, the executive branch, the courts, and the offices of other interest groups". National Dental Associations on the continent of Africa, and particularly the South African and Nigerian Dental Associations must take a cue from the American Medical Association which has moved beyond membership fees as the sole source of support, securing about two-thirds of its resources from real estate and business transactions (Ainsworth, 2002). African countries, are presently very remote from these standards and in the words of one of the respondents *"As oral health care workers, do we have any ideas that we want to share with the political parties…?"*.

The time is ripe for all dental professional groups to draw achievable plans for strategic engagement with policy makers and government for the improvement of oral health and overall benefit of the population.

8.10 ROLE OF THE WHO

The WHO has over the years put a lot of efforts into the development of oral health policies on the African continent (Myburgh, 1995; FDI/WHO, 2004; Thorpe, 2004; WHO, 2005; WHO, 2008a; WHO, 2014) but the outcome has not been satisfactory (Thorpe, 2006; Kaimenyi, 2006). The technical support from the WHO office is often too general and not specific to countries, usually reflecting western standards and goals. Local teams were not guided to come up with issues as they relate to the existing local conditions, especially those factors that may hinder the policy process. Hence, the oral health policies appear isolated from local occurrences, and fail to reflect the existing political reality and policy environment.

8.11 IMPORTANCE OF RESEARCH IN THE POLICY PROCESS

Research findings played insignificant roles in driving the policy process in both countries under study. Evidence-based policy requires that relevant and convincing data be made available to provide government with policy direction and necessary tools for evaluating the impact of implemented policies. Although publications emanating from Nigeria and South Africa account for about 68% of all oral health-related materials published from Africa, the reports were inadequate in quantity and quality to significantly influence the policy process (Adeniyi *et al*., 2006; Kanoute *et al*., 2012). It is also possible that these research findings had little impact on policymaking because of the gap between policymakers and researchers (Adeniyi *et al*., 2012a).

In addition to scientific journal publications and technical reports, oral health researchers need to ensure the dissemination of research findings in simple, user-friendly manner to policymakers with the practical policy implications clearly highlighted.

8.12 ESSENTIAL FACTORS FOR A SUCCESSFUL NATIONAL ORAL HEALTH POLICY

A successful national oral health policy process will require among other things visionary leadership from the oral health sector, with a multi-sectoral approach, involving other sectors outside oral health. The professional bodies, regulatory agencies, line ministries, development agencies, non-governmental organisations, faith-based organisations, the industries and private sector and also international agencies and organizations are important stakeholders. It is important to strategically integrate oral health into all relevant existing national health programmes (Primary Health Care, Health promotion, National Health Insurance Scheme etc). Hosseinpoor *et al*. (2011) has emphasized the need for policymakers to develop equitable policies for oral health, to ensure the establishment of financially fair oral health care, and to work for universal coverage in oral health care as emphasized by the WHO Primary Health Care (PHC) approach.

The policy process must also identify the source of financial support and ensure a dedicated budget for oral health without prejudice to the integration into other health promotion programmes. The wide dissemination of the policy to all stakeholders must be taken as a priority issue and modern modes of communication should also be explored. The policy once developed must be kept very high on the agenda, and technical assistance must be provided, where necessary, to fast-track the implementation. There must be avenues for stakeholders to meet, share experience and exchange ideas. Effective and efficient monitoring requires the development of indicators for oral health awareness, oral health status, service utilisation, human resource development, and oral health research activities among

others. It is advisable to incorporate these into existing, functional, data collection mechanisms. All these should be backed up with a good reporting mechanism.

8.13 THE CONCEPT OF ORAL HEALTH CHAMPIONS AND ORAL HEALTH AMBASSADORS

After the National Oral Health Policy was launched in Nigeria in November 2012, a significant role was identified for an Oral Health Champion at the National level and Oral Health Ambassadors in each of the 36 States, Federal capital territory, and the 774 Local Government areas in the country. These roles are anchored on the main priority area of the National Oral Health Policy. Facilitating and sourcing for resources is a major role that has been assigned to the National Oral Health Champion and the Ambassadors who would liaise with the Chief Dental Officers (Federal and States) to identify the needs/gaps and collaborate to develop strategies that will deliver effective and efficient services to the citizenry.

An 8-paged oral health promotion handbook for oral health ambassadors has been produced by the Federal Ministry of Health in Nigeria. It contains among other things, a summary of the goal, target, guiding principles and priority areas of the national oral health policy. It also outlined the responsibilities of the National Oral Health Champion and the State and Local government Oral Health Ambassadors, and the expectations of the Federal Ministry of Health (FMOH, Undated). At present, this concept appears to be a successful method of engaging the decision makers. The oral health champion is the Senate leader and most of the oral health ambassadors are political office holders. It therefore remains to be seen if the enthusiasm will be sustained beyond the expiration of their political terms of office. The concept and its useful to the oral health policy process require further exploration.

8.14 THE INITIAL AND FINAL HYPOTHESIS

The initial hypothesis for this study was that:

> *South Africa and Nigeria have National oral health policies and strategies developed by experts, supported by dental professionals and disseminated to stakeholders for implementation, and these are being effectively and efficiently implemented, monitored and evaluated, with full government support, for the overall benefit of the population".*

However, the findings have revealed that the 'experts' either lack any previous training or experience of policy formulation or are international experts not very familiar with the existing political and policy environment. They find themselves on the leadership of the policy formulation team because of their 'position' and can therefore only be qualified as 'positional experts'. The policy process may not enjoy the active support of the wider dental community, and after the policy formulation funds were usually not made available for the dissemination, implementation and monitoring. The supports from the various levels of government were very weak with grossly inadequate funding and no separate budget lines for oral health. Hence, these policies were poorly disseminated to stakeholders for implementation. Additionally, the implementations of the policies were not very efficient, and monitoring and evaluation were either completely overlooked or very poorly done. Consequently, the policies become documentations of rhetoric and fail to make the required impact.

Therefore, the final hypothesis which accounts for the situation observed in both countries under study is proposed:

> *South Africa and Nigeria have National oral health policies and strategies developed by "positional experts" and interested actors, who may not enjoy the support of the wider dental community, and these policies are often not efficiently disseminated to stakeholders for*

implementation, hence they fail to achieve the desired goals and objectives, not because they are not supported by government but due to poor dissemination and inadequate funding.

The cause of failure of the oral health policies can be attributed to the disconnection between the positional experts, other interested actors and government on one hand, and the other stakeholders on the other hand. However, the most important barriers were at the levels of dissemination, implementation, monitoring and evaluation, and revision of the policies (Figure 7.2).

CHAPTER 9

CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

This study has shown conclusively that the oral health policy process has not achieved the desired goals in both South Africa and Nigeria, and that greater advocacy for oral health is required in both countries. There is a need for greater advocacy for oral health within the general health policy. The dental professionals and groups must make deliberate efforts to create linkages and foster cooperation with other actors within and outside government in order to achieve tangible improvements for oral health, within the general health policies. They need to identify and engage the various interest groups within and outside health, who can influence the policy process.

The usual focus on policy content with poor consideration for the context and process is ill-advised and need to be reconsidered. Formulation of national oral health policies must be accompanied by effective implementation plans, and may necessitate the setting up of a Technical, Advisory or Policy team to monitor activities and evaluate the dissemination, and impact of the policy on the improvement of oral health prevention, care delivery and research. This “Task Force” must also ensure that oral health issues are kept on the agenda. Major international policy resolutions aimed at enhancing the organisation and delivery of oral health should be widely disseminated and used as advocacy documents to complement the national oral health policy (Appendix 8). Effectiveness of oral health policies will be enhanced when funds are allocated and researchers are supported to provide evidence that will assist policy actions. The oral health policies of both Nigeria and South Africa must also aim to reduce the maldistribution and discrepancies in the location of oral health training institutions, personnel and resource distribution.

In order to boost the adoption of the policies, the National Department/Ministry of Health should actively disseminate the national oral health policies to all stake holders at the District/Local, Provincial/State and National levels in both countries. This may also include development of flyers, leaflets and public documents translated into local languages, to enhance sensitization and community mobilization. The Department or designated committee must also regularly provide details of implementation of the policy to stakeholders, and constantly inform relevant Ministries at the National, Provincial/State and District/Local levels of the need to efficiently and effectively implement the policy (Appendix 9). It must therefore provide the forum for regular and productive meetings with the stakeholders. Special days such as the World Oral Health Day appear to be ideal for such feedbacks and also for the recruitment and consolidation of support for the policy.

It is also important to develop strategies for ensuring the cooperation and support of key politicians and opinion leaders, particularly those who could facilitate dedicated or improved budget lines for oral health. The appointment of a National Oral Health Champion and Oral health Ambassadors in each of the 36 States of Nigeria is worthy of further consideration.

9.2 SPECIFIC RECOMMENDATIONS

Based on the findings of this study, it is pertinent to make the following specific recommendations. Although many of these recommendations may be applicable well beyond the two countries (South Africa and Nigeria) that are the central focus of the present study.

1. **The South African oral health community and actors must reach out to influential members of the political class and engage them in oral health policy implementation and oral health promotion.**

   If oral health is to become an important policy issue in health, it will be necessary to strategically expand the network structure by consciously attracting influential actors (outside

oral health) who are not currently convinced that oral health is important. The Nigerian national oral health policy has enjoyed tremendous support and goodwill since the serving President of the Nigerian Senate was appointed the National Oral Health Champion and influential men and women were similarly appointed in all the States of the federation as Oral Health Ambassadors. This is encouraging and the strategy should work for South Africa and other African countries.

2. Oral health policies should be accompanied by detailed implementation plans

All oral health policies must be accompanied by detailed, written implementation plans with clearly identified action areas, time frame and implementing agency or responsible body for each policy item. The time frame must not just be identified as "short", "medium" or "long" term, but should have specific verifiable target dates. The time-frames and responsible authorities should then be the basis for the assessment of progress and determination of those that should be held accountable for any failures or draw-backs in the implementation. It will also give room for the identification and commendation of individuals, organizations and groups who may have contributed immensely to accelerating the policy implementation process.

3. Establish an Oral Health Policy Monitoring, Evaluation and Research Unit (OHPMER)

The bulk of the information generated by Ministries of health, health departments, local authorities, research units, international aid agencies, and Non-governmental organizations are not focused on oral health and remain unhelpful to decision-makers working to improve oral health, unless these are summarized and directed to appropriate actors for effective policy actions. Therefore, an Oral Health Policy Monitoring, Evaluation and Research (OHPMER) Unit is recommended which will combine expertise in public health, oral epidemiology, health economics and mass communication. The unit will aggregate and sieve existing information, conduct relevant dedicated studies, and monitor the implementation progress of oral health

policies in the country while also bringing into the system relevant best practices in other countries of the world. The Unit should continuously provide and disseminate policy-relevant information to all stakeholders at no direct cost to recipients. The unit should be technically robust, apolitical, non-partisan and ideally should be based within the university or research institution, and financed through the base-university and by both dedicated and competitive research grants. The location of the Unit should provide semi-autonomy and offer complete access to the myriad of sectors and experts from different fields that are relevant to oral health.

The OHPMER unit must be equipped with modern facilities for effective and efficient dissemination of information, one of which will be a dedicated website. While the Ministry of Health will not be an ideal host, it must also be equipped with all necessary tools not only to support its own internal analysis that will enable it formulate and effectively implement oral health policies and strategic plans, but also respond to external analysis, input and recommendations.

4. National Dental Professional Associations must maintain close and cordial relationship with their government and in particular the Ministry of Health, but ideally with all relevant line ministries, to advice and make recommendations on oral health policy.

It must be realised that the National Dental Associations in Africa are structurally different from their counterparts in the Western world such as the American Dental Association, the National Dental Association (USA), the Canadian Dental Association, the British Dental Association and other professional dental associations. Oftentimes, African National Dental Associations are led by people who work full-time in the government service and at a junior level in the Ministry of Health. The conflict between their employment status and their

expected role as leader of the profession makes it rather impractical for them to render any significant influence on the policy process, content and context. They often lack the recognition and respect required to influence the actions and inactions of those having direct responsibility for the implementation of the oral health policy, especially at the governmental level.

5. Oral health policies in African countries should adopt the Common Risk factor approach.

The oral health policies should adopt the common risk factor approach (Sheiham *et al*., 2000) and be integrated into the Primary Health care approach. These policies should also be compatible with the United Nations Resolution on prevention and control of non-communicable diseases - Article 19 "renal, oral and eye diseases pose a major health burden for many countries and that these diseases share common risk factors and can benefit from common responses to non-communicable diseases" (United Nations, 2011).

6. Key oral health messages should be supported by messages emphasizing the importance of oral health and the dangers of untreated dental diseases.

Such supportive messages may include information on the consequences of untreated tooth decay and gum disease which have been linked to pre-term births and low birth weight babies, and chronic conditions like heart disease, diabetes, and stroke.

7. Create a forum for sharing best practices and solving common problems

An annual meeting of Chief Dental Officers/Directors of Oral Health in each country would be create such an avenue. It will also enhance networking.

8. Need to build policy analysis capacity in the countries studied

In their study, Singh *et al* (2010) recognised the need for building policy analysis capacity that is grounded in sound theoretical models so that opportunities can be created to influence the policy process in South Africa. A similar situation applies to Nigeria (the other country of study). The situation may also not be different in other African countries.

9. National oral health policies, especially in African countries, must be strategically structured to eliminate the usual gap between policy content, programmes and actual implementation.

A seven-point agenda is proposed for bridging the gap between oral health policy design and implementation. It is envisaged that this will be applicable not only to South Africa and Nigeria, but also to other African countries.

National Oral Health Policies should:

1) specify a sustainable budgetary allocation for oral health. This should ideally be expressed as a percentage of the overall budgetary allocation for health.
2) address structural barriers to the effective delivery of oral health.
3) emphasize the building of relevant partnerships at all stages of the policy process. These should include policy-line ministries (education, information, water etc.), politicians, industry, traditional rulers, private sector, international agencies, and others.

4) identify and make provision for the recruitment of appropriate skills, expertise and human resources required at the different levels of oral health, for the effective implementation of the oral health policy.
5) Emphasize the setting up of appropriate machinery for data collection, monitoring and evaluation as part of the policy process, and support policy implementation with verifiable evidence and research.
6) ensure linkage and networking of actors and stakeholders, and encourage regular interaction of key implementers. A dedicated website and periodic newsletter could be very useful.
7) formalize the use of recognized national and internationally designated and recognized programmes (such as the World Oral Health Day - 20th March of every year) to further promote the oral health policy process, and garner support for oral health.

10. More work needs to be done in the area of oral health policy particularly on the challenges of implementation.

Large scale multi-country studies of oral health policy formulation and implementation should be undertaken on the African continent supported by greater levels of funding by national governments, and national and international agencies. Similarly, successful policy changes in other areas (such as HIV/AIDS and Reproductive health) should be examined to see how lessons learnt from these can be beneficial to oral health policy initiatives and implementation process. One of the goals should be the compilation of 'best policy practices' for the African continent.

The WHO can assist in this regard. It must now change the current approach and act more as a link to the best practices and facilitator of direct linkage with the highest level of policy

making in government. It should also arrange a meeting of all the countries with written national oral health policies in the African region to identify the barriers to implementation and assist also with making direct contacts with the governments to facilitate policy reviews, where necessary, and re-energize the policy implementation processes.

REFERENCES

1) Adeleke OA (2006). Report of a study on the profile of oral health manpower, facilities and training institutions in Nigeria. Technical Report. Jos: Intercountry Centre for Oral Health.

2) Adeniyi AA, Ogunbodede EO, Braimoh MO (2012a). An assessment of the role of government health related policies in improving the oral health status of Nigerians. *Nigerian Dental Journal* 20(1):3-9

3) Adeniyi AA, Sofola OO, Kalliecharan RV (2012b). An appraisal of the oral health care system in Nigeria. *International Dental Journal* 62:292-300.

4) Adeniyi AA, Uti OG, Sofola OO, Jeboda SO (2006). Postgraduate dental research in Nigeria: a retrospective appraisal of the scope and suggestions for future progress. *Nig Quarterly J Hosp Med* 16:66-68.

5) Adenubi JO (2013). The dental profession in Nigeria. What future? Lecture delivered at the All Fellows Day 2013 organised by the Faculty of Dentistry, National Postgraduate Medical College of Nigeria. Lagos: National Postgraduate Medical College.

6) Ainsworth S. (2002). Analyzing interest groups: Group influence on people and politics. New York: W.W. Norton.

7) Akinosi JO (2011). Oral and dental care in Nigeria. A legacy from our pioneers. 29th Convocation Lecture delivered on Thursday 15th September, 2011. Lagos: National Postgraduate Medical College of Nigeria.

8) Aniekwu I (2006). Health sector reform in Nigeria: A perspective on human rights and gender issues. *Local Environment*, 11(1), 127-140.

9) Badura B, Kickbusch I. (1991). Health Promotion Research. Towards a New Social Epidemiology. WHO Regional Publications. European Series. No. 37. World Health Organisation. Copenhagen: 59-79.

10) Baron DP (2000). Business and its environment. 3rd Edition. New Jersey: Prentice Hall, Upper Saddle River. Pp. 10-14

11) Baumgartner FR, Jones BD (1993). Agendas and instability in American politics. Chicago: University of Chicago Press.

12) Beaglehole R, Benzian H, Crail J, Mackay J (2009). The oral health atlas. Mapping a neglected global issue. Switzerland: FDI World Dental Federation. p. 96-103 (World Table)

13) Benzian H, Bergman M, Cohen LK, Hobdell M, Mackay J (2012). The UN High-level Meeting on Prevention and Control of Non-communicable Diseases and its significance for oral health worldwide. (Editorial). *J Public Health Dent.* 2012 Spring;72(2):91-3. doi: 10.1111/j.1752-7325.2012.00334.x.

14) Benzian H, Hobdell M, Holmgren C, Yee R, Monse B, Barnard JT, van Palenstein Helderman W. (2011). Political priority of global oral health: an analysis of reasons for international neglect. *International Dental Journal* 61(3):124-30. doi: 10.1111/j.1875-595X.2011.00028.x.

15) Bonita R, Beaglehole R, Kjellström T (2006). Epidemiology, health policy and planning. In: Basic epidemiology. 2nd Edition. Geneva: World Health Organisation. Chapter 10: 165-176.

16) Bowling A (2010). Research methods in health. Investigating health and health services. England: Open University Press. 3rd Edition. 525pp.

17) Boyce C, Neale P (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input. Pathfinder International Tool Series, Monitoring and Evaluation -2. Watertown: Pathfinder International. 12pp

18) Bradley S (1995). Methodological triangulation in health care research. *Nurse Researcher* 3(2):81-89.

19) Brock DW (2006). Truth or consequences: The role of philosophers in policy-making. In: Kuhse H, Singer P (Eds). Bioethics. An anthology. Blackwell Publishing Ltd., Malden: MA, USA. 2nd Edition. Pg. 715-718

20) Brugha R, Varvasovszky Z (2000). Stakeholder Analysis: A review. *Health Policy and Planning* Vol. 15(3):239-246

21) Buse K, Mays N, Walt G (2008). Making health policy. Berkshire: Open University Press.

22) Campbell DM, Redman S, jorm L, Cooke M, Zwi AB, Rychetnik L (2009). Increasing the use of evidence in health policy: practice and views of policy makers and researchers. *Australia and New Zealand Health Policy* 6:21. doi:10.1186/1743-8462-6-2e

23) Carter S, Henderson L (2005). Approaches to qualitative data collection in social science. In: Bowling A, Ebrahim S (eds). Handbook of health research methods: Investigation, measurement and analysis. Maidenhead: Open University Press.

24) Choi BCK, Gupta A, Ward B (2009). Good thinking: Six ways to bridge the gap between scientists and policy makers. *J Epidemiol Community Health* 63(3): 179.

25) CIA (2012). The World fact book. Central Intelligence Agency, USA. (https://www.cia.gov/library/publications/the-world-factbook/index.html, Accessed May 9, 2012).

26) CIA (2014). The World fact book. Central Intelligence Agency, USA. https://www.cia.gov/library/publications/the-world-factbook/index.html (Accessed April 17, 2014).

27) Cullinan K (2006). Health services in South Africa. A basic introduction. Health-e News Services. (http://www.health-e.org.za/2006/01/29/health-services-in-south-africa-a-basic-introduction/, Accessed April 17, 2014).

28) Davies HTO, Nutley SM (2001). Evidence-based policy and practice: moving from rhetoric to reality. Proceedings of the Third International, Inter-disciplinary Evidence-Based Policies and Indicator Systems Conference. July. CEM Centre, University of Durham. Pg 86-95.

29) Davies P (2004). Is evidence-based government possible? Jerry Lee Lecture 2004, presented to the Campbell Collaborative Colloquium, Washington DC. 19th February 2004.

30) DOH (1997). White paper for the transformation of the health system in South Africa. Pretoria: Department of Health, April 1997. Government Gazette 382 (17910). Notice 667 of 1997. (http://www.polity.org.za/polity/govdocs/white_papers/health.html, Accessed April 17, 2014).

31) DOH (2001). Draft National Policy for Oral health in South Africa. Pretoria: Department of Health.

32) DOH (2002). Draft National Oral Health Policy for South Africa. Pretoria: Department of Health. Unpublished: 1-9.

33) DOH (2004). Ethics in health research. Principles, structures and processes. Pretoria: Department of Health. 67pp. (Also available at: www.mrc.ac.za/ethics/ethics.htm).

34) DOH (2010). South African National Oral Health Strategy - 2010. 15pp Department of Health. http://www.doh.gov.za/docs/policy/strategy.pdf (Accessed May 23, 2012).

35) DOH (Undated). Implementation of the National Dental Health Policy. Undated. (Policy developed during the Apartheid era in South Africa, about 1975).

36) DOH/HST (2013). National health care facilities baseline audit. National summary report 2012 (revised 2013). Department of Health, Pretoria/Health Systems Trust, Cape Town. 77pp.

37) Dye T (2001). Top down policymaking. London: Chatham House Publishers

38) Edwards PJ, Roberts I, Clarke MJ, Diguiseppi C, Wentz R, Kwan I, Cooper R, Felix LM, Pratap S (2009). Methods to increase response to postal and electronic questionnaires. *Cochrane Database Syst Rev* Jul 8;(3): MR000008. Doi: 10.1002/14651858. MR000008.pub4.

39) FDI/WHO (2004). Nairobi Declaration on Oral Health in Africa A Commitment to Action. http://archive.fdiworldental.org/c/document_library/get_file?uuid=fa136f62-8d49-4afc-a530-11e03392b68a&groupId=10157. Switzerland: FDI World Dental Federation, World Health Organization.

40) Feder J (2004). Crowd-out and the Politics of Health Reform. *Journal of Law, Medicine & Ethics* 32(3), 461-464.

41) FMOH (2010). National strategic health development plan (National Health Plan) 2010-2015. Abuja, Federal Ministry of Health. February 2010. 148pp

42) FMOH (1988). The National Health Policy and Strategy to achieve health for all Nigerians. Lagos: Federal Ministry of Health. 54pp.

43) FMOH (2011). A report of the technical working group for the development of a road map for the improvement of oral health in Nigeria. Abuja: Federal Ministry of Health. May 2011.

44) FMOH (2012). National oral health policy. Abuja: Federal Ministry of Health. 30pp.

45) FMOH (2013). Federal Ministry of Health mid-term report of achievements of the Dr. Goodluck Ebele Jonathan's administration. Presented by the Honourable Minister of Health Professor C. O. Onyebuchi Chukwu at the Ministerial Platform on Thursday, June,13, 2013

46) FMOH (Undated, 2012?). Oral health promotion handbook for oral health ambassadors. Abuja: Federal Ministry of Health. 8pp.

47) Frankfort-Nachmias C, Nachmias D (1996). Research methods in the social sciences. 5th edition. London: St. Martins Press Inc. 675pp.

48) Fraser-Moleketi GJ (1995). A comprehensive social service. Social welfare and health services for all South Africans. In: Myburgh NG (Ed.). Future directions for oral health in South Africa. Proceedings of the Medic Africa '95 workshop on oral health policy. Faculty of Dentistry, and WHO Collaborating Centre, University of the Western Cape, Cape Town. Pp23-26.

49) Gilson L, Raphaely N (2008). The terrain of health policy analysis in low and middle income countries: a review of published literature 1994–2007. *Health Policy and Planning* 23:294–307

50) Glick M, da Silva OM, Seeberger GK, Xu T, Pucca G, Williams DM, Kess S, Eisele J and Severin T (2012). FDI Vision 2020: shaping the future of oral health. *International Dental Journal* 62:278-291.

51) Grindle M, Thomas J (1991). Public choice and policy change. Baltimore: Johns Hopkins University Press.

52) Hancock T (1991). National and international health goals and healthy public policy. In: Draper P. (Ed.) Health through public policy. The greening of public health. London: Green Print. Pp. 195-209

53) Harris R (2007). Reviewing existing data: Appraising the evidence. In: Pine C, Harris R (Ed). Community oral health. London: Quintessence Publishing Company. Chapter 5:81-102.

54) Heinert H (2007). Do policies determine politics? In: Fischer F, Miller GJ, Sidney MS (Eds). Handbook of public policy analysis. Theory, politics and methods. Boca Raton: CRC Press, Taylor and Francis Group. Chapter 8:109-119.

55) Hescot P, China E, Bourgeois D, Maina S, da Silva OM, Eisele JL, Simpson C, Horn V (2013). The FDI African Strategy for Oral Health: addressing the specific needs of the continent. *International Dental Journal* 63:113-120.

56) Hill MJ, Hupe PL (2002). Implementing public policy: Governance in theory and in practice. 1st Edition. London: Sage Publications Ltd. 232pp.

57) Horsburgh M, Perkins R, Coyle B, Degeling P (2006). The professional subcultures of students entering medicine, nursing and pharmacy programmes. *Journal of Interprofessional Care*, 20(4), 425 - 431.

58) Hosseinpoor AR, Itani L, Petersen PE. (2012). Socio-economic inequality in oral healthcare coverage: results from the World Health Survey. *J Dent Res.* 2012 Mar;91(3):275-81. doi: 10.1177/0022034511432341.

59) Hunter DJ (2003). Evidence-based policy and practice: riding for a fall? *Journal of the Royal Society of Medicine* 96:194-196.

60) Julian D (2005). Enhancing quality of practice through theory of change-based evaluation: Science or practice? *American Journal of Community Psychology* 35(3/4):159-168.

61) Kaimenyi JT (2006). Achieving oral health for all in Kenya: A reality or a myth? Inaugural lecture series. Thursday 18th May, 2006. Kenya: University of Nairobi. 65pp.

62) Kanoute A, Faye D, Bourgeois D (2012). Current status of oral health research in Africa: an overview. *International Dental Journal* 62: 301–307.

63) Katumba NJ (2011). Situation analysis of oral health in Uganda. Paper presented at the WHO Oral Health Week in Kampala, Uganda on 5th December, 2011.

(http://www.fdiworldental.org/documents/10157/f28dfcb7-c963-4456-a822-3c8bc765e13a, Accessed May 23, 2012).

64) Kingdon J (1984). Agendas, alternatives and public policies. Boston: Little Brown & Co.

65) Kingdon J (1995). Agenda, alternatives, and public policies. 2nd Edition. New York, Harper Collins.

66) Labiran A, Mafe M, Onajole B, lambo E (2008). Health workforce country profile for Nigeria. First Edition. Africa Health Workforce Observatory. (http://www.afro.who.int/hrh-observatory/country_information/fact_sheets/Nigeria.pdf, Accessed May 23, 2012).

67) Lewis JM (2012). Influencing public policy on oral health. *Community Dental and Oral Epidemiology* 40(Suppl.2):148-153.

68) Lewis JM. (2003). Evidence based policy: a technocratic wish in a political world. In: Lin V, Gibson B (Ed.) Evidence-based health policy: problems and possibilities. Melbourne: Oxford University Press p.250-259.

69) Lomas J (2000). Connecting research and policy. *Isuma: Canadian Journal of Policy Research* 1:140-144.

70) Lowi T (1979). The end of liberalism. New York: WW Norton & Company.

71) Miller G (1992). Managerial dilemmas. Cambridge: Cambridge University Press.

72) MOH (2002). Kenya national oral health policy and strategic plan: 2002-2012. June 2002. Nairobi: Ministry of Health.

73) MOHCW (2009). The national health strategy for Zimbabwe (2009-2013). Equity and equality in health: A people's right. Zimbabwe: Ministry of Health and Child Welfare.

74) Molete MP, Daly B, Hlungwani TM (2013). Oral health promotion in Gauteng: a qualitative study. *Global Health Promotion* 20(1):50-58

75) Moysés ST (2000). The impact of health promotion policies in schools on oral health in Curitiba, Brazil. A thesis submitted for the degree of Doctor of Philosophy of the

University of London, Department of Epidemiology and Public Health, The Royal Free and University College Medical School, University College London. 268pp.

76) MRC (2002). Guidelines on ethics for medical research. General principles including research on children, vulnerable groups, international collaboration and epidemiology. Pretoria: Medical Research Council. 97pp. (Also available at: www.mrc.ac.za/ethics/ethics.htm).

77) Mwaffisi MJ (Undated). Policy guidelines for oral health care in Tanzania. (http://www.tdadent.or.tz/index.php/site/print/policy_guidelines_for_oral_health_care_in_tanzania/, Accessed March 14, 2013).

78) Myburgh N (1995). A future for South African oral health policy? In: Myburgh NG (Edited). Future directions for oral health in South Africa. Proceeds of Medic Africa '95 workshop on oral health policy. Faculty of Dentistry & WHO Oral health Collaborating Centre, University of the Western Cape, Cape Town. Pg 47-50.

79) Myburgh NG, Owen CP, Hobdell MH, Chikte UME, Matsinhe D, Thorpe SJ (2005). A manual for national oral health policy formulation in the African Region. Brazzaville: World Health Organisation.

80) Naidoo S, Chikte UM, Moola H, Steyn K (2001). Perceptions of oral health: the South African demographic and health survey of 1998. *SADJ* 56(11):505-510.

81) Nash DA, Friedman JW, Mathu-Muju KR *et al* (2012). A review of the global literature on dental therapists. USA: W.K. Kellogg Foundation. 460pp.

82) National Planning Commission. (2004). Nigeria: National Economic Empowerment and Development Strategy (NEEDS). Abuja, National Planning Commission.

83) Ndiaye CF (2005). Oral Health in the African Region: Progress and perspectives of the Regional Strategy. *African Journal of Oral Health* 2(1&2):2-9

84) NEC (2005). National ethics and operational guidelines for research on human subjects, Nigeria. Abuja: National Ethics Board. 50pp.

85) Oberlander J (2003). The Politics of Health Reform: Why Do Bad Things Happen To Good Plans? *Health Aff:* W3.391-W3.404.

86) Oloriegbe IY (2006). Leadership for health sector reform in Nigeria: NMA's role and HERFON's experience. Port Harcourt.

87) Olukoga A, Folayan M, Olukoga T, Harris G, Ogunbodede E (2011). Healthcare workers' perceptions of hospitals' institutional structure. *American Journal of Tropical Medicine and Public Health* 1(3):79-88.

88) Ostrom E (1999). Institutional rational choice: An assessment of the institutional analysis and development framework. In:. jew P (Edited). Theories of the policy process. Boulder: Westview Press.

89) Owen P (1995). A critique of previous and current recommendations for South African Oral Health Policy. In: Myburgh NG (Edited). Future directions for oral health in South Africa. Proceeds of Medic Africa '95 workshop on oral health policy. Faculty of Dentistry & WHO Oral health Collaborating Centre, University of the Western Cape, Cape Town. Pg 27-34.

90) Parsons W (1995). Public Policy. An introduction to the theory and practice of policy analysis. London: Edward Elgar.

91) Patton CV, Sawicki DS (1993). Basic methods of policy Analysis and planning. Prentice Hall, Englewood Cliffs, New Jersey.

92) Pekruhn C, Honig L, Frosh Marcy, Burton Edelstein (2011). The State Oral Health Plan comparison tool Children's Dental Health Project, USA. (http://www.cdhp.org/resource/state_oral_health_plan_comparison_tool, Accessed May 20, 2012).

93) Petersen PE (2008). World Health Organization global policy for improvement of oral health – World Health Assembly 2007

94) Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C (2005). The global burden of oral diseases and risks to oral health. Bulletin of the World Health Organization 83:661-669

95) Roberts MJ, Hsiao W, Berman P, Reich MR (2004). Getting health reform right. A guide to improving erformance and equity. Oxford: Oxford University Press.

96) Sabatier PA (2007). The need for better theories. In: Sabatier PA (Ed). Theories of the policy process. MA, Cambridge: Westview Press. Introduction:3-20.

97) Sabatier PA, Jenkins-Smith HC (1993). Policy change and learning: An advocacy coalition approach. Boulder CO: Westview Press.

98) Sgan-Cohen HD, Evans RW, Whelton H, Villena RS, MacDougall M, Williams DM, IADR-GOHIRA Steering and Task Groups (2013). IADR Global Oral Health Inequalities Research Agenda. (IADR-GOHIRA). A Call to Action. *Journal of Dental Research* January 24, 2013, Doi:10:1170/0022034512475214

99) Shehu U (1998). Tertiary health care services in Nigeria. The past, present and future. 2nd Abayomi Bandele Bandipo Memorial Lecture delivered on 30th November, 1998 at the University College Hospital, Ibadan. *Nigerian Journal of Clinical Practice* 1998;1(2):45-52.

100) Sheiham A, Watt RG (2000). The common risk factor approach: a rational basis for promoting oral health. *Community Dent Oral Epidemiol* 28:399-406

101) Shiffman J (2007). Generating political priority for maternal mortality reduction in 5 developing countries. *American Journal of Public Health* 97:796-803.

102) Shiffman J, Smith S (2007). Generation of political priority for global health initiatives. A framework and case study of maternal mortality. *The Lancet* 37(9595):1370-1379.

103) Short S (1997). Elective affinities: research and health policy development. In: Gardner H (ed.) Health policy in Australia. Melbourne: Oxford University Press.

104) Singh A (2010). Oral health policies in developing countries. *Journal of Public Health Policy* 31:498-499.

105) Singh S (2002). A Critical Analysis of the Provision for Oral Health Promotion in South African Health Policy Analysis. Final Report. Pretoria: Health Systems Trust. Grant Number SDP/117/02

106) Singh S (2005). A Critical Analysis of the Provision for Oral Health Promotion in South African Health Policy Development. A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (Dental Public Health) in the Department of Community Oral Health, University of the Western Cape. June 2005.

http://etd.uwc.ac.za/usrfiles/modules/etd/docs/etd_init_8590_1178278903.pdf. (Accessed May 23, 2012).

107) Singh S, Myburgh NG, Lalloo R (2010). Policy analysis of oral health promotion in South Africa. *Global Health Promotion* 2010 Mar;17(1):16-24.

108) Siringi S (2002). Kenya embarks on campaign to improve oral health. *The Lancet* 360: 856 www.thelancet.com

109) Soares CLM (2012). Constructing public oral health policies in Brazil: issues for reflection. *Braz Oral Res* (Sao Paulo) 26(Spec. Issue 1):94-102.

110) Statistics South Africa (2011). Statistical Release P032. Statistics South Africa: Mid-year population estimates 2011. Pretoria: Statistics South Africa.

111) Strachan B, Zabow T, van der Spuy ZM (2011). More doctors and dentists are needed in South Africa. *SAMJ* 101(8):523-528.

112) Sweeney K (1996). Evidence and uncertainty. In: Marshall M (ed.). Sense and sensibility in health care. London: BMJ Publishing Group.

113) Szolnoki G, Hoffmann D (2013). Online, face-to-face, and telephonic surveys – comparing different sampling methods in wine consumer research. *Wine Economics and Policy* 2(2): 57-66, doi:10.1016/j.wep.2013.10.001.

114) Thorpe S (2004). Summary report. FDI/WHO planning conference for oral health in the African region. Nairobi, Kenya - 14-16 April 2004. Commonwealth Dental Association, UK.

115) Thorpe S (2006). Oral health issues in the African region: current situation and future perspectives. *Journal of Dental Education* 70(11) Suppl.:8-15.

116) Thorpe SJ (1995). A regional overview of oral health services in Africa. In: Myburgh NG (Edited). Future directions for oral health in South Africa. Proceeds of Medic Africa ’95 workshop on oral health policy. Faculty of Dentistry & WHO Oral Health Collaborating Centre, University of the Western Cape, Cape Town. Pg 35-46.

117) Tones K, Green J (2004). Health promotion. Planning strategies. London: Sage Publications Ltd.

118) Turner DW (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report* 15(3): 754-760.

119) Uneke CJ, Ogbonna A, Ezeoha PG, Oyibo F, Onwe BAF and The Innovative Health Research Group. (2009). "Health System Research and Policy Development in Nigeria: The Challenges and Way Forward." *Internet Journal of World Health and Societal Politics* 6: 2.

120) United Nations (2011). Political declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. Resolution A/66/L1. 2011. New York: United Nations General Assembly.

121) Van Wyk PJ, van Wyk C (2004). Oral health in South Africa. *International Dental Journal* 54(6):373-377.

122) Vogl S (2013). Telephone versus face-to-face interviews. Mode effect on semistructured interviews with children. *Sociological Methodology* 43(1): 133-177.

123) Walt G, Gilson L (1994). Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning* 9(4): 353-370.

124) Walt G, Shiffman J, Schneider H, Murray SF, Brugha R, Gilson L (2008). 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning* 23:308-317

125) Walt G. (1994). Health policy: An introduction to process and power. London: Zed Books

126) Wanless D (2004). Securing good health for the whole population. Final Report. London: HMSO. http://www.hm_treasury.gov.uk

127) Weiss CH (1979). The many meanings of research utilization. *Public Administration Review* 39:426-431.

128) Weissert CS, Weissert WG (2006). Governing health. The politics of health policy. Baltimore: The Johns Hopkins University Press. 3rd Edition.

129) WHO (1998). Oral health in the African Region: A regional strategy 1999–2008, Zimbabwe, Harare: World Health Organization, Regional Office for Africa (AFR/RC49/10).

130) WHO (1999). Consultative meeting on implementation of regional oral health strategy in African countries. Harare, Zimbabwe. 30 March – 1 April 1999. Final Report. Zimbabwe, Harare: World health Organisation, Regional Office for Africa.

131) WHO (2000). World Health Report 2000. Improving health systems performance. World Health Organization, Geneva.

132) WHO (2005). Writing oral health policy: A manual for oral health managers in the WHO African Region, Brazzaville, World Health Organization, Regional Office for Africa (AFR/ORH/05.1),

133) WHO (2007). World Health Assembly. Oral health: action plan for promotion and integrated disease prevention. WHA60.17. World Health Organization, Geneva.

134) WHO (2008a). Implementation of the regional oral health strategy: update and way forward. Report of the Regional Director. WHO Regional Committee for Africa. Fifty-eighth session Yaounde, Republic of Cameroon, 1–5 September 2008. Provisional Agenda item 7.7. AFR/RC58/9 24 June 2008.

135) WHO (2008b). Public policies for the public's health. In: WHO. The World Health Report 2008. Primary Health Care. Now more than ever. World Health Organization, Geneva. Chapter 4: 63-78.

136) WHO (2014). Strategic directions and priorities for actions. Oral and dental health. WHO Regional Office for Africa. 3pp.

137) Wildavsky A (1979). Speaking truth to power. Boston: Little Brown

138) Wong TC (2013). NDAs and public oral health policy. FDI World Dental Federation. (http://www.fdiworldental.org/media/presidents-message/ndas-and-public-oral-health-policy.aspx).

139) Young E, Quinn L (2002) Writing Effective Public Policy Papers: A Guide To Policy Advisers in Central and Eastern Europe, Budapest: LGI.

APPENDIX 1: INTERVIEW GUIDE

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

INFORMATION ABOUT THE RESPONDENT (to be obtained before the Interview)

Gender: Female ☐ Male ☐

Official position/Title: _____

Ministry/Department/Organization: _____

Type of interview: Face to face ☐ Telephonic ☐

Date of interview: _____

Name of interviewer: _____

INTRODUCTION

Good morning Sir/Madam [*or as appropriate*]. Thank you very much for making time for this interview. My name is [*state your name*] and from [*state your university*]. This interview is aimed at assessing the development and implementation of the Oral Health Policy in South Africa (or Nigeria). The results of the interviews will assist stakeholders in identifying any barriers to the implementation of the policy. It would also help to improve policy dissemination, resource mobilization, and the updating of policy implementation plans. It is anticipated that the interview will take about 30 minutes.

	MAIN QUESTIONS	ADDITIONAL QUESTIONS	CLARIFYING QUESTIONS
A.	**BACKGROUND/CONTENT**		
1	Is oral health a major problem in the [country, your State, your district/local government area]?	• Why do you consider oral health to be (or not to be) a problem? • Which dental/oral health problems are encountered in your area? • What is the scope of the problem, and have you had any personal experience of dental treatment? • Have you noticed any changes in the oral health delivery over the past few years?	• Can you expatiate on this? • Can you give me some examples?
2a	Do you have an Oral Health Policy for your Province/State/District/ Local Government? **(If No, go to question A2b. Otherwise, skip question A2b)**	• If yes, was it developed specifically for your [Province/State/District/Local Government] or simply adapted from the National Oral Health Policy? • Do you have a copy of the Oral Health Policy document? • Are you currently implementing an Oral Health Care policy in your [Province/State/District/Local Government]?	• Can you please explain? • How long ago was this?
2b	What information do you have about the National Oral Health Policy for the country?	• Do you have a copy of the National Oral Health Policy document? • Have you ever participated in the process of formulating an oral health policy	

		either at the National/Provincial/State/District or Local government level? • Which Ministry/Department/Institution should have been responsible for monitoring the implementation of the National policy in your Province/State/District? • Which indicators would be appropriate for monitoring the implementation of an oral health policy in your Province/State/District/Local Government? • Is there a mechanism for which the implementation of an oral health policy can be funded in your Province/State/District/Local Government? • Which of the evaluation methods would be appropriate for an oral health policy in your Province/State/District/Local Government? **(Terminate the interview here for those answering Question A2b)**	
3	To what extent do you think the current Oral health Policy addresses the key dental issues in the [country, your state, your district (or local government area), technical area]?	• Are there important issues that are not addressed by the policy? • Do you think there are other avenues for addressing the issue(s) that you have identified?	
4	To what extent does the policy address gender issues?		
5	To what extent does the policy address the needs of the poor and disadvantaged groups?		
6	In your opinion, are the goals and objectives achievable within the timeframe set out in the policy?	• Why do you think so?	
B.	**PROCESS/OUTCOME**		
1	How extensive was your involvement during the formulation of the policy?	• Do you think it would have made a difference if you had been more involved?	• Can you expatiate on this? • Can you give me some examples? • Can you please explain?
2	Can you briefly identify the stakeholders that played important roles in the formulation process, and what were their roles? (If not known, move to next question)	• In what way has the degree of involvement of stakeholders in the policy formulation affected implementation?	

3	Is there an official implementation plan? (Yes/No/Don't know)	• How helpful is this? (If available) How helpful could it have been? (If unavailable or Don't know if available) • If there is no overall implementation plan for the policy, what document is currently guiding the implementation of the policy? • In your opinion, how effective is the coordination among the various organizations that are implementing strategies designed to achieve the policy's goals?	
4	How do you plan to assess the implementation of the Oral Health Policy?	• To what extent are different sectors within the government involved in implementing the policy? • Which other organizations could be involved in order to improve the implementation of the policy? • Do you think additional policy action such as issuance of operational guidelines would facilitate the implementation of this policy? • In your opinion, how well was the policy disseminated to various implementing agencies? • In your opinion, how has this degree of dissemination affected implementation?	
C.	**CONTEXT - Social, Political, Economic And Cultural Factors**		
1	From your perspective, how do factors such as ethnic disparities, religious practices, cultural beliefs, and professional rivalry either at local or national levels, facilitate or hinder the process of implementing this policy?		• Can you expatiate on this? • Can you give me some examples? • Can you please explain?
2	Has there been any effect of political factors such as changes in government/Ministers, decentralization, policy environment, and international agreements (e.g. introduction of the Millennium Development Goals) on the implementation of this policy?	• In what way?	
3	In your opinion, how do economic factors such as unemployment, poverty, and donor priorities facilitate or hinder the process of implementing this policy?		
4	How will you assess the overall support for the policy?	• Which opinion leaders or institutions support the implementation of the policy? • Which opinion leaders or institutions oppose the implementation of the policy?	
5	In your understanding, which is the lead Ministry/Department/Institution	• How effective is this Ministry/Department/Institution's	

	responsible for implementing the policy?	leadership in implementing the policy?	
D.	**FUNDING**		
1	Is there a mechanism in place for funding the implementation of the Oral health Policy?	• How adequate is the current allocation of financial resources for the policy? • Are there challenges in disbursing allocated funds? • How will the funding be sustained for the duration of the policy? • How can funding for the policy be improved? (where applicable)	• Can you expatiate on this? • Can you give me some examples? • Can you please explain?
E.	**MONITORING/EVALUATION**		
1	Which Ministry/Department/Institution is officially responsible for monitoring the implementation of the policy?	• Which of the evaluation methods (regular meetings, periodic reports, site visits, service statistics, client satisfaction surveys, etc.) are being utilized? • Which indicators are being used to monitor the implementation? • Are there positive changes as a result of implementing this policy?	• Can you expatiate on this? • Can you give me some examples? • Can you please explain?

THE INTERVIEW WILL END BY THANKING THE RESPONDENT FOR HIS/HER TIME.

APPENDIX 2: QUESTIONNAIRE FOR QUANTITATIVE STUDY

QUESTIONNAIRE

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

INTRODUCTION & BACKGROUND

I would like to invite you to participate in a study that is part of my Doctoral study at the Department of Community Oral Health, University of the Western Cape. I am researching the process, content, implementation and evaluation of oral health policies in African countries, as well as South Africa. It is anticipated that the findings will assist stakeholders to identify the barriers to the implementation of oral health policies. Furthermore, it should help to improve policy dissemination, resource mobilization, and updating of policy implementation plans. I would like to thank you in advance for taking the time to complete this questionnaire.

Please note that there are three sections to the questionnaire and all need to be completed:

Section 1 – Demographic details

Section 2 – General questions on oral health and oral health policies

Section 3 – Issues relating directly to Oral Health Policy implementation in South Africa. For this section, please indicate your opinion on a 5-point scale: Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree.

Please answer by checking (✔) the box which corresponds to your opinion or write your answer(s) in the space provided.

All the information that you provide will be strictly confidential, anonymous and will be reported as group data.

Kindly complete the questionnaire before **31st March 2014.**

If you would like any further information about the study or to report a study-related problem, please contact me **Eyitope Ogunbodede** by email: eogunbodede@gmail.com.

For queries, concerns or complaints about the study, or for information about your rights as a research participant, please contact:

Professor Sudeshni Naidoo PhD
Deputy Dean for Research
Faculty of Dentistry & WHO Collaborating Centre for Oral Health
University of the Western Cape
Private Bag X1, Tygerberg 7505
Cape Town, South Africa.
Tel -27-21-937 3003 (w)
Fax -27-21-931 2287
E-mail: suenaidoo@uwc.ac.za

SECTION 1: **DEMOGRAPHIC DETAILS**

1. Your age (years) _____
2. Gender: ☐ Female ☐ Male
3. Official Position/Title: _____
4. Place of work: _____
5. Office Location (Including Town/City): _____
6. In what year did you qualify? (As Dentist/Dental Technologist/Dental Therapist/Dental Nurse/Oral Hygienist/Dental Technician) _____
7. How many years have you actively practiced your profession? _____ years
8. Your Highest Qualification: ☐ Diploma/Certificate (e.g. Nursing, Oral Hygiene, Dental Therapy etc) ☐ Bachelor's degree ☐ Medical/Dental degree ☐ Master's degree ☐ Doctoral Degree ☐ Postgraduate Fellowship ☐ Others (please state)_____
9. How will you describe the setting of your place of primary practice:

   ☐ Urban ☐ Suburban ☐ Small town ☐ Rural

10. If you are a specialist, what area of dentistry do you practice in?

    ☐ General dentistry ☐ Community/Public Health Dentistry ☐ Periodontics ☐ Endodontics ☐ Oral Surgery ☐ Orthodontics ☐ Pediatric Dentistry ☐ Prosthodontics ☐ Other (please state)_____

11. In what type of practice setting do you work?

    ☐ Ministry/Non-hospital setting ☐ Solo dental practice ☐ Privately-owned multi-dentist practice ☐ Retired or not actively practicing ☐ Industry ☐ Dental education ☐ Other _____

SECTION 2: **GENERAL ISSUES ON ORAL HEALTH POLICIES**

1. Are you familiar with the South African Oral Health Policy document? ☐ Yes ☐ No
2. Do you have a copy of the South African Oral Health Policy document? ☐ Yes ☐ No
3. Are you familiar with the South African National Oral Health Strategy document? ☐ Yes ☐ No
4. Do you have a copy of the National Oral Health Strategy document? ☐ Yes ☐ No
5. What role did you play in the development and implementation of the current National Oral Health Policy/Strategy documents? ☐ None ☐ Teacher ☐ Student ☐ Facilitator ☐ Gave financial support ☐ Others (clarify)_____
6. Have you ever participated in the process of formulating an oral health policy either at the National/Provincial/State/District or Local government level? ☐ Yes ☐ No
7. Have you ever participated in the monitoring and evaluation of the National Oral Health Policy either through meetings, periodic reports, site visits, service statistics or satisfaction surveys? ☐ Yes ☐ No
8. How many times have you participated in continuing education courses, seminars/workshops on oral health policy after qualifying as a dentist? ☐ Never ☐ Only once ☐ Twice or more
9. Are you currently implementing an Oral Health policy in your Province/State/District/Local Government/Establishment? ☐ Yes ☐ No ☐ Don't know
10. How enthusiastic are you, personally, in supporting the National Oral Health Policy? ☐ Highly enthusiastic ☐ Enthusiastic ☐ Undecided ☐ Somewhat enthusiastic ☐ Not enthusiastic

SECTION 3: **IMPLEMENTATION OF ORAL HEALTH POLICIES**

Please rate your level of agreement with each of the statements below by selecting only one of the options: *Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree*

	Question	**Strongly Disagree**	**Disagree**	**Un-decided**	**Agree**	**Strongly Agree**
1	Oral health is a major problem in South Africa					
2	There have been major improvements in oral health delivery in South Africa over the past few years					
3	The budgetary provision for oral health is generally poor in South Africa.					
4	Oral health is fully integrated into Primary Health Care (PHC) in the country					
5	Having a National Oral Health policy/Strategy is very important for the improvement of oral health in South Africa.					
6	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy in South Africa					
7	Lack of capacity at an individual level is a major challenge in implementing oral health policies in South Africa					
8	Lack of capacity at local government, district or sub-district levels is a major challenge in implementing oral health policies in South Africa					
9	Lack of communication and poor networking between policy makers and implementers is a major drawback for the National Oral Health Policy/Strategy					
10	Non-involvement of oral healthcare recipients in the development of policies and planning of oral health care delivery is a major issue in South Africa					
11	There is failure to integrate research findings into the oral health policy development process					
12	The implementation of the National Oral Health Policy/Strategy has been very effective and efficient					
13	There have been positive changes as a result of implementing the National Oral Health Policy/Strategy					
14	Additional policy action, such as operational guidelines, will enhance the implementation of the National Oral Health Policy/Strategy					
15	Administrators in hospitals and Departments/Ministries of Health have been very enthusiastic in supporting the National Oral Health Policy/Strategy					
16	Deans of Dental Schools/Dental educators have been very enthusiastic in supporting the National Oral Health Strategy					
17	Medical (non-dental) colleagues have been very enthusiastic in supporting the National Oral Health Strategy					

	Question	Strongly Disagree	Disagree	Un-decided	Agree	Strongly Agree
18	The prospect of developing a stronger oral health policy/strategy for South Africa within the next 5 years is very strong.					
19	Dental professional interest groups in the country have effective lobbying mechanisms, through which they make tangible contributions to Oral Health.					
20	Information and data provided by dental professional interest groups in the country have helped in formulating and defending Oral Health Policies					
21	National and international health goals have contributed to the development and sustenance of oral health policies in South Africa.					

THANK YOU FOR YOUR TIME

(* South Africa will be replaced with Nigeria for Nigerian respondents)

APPENDIX 3: ETHICAL CLEARANCE

Office of the Deputy Dean
Postgraduate Studies and Research
Faculty of Dentistry & WHO Collaborating Centre for Oral Health

UNIVERSITY OF THE WESTERN CAPE
Private Bag X1, Tygerberg 7505
Cape Town
SOUTH AFRICA

Date: 20th July 2012

For Attention: Dr EO Ogunbodede
Department of Community Oral Health

Dear Dr Ogunbodede,

STUDY PROJECT: Implementation of oral health policies in African countries: South Africa and Nigeria as case studies

PROJECT REGISTRATION NUMBER: 12/6/37

ETHICS: Approved

At a meeting of the Senate Research Committee held on Friday 20th July 2012 the above project was approved. This project is therefore now registered and you can proceed with the study. Please quote the above-mentioned project title and registration number in all further correspondence. Please carefully read the Standards and Guidance for Researchers below before carrying out your study.

Patients participating in a research project at the Tygerberg and Mitchells Plain Oral Health Centres will not be treated free of charge as the Provincial Administration of the Western Cape does not support research financially.

Due to the heavy workload auxiliary staff of the Oral Health Centres cannot offer assistance with research projects.

Yours sincerely

Professor Sudeshni Naidoo

Tel -27-21-937 3148 (w); Fax -27-21-931 2287 e-mail: suenaidoo@uwc.ac.za

APPENDIX 4: INFORMED CONSENT

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

CONSENT FORM

(The research participant will sign original, which remains with researcher while the researcher will sign the copy for the personal records of the research participant)

1. The researcher has explained to me that the purpose of this interview is to collect information on the process, content, implementation and evaluation of oral health policies in [country] as part of a Doctoral research from the Department of Community Oral Health at the University of the Western Cape, South Africa.
2. I understand the overall aims of the research and it is also clear to me how the information I give in this interview will be used.
3. I understand that the questions I will be asked pertain to my experience in working with my Department/Ministry/organization rather than my personal experiences, and that I do not have to speak about my personal experiences unless I find it convenient.
4. The researcher has explained that the information I give will be confidential and that my anonymity, and that of my organization/department and its clients, will be preserved.
5. I understand that I may decline to participate in the interview, and that I can end the interview at any point. I further understand that I may refuse to answer specific questions without having to give any reasons.
6. The researcher has explained the purpose of recording this interview, which is to ensure accuracy. I have also been informed of what will happen to the recording. I agree to the recording under these conditions.
7. I am aware that the information I give in this interview will be included in a research report to the University of the Western Cape, but may be used for published or unpublished research at a later stage without further consent.
8. I have received a Participant Information Form with contact details of the project coordinator(s) in case I would like further information about the study.
9. I understand what will be required of me to take part in the study.

I hereby consent to participate in this research.

---------- ----------

Signature: Research Participant **Signature: Researcher**

Date_____

APPENDIX 5: PARTICIPANT INFORMATION FORM

IMPLEMENTATION OF ORAL HEALTH POLICIES IN AFRICAN COUNTRIES: SOUTH AFRICA AND NIGERIA AS CASE STUDIES

PARTICIPANT INFORMATION FORM
(The research participant will receive a copy)

1. The purpose of this interview is to collect information on the process, content, implementation and evaluation of oral health policies in Nigeria. This is part of a Doctoral research from the Department of Community Oral Health at the University of the Western Cape, South Africa aimed at collating and analyzing all oral health related policies of the South African and Nigerian governments in the last decade.

2. You have been identified as a major stakeholder and key information resource. We are therefore interested in interviewing you regarding your role and contributions in oral health and in the oral health policy planning, formulation and implementation processes for Nigeria.

3. The interview will take about 30 minutes. For purposes of accuracy, we would like to ask your permission to record the interview. Once we have transcribed the recording, we will destroy the recording and refer only to the written document (transcription). Your name will not appear on either the recording (while it exists) or the written transcription, and neither your name nor anything that identifies you will be used in any reports of this study. There are no risks in participating in this study.

4. If there is anything that you would prefer not to discuss, please feel free to say so. Your participation is voluntary, and you may decline to answer any question or end the interview at any point. You do not have to give reasons for declining to answer any specific question.

5. The information you give in this interview will be included in a research report to the University of the Western Cape, but may be used for published or unpublished research at a later stage without further consent.

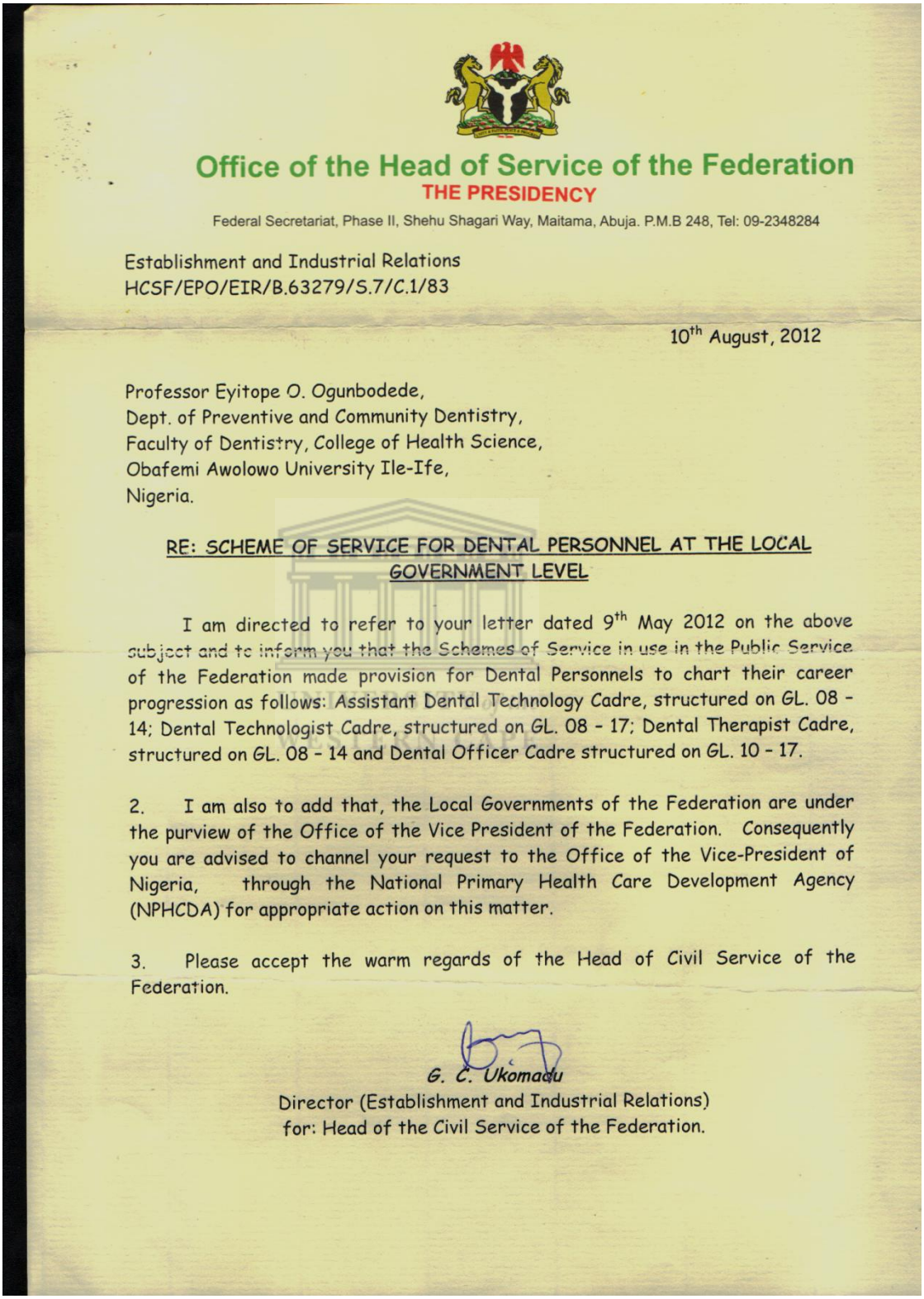
6. The questions you will be asked pertain to your experience in working with your Department/ministry/organization rather than your personal experiences. Therefore, you do not have to tell us your personal experiences unless you find it convenient.

7. If you would like to take part in the study, we will kindly request that you sign a consent form. Please do not write your name on the consent form. We will give you a copy of the consent form for your own records, after you have signed.

If you would like to know anything more about the study or to report a study-related problem, please contact **Eyitope Ogunbodede** on telephone number 08037195770 or by email (eogunbodede@gmail.com).

For problems, concerns or complaints about the study, or for information about your rights as a research participant, please contact:
Professor Sudeshni Naidoo PhD
Deputy Dean, Postgraduate Studies and Research
Faculty of Dentistry & WHO Collaborating Centre for Oral Health
University of the Western Cape
Private Bag X1, Tygerberg 7505
Cape Town, South Africa.
Tel -27-21-937 3148 (w)
Fax -27-21-931 2287
E-mail: suenaidoo@uwc.ac.za

APPENDIX 6: LETTER FROM HEAD OF SERVICE OF THE FEDERATION



Office of the Head of Service of the Federation
THE PRESIDENCY

Federal Secretariat, Phase II, Shehu Shagari Way, Maitama, Abuja. P.M.B 248, Tel: 09-2348284

Establishment and Industrial Relations
HCSF/EPO/EIR/B.63279/S.7/C.1/83

10th August, 2012

Professor Eyitope O. Ogunbodede,
Dept. of Preventive and Community Dentistry,
Faculty of Dentistry, College of Health Science,
Obafemi Awolowo University Ile-Ife,
Nigeria.

RE: SCHEME OF SERVICE FOR DENTAL PERSONNEL AT THE LOCAL GOVERNMENT LEVEL

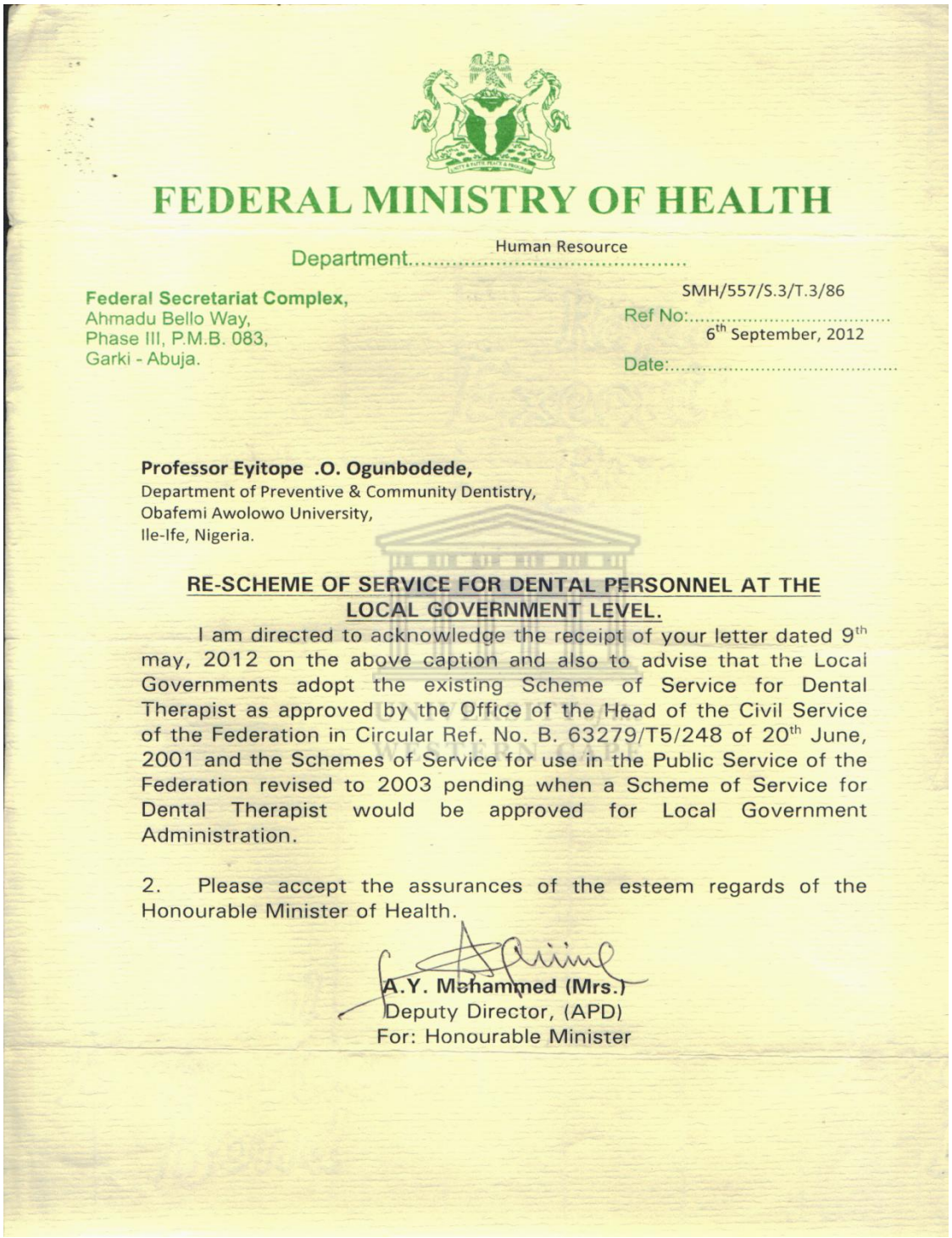
I am directed to refer to your letter dated 9th May 2012 on the above subject and to inform you that the Schemes of Service in use in the Public Service of the Federation made provision for Dental Personnels to chart their career progression as follows: Assistant Dental Technology Cadre, structured on GL. 08 – 14; Dental Technologist Cadre, structured on GL. 08 – 17; Dental Therapist Cadre, structured on GL. 08 – 14 and Dental Officer Cadre structured on GL. 10 – 17.

2. I am also to add that, the Local Governments of the Federation are under the purview of the Office of the Vice President of the Federation. Consequently you are advised to channel your request to the Office of the Vice-President of Nigeria, through the National Primary Health Care Development Agency (NPHCDA) for appropriate action on this matter.

3. Please accept the warm regards of the Head of Civil Service of the Federation.

G. C. Ukomadu
Director (Establishment and Industrial Relations)
for: Head of the Civil Service of the Federation.

APPENDIX 7: LETTER FROM THE FEDERAL MINISTRY OF HEALTH



FEDERAL MINISTRY OF HEALTH

Department..... Human Resource

Federal Secretariat Complex,
Ahmadu Bello Way,
Phase III, P.M.B. 083,
Garki - Abuja.

SMH/557/S.3/T.3/86
Ref No:.....
6th September, 2012
Date:.....

Professor Eyitope .O. Ogunbodede,
Department of Preventive & Community Dentistry,
Obafemi Awolowo University,
Ile-Ife, Nigeria.

RE-SCHEME OF SERVICE FOR DENTAL PERSONNEL AT THE LOCAL GOVERNMENT LEVEL.

I am directed to acknowledge the receipt of your letter dated 9th may, 2012 on the above caption and also to advise that the Local Governments adopt the existing Scheme of Service for Dental Therapist as approved by the Office of the Head of the Civil Service of the Federation in Circular Ref. No. B. 63279/T5/248 of 20th June, 2001 and the Schemes of Service for use in the Public Service of the Federation revised to 2003 pending when a Scheme of Service for Dental Therapist would be approved for Local Government Administration.

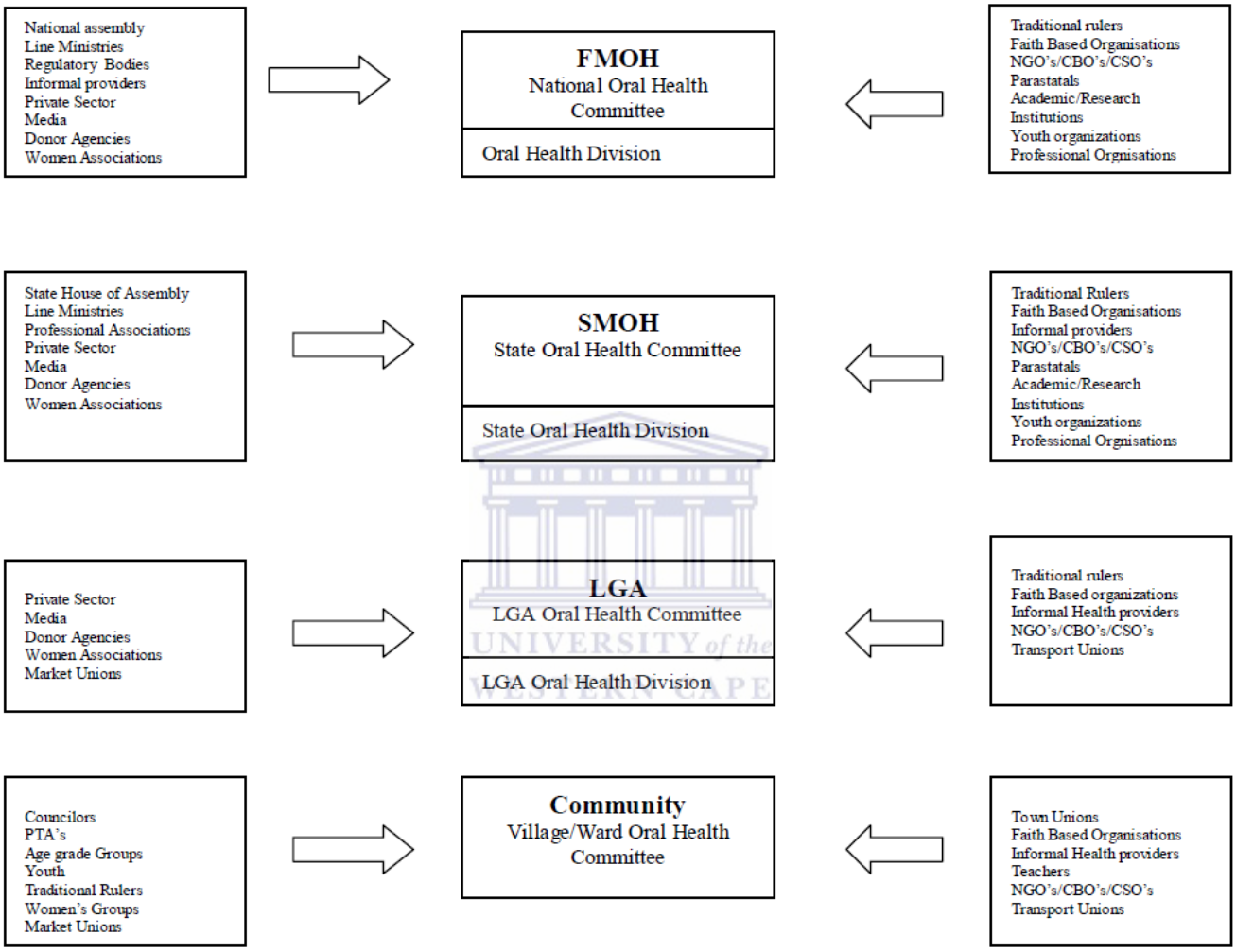
2. Please accept the assurances of the esteem regards of the Honourable Minister of Health.

A.Y. Mohammed (Mrs.)
Deputy Director, (APD)
For: Honourable Minister

APPENDIX 8: SOME INTERNATIONAL ORAL HEALTH POLICIES RELEVANT TO AFRICA

	Organisation	Policy Thrust & Year	Date	Remark
1	United Nations	Resolution on prevention and control of non-communicable diseases. Article 19 "renal, oral and eye diseases pose a major health burden for many countries and that these diseases share common risk factors and can benefit from common responses to non-communicable diseases (United Nations, 2011).	Summit on Non-communicable diseases in New York, 19-20 September, 2011	
2	WHO (Oral health programme)	WHA60.17 Oral Health Resolutions. Various aspects (2007)		See Website
3	FDI	FDI Vision 2020: Shaping the future of oral health (2012). Based on two key principles: *Oral health as a fundamental right* and *Oral health in all policies.*	FDI General Assembly during its meeting in Hong Kong on August 31st, 2012	Glick *et al* (2012), Wong (2013)
		The FDI African Strategy for Oral Health: Addressing the specific needs of the continent (2012).	African Summit for Oral Health, Cape Town held October 30/31, 2012.	Hescot *et al* (2013) http://www.fdiworldental.org
		Improving access to oral health care (2009)	Original 1998, Revised 2005, Reconfirmed 2009	See index of FDI policy statements at: http://www.fdiworldental.org
		Other FDI policies include: Perinatal and infant oral health (2014); Early detection of HIV infection and appropriate care of subjects with HIV/AIDS (2014); Oral radiations (2014); Dental amalgam (1997-2009, merger of several documents); Healthy ageing (2009); Oral and pharyngeal cancer (2008); Water fluoridation (2008); Dental implants (2008); oral and dental care of people with disabilities (2003);		
	IADR	Health Inequality GOHIRN (Sgan-Cohen, 2013)		

APPENDIX 9: FRAMEWORK FOR ORAL HEALTH ROLES AT THE DIFFERENT LEVELS OF GOVERNMENT IN NIGERIA



Source: FMOH (2012), Page 14.