CHAPTER ONE

1.1 INTRODUCTION

Dental education has arrived at a crossroads. During the last 150 years, it has evolved from aprelude to apprenticeship into a comprehensive program of professional education.

Advancesinscience,technology,andpublichealthprogramshavegreatlyreducedtoothdecayandtoothloss. Dentists are respected professionals, and dental schools are part of many of the nation'sleadingpublicand privateuniversities.

This progress notwithstanding, the position of dental education within the university is beingquestioned as is its relationship to medicine and the larger health care system. Six dentalschools—all private—have closed in the last decade, and others among the 54remaining schools are in jeopardy. The dental profession is at odds with itself on a number

ofissuesincludingworkforcepolicies,licensure,andhealthcarerestructuring.Tensionsbetweenpractitionersandeducatorscanundercuttheprofession'spositionwithintheuniversity.

The future of dental education will be shaped, in part, by scientific, technological, political,and economic factors that are largely beyond the profession's control. Nonetheless, dentaleducators—individuallyandcollectively—haveimportantchoicestomake.Theymayattempttopreservethestatusquo—ineffect,apathtowardstagnationandeventualdecline.Alternatively,theycanchooseamoredifficultpathofreassessingandrenewingtheirmissionsofeducation,research,andpatientcaresothattheycontributemore—andmorevisibly—totheuniversityandthe

community.Takingthislatterpathwill requiremorevigorin implementinglong-standing recommendations for educational reform as well as attention to new issues andobjectives. For dental educators to pursue change successfully, they will need the activecooperation of the larger dental community as well as support from university officials andstateand national policymakers.

ThisInstituteofMedicine(IOM)studywaspromptedbyconcernsthatthechallengesconfrontingdentaleducation,althoughgenerallyrecognized,werenotunderstoodorappreciated

adequately and that effective responses had yet to be identified or presented in apersuasive manner. The purpose of the study was "to assess dental education in the UnitedStates and make recommendations regarding its future." It was overseen by an 18-
membercommitteethatwasappointedafterextensiveconsultationwithdentalandrelatedorganizations. The group included members with expertise and experience in dental practiceandeducation,oralhealthandhealthservicesresearch,otherareasofhealthprofessionsand Higher education, health care delivery and financing, and public policy. The committee as awhole met six times between February 1993 and May 1994. As described in the Preface andsummarized,itundertookawiderangeofactivitiestocollectinformationandperspectives from all segments of the dental community and other relevant, interested groups.(The papers commissioned by the committee will be published in the Journal of DentalEducation) This document, which was submitted for outsidereview in accordance with IOM and National Research Council procedures and policies,constitutesthecommittee's finalreport.

Dental care utilization can be defined as the percentage of the population who access dentalservices over a specified period of time1. Measures of actual dental care utilization describethe percentage of the population who have seen a dentist at different time M intervals. Dentaldisease is a serious public health problem with universal distribution and affecting all M agegroups2.However,despitethisuniversaldistribution,onlyafewseekdentalcare.Thusawidegap is created between the actual dental needs of the population and the demand for dentalcare3.Althoughdentistsagreethatregulardentalvisitsareessentialformaintaininggoodoralhealth, national studies in the United States of America estimate that only 41-50% of allAmericans visit the dentist each year4. In Nigeria, Savage and Arowojolu reported that M 24(31.58%) of the 76 subjects investigated perceived it as being normal for them to bleed fromthegum5.

Therefore,theyhavenoreasontoseekdentalcareforthisobviouspathologicalcondition.The studybySavageandArowojolufurtherreportedthat164(82.4%)oftheirsubjectsclaimednott

o notice bleeding from their gum and believed that they do not have gum disease but dentalexamination revealed that none of the subjects seen had healthy periodontal status.

Amongstthosethatadmittedtohavingnoticedthebleedingfromtheirgum,justabouthalfadmittedthatit is a sign of gingival disease yet none of them sought for dental care5. This observation inNigeriaisinlinewiththatofAinamoandAinamo6.Therearereportsthatdentalpatientsonly visit the dentist when in pain and never bother to return for M follow-up in most cases 7. Tothe best of our knowledge, only few studies have been carried out to either confirm or disputethisclaim in Nigeria.

1.2 DEFINITIONOFDENTAL CLINIC

CLINIC can be define as a healthcare facility where patients receive medical treatment, consultation and care from doctors, nurses or other healthcare professionals.

DENTAL CLINIC can be define as a specialized healthcare facility designed to accommodate dental examination, treatment and procedures. The design of a dental clinic incorporates functional spaces such as reception and waiting area, consultation room, sterilization zones, treatment rooms, x-ray or imaging room and storage for dental equipment and supplies.

1.3 HISTORICALBACKGROUND

Dentistryisoneoftheoldestmedicalprofessions,datingbackto7000B.C.withtheIndus Valley Civilization.However, it wasn't until 5000 B.C. that descriptions related to dentistryandtoothdecaywereavailable.Atthetime,aSumeriantextdescribedtoothwormsas causingdentaldecay, an ideathat wasn'tprovenfalse until the1700s!

In ancient Greece, Hippocrates and Aristotle wrote about dentistry, specifically about treatingdecaying teeth, but it wasn't until 1530 that the first book entirely devoted to dentistry—TheLittleMedicinalBookforAllKindsofDiseasesandInfirmitiesoftheTeeth—waspublished.

By the 1700s, dentistry had become a more defined profession.In 1723, Pierre Fauchard, aFrenchsurgeoncreditedastheFatherofModernDentistry,publishedhisinfluentialbook,TheSurgeonDentist,aTreatiseonTeeth,whichforthefirsttimedefinedacomprehensivesystem for caring for and treating teeth.Additionally, Fauchardfirst introduced the idea of dentalfillings and the use of dental prosthesis, and he identified that acids from sugar led to toothdecay.

In1840,thefirstdentalcollege(BaltimoreCollegeofDentalSurgery)opened,establishingtheneedformoreoversight.IntheUnitedStates,Alabamaledthewaybyenactingthefirstdental practice act in 1841, and nearly 20 years later, the American Dental Association (ADA) wasformed.Thefirstuniversity-affiliateddentalinstitution,theHarvardUniversityDentalSchool,wasfounded in 1867

By 1873, Colgate had mass produced the first toothpaste, and mass-produced toothbrushesfollowedafewyears later. What may come as a surprise is that the first African American to earn a dental degree datesallthewaybackto1869,andthefirstfemaledentalassistantwasemployedinNewOrleansin1885.WhatmightbemostsurprisingofallisthatmostAmericansdidnotadoptgoodbrushinghabits until after World War II, when soldiers stationed abroad brought the concept of goodoralhealth back to theUnited States.

1.4 AIM AND OBJECTIVES OF THE PROJECT

AIM OF THE PROJECT

To design a functional, efficient and culturally appropriate dental clinic in Benin city, Edo states that enhance patient care, ensures hygiene and integrates modern dental technologies while considering the local climate, infrastructure and community needs.

OBJECTIVES OF THE PROJECT

- To use heat-resistant roofing and locally sourced materials suitable for Benin City humid climate.
- To utilize passive cooling techniques, such as cross-ventilation and shading, to reduce reliance on air conditioning.
- To ensure barrier-free access for people with disabilities, including ramps and wide doorways.
- To allocate space for modern dental equipment, digital imaging and telemedicine facilities.

- To incorporate calming colors, natural lights and noise reduction features to ease patient anxiety.

1.5 PROJECT JUSTIFICATION OF THE PROJECT

This project justify, a well-planned dental clinic in Benin City which will enhance patient care, optimize operational patient efficiency and support infection control. Architectural consideration will ensure a functional, aesthetically pleasing, and sustainable healthcare facility that meets modern medical standards.

1.6 CLIENT BACKGROUND

The name of my client is GODWIN NOGHEGHASE OBASEKI.

Former Governor of Edo state.

Godwin NogheghaseObaseki is a Nigerian politician and a businessman who is the former Governor of Edo State. He was first elected governor under the platform of the All Progressive Congress in the year 2016 where he defected Mr. Osagieize-iyamu of the PDP and was sworn in as the governor on 12 November 2016 to 2024Born : 1 July 1957[age 68 years], Benin city organization founded : Afrinvest office, Former governor of Edo state since 2016, Party : People Democracy Party , Education : Columbia University, Pace University and University of Lagos, University of Ibadan Nationality : Nigerian.

1.7 SCOPE OF THE STUDY

- Proposed Building
- Quarters
- Cafeteria
- Gate House
- Generator House
- Parking Lot
- Interlock
- Access Road

1.8 RESEACH METHOLODY

Variousavenueswereexpressedasregardsthemethodofresearchonordertoarriveatafunctionalandappealingdesignconcepts.Thefollowingresearchmethodswereemployed.

LITERATURE REVIEW:
Referencetotolerateforideasofvariouswriterwereconsultedinordertoattainusefulandimportantpastworkonsimilarproject.

INTERNET**:**Thisisaresearchthatwasdoneandgainedfromtheinternetinothertogetfurtherinformation.

PERSONAL
OBSERVATION**:**personalinitiativecoupledwithinquisitivemeasure,interviewandvisualizethedailyactivitiesthattakeplacewithinvicinityandnecessarypictureswereretakeninordertoattaintherequiredmotive

CASE
STUDIES**:**Thisinvolvesthethoroughsynthesisandanalysisofsimilarexistingstructure(building)Basedonthedatacollectedandbetterdeductionwasmadeforrealizationofthebest.