GUEST EDITORIAL

Understanding How Centuries of Abandonment and Rejection Forced Dentistry to Professional Autonomy in The Field of Medicine

Introduction

As Nigerian universities progressively introduce dental schools in their Colleges of Medicine/Health Sciences starting with the University of Lagos in 1966, there is need for interdisciplinary understanding of important professional facets.[1] This is to promote mutual respect, appreciation and co-operation. Whereas Nigerian medical and dental students studied History of Medicine together, there is no History of Dentistry in dental curriculum to explain how dentistry not only separated from surgery but became a distinct profession in the field of medicine. Medical practitioners need to understand why their medical training segregated between the mouth and the rest of the human body.

Dentistry is the medical specialty concerned with prevention and treatment of diseases, disorders and abnormalities in the oral cavity including diseases of the teeth and the supporting bony and soft tissue structures.[2] The name "dentistry" proceeds from the profession's historical high level involvement with the teeth. This is not surprising since the teeth are the oral structures most susceptible to pathological processes and thus. most troublesome in spite of resistance to destructive conditions post-mortem. Today, the name "stomatology" perhaps, seems more embracing for the specialty than "dentistry".

History

Pre-historically, the brutish way of life involved in food gathering as well as the traumatic encounters with wild beasts and fellow men predisposed to various serious injuries. Anatomically, it could be inferred that in those societies, serious trauma to the extreme upper parts of the body, the head and neck, would result in death instantly unless the injury is limited to the mouth region. Such injuries to the jaws and mouth, including those proceeding from habitually masticating coarse, hard food substances and dental decay might not be immediately fatal but evidently would lead to chronic suffering. The growth of agriculture about 10,000 years ago favoured a marked increase in dental decay.

The ancient physicians must have been provoked to investigate management of these troublesome, lingering oro-dental problems propelled by those conditions occasionally manifesting as acute advanced pulpitis, a nightmare of excruciating painfulness that

may lead to hysteria. Such lingering, painful, yet immediately non-life threatening conditions, including jaw fractures that defy common immobilization techniques as well as periodontitis traceable to at least 100,000 years in human remains must have explained why dental care was attributed with very long history.[2]

Thus, in ancient times, dental problems were handled by medical specialists especially those associated with surgery until the Western Roman Empire fell in 475 AD.[2,3] Knowledge generally got devastated but medical knowledge reposed with the monks. In 1163 AD, the Pope forbade the clergy from any form of blood shedding. Thus the monks continued as physicians while the illiterate barbers who cut the monks' hair and surgically assisted them transformed into "barber surgeons".[2] When the medieval universities started training physicians, because of this association with lowly artisans, surgery was considered not only manual but akin to butchery and the teaching initially rejected.[2] Latter, by 1300 AD, surgery started being accepted in Italian universities but dental aspect was continually rejected.

If medieval surgery lacked nobility, medieval dental practice was more seriously despised. The practice which included artificial teeth production, drilling and filling of teeth, dental prophylaxis and wiring for jaw fractures etc. involved skilled workmanship deemed incompatible with great philosophical learning.[4] Again, although administration of herbal remedies and bleeding were used, dental treatment also involved the use of charms and amulets to cure tooth worms and then, supplication to St. Appolonia.[4]

When all failed, dental extraction was a field of crude and painful brutality with piercing cries resonating through the ages. It could be practiced as an exploitative market place comedy laced with showmanship to provide entertainment with sufferer's harrowing torture.[5] In many cases, it could go awry with fragmentation of the crown, fractured jaw or death through over bleeding as well as subsequent infection. For centuries, oro-dental care was abandoned to artisans and charlatans in spite of appeals to physicians by eminent surgeons especially Guy de Chauliac, the most important 14th century surgery teacher at the University of Montpellier, France.[4]

The turning point

However, the dental torments of French royalties especially Louis XIV in the 17th century favoured the development of dental care in France.[6] Thus by 1700, as a result of improved status, honour and prestige, some French surgeons restricted their practice to oral care.[2] One of them, Pierre Fauchard, introduced the word "dentist" in French and established modern "dentistry" by effectively separating the field from "general surgery" in his 1728 monumental book, "The surgeon-dentist".[2]

In England, general surgery was letter integrated with medicine in the universities. Dietary sugar, the main cause of dental decay, was no longer restricted to the rich. Thus in England, as in America, towards mid-19th century, mind–numbing dental pain was so common that lots of quacks practiced extractions without any training. According to Otto, with respect to America, formal training was lacking so that one was a dentist simply

by calling oneself a dentist.[7] No wonder, the associated notoriety and dental phobia that stigmatise the profession to this day.

In America where the scourge of dental decay was spreading like wildfire as in Europe with consequent mortality, quackery was only aborted by the American dental professional breakthrough. The breakthrough was sequel to self-help pioneered by two physicians practicing dentistry, Horace Hyden and Chapin Harry, who feeling the predicament of both dental patients and dental practitioners, requested the University of Maryland to establish a medical specialty of dentistry.[7] The hostile rejection, described by Otto as historic rebuff, was repeated after a second request to a New York Medical School.[7]

A conciliatory perspective of the impasse was that the learned physicians, for ages, felt that dentistry was destined for a different path of development since the unique irreversible pathological degeneration of dental and periodontal tissues could not respond to medication.[7] However, the result of the rebuff was the establishment of Baltimore College of Dental Surgery by the dentists in 1840 as the world's first dental school.[7] Probably in line with the various artisans that have practiced dentistry- blacksmiths, barbers, jewelers, cosmetologists, ivory turners, apothecaries etc., the initial graduates were mere technicians. With fusion of medical, surgical and technical knowledge, the profession acquired complexity.

Professionalism

Professionalization not only led to humane and evidence based dentistry but also resulted in unimaginable clinical and technological advancement. Earlier, it was inconceivable that a diseased mandible could be removed and the maxillofacial/oral surgeon could source the required bone for replacement from other parts of the body – iliac crest, rib, fibular or cavenum of the skull.

After 1840, two Americans, in the course of their dental practice, revolutionalised anaesthesia. Horace Wells, in 1844, discovered use of nitrous oxide (NO_2), laughing gas, as general anaesthesia while in 1846, Thomas Norton introduced ether. In cosmetology, dentistry has perfected the "Hollywood Smile" transforming from a trade tainted with phobia to a profession sought by celebrities and public figures.

Rejection ultimately lifted dentistry to prestige and prosperity in advanced countries generally. The same cannot be said of Italy where dentistry lacks luster. From late 19th century, Italian physicians, due to overproduction and consequent competition, cornered convenient aspects of the hitherto rejected artisan occupation, declaring the field an integral part of medicine. It was only in 1985 that dental degree courses were established but in medical faculties.[8]

Situation in Nigeria

In some countries, the result of the gulf with mainline medicine constitutes confounding problems evoking calls for integration. In Nigeria, sharing of trade union (Nigeria Medical Association), regulatory body (Medical and Dental Council of Nigeria), training arena (College of Medicine) and in some hospitals, patients' case notes, engender so much unity that the professional

dichotomy issue seems generally perceived as a myth. However, organized dentistry, mindful of its history, opposes any relationship perceived as medical dominance.

The professional dichotomy entrenched under the prevailing circumstances, while anomalous, could be adjudged morally justifiable, having reversed the harm of past centuries. Consequently, it has satisfied each of the parties involved–the physicians, unrepentantly isolated dentistry, the dentists, now highly trained. Finally, the patients, hurting or not hurting, can now access quality professional care. For Nigerian health professionals, understanding the evolutionary travails of dentistry as well as other intricate issues of the past, could help demystify and resolve some of the puzzles, mistakes and misunderstandings of the present.

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