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Review

Clinical Communication and Sustainable Healthcare Delivery in the Era of Pandemics: Revisiting Nigeria's Biomedical Model

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Clinical activity is a communication activity, but Nigeria's healthcare model does not recognise communication as integral in the clinical process. The recent pandemics have also proved the burden of public health as largely psychosocial, but again, the existing paradigm does not recognise the biopsychosocial nature of illness. This paper explored clinical communication and sustainable healthcare delivery in Nigeria based on the existing model, emerging paradigms and current realities. The paper used ethnographic and library methods. It justifies that the existing biomedical paradigm does not provide for the role of communication in clinical activity, which is sine-qua-non in attaining sustainable healthcare delivery; that, the country's health system, both in policy and practice, does not recognise the patient as an important stakeholder whose participation in the clinical activity is integral for satisfactory outcome. It further identifies the failure of biomedicine in answering for the health needs of the people, evident in high rate of self-medication, resistance to medical programmes and facilities such as immunisation, anti-natal care. The paper recommends, amongst other things, remodelling of healthcare delivery on Biopsychosocial Model as proposed by George Engel for effective and sustainable healthcare delivery.

Key Words: biomedical model, biopsychosocial model, clinical communication, sustainable healthcare delivery, Nigeria, pandemics.

INTRODUCTION

Communication is an indispensable component of the treatment and healing process. According to Kourakos et al., (2017) communication is the basis of patients' care. The magic and creative ability of medicine resides in the interpersonal relationship between patients and clinicians (Ha et al., 2010). Put differently, it means, the clinical process is largely a communication process; its outcome significantly reliant on the efficacy of communication between and among the major participants of the process (that is, patients and clinicians). Effective clinical communication is a powerful diagnostic tool and a major factor in determining patient satisfaction. For instance, a study by Farzianpour et al., (2015) found out that the relationship of hospital personnel with patient was the most important factor in patient satisfaction in Tehran, Iran. Another study by Ella et al., (2016) found out that effective communication was a major factor contributing to patients' perception of their dignity being respected by nurses in Calabar, Nigeria. According to Swasey (2013) Clinicians who have mastered the art and science of effective

communication provide the best medical treatment for patients. It is used as a major antidote in the care for patients with life-threatening sicknesses like cancer and diabetes (Epstein and Street, 2007; Živanović and Ćirić, 2017). However, communication problems during clinical activity are a major global challenge to sustainable healthcare delivery. The Toronto consensus statement for example acknowledged that "most complaints by the public about physicians deal not with clinical competency problems, but with communication problems and the majority of malpractice allegations arise from communication errors" (Simpson et al.,1991). Teutsch (2003) also writes that difficulties in the effective healthcare delivery are largely problems in the communication between patients and clinicians rather than from any failing in the technical aspects of medical care.

The increase in cases of chronic diseases has heightened the need for effective clinical communication. Chronic health challenges such as cardiovascular and respiratory diseases, cancer, diabetes, Ebola and Corona Virus have become prevalent in the world, with sub-Saharan Africa and Nigeria in particular accounting for high figures (United Nations, 2017). Most of these health challenges are associated with lifestyle and behaviour practices such as poor hygiene, human-animal relationship, exposure to ambient air pollution, smoking, choice of diet, etc. The implication of this health situation is that healthcare professionals have huge communication role to play both in managing these conditions, ensuring patients' adherence to recommended health practices (Stavropoulou, 2012).

Regrettably, Nigeria's model of healthcare delivery, which is biomedicine, does not acknowledge communication as an essential component of the clinical process (Wade and Halligan, 2004). Healthcare delivery under biomedical model is based on medical superiority complex by which illness is conceived and approached basically as diseases, even though the constitution of the World Health Organisation conceives health beyond the "mere absence of disease or infirmity" (World Health Organisation, 1946).

Models or theories of health and illness however, have significant influence on the standard of healthcare delivery, on healthcare outcomes and the health system generally. According to Alderson (1998), theories are not just important but necessary to healthcare practice, to health promotion and to health research. They shape the behaviour of practitioners during data collection and interpretation. Health models also form the national perception or understanding of illness. They determine how medical resources are explored and applied in healthcare delivery. They also influence the extent of the relationship between medical practitioners and the citizens (Wade and Halligan, 2004). Again, the World Health Organisation (2012) describes the usefulness of theories as:

> A toolbox for moving beyond intuition to designing and evaluating health education interventions that are based on an understanding of why people engage in certain health behaviour; a foundation for programme planning and development that is consistent with the current emphasis on using evidence-based interventions; a road map for studying problems, developing appropriate interventions, identifying indicators and evaluating impacts; a guide to help explain the processes for changing health behaviour and the influences of the many forces that affect it, including social and physical environments (p.18).

Given the imperative of communication and health theories to the clinical activity and the sustainability of healthcare delivery, as well as the fact that current health experiences particularly with the increasing cases of chronic diseases and epidemics, including the novel corona virus (COVID-19) have challenged the superiority complex of Nigeria's biomedicine, this paper seeks to investigate clinical communication and healthcare delivery in Nigeria by exploring the existing model, emerging paradigms and current realities in this era of pandemics using ethnographic and library methods.

THEORETICAL FRAMEWORK

The paper is anchored on Biopsychosocial Model of healthcare by Engel (1977). The model debuted in response to the inadequacies of biomedical model, which was in existence at the time. Engel observed that biomedical model was grossly inadequate for effective healthcare delivery because it did not give room within its framework for effective communication between healthcare professionals and patients as it neglects the social, psychological, and behavioural dimensions of illness. World Health

Organisation (2003) also states that the model largely ignores other important factors on healthcare such as patients' views about the symptoms of their sicknesses or their medications.

Engel (1977) argued that the role of clinicians in healthcare delivery is, and always has been, very much that of educator and psychotherapist. Ehlinger, (2016) also writes that communication is the major responsibility and the most essential skill of clinicians with which they empower individuals so that they can protect their health and the health of the public.

According to Neo (2011), the biopsychosocial model conceives human illness as not a solely medical problem but an intricate blend of biological, psychological, and social factors. In other words, the model explains the bio-psycho-social unity of human system, which also means that the biological determinants of illness are strongly influenced by psychological and social condition or state of the patients (Havelka et al., 2009).

The 'bio' components of illness are the aspects of human biology that influence health, such as genetics, changes in organ functioning like liver, the kidney, metabolic malfunction, etc. The 'psycho' components are concerned with changes in emotions and thoughts, which are often occasioned by unpleasant experiences such as loss of job, death of a loved one, long experiences of unemployment, while the 'social' components of the model are concerned with communal or societal factors that relate naturally to human health such as economic status, culture and social interactions, etc. In biopsychosocial terms, these factors blend together in a Trinitarian fashion in every sick person in no particular order. Therefore, in order to achieve good health outcomes, the biopsychosocial model teaches that clinicians must uphold their role as educators and psychotherapists, their major responsibility and the most essential skills being communication with patients, which enables them care for an integrated whole person, with both the mind and the body together as interconnected entities functioning simultaneously and symbiotically (Bevers et al., 2016).

RELEVANCE OF THE MODEL TO THE STUDY

Biopsychosocial model of healthcare is relevant to this paper because it provides a clear template for understanding the nature of human illness, the limitations of biomedicine, and the need for effective clinical communication as sine-qua-non in sustainable healthcare delivery, particularly in this era of pandemic in which health education has become a major component of sustainable healthcare. Using the tenets of the model, the researchers explicate the emptiness of medical superiority complex, especially as experienced in Nigerian healthcare system, and to chart a new course for collaborative and holistic clinical process towards a sustainable healthcare delivery in the country.

Bevers et al., (2016) wrote in support of the model that a multidimensional interaction with those in pain is vital to addressing illness in its multifaceted form. Without a biopsychosocial approach, health science will not have comprehensive understanding of the concept of well-being, it will not be able to characterise and measure well-being holistically, to manage pain successfully and determine the outcome and satisfaction of patients objectively. Salmon and Young (2009) also point out the relevance of the model in addressing issues of patient fundamental human rights, which according to them, is the reason the biopsychosocial paradigm is dominating health policy and shaping the teaching and research in clinical communication in recent times. Accordingly, by promoting patients as equal partners in healthcare, the model is relevant in enhancing respect for their fundamental human rights in the process of care delivery.

BIOMEDICINE

Biomedicine is a model of illness and healthcare based on conservative ideologies of medical practitioners who believe that biological factors have a unilateral role in determining human health and illness. The model is attributed to the western medical scientists of the classical time (Engel, 1977). Under this model, knowledge of human body, its anatomical structure, physiology, biochemical composition (or how they are affected by foreign bodies) and drugs are revered as supreme and ultimate in healthcare delivery. Application of medical knowledge is basically for treatment and elimination of diseases and their symptoms through physical interventions, usually drugs and surgery. Healthcare delivery is focused on diseases rather than on well-being of citizens (Havelka et al., 2009).

In line with the biomedical paradigm, a nation's health system must direct its investments on health in advancing research in medical science, pharmacology and procurement of advanced tech equipment for medical and nursing care. Emphasis on nursing care are placed on technical skills in handling machines, proficiency in assessment, intervention, medical directives and algorithms (Mazzotta, 2016).

Again, in line with this superiority complex of biomedical theory, the health of the people is considered the responsibility of medical practitioners whose main job is diagnosis (confirmation of symptoms), administration of drugs and mutilation of human body (surgery) to correct physiological malfunctioning (Taukeni, 2019).

Under this paradigm, communication with patients is unilateral and exclusive. It is unilateral because patients don't have opportunity to contribute their opinions since they are deemed ignorant about their health. It is also exclusive for management of diseases; therefore, patients are involved only as diagnostic tool for ascertaining the symptoms and effects of drugs. Non-sick citizens are involved only where clinicians cannot understand the patient or where the patients are unable to talk.

CLINICAL COMMUNICATION

Clinical communication refers to the interpersonal interaction or relationship that takes place between clinicians and citizens for health purposes. Some scholars, including Epstein and Street (2007) refer to it as *patient-clinician communication* or *patient-centred communication*. Others, such as Simpson et al., (1991) and Ha et al., (2010) call it *doctor-patient communication* while Swasey (2013) refers to it as *physician and patient communication*; although these conceptualisations are not appropriate because they tend to limit the scope of clinical communication to a small section of clinicians – doctors or physicians. Also, they do not recognise the rest of the actors or participants in the clinical communication process as well as the necessity of their roles in the clinical process.

Larson et al., (2017) on their part refer to clinical communication as *provider communication*, which is communication by care providers. This conceptualisation too is not appropriate because it does not recognise the necessity of care-receivers (patients) in the clinical communication process. Such a conceptualisation can lead to non-participation of patients or citizens and eventually render the clinical communication process ineffective.

Clinical communication is an equally essential component of the clinical activity, designed for effective meaning sharing, education and instructions, for therapy and for soothing emotional anxiety (Boehm and LaBranche, 2017). These attributes are embedded in the very principles that define effective clinical communication, which are to *care*, to *solve* and to *educate* (Centre for Human Services, 1999). Accordingly, during the clinical activity, clinicians are expected to show *care* by establishing and maintaining rapport and trust with the patient. When proper care is given, the diagnosis can establish all the factors responsible for the health challenge, including the socio-emotional problems of the patients. By establishing all the factors, treatment options will work better to *solve* the problem. Then, the clinician should *educate* and counsel the patient by ensuring that patients understand and accept decisions about their health problems and treatment options selected.

As a therapeutic tool, clinical communication is used for management of pains or illnesses in healthcare facilities such as hospitals, clinics, nursing homes, primary healthcare centres in rural areas, makeshift tents in camps of displaced persons (IDP or Refugee camps) and the treatment (isolation) centres (Swasey, 2013). It begins from the point of meeting new patients and include all forms of interaction with the patient across clinical situations (Salmon and Young, 2017).

As a form of health education, the scope of clinical communication includes interactions between clinicians and citizens for prevention of ill-health. In modern times, the digital technology has offered wide range of opportunities for this form of communication between clinicians and citizens.

METHODOLOGY

The study used ethnographic and library methods. Library information including journal articles, book chapters, thesis reports, reports, manuals and policy documents of government ministries and sectorial bodies in the health sector that relate to the key variables: clinical communication, sustainable

healthcare, biomedical model, biopsychosocial model and pandemics were retrieved via Google search engine. These were critically read, summarised and analysed. Critical review of these library materials was juxtaposed with ethnographic experiences of the researchers both personal and vicarious, as adult citizens and patients in Nigeria.

DISCUSSION

The clinical activity is a communication activity, designed for sharing meaning on health issues between clinicians (health practitioners) and patients (citizens). Kidd et al., (2005) explained this oneness of communication and clinical activities by challenging the culture of teaching communication and clinical skills separately to medical students. According to them,

> When working with patients and colleagues, communication and clinical skills are practised simultaneously. The practice of teaching communication skills separately from clinical skills reflects a reductionist paradigm. This may be helpful at an early stage of learning, but it may limit the coherence needed to ensure that doctors communicate satisfactorily with patients (p. 374).

Two things are important to note from this quotation: that clinical activity is a communication activity; albeit somehow distinct, but seamlessly intertwined and practiced simultaneously by one and same individual practitioners. Second, it explains the inadequacies of biomedicine – a reductionist model. Under biomedicine, communication is separated and treated with less concern than the technical skills of the clinician. This often results to poor interaction with patients and consequently, unsatisfactory health outcomes.

Biomedicine and Clinical Communication in Nigeria

Healthcare delivery in Nigeria is modelled on biomedicine, which amongst other principles (as earlier explained under conceptual clarification), has jettisoned participatory communication from the nation's definitions of clinical process. Although the National Health Policy by the Federal Ministry of Health (2016a) Chapter 4, 2.9 provides for communication as an initiative for informing, educating and dialoguing with individuals and communities, empirically, however, the clinical process does not give reasonable attention to communication beyond the biomedical definition of what it is. As a major evidence, the Nigeria Standard Treatment Guidelines also referred to as the National Standard Treatment Guideline (NSTG) or National Treatment Manual (NTM) does not provide for participatory clinical communication as a standard for treatment in the country. The NTM is a document that provides the modus operandi for clinical activity in the country. According to the Federal Ministry of Health (2016b) the NTM is:

> Systematically developed to assist practitioners and patients in making decisions about appropriate healthcare in clinical practice. The document also identifies, evaluates, summarises the highest quality of evidence and provides the most current information on the diagnosis, therapy with appropriate dosage of medications including its risk benefit and cost effectiveness. It provides information on the prognosis and importantly the prevention of diseases (p. v).

Herewith, the NTM is officially recognised as a reference document for clinical practitioners and patients, aimed at standardising medical care and or raising the quality of care. However, it completely fails to address the expected collaborative relationship between clinicians and patients. There is no single mention of the word communication in the entire document, no recommendation for, or recognition of the importance of patient's participation in the clinical process towards achieving the desired quality or standardised medical care.

Outside policy documents, Nigerian health system has no specific programmes or projects on ground for proper communication or collaboration between clinicians and citizens (patients). The main community engagement by the health sector has been vaccination or immunisation and mass media campaigns. Yet, these also follow biomedical approach, which have obviously not yielded any positive effect on the health of citizens. Ethnographic experience indicates that immunisation exercises in the country have continued to meet different forms of resistance due to poor or no communication at all with patients (citizens). For example, Gunnala et al., (2016) in a study on routine vaccination in 40 districts in Northern Nigeria found out a median coverage of less than 50% across all districts for each of eight vaccine doses (1 Bacille Calmette-Gue´rin dose, 3

diphtheria-pertussis-tetanus (DPT) doses, 3 oral poliovirus vaccine doses, and 1 measles vaccine dose). Health professionals simply assume that people need these vaccines and treated nets without giving those to use them the opportunity to hear their concerns about these medications.

Many families and communities, especially in Northern Nigeria have resisted immunisation of children to date for various concerns including misinformation and lack of knowledge about vaccines and vaccination services (Renne, 2006; Gunnala et al., 2016). In the Central and Southern regions, families collect government distributed mosquito nets but instead use them as protective cover for seedlings. In many parts of the country pregnant women still avoid ante-natal care and hospital birth because of bad experiences during clinical interactions (Aluko-Arowolo et al., 2015). Research findings on patients' perception of clinicians and healthcare facilities in the country such as Ibrahim et al.,(2015) and Odusanya et al., (2018) have continue to indicate significant levels of dissatisfaction, while those on health management such as Russell (2013) have indicated a lost in touch with current global realities of health and illness. Ethnographic facts and evidences have proven the efficacy and in fact, the superiority of biopsychosocial approach to healthcare over biomedical hegemony of the health practitioners. For example, the introduction of Artemisinin-Based Combination Therapies (ACTs) for home treatment of malaria, alongside preventive care measures such as Insecticide Treated Nets (ITNs) and mass media campaigns on environmental hygiene is a biopsychosocial approach, which has reportedly yielded positive results recently in the long battle against malaria, which according to the Federal Ministry of Health and National Malaria Control Programme (2012) pre-dates Nigeria's independence.

This recent approach to the battle against malaria is in recognition of the biopsychosocial nature of the disease. The Federal Ministry of Health and National Malaria Control Programme (2012) captures this position succinctly that "the malaria burden adversely impacts the physical, mental, and social well-being of all Nigerians." Unfortunately, despite government acknowledgement of the biopsychosocial nature of health, medical practice in the country has adamantly followed biomedical model. There is no policy framework for proper collaboration or participation of citizens in the clinical process. Clinical interaction has remained dominantly in healthcare facilities, yet unilateral and exclusive. Patients mainly respond to questions from clinicians. They are largely denied the least opportunity to know their health information and the worst to contribute their opinions during clinical process, the consequence being unsatisfactory health outcomes. Biomedicine has indeed done more damage than good to Nigeria's healthcare delivery and the health system generally.

Biomedicine and the Rise of Self-Medication in Nigeria

Research findings including Afolabi (2008), Ayanwale et al., (2017) and Esan et al., (2018) have indicated that Nigerians have adopted self-care the more they advance in age, education and public health awareness. Another set of research findings, including Oweghoro et al., (2015); Obasola and Agunbiade (2016); Onyi and Titus (2018) indicate that most educated Nigerians nowadays take time to look up the internet for solution on their health challenges and they go to hospital only when symptoms persist, with many preferring the internet-based information as accurate and dependable than clinics and hospitals.

These research findings communicate the failure of biomedicine in answering for the health needs of the people. People have lost confidence in the clinical activity in Nigeria, consequently, those who cannot afford international medical trips have largely resorted to self-care, the Internet being a major source of health information for the literate while herbalists serve the needs of those who for reasons of illiteracy and poverty cannot access internet facilities. The research findings also explain the reality of the fact that people's health belongs to them and they would want to own their health and manage it better if they are exposed to the right information. By the way the "contribution of self-medication in the promotion of health is beyond doubt" (Andualem and Gebre-Mariam, 2004). In places where holistic theories of health are dominant, self-care has been promoted based on the belief that promotion of health is an inclusive task, requiring the role of participants at different levels of society (Andualem and Gebre-Mariam, 2004; Omolase et al., 2007).

Biomedicine and the Era of Pandemics

The avalanche of pandemics and epidemics, which

have befallen humanity in what has been described as the era of pandemics has significantly promoted certain realities about health and illness. First, it has become very clear to all and sundry that every citizen is a patient needing treatment. Apart from those who test positive, some people have lost their jobs to the pandemics, traders, craftsmen and all businesses prevented from operating as markets are shut down, students and teachers locked out of schools, religious activities placed on hold. Nose masks and face-shields, hand washing and sanitising have become national standard. So, the burden of the pandemics has been distributed across society and everyone is traumatised or distressed either physically, socially or psychologically. Governments on their part have been compelled to treat every citizen either as a victim on hospital bed or a psychosocial victim in chains of hunger and depression, through palliative measures either in cash or food stuff. This is the psychosocial reality of health and illness and governments have been forced to design and test-run its approach in what is expected to become new model of healthcare delivery in this era of pandemics. Secondly, the pandemics have made it very clear the importance and supremacy of preventive health. A Dutch philosopher Desiderius Erasmus has been credited for championing the cause of preventive health in a popular statement "prevention is better than cure," in which he emphasised "focusing on what matters to the individuals to promote better health and well-being and stopping them from becoming ill" (Mazzolai et al., 2012). This is a key principle in public health, which unfortunately has been underrated under biomedical paradigm of healthcare delivery. The era of pandemics however, has significantly revealed the truth that much of the public health challenges confronting humanity can best be prevented than cured or treated. In Nigeria, Muhammad et al., (2017) captured some of these health challenges as:

> Infectious diseases, sewage disposal, water supply, health insurance, air pollution, noise pollution, environmental radiation, housing, solid waste disposal, disaster management, control of vector diseases, doctor-population ratio, population-bed ratio, population per health facility, payment system or methods, utilization of care, access to care, improper co-ordination of donor funds, maternal mortality, infant mortality, health financing, poor sanitation and hygiene, incessant doctors strike, disease surveillance, smoking of tobacco, brain drain, rapid urbanization, non-communicable diseases, alcohol abuse, environment degradation, road traffic injuries (p.8).

Other issues missing from the list above include poverty and hunger, unemployment, home violence, child abuse, sexual harassment, prostitution, abortion, medical errors, arm-robbery, kidnapping, land disputes or communal clashes and terrorism. Clearly, these are health challenges that are more psychosocial in nature than biological both in terms of their causes and effect on individuals and which can best be prevented through non-medical means than wait to be treated in hospitals. This also explains why they have seamlessly exerted overwhelming pressure on health facilities across the world as experienced from the effects of COVID-19. A situation where the world's most advanced medical economies such as Italy, America, United Kingdom, China, and India could not contain the health emergencies leading to huge numbers of fatalities etc.

The message from this corona experience is very clear: When the health system fails to treat psychosocial symptoms of illness and on time, they metamorphose into biological symptoms with overwhelming pressure on health facilities no matter how scientifically and technologically advanced the facilities might have been developed. Given the example of Ebola, Lassa and the Novel Corona Viruses, what has kept the world moving in this era of pandemics is preventive health measures: governments locking up communities and states to prevent human contact, sustained clinical communication using all available channels in sharing information with citizens and educating them on preventive, hygiene and non-pharmaceutical measures such as proper washing of hands, general cleanliness and avoiding meat from wield animals and birds as well as the use of natural substances such as lemon fruits, ginger, hot water and regular exercise for home remedy of early symptoms. World Health Organisation (2019) acknowledges Non-pharmaceutical interventions as the only set of pandemic countermeasures that are readily available at all times and in all countries to delay the introduction of the pandemic virus into a population; to delay the height and peak of the epidemic where it has started; to reduce transmission; and reduce the total number of infections and hence the total number of severe cases. This again, is a signal to public

health stakeholders that, if the health system must be seen as working, it is time to take clinical activity to the doorsteps of citizens through preventive and psychosocial strategies.

It is interesting to note that most if not all, or at least the learned citizens have shown significant interest in these messages, which also indicates that all humanity are patients in need of information to protect their health. Of course, these have proved effective evident in the early containment of Ebola and Lassa viruses and huge numbers of recovery cases from COVID-19 while medical cure for the virus is still being expected as well as less numbers of infections been recorded during lockdown and with proper use of hygiene measures and face shields. The efficacy of preventive health measures as well as the overwhelming pressure of the pandemics on advanced health systems also communicate the failure or inadequacies of biomedicine. Indeed, Alfred Adler in his theory of psychoanalysis (Healthline, 2019) is right that superiority complex is simply a defence mechanism for inadequacies that humans are always struggling to shield away.

CONCLUSION

This paper has established that clinical activity is a communication activity and the sustainability of healthcare delivery depends significantly on the effectiveness of communication between clinicians and patients. It is also established that the health of the citizens is their responsibility and they would manage it better if they are given the right information at the right time. Therefore, for Nigeria to actualise her quest for effective, sustainable healthcare delivery, the nation's clinical process must be remodelled on a holistic paradigm that seeks or emphasises collaboration with citizens, not just in treating their illnesses but also to guide and empower them to remain responsible and in control of their health.

Also, the era of pandemics has opened the eyes of every stakeholder in the public health to appreciate the reality of the biopsychosocial nature of health and illness, and the fact that much of the burden of public health in the country is psychosocial than biological. Therefore, the need for the nation's health system as a whole should be to shift away from the current biomedical approach, which apart from stifling patient-clinician collaboration in the clinical process also ignores the social and psychological nature of human illness.

Again, the paper has established that much of the burden of public health in Nigeria requires biopsychosocial approach and the compulsory pre-test of this paradigm given the instances of Ebola, Lassa and the Novel Corona viruses has apparently proved it effective for sustainable healthcare delivery in the country.

RECOMMENDATIONS

1. The ministry of health should review the current biomedical paradigm of healthcare delivery to remodel it after biopsychosocial approach. The tenets of the new model should be properly laid down in the National Treatment Manual while all the regulatory and sectorial bodies in the health sector such as the Medical Laboratory Science Council of Nigeria (MLSCN), the Pharmacists Council of Nigeria (PCN), Dietitians Association of Nigeria (DAN), Nursing and Midwifery Council of Nigeria (NMCN), the Medical and Dental Council of Nigeria (MDCN), and the Community Health Practitioners Registration Board of Nigeria should be empowered accordingly to enforce and ensure compliance by stakeholders.
2. The ministry of health should collaborate with the ministry of education to ensure that the training curricular of emerging health practitioners is redesigned to significantly reflect the biopsychosocial paradigm.
3. Governments at all levels must demonstrate the political will by making the necessary budgetary sacrifices that are required in implementing the biopsychosocial paradigm of healthcare delivery in line with the global realities of health and illness in this era of pandemics.

REFERENCES

Afolabi AO (2008). Factors Influencing the Pattern of Self-Medication in an Adult Nigerian Population. Annals of African Medicine, 7(3): 120–127.

Alderson P (1998). Theories in health care and research: The importance of theories in health care. British Medical Journal, 317(3): 1007–1010. https://doi.org/10.1016/S1553-7250(05)31023-3

Aluko-Arowolo S, Ogundimu AO and Solarin TM (2015). Patient-physician relationship and ante-natal seeking behaviour in public hospitals. Journal of Medicine and Medical Sciences, 6(5): 95–103. https://doi.org/http:/dx.doi.org/10.14303/jmms.2015.077

Andualem T and Gebre-Mariam T (2004). Self-Medication Practices in Addis Ababa: A Prospective Study. Ethiopian Journal of Health Science, 14(1): 1–11.

Ayanwale MB, Okafor IP and Odukoya OO (2017). Self-medication among rural residents in Lagos, Nigeria. Journal of Medicine in the Tropics, 19: 65 – 71. https://doi.org/10.4103/jomt.jomt

Bevers K, Watts L, Kishino ND and Gatchel RJ (2016). The Biopsychosocial Model of the Assessment, Prevention, and Treatment of Chronic Pain. US Neurology, 12(2): 98–104. https://doi.org/https://doi.org/10.17925/USN.2016.12.02.98

Boehm L and LaBranche E (2017). Clinical Communication Deconstructed: A framework for successful, human-centred clinical communication. In Veterinary Surgery (Vol. 2, Issue 1). https://doi.org/10.1111/j.1532-950X.1973.tb01678.x

Centre for Human Services (1999). Improving Interpersonal Communication Between Healthcare Providers and Clients: Reference Manual. Centre for Human Services. https://pdfs.semanticscholar.org/dadf/fa41e2b19ea5c3968a487d55f02226b5ff0d.pdf

Ehlinger EP (2016). Social Medicine: A Foundational Practice for Advancing Health Equity and Optimal Health for All. Minnesota Department of Health. https://static1.squarespace.com/static/5666e742d82d5ed3d741a0fd/t/5900ae6fa5790a1226d0e330/1493216881354/Social+Medicine+Toolkit+.pdf

Ella RE, Samson-Akpan PE, Mgbekem MA and Edet G (2016). Factors Influencing Patients Perception of Nurses Respect for Their Dignity in a Public Hospital in Calabar, Nigeria. International Journal of Humanities, Social Sciences and Education, 3(8): 72–81. https://doi.org/10.20431/2349-0381.0308007

Engel GL (1977). The Need for a New Medical Model: A Challenge for Biomedicine. Science, 196(4286): 129–136.

Epstein RM and Street RLJ (2007). Patient-Centered Communication in Cancer Care: Promoting Healing and Reducing Suffering. National Cancer Institute.

Esan DT, Fasoro AA, Odesanya OE, Esan TO, Ojo EF and Faeji CO (2018). Assessment of Self-Medication Practices and Its Associated Factors among Undergraduates of a Private University in Nigeria. Journal of Environmental and Public Health, 2018(December). https://doi.org/10.1155/2018/5439079

Farzianpour F, Byravan R and Amirian S (2015). Evaluation of Patient Satisfaction and Factors Affecting It: A Review of the Literature. Health, 7:1460–1465. https://doi.org/http://dx.doi.org/10.4236/health.2015.711160

Federal Ministry of Health (2016a). National Health Policy 2016: Promoting the health of Nigerians to accelerate socio-economic development. https://doi.org/10.1097/mou.0000000000000264

Federal Ministry of Health (2016b). Nigeria Standard Treatment Guidelines (2nd Editio). Federal Ministry of Health, Nigeria.

Federal Ministry of Health and National Malaria Control Programme. (2012). Roll Back Malaria Partnership: Focus on Nigeria. In Progress and Impact Series, Country Reports (Vol. 4). https://www.mmv.org/sites/default/files/uploads/docs/publications/RBM_Nigeria_3.pdf

Gunnala R, Ogbuanu IU, Adegoke OJ, Scobie HM, Uba BV, Wannemuehler KA, Ruiz A., Elmousaad H, Ohuabunwo CJ, Mustafa M, Nguku P, Waziri NE and Vertefeuille JF (2016). Routine Vaccination Coverage in Northern Nigeria: Results from 40 District-Level Cluster Surveys, 2014-2015. PLoS ONE, 11(12): 2014–2015. https://doi.org/10.1371/journal.pone.0167835

Ha JF, Anat DS and Longnecker N (2010). Doctor-Patient Communication: A Review. The Ochsner Journal, 10(1): 38–43.

Havelka M, Lucanin JD and Lucanin D (2009). Biopsychosocial Model: The Integrated Approach to Health and Disease. Coll. Antropol., 33(1): 303–310.

Healthline (2019). What is a Superiority Complex? https://www.healthline.com/health/mental-health/superiority-complex#bottom-line

Ibrahim YS, Mohtar S bin, Hassan A and Dutse G (2015). Patient Perception on Service Quality Improvement among Public and Private Healthcare Providers in Nigeria and Malaysia. World Journal of Preventive Medicine, 3(4): 84–93. https://doi.org/10.12691/jpm-3-4-1

Kidd J, Patel V and Peile E (2005). Clinical and

communication skills need to be learnt side by side. British Medical Journal, 330: 374–375. https://doi.org/10.1136/bmj.330.7488.374

Kourakos M, Fradelos EC, Papathanasiou IV, Saridi M and Kafkia T (2017). Communication as the Basis of Care for Patients with Chronic Diseases. American Journal of Nursing Science, 7(3–1): 7–12. https://doi.org/10.11648/j.ajns.s.2018070301.12

Larson E, Leslie HH and Kruk ME (2017). The determinants and outcomes of good provider communication: a cross- sectional study in seven African countries. BMJ Open, 7(e014888): 1–9. https://doi.org/10.1136/bmjopen-2016-014888

Mazzolai L, De Moerloose P and Righini M (2012). Prevention is better than cure. In Revue Médicale Suisse, 8 (327): 299.

Mazzotta CP (2016). Biomedical approaches to care and their influence on point of care nurses: a scoping review. Journal of Nursing Education and Practice, 6(8): 93–101. https://doi.org/10.5430/jnep.v6n8p93

Muhammad F, Abdulkareem JH and Chowdhury AA (2017). Major Public Health Problems in Nigeria: A review. South East Asia Journal of Public Health, 7(1): 6–11. https://doi.org/10.3329/seajph.v7i1.34672

Neo LF (2011). Working toward the best doctor-patient communication. Singapore Medical Journal, 52(10): 720–725.

Obasola OI and Agunbiade OM (2016). Online Health Information Seeking Pattern Among Undergraduates in a Nigerian University. SAGE Open, Pp. 1–9. https://doi.org/10.1177/2158244016635255

Odusanya OO, Akinyinka MR, Oluwole EO, Odugbemi BA and Bakare OQ (2018). How Does the Public Perceive Healthcare Workers in Lagos? A Comparison of Health Workers in Public and Private Health Facilities. Nigerian Postgraduate Medical Journal, 25: 177–185. https://doi.org/10.4103/npmj.npmj_102_18

Omolase CO, Adeleke OE, Afolabi AO and Afolabi O (2007). Self Medication amongst General Outpatients in a Nigerian Community Hospital. Annals of Ibadan Postgraduate Medicine, 5(2): 64–67.

Onyi T and Titus R (2018). The Utilization of Internet for Health Information among Pioneer Medical Students in a Nigerian University. World Journal of Pharmaceutical and Medical Research, 4(3): 121–131.

Oweghoro BM, Adeleke IT, Mshelia PP, Ogundiran LM, Momoh A, Yusuf J and Adeoti DI (2015). Knowledge, access and use of internet-based health information for personal healthcare among employees of the foremost Nigerian University. American Journal of Health Research, 3(1): 25–31. https://doi.org/10.11648/j.ajhr.s.2015030101.14

Renne E (2006). Perspectives on polio and immunization in Northern Nigeria. Social Science and Medicine, 63(7): 1857–1869. https://doi.org/10.1016/j.socscimed.2006.04.025

Russell C (2013). Biomedicine. In Sociology for Health Professionals, Pp. 6–22. https://www.sagepub.com/sites/default/files/upm-binaries/59005_Russell.pdf

Salmon P and Young B (2009). Dependence and caring in clinical communication: The relevance of attachment and other theories. Patient Education and Counselling, 74(3): 331–338. https://doi.org/10.1016/j.pec.2008.12.011

Salmon P and Young B (2017). A new paradigm for clinical communication: critical review of literature in cancer care. Medical Education, 51: 258–268. https://doi.org/10.1111/medu.13204

Simpson M, Buckman R, Stewart M, Maguire P, Lipkin M, Novack D and Till J (1991). Doctor-patient communication: The Toronto consensus statement. British Medical Journal, 303(6814): 1385–1387. https://doi.org/10.1136/bmj.303.6814.1385

Stavropoulou C (2012). The doctor-patient relationship: A review of the theory and policy implications. In the LSE Companion to Health Policy (pp. 314–326). Edward Elgar Publishing Limited. https://doi.org/http://dx.doi.org/10.4337/9781781004241

Swasey ML (2013). Physician and Patient Communication: A Grounded Theory of Analysis of Physician and Patient Web-Logs [Southern Utah University]. https://www.suu.edu/hss/comm/masters/capstone/thesis/swaseythesis.pdf

Taukeni SG (2019). Introductory Chapter: Bio-Psychosocial Model of Health. In Psychology of Health: Biopsychosoical Approach. Intech Open. https://doi.org/DOI: http://dx.doi.org/10.5772/intechopen.85024

Teutsch C (2003). Patient-Doctor Communication. Medical Clinics of North America.

https://www.researchgate.net/publication/9006103_Patient-Doctor_Communication

United Nations (2017). The Sustainable Development Goals Report. https://sdgactioncampaign.org/wp-content/uploads/2017/07/TheSustainableDevelopmentGoalsReport2017.pdf

Wade DT and Halligan PW (2004). Do Biomedical Models of Illness Make for Good Healthcare Systems? BMJ, 329, 1398–1401. https://doi.org/10.1136/bmj.329.7479.1398

World Health Organisation (1946). Health. In Constitution of the World Health Organisation. Author.https://treaties.un.org/doc/Treaties/1948/04/19480407 10-51 PM/Ch_IX_01p.pdf

World Health Organisation (2003). ANNEXES: Behavioural mechanisms explaining adherence: what every health professional should know (pp. 156–191). https://www.who.int/chp/knowledge/publications/adherence_annexes.pdf?ua=1

World Health Organisation. (2019). Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza. https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf?ua=1

World Health Organisation (2012). Health Education: Theoretical Concepts, Effective Strategies and Core Competencies. https://doi.org/10.1177/1524839914538045

Živanvić D and Ćirić Z (2017). Therapeutic Communication in Health Care. SciFed Nursing and Healthcare Journal, 1(2): 1–7.