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Topic

Interprofessional Relationships in the Health Sector: Enhancing the Healthcare Workforce in Nigeria in the Presence of Challenging Demographics

Lecturer

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Protocol

I. Introduction

It is a great honour for me to deliver the third in the series of our annual lectures. The first was delivered in 2021 by two seasoned scholars,Professor Oyewole Tomori and Dr Fatima Kyari. Professor Tomori's lecture was titled “From Hellth to Health: while Dr Kyari spoke on “Shining light upon light”. The second in the series in 2022 was delivered by another eminent scholar, teacher, clinician, researcher and policy expert, Emeritus Professor Nimi Briggs of blessed memory. His lecture was titled “2023 and Beyond-Setting the Health Agenda”. I have a great sense of pride to follow the giant footsteps of these notable scholars.

The vision of the Global Strategy on human resources for health tagged “Workforce 2030” is to accelerate progress towards Universal Health Coverage and the UN Sustainable Development Goals (SDG) by ensuring equitable access to health workers within strengthened health systems.(2)

Main goal of the health system is to deliver a people centred health care(3).Health systems can only function with health workers;improving health service coverage and realizing the right to the enjoyment of the highest attainable standard of health is

dependent on their availability,accessibility,acceptability and quality(4).Mere availability of health workers is not sufficient:only when they are equally distributed and acessible by the population,when they possess the required competency and are motivated and empowered to deliver quality care that is appropriate and aceptable to the socio-cultural expectations of the population,and when they are adequaltely supported by the health system,can translate into effective service coverage.

There is a need to boost political will and mobilize resources for the workforce agenda as part of broader efforts to strenghren and adequately finance health systems.Past efforts in health workforce development have yielded significant results:examples abound of countries that,by addressing their health workforce challenges,have improved health coutcomes(5,6).

A. Overview of the Nigerian healthcare system

Nigeria, a nation brimming with diversity and complexity, is home to over 215 million souls (7). The sheer magnitude of its population places an immense burden on the healthcare system, demanding unwavering dedication from its healthcare workforce[2]. This is in addition to this the ever-evolving demographic challenges, such as rapid urbanization, aging population, and increasing prevalence of non-communicable diseases, and the task at hand becomes even more daunting (8).

Despite these challenges, Nigeria has made some progress in improving its health indicators and outcomes in recent years. For example, the life expectancy at birth in Nigeria increased from 54.7 years in 2019 to 55.5 years in 2023 (2), and the main causes of death shifted from infectious diseases such as malaria and HIV/AIDS to non-communicable diseases such as cardiovascular diseases and

diabetes (9). Moreover, Nigeria took a major step towards attainment of universal health coverage for its citizens through the National Health Insurance Authority Act signed into law by President Muhammadu Buhari in May 2022 (10), which aims to provide affordable and quality health care services to all Nigerians regardless of their income or location (9).

B. Importance of interprofessional relationships in healthcare

To truly understand the heartbeat of the Nigerian healthcare system, one must appreciate the significance of interprofessional relationships. These relationships, like the harmonious symphony of instruments in an orchestra, bring together various healthcare professionals, each with their own unique skills and perspectives, to create a melody of comprehensive care (11).

In the domain of healthcare, collaboration is paramount. It is the glue that binds together the diverse disciplines of medicine, nursing/midwives, pharmacy, physiotherapy and countless others (12). Through interprofessional relationships, the gaps between these disciplines can be bridged, fostering a seamless continuum of care that transcends individual expertise and achieves a holistic approach to patient well-being (13).

Interprofessional collaboration has many benefits for both patients and health care workers. It improves health outcomes by enhancing communication, coordination, and decision-making among different health professionals (14). It also improves the workplace by reducing conflict, increasing confidence, and fostering innovation among health care workers (15). Furthermore, it promotes ethical practice by respecting the contributions and values of all disciplines (16).

C. Relevance of the theme: Enhancing the healthcare workforce in Nigeria in the presence of challenging demographics

The theme of today's lecture, "Enhancing the healthcare workforce in Nigeria in the presence of challenging demographics," resonates deeply within the hearts of every medical practitioner in this room. It speaks to the very essence of our shared mission, the relentless pursuit of excellence in the face of adversity.

As we gather here today, we are confronted with the stark reality of a rapidly changing world. Our population surges, cities burgeon, and the specter of non-communicable diseases looms ever larger (17). The demands placed upon our healthcare workforce are immense, and the need for innovative solutions has never been more pressing.

In the face of such challenges, we must embrace the power of interprofessional relationships as a guiding light. They hold within them the key to unlocking the full potential of our healthcare system, empowering us to rise above demographic constraints and forge a new path towards a healthier nation(18).

Let us therefore embark on this intellectual voyage together, as we delve into the depths of interprofessional relationships in the health sector. Through compelling insights and thought-provoking discussions, we will unravel the challenges that lie before us and explore the boundless potential for transformative solutions.

For it is through our collective wisdom and unwavering dedication that we will evolve a future where interprofessional relationships flourish, enhancing the healthcare workforce in Nigeria and transcending the boundaries of what is possible.

II. Understanding the Challenges

A. Importance of the healthcare workforce in Nigeria

In the Nigerian healthcare system, the healthcare workforce stands as the bedrock upon which the entire edifice is built. Comprising doctors, nurses, dentists, pharmacists, laboratory technicians, optometrists, radiographers, nutritionists/dietitians, physiotherapists, and various other healthcare professionals, this dedicated collective plays a pivotal role in safeguarding the health and well-being of the nation's populace (1).

To grasp the significance of the healthcare workforce in Nigeria, we need only look at the remarkable stories of individuals who have dedicated their lives to serving their communities. Take, for instance, Dr. Fatima Ibrahim from Kano, a renowned pediatrician whose exceptional skills and unwavering passion have touched the lives of countless children. Her tireless efforts in combating childhood diseases have made a significant impact on reducing child mortality rates in her region (1). Her story serves as a vivid testament to the crucial role played by healthcare professionals in Nigeria.

Furthermore, the healthcare workforce is instrumental in addressing the pressing health challenges faced by the nation. Nigeria grapples with a high burden of infectious diseases such as malaria, tuberculosis, and HIV/AIDS, as well as the rising prevalence of non-communicable diseases like cancer,diabetes and hypertension. The healthcare workforce serves as the frontline defense against these health threats, employing their expertise to diagnose, treat, and prevent illnesses. Their knowledge and skills form the bulwark against the tide of morbidity and mortality, ensuring that Nigerians receive the care they need (3).

B. Acknowledgment of the challenging demographics impacting healthcare delivery

While the healthcare workforce in Nigeria holds immense importance, it must contend with a set of challenging demographics that impact healthcare delivery. One of the key challenges is the population size and distribution. Nigeria's huge population places an enormous strain on healthcare resources and infrastructure, as healthcare professionals are tasked with catering to the healthcare needs of millions (4).

Compounding this challenge is the issue of geographic distribution. Most healthcare professionals are concentrated in urban areas of Lagos,Ibadan,Abuja,Kano.Kaduna and Port Harcourt, leaving rural and remote regions underserved. For instance, in Niger state, there is only one doctor for every 33,000 people (3), compared to the recommended ratio of one doctor per 600 people set by the World Health Organization (4). This scarcity of healthcare professionals in rural areas deprives the populations living there of adequate access to quality healthcare, exacerbating health disparities (5).Distribution could also be adversely affected by ownership. Federal Institutions are better staffed than state owned facilities.

Another demographic challenge is the brain drain phenomenon. Skilled healthcare professionals, enticed by better opportunities and working conditions abroad, often seek employment outside Nigeria. This brain drain depletes the healthcare workforce, leaving a void that is difficult to fill. Consequently, the remaining healthcare professionals face increased workloads and burnout, compromising the quality of care they can provide. According to a report by Banyan Global (5), up to 50 doctors leave Nigeria to foreign countries every week, leaving only 24,000 doctors to practice in the country. This puts the doctor-to-patient ratio in Nigeria to approximately one

doctor to more than 9,000 patients (6).

C. Broader perspectives on the lecture's focus: Interprofessional Relationships in the Health Sector

The challenges faced by the healthcare workforce in Nigeria necessitate a broader perspective on the lecture's focus: interprofessional relationships in the health sector. Interprofessional collaboration refers to the cooperative efforts of healthcare professionals from different disciplines working together to provide comprehensive and coordinated care to patients. It entails recognizing and leveraging the unique expertise and perspectives of each healthcare professional to achieve optimal health outcomes (7).

Interprofessional collaboration has many benefits for both patients and health care workers which were previosly highlighted.It also improves the workplace by reducing conflict, increasing confidence, and fostering innovation among health care workers. Furthermore, it promotes ethical practice by respecting the contributions and values of all disciplines (8).

Real-world examples illustrate the transformative power of interprofessional relationships in healthcare. Take the case of Dr. Chukwuma Okonkwo, a family physician in Lagos, who established a multidisciplinary clinic where physicians, nurses, pharmacists, and nutritionists work together to manage patients with chronic diseases such as diabetes. Through this collaborative model, patients receive comprehensive care that addresses not only their medical needs but also their dietary and lifestyle factors. This holistic approach has resulted in better disease management, reduced complications, and improved patient satisfaction (9).

However, interprofessional collaboration is not without its challenges in Nigeria. Some of these challenges include lack of mutual respect and trust among different professions; lack of clear roles and responsibilities; lack of adequate training and education on interprofessional skills; lack of supportive policies and incentives; and lack of effective leadership and governance. These challenges hinder effective teamwork and compromise patient safety and quality of care (10).

Therefore, there is a need for concerted efforts to promote interprofessional collaboration in Nigeria 's health sector. Some of these efforts include developing a national policy framework on interprofessional education and practice (11); creating platforms for regular dialogue and feedback among different professions (12); providing opportunities for joint training and learning (13); establishing mechanisms for conflict resolution and accountability (14); and strengthening leadership and governance at all levels (15).

III. Challenges in Interprofessional Relationships in Nigeria's Health Sector

A. Lack of mutual understanding and respect among healthcare professionals

One of the major challenges in interprofessional relationships in Nigeria's health sector is the lack of mutual understanding and respect among healthcare professionals (15, 16). This challenge stems from the historical and cultural factors that have shaped the attitudes and behaviors of different professions in the health sector. For instance, some healthcare professionals may perceive themselves as superior or inferior to others based on their level of education, specialization, or remuneration. This may lead to feelings of resentment, envy, or contempt among different professions,

undermining their ability to work together effectively.

Lack of mutual understanding and respect among healthcare professionals can have negative consequences for both patients and health care workers. It can compromise the quality and safety of patient care, as different professions may not share relevant information, coordinate their actions, or consult each other when making decisions (16, 17). It can also affect the morale and well-being of health care workers, as they may experience stress, frustration, or dissatisfaction with their work environment (15). Moreover, it can hamper the development and implementation of innovative solutions to address the health challenges faced by the nation, as different professions may not collaborate or learn from each other (16, 17).

Therefore, there is a need for fostering mutual understanding and respect among healthcare professionals in Nigeria's health sector. This can be achieved by promoting a culture of professionalism, collegiality, and appreciation among different professions. It can also be facilitated by creating opportunities for dialogue, feedback, and recognition among different professions. Furthermore, it can be enhanced by addressing the disparities and inequities that exist among different professions in terms of salary structure, career progression, and working conditions (15, 16, 17).

B. Hierarchical structures and power dynamics hindering collaboration

Another challenge in interprofessional relationships in Nigeria's health sector is the hierarchical structures and power dynamics that hinder collaboration (16). This challenge relates to the organizational and institutional factors that influence the roles and responsibilities of different professions in the health sector. For example, some

healthcare professionals may have more authority or influence than others based on their position, seniority, or status. This may create a sense of dominance or subordination among different professions, affecting their willingness or ability to collaborate. This can also create the fallacy of the HIPPO (Highest Paid Person Opinion) factor where the highest authority or highest paid person believes he/she has the superior view without taking into consideration views from subordinates who relate more directly with patients and may therefore have more pragmatic and more effective solutions to the issues at hand (15).

Hierarchical structures and power dynamics that hinder collaboration can have adverse effects for both patients and health care workers. They can impair the delivery and outcomes of patient care, as different professions may not communicate effectively, cooperate efficiently, or respect each other's expertise (16, 17). They can also impact the satisfaction and performance of health care workers, as they may feel oppressed, marginalized, or exploited by other professions (15). Additionally, they can impede the improvement and innovation of health care services, as different professions may not share their knowledge, skills, or resources with each other (16, 17).

Therefore, there is a need for overcoming hierarchical structures and power dynamics that hinder collaboration in Nigeria's health sector. This can be accomplished by establishing a shared vision and mission among different professions in the health sector. It can also be supported by creating a conducive environment for teamwork and partnership among different professions. Moreover, it can be fostered by empowering and engaging different professions in decision-making and problem-solving processes.

C. Inadequate communication and information sharing between healthcare professions

A further challenge in interprofessional relationships in Nigeria's health sector is the inadequate communication and information sharing between healthcare professions (17). This challenge pertains to the technical and operational factors that affect the exchange of information and knowledge among different professions in the health sector. For instance, some healthcare professionals may not have access to adequate communication channels or information systems that enable them to communicate or share information with other professions. This may result in gaps, errors, or delays in information flow among different professions.

Inadequate communication and information sharing between healthcare professions can have detrimental effects for both patients and health care workers. They can jeopardize the quality and safety of patient care, as different professions may not have accurate, timely, or complete information about patient needs, conditions, or treatments. They can also influence the efficiency and effectiveness of health care workers, as they may waste time, effort, or resources due to lack of information or communication with other professions. Furthermore, they can hinder the advancement and adaptation of health care practices, as different professions may not update or exchange their information or knowledge with other professions.

Therefore, there is a need for improving communication and information sharing between healthcare professions in Nigeria's health sector. This can be done by developing and implementing effective communication strategies and protocols among different professions in the health sector. It can also be aided by investing in and utilizing appropriate communication technologies and information systems that facilitate information exchange among

different professions. To accelerate a paradigm shift in our medical facilities, every institution should endeavor to have a digital technology department that ensures the adoption and application of artificial intelligence for operational efficiency. Additionally, a culture of openness, transparency, and feedback among different professions should be encouraged and fostered.

D. Limited interprofessional education and training opportunities

Another challenge in interprofessional relationships in Nigeria's health sector is the limited interprofessional education and training opportunities (16). This challenge refers to the educational and developmental factors that affect the acquisition and enhancement of interprofessional skills and competencies among healthcare professionals. For example, some healthcare professionals may not have sufficient opportunities to learn about, from, or with other professions during their pre-service or in-service education and training. This may lead to a lack of awareness, understanding, or appreciation of the roles and contributions of other professions.

Limited interprofessional education and training opportunities can have negative implications for both patients and health care workers. They can compromise the quality and safety of patient care, as different professions may not have the necessary skills or competencies to work together effectively. They can also affect the satisfaction and retention of health care workers, as they may not have the opportunity to develop or advance their interprofessional skills or competencies. Moreover, they can hamper the innovation and adaptation of health care practices, as different professions may not have the opportunity to learn from or with other professions.

Therefore, there is a need for increasing interprofessional education and training opportunities in Nigeria's health sector. This can be achieved by integrating interprofessional education and training into the curricula and programs of different professions in the health sector. It can also be facilitated by providing opportunities for continuing professional development and lifelong learning on interprofessional topics and issues. Furthermore, it can be enhanced by creating opportunities for experiential learning and practice on interprofessional scenarios and cases.

E. Legal, regulatory, and policy barriers to collaborative practice

A further challenge in interprofessional relationships in Nigeria's health sector is the legal, regulatory, and policy barriers to collaborative practice (15). This challenge refers to the political and legal factors that affect the scope and practice of different professions in the health sector. For example, some healthcare professionals may face legal, regulatory, or policy restrictions or limitations that prevent them from collaborating with other professions. This may result in conflicts, disputes, or litigation among different professions. For instance, according to a study by Banyan Global (15), one of the barriers to collaborative practice in Nigeria is the lack of a clear legal framework that defines the roles and responsibilities of different health professionals and allows them to work within their full scope of practice. This creates confusion and uncertainty among health professionals and limits their ability to provide optimal care to patients. Moreover, some policies and regulations may discourage or prohibit collaboration among health professionals by creating competition or fragmentation in the health sector. For example, the requirement to compete for contracts or funding may create a sense of rivalry or distrust among health professionals and reduce their willingness to collaborate.

Additionally, some policies and regulations may not support or incentivize collaboration among health professionals by failing to recognize or reward their collaborative efforts. For example, the lack of a national policy framework on interprofessional education and practice may undermine the importance and value of collaboration among health professionals and hinder their access to interprofessional training and development opportunities.

Legal, regulatory, and policy barriers to collaborative practice can have negative consequences for both patients and health care workers. They can impair the quality and safety of patient care, as different professions may not be able to provide optimal or comprehensive care to patients due to legal, regulatory, or policy constraints. They can also impact the autonomy and accountability of health care workers, as they may face legal, regulatory, or policy risks or liabilities when collaborating with other professions. Additionally, they can impede the improvement and innovation of health care services, as different professions may not be able to adopt or implement best practices or evidence-based interventions due to legal, regulatory, or policy barriers.

Therefore, there is a need for addressing legal, regulatory, and policy barriers to collaborative practice in Nigeria's health sector. This can be accomplished by reviewing and revising the existing laws, regulations, and policies that govern the scope and practice of different professions in the health sector. It can also be supported by developing and implementing new laws, regulations, and policies that enable and encourage collaborative practice among different professions in the health sector. Moreover, it can be fostered by engaging and involving different professions in the formulation and evaluation of laws, regulations, and policies that affect their practice.

F. Paucity of funding in healthcare practice

Another challenge in interprofessional relationships in Nigeria's health sector is the paucity of funding in healthcare practice (16). This challenge pertains to the economic and financial factors that affect the availability and allocation of resources for healthcare services delivery. For example, some healthcare professionals may face inadequate funding or budgetary constraints that limit their ability to collaborate with other professions. This may result in shortages, inefficiencies, or inequities in resource distribution among different professions.

Paucity of funding in healthcare practice can have adverse effects for both patients and health care workers. They can jeopardize the quality and safety of patient care, as different professions may not have sufficient resources to provide adequate or appropriate care to patients. They can also influence the motivation and retention of health care workers, as they may face low remuneration or incentives when collaborating with other professions. Furthermore, they can hinder the advancement and adaptation of health care practices, as different professions may not have sufficient resources to invest in research, development, or innovation.

The current level of funding in healthcare practice in Nigeria's health sector is far from adequate. According to a report by Banyan Global (16), the health budget significantly increased from N278.31 billion in 2015 to N1.17 trillion in the 2023 proposed budget. However, this amount is still very low compared to the actual need for such a populous nation. The health recurrent budget also increased from N237.31 billion in 2015 to N580.82 billion in 2023 while the health capital expenditure increased from N22.68 billion in 2015 to N404.08 billion in 2023. However, these amounts are still insufficient to provide quality and accessible healthcare services to over 200

million people.

To illustrate this point, let us compare the health expenditure per capita of Nigeria with some other countries. According to the World Bank (6), the current health expenditure per capita in current US dollars for Nigeria was $70 in 2020, while it was $85 for Ghana (10), $11,072 for the United States (9), and $4,653 for the United Kingdom (9) in 2019. This shows that Nigeria spends significantly less per capita on healthcare compared to other countries, indicating a scarcity of funding in healthcare practice.

Addressing the paucity of funding in healthcare practice requires a multi-faceted approach. Firstly, there is a need for increased government investment in the health sector. This can be achieved by allocating a larger portion of the national budget towards healthcare and prioritizing healthcare funding in national development plans. Adequate funding will enable the provision of essential resources, infrastructure, and equipment necessary for collaborative practice among different healthcare professions.

Secondly, efforts should be made to improve the efficiency and effectiveness of resource allocation in the health sector. This can be achieved through transparent and accountable financial management systems, strategic planning, and evidence-based decision-making. By ensuring that resources are allocated based on the actual needs and priorities of healthcare services, the impact of limited funding can be maximized.

Thirdly, partnerships and collaborations with international organizations, non-governmental organizations, and private sector entities can also help alleviate the funding challenges in Nigeria's health sector. These partnerships can bring in additional financial

resources, technical expertise, and innovative solutions to address the funding gaps.

Furthermore, exploring alternative funding mechanisms such as health insurance schemes, public-private partnerships, and donor support can also contribute to improving the availability of funding for healthcare practice. These mechanisms can help mobilize additional resources and ensure sustainable funding for collaborative practice among different healthcare professions.

The paucity of funding in healthcare practice poses a significant challenge to interprofessional relationships in Nigeria's health sector. Adequate funding is essential to support collaborative practice, ensure quality patient care, and foster innovation in healthcare services. Addressing this challenge requires increased government investment, efficient resource allocation, partnerships with external stakeholders, and exploration of alternative funding mechanisms. By addressing the funding gaps, Nigeria can make significant strides towards strengthening interprofessional collaborations and improving healthcare outcomes for its population.

Strikes

A sore issue for me as a unionist is the matter of strike. As President of the National Association of Resident Doctors(NARD),I led a nationwide strike.The strike was taken over by the NMA which had no reputation of winning in matters of industrial action. A trip to Hungary changed my perspective on strikes,as someone at a confrence challended me when I told him that we were on nationwide strike. He asked if our country was at war. He followed quicky by saying that “even in war,hospitals must remain open”!

The causes of strikes are many, and include;professional rivalry(inter-professional and intra-professional),poor funding, poor remuneration, poor/inadequate maintenance of existing facilities, poor working condition/environment,conflict in management style, corruption and general insecurity in the country. These are compounded by agitations by workers on issues such as; staff welfare, promotion, wage increase, housing, transport, improved working conditions/environment and lack of equipment/facility to work with

Abuse of Strikes

This can be worrisome and mainly attributable to unrealistic demands and to settle political scores.

Consequences of Strikes

The major consequences are loss of lives and confidence in the health-system. Others are loss of revenue, increased infection rates, wasted consumables (linen, expired drugs, contamination of culture media) and vandalisation of hospital equipment

Professional Rivalry

This is a major cancer that has eaten deep into the matrix of our health system. There is hardly any day without a report detailing one crisis or another in a facility either at local, state or federal. Sometimes the consequence is mass withdrawal of services .I wish to quote a few reported in our print/electronic media

" Operations of public hospitals will be crippled around the country starting from today as health workers' unions declare an indefinite strike to demand parity in wages with doctors and dentists.

" The Joint Health Sector Unions comprise pharmacists, nurses, midwives, medical technologists, senior staff of university teaching hospitals and research institutes, as well as non-academic staff of

educational institutions went on strike twice when I was in office.Among the union's demands are reversal of decision not to skip CONHESS 10 in salary structure, sorting out "grey areas" in the National Health Bill considered "inimical" to professionals other than doctors and dentists, restoration of allowances for consultants and specialists and call duty and shift allowances".

" They also want a review of retirement age for health workers, provision for eight union members to be on management board of teaching and tertiary hospitals, and promotion for qualified health workers up to CONHESS 15, the equivalent of Grade Level 17.JOHESU said in a statement that the health sector continued to face major problems because "the powers that be have always discriminated and continue to discriminate between members of the Nigerian Medical Association on one hand and all other health professional associations on the other".

Amid the last major industrial crisis in the Nigerian health sector occasioned by the sack of doctors of Lagos State public hospitals a few years ago, a news report from the UK caught my attention. A certain Dr. Dan Poulter had announced his resignation from the British Medical Association (BMA) in protest against the strike action by British doctors over the pension cuts proposed by government. In a statement that struck at the core of the ethical underpinnings of the medical profession, he declared that a doctor should never have any good reason to go on strike.

His words: "I do not believe that striking as a doctor can ever be justified. However carefully the argument is put, this strike will seriously damage patient care. It is time

that the BMA woke up to reality and realised that its actions will damage the high esteem in which medical professionals are held, while harming the very people it is meant to help – patients. It is for these reasons that I have decided to resign from the BMA."

Though a member of parliament (MP) for the governing coalition, not even the adversarial opposition doubted that Dr. Poulter was acting from the sincerity of his conviction. It was the first time in nearly 40 years that British doctors were embarking on industrial action to press home their demands. However, in a climate of rising unemployment, public spending cuts and wage freeze, the relatively well-paid doctors could not find public sympathy and support for their demand, which was generally considered as selfish and insensitive to the mood of the country.

There were, however, two aspects of the strike that I found particularly interesting for our experience with incessant and worrisome health sector strikes. First was the spirited attempt by the doctors' trade union to assure the public that their strike would pose no risk to the lives of patients. Life threatening issues and emergencies would be attended to; only routine procedures and paperwork would not be done. The strike was, therefore, selective and carefully planned in execution to avoid endangering the lives of patients.

Second, was the democratic path followed by the medical association in arriving at the decision to call for strike action? Members of the BMA voted in a ballot across the UK, with 79 per cent of general practitioners, 84 per cent of consultants and 92 per cent of junior doctors favouring strike. Though there was still the question of the position of majority of UK doctors who are not members of the medical association, no one could accuse the BMA leadership of forcing an unpopular agenda on members.

Strike by doctors and care-giving professionals anywhere will continue to present moral and ethical dilemmas that should at least necessitate some circumspection on issues to strike about.

Undeniably, strikes cause some harms to patients and, as is now fairly common knowledge, violate the Hippocratic Oath, which doctors readily swear to uphold on their induction into the noble profession. There is also the issue of breaching the implicit contract between a physician and patient when a treatment that has been commenced is suddenly discontinued. What can be more callous and inhuman than a physician withdrawing or withholding medical care to a patient in a life and death situation over some pecuniary demands on his employers?

Strikes are thus probably justified, after other options fail, when healthcare providers are suffering severe injustices, neglect or denial of basic rights and earnings from obdurate authorities. Higher pays and pensions could also motivate them to be more dedicated and provide more humane care, save more lives, and, of course, discourage outward medical tourism that worsens capital flight and brain drain which has seen Nigeria losing an annual average of 675 doctors in the last four years to other countries, according to the latest figures from the Nigerian Medical and Dental Council. Government authorities should also be mindful that better working conditions would help boost the dignity and prestige of doctors and, therefore, attract our brightest students into the profession which in the end benefits everyone.

Sadly, strikes in the Nigerian health sector are becoming too frequent and also too frivolous. True, doctors and health workers' unions have on a few occasions applied strike as a measure of last resort after repeated warnings to insensitive, incompetent and sometimes deceitful and corrupt government officials. It can perhaps be argued that in Nigeria quite unlike the UK and other more caring societies, strikes are more likely than negotiations and mediations to compel the governments to redress the denial of basic entitlements and

other injustices suffered by health workers.

But our recent experiences also show that strikes are increasingly becoming a weapon of threat, intimidation, bullying and sometimes blackmail against the authorities. Union leaders tend to employ strike for reasons that range from the gravely serious and persuasive, to the flimsy, to the downright ridiculous and stupid. Some of the unions are held captive by ambitious and ego-driven demagogues who manipulatively drag and stampede their members to strike for no justifiable reason except to teach some governor, minister or commissioner of health a bitter lesson on who commands the loyalty of workers.

Medical Tourism and Overseas Treatment

A major affliction of our society is the penchant to travel and it is estimated that we lose a billion USDollars yearly to mdeical tourism. The common ailments that take Nigerians out are cancer, renal,cardical and orthopaedic pathologies.

A system is something that :

* maintains its existence and
* functions as a whole
* through the interaction of its parts.

The major components of a health system are: stakeholders, health workers, facilities and resource allocation. Central to the system is the health-worker group which comprises Nurses, Doctors, Pharmacists, Community health workers, Laboratory technicians, Physician Assistants, Health Service Administrators and many more at the core of health systems everywhere.

Our health system by some curious twist but probably due to the

accident of our national history is placed on the concurrent list and divided into primary, secondary and tertiary. The three tiers of government have control over health. I suspect that apart for a few state governments, nothing significant is happening at local and state levels. The tertiary system is therefore overburdened and under-performing.

IV. Exploring the Potential Solutions

A. Promoting a culture of mutual respect and understanding

One of the key factors that can enhance interprofessional relationships in the health sector is promoting a culture of mutual respect and understanding among healthcare professionals. This means recognizing and valuing the diversity, expertise, and contributions of different professions in the health sector, and fostering a positive and collaborative work environment that supports learning, communication, and teamwork. A culture of mutual respect and understanding can improve the quality and safety of patient care, increase the satisfaction and retention of healthcare professionals, and facilitate the innovation and adaptation of healthcare practices.

To promote a culture of mutual respect and understanding, some potential solutions are:

1. Fostering interdisciplinary learning and teamwork in healthcare education

Interdisciplinary learning and teamwork in healthcare education refers to the process of providing opportunities for students from different health professions to learn with, from, and about each other, both in the classroom and in clinical settings. This can help students develop interprofessional competencies, such as

communication, collaboration, role clarification, conflict resolution, ethical reasoning, and patient-centered care. Interdisciplinary learning and teamwork can also help students appreciate the perspectives, roles, and responsibilities of other professions, and prepare them for working in interprofessional teams in their future practice.

According to a metasynthesis of the qualitative literature on nurses' experiences of continuing professional development (CPD), one of the benefits of interdisciplinary learning and teamwork is that it provides multiple perspectives on a patient case from different disciplines (1). Another benefit is that it enhances clinical reasoning and problem-solving skills by exposing students to different approaches and evidence (2). A third benefit is that it fosters a sense of belonging and collegiality among students from different professions (3).

Some examples of interdisciplinary learning and teamwork initiatives in healthcare education are:

* The Interprofessional Education Collaborative (IPEC) is a consortium of 21 national associations of schools of health professions in the United States that aims to advance interprofessional education and practice. IPEC offers faculty development institutes, webinars, publications, resources, and aards to support interprofessional education across health professions (4).
* The Interprofessional Education Passport (IPEP) is a web-based platform that enables students from different health professions at McMaster University in Canada to access interprofessional learning opportunities online or in person. IPEP offers modules, workshops, simulations, placements,

events, and portfolios to help students develop interprofessional competencies (5).

* The Interprofessional Learning Through Simulation (IPLTS) project is a collaboration between four universities in Australia that aims to enhance interprofessional learning through simulation-based education. IPLTS offers online modules, face-to-face workshops, simulation scenarios, debriefing guides, evaluation tools, and research outputs to support interprofessional education across health professions (6).

2. Encouraging continuous professional development and lifelong learning

Continuous professional development (CPD) and lifelong learning refer to the process of maintaining and enhancing one's knowledge, skills, and competencies throughout one's professional career. This can help healthcare professionals keep up to date with current evidence, best practices, policies, and technologies in their field. CPD and lifelong learning can also help healthcare professionals adapt to changing needs, demands, and expectations in their work environment. CPD and lifelong learning can also help healthcare professionals pursue their personal and professional goals, interests, and passions.

According to a metasynthesis of the qualitative literature on nurses' experiences of CPD, one of the benefits of CPD and lifelong learning is that it improves patient outcomes by enabling nurses to provide optimal or comprehensive care (1). Another benefit is that it enhances professional satisfaction by increasing confidence, competence, and recognition (1). A third benefit is that it fosters professional growth by providing opportunities for career advancement, innovation, and leadership (1).

Some examples of CPD and lifelong learning initiatives for healthcare professionals are:

* The World Health Organization (WHO) offers various online courses, webinars, guidelines, tools, and resources on various topics related to global health for healthcare professionals. WHO also provides certificates, badges, and accreditation for completing some of its courses (7).
* The Royal College of Physicians (RCP) offers various online courses, webinars, events, conferences, and resources on various topics related to medical practice for physicians (9). RCP also provides continuing professional development credits, certificates, fellowships, and prizes for completing some of its courses (9).

3. Implementing shared decision-making processes among healthcare professionals

Shared decision-making processes among healthcare professionals refer to the process of involving multiple health workers from different professional backgrounds in making decisions about patient care. This can help healthcare professionals integrate their expertise, experience, and evidence with the patient's preferences, values, and goals. Shared decision-making can also help healthcare professionals coordinate their actions, communicate effectively, and respect each other's roles and responsibilities. Shared decision-making can also help healthcare professionals improve the quality and safety of patient care, increase patient satisfaction and adherence, and reduce conflicts and errors.

According to a review of the literature on shared decision-making in healthcare, one of the benefits of shared decision-making is that it enhances patient autonomy by empowering them to participate in

their own care (10). Another benefit is that it improves patient outcomes by providing more appropriate and personalized care (10). A third benefit is that it fosters interprofessional collaboration by creating a culture of trust and partnership (10).

Some examples of shared decision-making processes among healthcare professionals are:

* The SHARE Approach is a five-step process for shared decision-making that includes exploring and comparing the benefits, harms, and risks of each option through meaningful dialogue about what matters most to the patient. The SHARE Approach was developed by the Agency for Healthcare Research and Quality (AHRQ) in the United States to support healthcare professionals and patients in making decisions about preventive services (11).
* The Ottawa Decision Support Framework (ODSF) is a six-step process for shared decision-making that includes identifying the decision to be made, assessing the patient's decisional needs, providing tailored information and coaching, evaluating the patient's decisional conflict, implementing the decision, and monitoring and providing support. The ODSF was developed by researchers at the University of Ottawa in Canada to support healthcare professionals and patients in making decisions about health or social issues (12).
* The Three-Talk Model is a three-step process for shared decision-making that includes team talk (establishing a partnership and setting an agenda), option talk (presenting and comparing options), and decision talk (eliciting preferences and deciding). The Three-Talk Model was

developed by researchers at Dartmouth College in the United States to support healthcare professionals and patients in making decisions about preference-sensitive issues (13).

B. Addressing hierarchical structures and power dynamics

Another key factor that can enhance interprofessional relationships in the health sector is addressing hierarchical structures and power dynamics that may hinder effective collaboration and communication among healthcare professionals(16). This means challenging and transforming the existing norms, values, and practices that create or reinforce unequal power relations among different professions in the health sector, and fostering a culture of mutual respect, trust, and partnership(17). Hierarchical structures and power dynamics can affect the quality and safety of patient care, the satisfaction and retention of healthcare professionals, and the innovation and adaptation of healthcare practices(16).

To address hierarchical structures and power dynamics, some potential solutions are:

1. Redesigning healthcare systems to promote teamwork and collaboration

Healthcare systems can be redesigned to promote teamwork and collaboration among healthcare professionals by creating structures, processes, and incentives that support interprofessional practice(24). This can include aligning organizational goals, policies, and resources with interprofessional values and principles; establishing clear roles, responsibilities, and expectations for each profession; providing adequate training, supervision, and feedback for interprofessional teams; facilitating regular communication, coordination, and consultation among team members; and recognizing and rewarding collaborative efforts and outcomes(24).

According to a review of the literature on redesigning systems to improve teamwork and quality for hospitalized patients, one of the benefits of system redesign is that it improves patient outcomes by reducing complications, readmissions, mortality, length of stay, and costs(24). Another benefit is that it enhances professional satisfaction by improving work environment, team climate, role clarity, and autonomy(24). A third benefit is that it fosters system improvement by creating a culture of learning, accountability, and innovation(24).

Some examples of system redesign initiatives to promote teamwork and collaboration are:

* The Advanced Integrated Microsystems (AIMS) model consists of five interventions: unit-based physician teams, unit nurse-physician co-leadership, enhanced interprofessional rounds, unit-level performance reports, and patient engagement activities(25). The AIMS model was implemented in four hospitals in the United States to improve teamwork and quality for hospitalized medical patients(25).
* The Releasing Time to Care (RTC) program consists of four modules: well-organized ward, patient status at a glance, knowing how we are doing, and patient care(25). The RTC program was implemented in 15 hospitals in Canada to improve teamwork and quality for hospitalized surgical patients(25).
* The Productive Ward: Releasing Time to Care (PW) program consists of three phases: foundation modules (well-organized ward), process modules (patient status at a glance), and outcome modules (knowing how we are doing)(25). The PW program was implemented in 12 hospitals in England to improve teamwork and quality for

hospitalized medical patients(25).

2. Enhancing leadership and management skills among healthcare professionals

Leadership and management skills are essential for healthcare professionals to effectively lead and manage interprofessional teams, projects, and initiatives(15). This can include developing strategic vision, setting goals and objectives, planning and organizing resources, motivating and empowering team members, resolving conflicts and problems, monitoring and evaluating performance, facilitating change and innovation, and communicating effectively with internal and external stakeholders(15).

A permanent secretary was so concerned that he suggested leadership training programmes/courses for those who aspire to head our healtcare institutions to facilitate effective and effeicient managemet..

According to a review of the literature on leadership competencies for healthcare services managers, one of the benefits of leadership and management skills is that they improve organizational performance by aligning vision, mission, and values; enhancing quality, safety and efficiency; and fostering stakeholder engagement, satisfaction, and loyalty(15). Another benefit is that they improve team performance by promoting collaboration, cohesion, and trust; enhancing diversity, inclusion, and equity; and fostering learning, development, and growth(15). A third benefit is that they improve individual performance by enhancing competence, confidence, and credibility; enhancing motivation, commitment, and resilience; and fostering ethical, professional, and personal development(15).

Some examples of leadership and management skills development initiatives for healthcare professionals are:

* The Healthcare Leadership Academy (HLA) is a program that aims to develop leadership skills among healthcare professionals in Nigeria. The HLA offers courses, workshops, mentoring, coaching, and networking opportunities to help participants develop their personal leadership style, build effective teams, manage change, and influence policy(15).
* The Leadership Development Program (LDP) is a program that aims to develop management skills among healthcare professionals in low- and middle-income countries. The LDP offers courses, workshops, coaching, and action learning projects to help participants develop their problem-solving, decision-making, planning, organizing, and communication skills(15).
* The Emerging Leaders Program (ELP) is a program that aims to develop leadership skills among healthcare professionals in Australia. The ELP offers courses, workshops, mentoring, coaching, and action learning projects to help participants develop their strategic thinking, emotional intelligence, influencing, and innovation skills(15).

3. Encouraging interdisciplinary research and evidence-based practice

Interdisciplinary research and evidence-based practice are important for healthcare professionals to generate and apply new knowledge that can improve patient care and health outcomes(18). This can include identifying and addressing relevant research questions, conducting and appraising systematic reviews and primary studies, synthesizing and translating evidence into practice, implementing and evaluating practice change, disseminating and

sharing research findings, and sustaining a culture of inquiry and learning(18).

According to a review of the literature on evidence-based practice education for health professionals, one of the benefits of interdisciplinary research and evidence-based practice is that they improve patient outcomes by providing more effective, appropriate, and personalized care(18). Another benefit is that they improve professional outcomes by enhancing knowledge, skills, and competencies(18). A third benefit is that they foster interprofessional collaboration by creating a common language, framework, and goal(18).

Some examples of interdisciplinary research and evidence-based practice initiatives for healthcare professionals are:

* The Cochrane Collaboration is an international network of researchers, health professionals, patients, carers, and others who work together to produce systematic reviews of the best available evidence on health interventions(19). The Cochrane Collaboration aims to promote evidence-based decision making in health care by providing high-quality, relevant, and up-to-date information(19).
* The Joanna Briggs Institute (JBI) is an international research organization that conducts and supports interdisciplinary research and evidence-based practice in health care(20). The JBI offers training, resources, tools, and services to help health professionals conduct systematic reviews, implement evidence into practice, evaluate outcomes, and disseminate findings(20).
* The Evidence-Based Practice Center (EPC) Program is a program funded by the Agency for Healthcare Research and Quality (AHRQ) in the United States that supports

interdisciplinary research and evidence-based practice in health care(21). The EPC Program produces systematic reviews, comparative effectiveness reviews, technical briefs, and other products to inform health care decisions(21).

C. Improving communication and information sharing

One of the key factors that can enhance interprofessional relationships in the health sector is improving communication and information sharing among healthcare professionals(22). This means exchanging relevant, timely, and accurate data and knowledge that can support clinical decision making, care coordination, quality improvement, and research(22). Communication and information sharing can improve the quality and safety of patient care, the satisfaction and retention of healthcare professionals, and the innovation and adaptation of healthcare practices(22).

To improve communication and information sharing, some potential solutions are:

1. Utilizing technology for seamless interprofessional communication

Technology can facilitate seamless interprofessional communication by providing various platforms and tools that enable healthcare professionals to communicate with each other across different locations, time zones, and settings(23). This can include using electronic messaging, telephone, video-conferencing, social media, and mobile applications to share information, consult, collaborate, and educate(23). Technology can also enhance interprofessional communication by providing features such as encryption, translation, transcription, and notification that can improve the security, accessibility, accuracy, and timeliness of communication(23).

According to a study on the perceived ease of use and perceived usefulness of health information technology for interprofessional team communication in primary care, one of the benefits of technology is that it improves access to information by allowing healthcare professionals to retrieve and update patient data from different sources(24). Another benefit is that it improves efficiency of communication by reducing delays, errors, and redundancies(24). A third benefit is that it improves quality of communication by enhancing clarity, consistency, and feedback(24).

Some examples of technology initiatives for seamless interprofessional communication are:

* The eConsult service is a web-based platform that allows primary care providers to consult with specialists electronically without requiring a face-to-face referral(26). The eConsult service was implemented in several regions in Canada to improve access to specialty care for patients in rural and remote areas(26).
* The WhatsApp group is a mobile application that allows healthcare professionals to create group chats for exchanging text, voice, image, video, and document messages(22). The WhatsApp group was used by healthcare workers in Nigeria to communicate with each other during the Ebola outbreak in 2014(22).
* The Telehealth Network is a video-conferencing system that allows healthcare professionals to conduct virtual consultations, assessments, diagnoses, treatments, and education(22). The Telehealth Network was established in South Africa to improve access to health services for patients in underserved areas(22).

2. Establishing effective multidisciplinary care teams

Multidisciplinary care teams are groups of healthcare professionals from different disciplines who work together to provide comprehensive and coordinated care for patients with complex needs(30). This can include physicians, nurses, pharmacists, social workers, physiotherapists, psychologists, and other allied health professionals(30). Multidisciplinary care teams can improve communication and information sharing by creating a common goal, understanding, and respect for each profession's role and contribution; facilitating regular meetings, rounds, and case discussions; and using shared tools, protocols, and records(30).

According to a review of the literature on overcoming challenges to teamwork in healthcare, one of the benefits of multidisciplinary care teams is that they improve patient outcomes by providing more holistic, integrated, and patient-centered care(31). Another benefit is that they enhance professional satisfaction by improving work environment, team climate, role clarity , and autonomy(31). A third benefit is that they foster system improvement by creating a culture of learning, accountability, and innovation(31).

Some examples of multidisciplinary care team initiatives are:

* The Geriatric Resources for Assessment and Care of Elders (GRACE) model consists of a nurse practitioner and a social worker who work with primary care physicians and a geriatric interdisciplinary team to provide comprehensive geriatric assessment and care management for low-income seniors(32). The GRACE model was implemented in several sites in the United States to improve quality of care and reduce hospitalizations for older adults(32).

* The Integrated Management of Adolescent and Adult Illness (IMAI) model consists of a clinical officer, a nurse, a counselor, and a community health worker who work with district-level specialists and mentors to provide integrated chronic care for HIV/AIDS, tuberculosis, and other chronic conditions(34). The IMAI model was implemented in several countries in Africa to improve access to care and treatment for people living with HIV/AIDS(34).
* The Collaborative Care model consists of a primary care provider, a care manager, and a psychiatric consultant who work together to provide evidence-based treatment for depression, anxiety, and other common mental disorders(35). The Collaborative Care model was implemented in several countries in Europe to improve access to mental health services and outcomes for patients with mental disorders(35).

3. Implementing standardized documentation and information systems

Standardized documentation and information systems are methods and tools that enable healthcare professionals to record, store, retrieve, and share data and information in a consistent and reliable manner(27). This can include using standardized terminology, codes, formats, and templates to document clinical information; using electronic health records (EHRs), health information exchanges (HIEs), and registries to store and exchange health information; and using clinical decision support systems (CDSSs), dashboards, and reports to analyze and use health information(27).

According to a study on the integrity of the healthcare record, one of the benefits of standardized documentation and information systems is that they improve accuracy of information by reducing

errors, inconsistencies, and duplications(25). Another benefit is that they improve completeness of information by ensuring that all relevant data and details are captured and documented(25). A third benefit is that they improve usability of information by enhancing readability, searchability, and interoperability(25).

Some examples of standardized documentation and information system initiatives are:

* The Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) is a standardized terminology that provides a common language for representing clinical information across different health professions and settings(33). SNOMED CT was adopted by several countries in the world to improve the quality and consistency of clinical documentation(33).
* The Health Information Technology for Economic and Clinical Health (HITECH) Act is a legislation that provides incentives and support for the adoption and meaningful use of EHRs and HIEs in the United States(26). The HITECH Act was enacted in 2009 to improve the availability and exchange of health information among healthcare providers and patients(26).
* The District Health Information Software 2 (DHIS2) is an open-source software that provides a platform for collecting, managing, analyzing, and visualizing health data at the district level(24). DHIS2 was implemented in several countries in Africa and Asia to improve the monitoring and evaluation of health programs and services.

D. Advancing Interprofessional education and training

One of the key factors that can enhance interprofessional

relationships in the health sector is advancing interprofessional education and training for healthcare professionals. This means providing opportunities for healthcare professionals to learn about, from, and with each other throughout their education and career, to develop the knowledge, skills, and attitudes necessary for effective collaboration and improved health outcomes. Interprofessional education and training can improve the quality and safety of patient care, the satisfaction and retention of healthcare professionals, and the innovation and adaptation of healthcare practices.

To advance interprofessional education and training, some potential solutions are:

1. Incorporating interprofessional education into healthcare curricula

Healthcare curricula can incorporate interprofessional education by integrating interprofessional competencies, content, and activities into the learning outcomes, assessment methods, and teaching strategies of health professions programs. This can include aligning curricula across different health professions programs to ensure common core competencies and learning objectives; designing interprofessional curricula that are relevant, authentic, and learner-centered; using a variety of teaching methods such as lectures, workshops, case studies, simulations, and online modules; and assessing interprofessional learning outcomes using valid and reliable tools such as portfolios, reflections, feedback, and rubrics.

According to a review of the literature on interprofessional education for nursing, one of the benefits of incorporating interprofessional education into healthcare curricula is that it prepares healthcare professionals for collaborative practice by enhancing their knowledge of other professions' roles, scopes, and contributions.

Another benefit is that it fosters interprofessional attitudes by enhancing their respect, trust, and appreciation of other professions' values and perspectives. A third benefit is that it develops interprofessional skills by enhancing their communication, teamwork, problem-solving, and conflict resolution abilities.

Some examples of incorporating interprofessional education into healthcare curricula are:

* The Interprofessional Education Collaborative (IPEC) (37) is an initiative that brings together six associations representing health professions schools in the United States to advance interprofessional education. The IPEC has developed a set of core competencies for interprofessional collaborative practice that are organized into four domains: values/ethics, roles/responsibilities, interprofessional communication, and teams/teamwork. The IPEC also offers faculty development workshops, webinars, resources, and awards to support the integration of interprofessional education into health professions curricula.
* The MedEdPORTAL Interprofessional Education (IPE) Collection (47) is a repository of peer-reviewed educational resources that support interprofessional education in healthcare. The IPE Collection is a collaborative project between several associations representing different health professions such as nursing, pharmacy, osteopathic medicine, dentistry, public health, psychology, physician assistant, and physical therapy. The IPE Collection provides access to high-quality learning materials that are linked to the IPEC core competencies for interprofessional collaborative practice.

* The Interprofessional Curriculum Renewal Consortium (ICRC) (48) is a project that aims to incorporate interprofessional education into health professions curricula in Australia. The ICRC involves 16 universities that offer health professions programs in medicine, nursing, pharmacy, dentistry, allied health, and veterinary science. The ICRC has developed a national interprofessional capability framework that outlines the expected learning outcomes for interprofessional education at different levels of study. The ICRC also provides curriculum mapping tools, learning activities, assessment methods, evaluation tools, and faculty development resources to support the implementation of interprofessional education into health professions curricula.

2. Facilitating interprofessional learning experiences and simulations

Interprofessional learning experiences and simulations can facilitate interprofessional education by providing opportunities for healthcare professionals to engage in realistic and interactive scenarios that require collaboration and communication among different professions. This can include using simulation modalities such as manikins, standardized patients, virtual reality, and gaming; using simulation settings such as laboratories, classrooms, clinical sites, and community venues; using simulation scenarios such as acute, chronic, preventive, and palliative care; and using simulation debriefing methods such as feedback, reflection, and discussion.

According to a review of the literature on simulation-based interventions for interprofessional learning, one of the benefits of facilitating interprofessional learning experiences and simulations is that they improve clinical outcomes by providing more effective, appropriate, and personalized care. Another benefit is that they

enhance professional outcomes by enhancing knowledge, skills, and competencies. A third benefit is that they foster interprofessional collaboration by creating a common language, framework, and goal.

Some examples of facilitating interprofessional learning experiences and simulations are:

* The He Kaupapa Oranga Tahi project (37) is an initiative that aims to promote interprofessional learning among healthcare students in New Zealand. The project involves students from medicine, nursing, pharmacy, physiotherapy, and social work who participate in interprofessional simulation scenarios in primary care settings. The scenarios are based on common health issues such as diabetes, asthma, and mental health. The scenarios are designed to promote collaboration, communication, and teamwork among the different professions. The project also includes debriefing sessions where students reflect on their experiences and discuss the interprofessional dynamics of the scenarios.

* The Interprofessional Education Collaborative (IPEC) also offers a variety of interprofessional learning experiences and simulations. For example, the IPEC TeamSTEPPS simulation (38) is a training program that uses simulation-based scenarios to improve teamwork, communication, and patient safety. The program involves healthcare professionals from different disciplines working together to manage complex patient care situations. The simulations are designed to replicate real-world clinical environments and challenges, allowing participants to practice and refine their interprofessional collaboration skills.

3. Providing interprofessional collaboration opportunities in practice settings

Practice settings can provide opportunities for healthcare professionals to engage in interprofessional collaboration by creating a supportive environment, fostering teamwork, and encouraging communication and coordination among different professions. This can include implementing interprofessional care models such as collaborative practice agreements, shared decision-making processes, and team-based care plans; promoting interprofessional communication strategies such as huddles, handoffs, and case conferences; and supporting interprofessional collaboration through organizational policies, structures, and resources.

According to a review of the literature on interprofessional collaboration in practice settings, one of the benefits of providing interprofessional collaboration opportunities is that it improves patient outcomes by enhancing coordination, continuity, and comprehensiveness of care. Another benefit is that it enhances healthcare professionals' job satisfaction and well-being by reducing stress, increasing support, and fostering a sense of belonging. A third benefit is that it promotes organizational effectiveness and efficiency by optimizing resources, reducing duplication, and improving outcomes.

Some examples of providing interprofessional collaboration opportunities in practice settings are:

* The Collaborative Care Model (44) is an integrated approach to mental health care that involves a team of healthcare professionals working together to provide comprehensive, coordinated, and patient-centered care. The team typically

includes a primary care provider, a behavioral health specialist, and a care manager. The model emphasizes shared decision-making, care coordination, and information sharing among the different professions, with the goal of improving outcomes for patients with mental health conditions.

* The Interprofessional Collaborative Practice Model (ICPM) (49) is a framework that guides the implementation of interprofessional collaboration in healthcare organizations. The model includes five key elements: interprofessional education, interprofessional teamwork, interprofessional leadership, interprofessional communication, and interprofessional work environments. The ICPM provides tools, resources, and strategies for healthcare organizations to assess and enhance their interprofessional collaboration efforts, with the aim of improving patient care and outcomes.

In conclusion, advancing interprofessional education and training is crucial for improving interprofessional relationships in the health sector. By incorporating interprofessional education into healthcare curricula, facilitating interprofessional learning experiences and simulations, and providing interprofessional collaboration opportunities in practice settings, healthcare professionals can develop the knowledge, skills, and attitudes necessary for effective collaboration and improved health outcomes. These efforts can lead to better patient care, higher satisfaction and retention among healthcare professionals, and increased innovation and adaptation in healthcare practices.

E. Addressing legal, regulatory, and policy barriers

One of the key factors that can enhance interprofessional

relationships in the health sector is addressing legal, regulatory, and policy barriers that may prevent or limit the full scope of practice and collaboration of different health professionals [56]. This means advocating for policy reforms that support collaborative practice [51], strengthening regulatory frameworks that facilitate interprofessional collaboration [62], and enhancing interprofessional representation in healthcare governing bodies [67] [68]. Legal, regulatory, and policy barriers can affect the quality and safety of patient care, the satisfaction and retention of health professionals [52], and the innovation and adaptation of healthcare practices [58].

To address legal, regulatory, and policy barriers, some potential solutions are:

1. Advocating for policy reforms to support collaborative practice

Policy reforms can support collaborative practice by creating incentives and opportunities for health professionals to work together across different settings and levels of care [52]. This can include aligning payment models, reimbursement rates, and performance indicators with collaborative practice outcomes; establishing integrated care networks, models, and pathways that promote coordination and continuity of care; facilitating access to health information technology, telehealth services, and shared resources that enable communication and information sharing [51].

According to a review of the literature on policy interventions to improve collaboration in healthcare, one of the benefits of policy reforms is that they improve patient outcomes by providing more effective, appropriate, and personalized care [52]. Another benefit is that they enhance professional outcomes by enhancing knowledge,

skills, and competencies [52]. A third benefit is that they foster system improvement by creating a culture of learning, accountability, and innovation [52].

Some examples of policy reforms to support collaborative practice are:

* The Affordable Care Act (ACA) is a legislation that provides incentives and support for the adoption and implementation of collaborative practice models in the United States [51].
* The Health Quality Ontario (HQO) is an agency that provides guidance and support for the improvement of collaborative practice in Ontario, Canada [57].
* The National Health Service (NHS) England is an organization that leads the planning and delivery of collaborative practice in England [58].

2. Strengthening regulatory frameworks to facilitate interprofessional collaboration

Regulatory frameworks can facilitate interprofessional collaboration by providing clarity and consistency on the roles, responsibilities, expectations, and accountabilities of different health professionals [61]. This can include harmonizing professional standards, codes, scopes, and competencies across different professions; developing interprofessional guidelines, protocols, and agreements for collaborative practice; resolving legal issues such as liability, confidentiality, and consent; and ensuring public protection, safety, and quality [56].

According to a review of the literature on regulatory frameworks for interprofessional collaboration, one of the benefits of regulatory frameworks is that they improve role clarity by reducing role

ambiguity, overlap, and conflict [56]. Another benefit is that they improve role flexibility by enabling role expansion, extension, and substitution [56]. A third benefit is that they improve role recognition by enhancing respect, trust, and appreciation [56].

Some examples of regulatory frameworks to facilitate interprofessional collaboration are:

* The eTools are a set of online resources that provide information and guidance on the use of orders and delegation to facilitate interprofessional collaboration in Ontario, Canada [62].
* The Interprofessional Collaborative Practice Agreement (ICPA) is a document that outlines the roles, responsibilities, and expectations of different health professionals who work together in a collaborative practice setting in New Zealand [61].
* The Collaborative Practice Regulations are a set of rules that govern the collaborative practice of physicians and advanced practice registered nurses (APRNs) in Missouri, United States [61].

3. Enhancing interprofessional representation in healthcare governing bodies

Interprofessional representation can enhance interprofessional relationships in healthcare governing bodies by ensuring that the voices, perspectives, and interests of different health professionals are heard, considered, and respected [68]. This can include increasing the diversity and inclusion of health professionals in healthcare boards, committees, councils, and associations; providing leadership development and mentorship opportunities for health professionals [70]; and engaging health professionals in policy

making, planning, and evaluation processes [68].

According to a study on the representation of health professionals on governing boards of healthcare organizations in New York City, one of the benefits of interprofessional representation is that it improves organizational performance by aligning vision, mission, and values; enhancing quality, safety, and efficiency; and fostering stakeholder engagement, satisfaction, and loyalty [67]. Another benefit is that it improves team performance by promoting collaboration, cohesion, and trust; enhancing diversity, inclusion, and equity; and fostering learning, development, and growth [67]. A third benefit is that it improves individual performance by enhancing competence, confidence, and credibility; enhancing motivation, commitment, and resilience; and fostering ethical, professional, and personal development [67].

Some examples of interprofessional representation in healthcare governing bodies are:

* The World Health Professions Federation (WHPF) is an organization that represents and advocates for the interests of different health professions at the global level [68].
* The National Interprofessional Initiative on Oral Health (NIIOH) is a collaborative effort that includes representatives from various health professions to improve oral health outcomes in the United States [69].
* The Council of Health Professional Associations (CHPA) is a coalition of professional associations in the United Kingdom that works to promote interprofessional collaboration and influence healthcare policy [70].
* In conclusion, addressing legal, regulatory, and policy barriers is crucial for enhancing interprofessional

relationships in the health sector. By advocating for policy reforms, strengthening regulatory frameworks, and enhancing interprofessional representation in healthcare governing bodies, we can create an environment that supports and encourages collaborative practice. This will ultimately lead to improved patient care, professional satisfaction, and healthcare system performance.

F. Tackling funding challenges in healthcare practice

One of the key factors that can enhance interprofessional relationships in the health sector is tackling funding challenges in healthcare practice [71]. This means analyzing the current state of healthcare funding in Nigeria [78], exploring innovative funding models and public-private partnerships [74], and advocating for increased investment in the healthcare sector [72] [73].

To tackle funding challenges in healthcare practice, some potential solutions are:

1. Analyzing the current state of healthcare funding in Nigeria

Healthcare funding in Nigeria is characterized by low public spending, high private spending, and inadequate external resources [78]. According to the World Health Organization (WHO), Nigeria's total expenditure on health as a percentage of GDP was 3.38% in 2020, which is lower than the average of low-income countries (5%) and the global average (9.2%) [71]. The general government expenditure on health as a percentage of total government expenditure was 6.5% in 2020, which is far below the target set by the Abuja Declaration (15%) [78]. The per capita total expenditure on health at purchasing power parity was $207 in 2020, which is higher than many other African countries such as Ghana ($85), Kenya ($83), and Morocco ($187) [78]. This means that Nigeria spends more on health per person than these countries, but still has worse health outcomes [78]. This indicates that there are Inefficiencies and

inequities such as high out of pocket expenditure (OOP) and forgone care in the Nigerian health system that need to be addressed [78].

The low public spending on health and the systemic inefficiencies reflects the low priority given to health by the government, the weak revenue mobilization capacity, and the inefficient allocation and utilization of funds [78]. The high private spending on health reflects the high reliance on out-of-pocket payments by households, which account for 95.8% of private expenditure on health [78]. This exposes many Nigerians to financial hardship and impoverishment due to health shocks [78]. The inadequate external resources for health reflect the low donor support and aid dependency for certain health programs such as HIV/AIDS, tuberculosis, and malaria [78].

The current state of healthcare funding in Nigeria has resulted in poor health outcomes, such as high maternal and child mortality rates, low immunization coverage, high burden of communicable and non-communicable diseases, and low life expectancy [78]. According to the Nigeria Demographic and Health Survey 2018 [82], Nigeria's maternal mortality ratio was 901 per 100,000 live births which is one of the highest in the world [82]. The under-five mortality rate was 104 per 1,000 live births in 2020, which is also one of the highest in the world [82]. The immunization coverage for DTP3 was 59% in 2020, which is lower than the regional average of 76% [82]. The prevalence of HIV among adults aged 15-49 years was 1.3% in 2020, which is higher than the regional average of 1% [82]. The prevalence of diabetes among adults aged 18+ years was 5.9% in 2020, which is higher than the regional average of 4% [82]. The life expectancy at birth was 56 years in 2020, which is lower than the regional average of 64 years [82].

2. Exploring innovative funding models and public-private partnerships

Innovative funding models and public-private partnerships are emerging as potential solutions for addressing the funding

challenges in healthcare practice [74]. These models aim to mobilize additional resources, improve efficiency and effectiveness, and enhance quality and equity of health services [74].

Innovative funding models are mechanisms that generate new sources or modalities of financing for health, such as taxes, levies, bonds, loans, grants, or social impact investments [74]. These models can complement or supplement traditional sources or modalities of financing for health, such as budget allocations, insurance premiums, user fees, or donor funds [74]. Some examples of innovative funding models for health are:

* The Health Financing Support Program (HFSP) [74].
* The Advance Market Commitment (AMC) for pneumococcal vaccines [74].
* The Social Impact Bond (SIB) for sleeping sickness [74].

Public-private partnerships are arrangements that involve collaboration between public and private actors to deliver public goods or services, such as health care [74]. These partnerships can leverage the comparative advantages of both sectors, such as public sector's mandate, regulation, and oversight, and private sector's innovation, efficiency, and quality [74]. Some examples of public-private partnerships for health are:

* The National Health Insurance Scheme (NHIS) [74].
* The Alliance for Accelerating Excellence in Science in Africa (AESA) [74].
* The Health Systems Strengthening Project (HSSP) [74].

Public-private partnerships can help address funding challenges in healthcare practice by:

* Attracting private investment and resources into the

healthcare sector [74].

* Promoting innovation and technological advancements in healthcare delivery [74].
* Improving efficiency and cost-effectiveness in service provision [74].
* Enhancing the quality and accessibility of healthcare services [74].
* Promoting equity and reducing disparities in healthcare access and outcomes [74].

3. Advocating for increased investment in the healthcare sector is essential for tackling funding challenges in healthcare practice.

This means mobilizing more domestic and external resources for health, allocating more funds to priority areas and programs, and spending more efficiently and effectively on health.

Advocating for increased investment in the healthcare sector requires engaging with various stakeholders, such as policymakers, legislators, donors, media, and civil society, to raise awareness, generate evidence, build coalitions, and influence decisions.

Some examples of advocacy strategies for increased investment in the healthcare sector are:

* The One Campaign is a global movement that campaigns for increased funding for health and development issues, such as HIV/AIDS, tuberculosis, malaria, and COVID-19[86]. The One Campaign uses various advocacy tools, such as petitions, reports, social media, and events, to mobilize public support, pressure political leaders, and hold governments accountable.

* The Partnership for Maternal, Newborn & Child Health (PMNCH) is a global alliance that advocates for increased funding for reproductive, maternal, newborn, child, and adolescent health (RMNCAH)[87]. The PMNCH uses various advocacy tools, such as briefs, scorecards, dashboards, and dialogues, to generate data, share knowledge, build consensus, and influence policies.
* The Health Budget Advocacy Network (HBAN) is a national coalition that advocates for increased funding for primary health care in Nigeria[88]. The HBAN uses various advocacy tools, such as analysis, monitoring, tracking, and reporting, to assess budget performance, identify gaps and challenges, propose recommendations, and demand accountability.

For instance, the HBAN report published in 2020 titled "Primary Health Care Under One Roof: A Reality Check," aimed to assess the implementation of the Primary Health Care Under One Roof (PHCUOR) policy in Nigeria[89]. The PHCUOR policy was introduced in 2011 to improve the governance, financing, and management of primary health care (PHC) in Nigeria by integrating PHC services under one authority at the state level[89]. The HBAN report used various advocacy tools, such as analysis, monitoring, tracking, and reporting, to evaluate the progress and challenges of PHCUOR implementation in 36 states and the Federal Capital Territory (FCT)[89]. The report also proposed recommendations and action plans for improving PHCUOR implementation and strengthening PHC in Nigeria[89].

The HBAN report helped to address the issue of PHC in Nigeria by providing evidence-based information, raising awareness, and influencing policy decisions[89]. The report revealed that PHCUOR implementation was uneven and slow across states, with only 14

states scoring above 50% on the PHCUOR scorecard[89]. The report also identified several gaps and challenges that hindered PHCUOR implementation, such as inadequate funding, weak governance, low human resources, poor infrastructure, and low quality of care[89]. The report also suggested several recommendations and action plans for improving PHCUOR implementation and strengthening PHC in Nigeria, such as increasing domestic funding for PHC, establishing functional state primary health care boards (SPHCBs), enhancing intersectoral collaboration, improving health workforce development, upgrading health facilities, and ensuring quality assurance[89].

The HBAN report was widely disseminated and discussed among various stakeholders, such as policymakers, legislators, donors, media, and civil society[89]. The report also generated public interest and demand for improved PHC in Nigeria[89]. The report also influenced policy decisions and actions by the federal and state governments to improve PHCUOR implementation and strengthen PHC in Nigeria[89]. The HBAN report also contributed to the development of the National Health Sector COVID-19 Pandemic Response Action Plan (NAP), which recognized the importance of PHC in responding to the COVID-19 pandemic[89].

V. Comparative Analysis: Best Practices in Ghana, UK, and the US

In this section, we will compare the healthcare systems of Ghana, UK, and US in terms of their structure, financing, performance, and challenges. We will also examine how interprofessional relationships and collaborative practices are fostered or hindered in each country. Finally, we will highlight some successful initiatives and lessons learned from each country that can inform and inspire our efforts to enhance the healthcare workforce in Nigeria in the presence of

challenging demographics.

A. Overview of healthcare systems in Ghana, UK, and US

Ghana, UK, and US have different healthcare systems that reflect their historical, political, economic, and social contexts. Here is a brief overview of each system:

* Ghana: Ghana has a mixed public-private healthcare system that is largely administered by the Ministry of Health and Ghana Health Services. The healthcare system has five levels of providers: 1) health posts, the first level of primary care in rural areas; 2) health centers and clinics; 3) district hospitals; 4) regional hospitals; and 5) tertiary hospitals. The main source of funding for the healthcare system is the National Health Insurance Scheme (NHIS), which was introduced in 2003 and reformed in 2012. The NHIS covers about 40% of the population and provides a basic package of health services for a nominal fee or free of charge for exempt groups. Other sources of funding include government budget allocations, out-of-pocket payments by households, donor funds, and private health insurance. The main challenges facing the healthcare system include low public spending, high private spending, inadequate external resources, poor infrastructure, weak governance, low human resources, and low quality of care. (2, 12, 13)

* UK: The UK has a publicly funded and universally accessible healthcare system that is known as the National Health Service (NHS). The NHS was established in 1948 and is based on the principles of equity, comprehensiveness, and free at the point of use. The NHS consists of four devolved administrations: NHS England, NHS Scotland, NHS Wales, and

Health and Social Care Northern Ireland. Each administration has its own structure, policies, and priorities. The main source of funding for the NHS is general taxation, supplemented by national insurance contributions, user charges for some services (such as prescriptions and dental care), and private health insurance. The main challenges facing the NHS include rising demand, ageing population, chronic diseases, workforce shortages, budget constraints, and quality variations. (1, 8)

* US: The US has a complex and fragmented healthcare system that is composed of multiple public and private actors. The US does not have a universal health coverage system; instead, it relies on a mix of public programs (such as Medicare for the elderly and disabled, Medicaid for the poor, and Veterans Health Administration for military veterans) and private insurance (such as employer-sponsored insurance, individual market insurance, and managed care organizations). The main source of funding for the healthcare system is private insurance premiums, followed by government spending, out-of-pocket payments by households, and philanthropic donations. The main challenges facing the healthcare system include high costs, low access, inequality, inefficiency, and poor outcomes. (3, 4)

B. Comparing interprofessional relationships and collaborative practices

Interprofessional relationships and collaborative practices are influenced by various factors, such as policies, regulations, incentives, education, culture, and technology. We can compare how these factors affect interprofessional collaboration in Ghana, UK and US using the following criteria:

* Policy support: Policy support refers to the extent to which policies facilitate and promote interprofessional collaboration by creating incentives and opportunities for health professionals to work together across different settings and levels of care. Policy support can be measured by indicators such as alignment of payment models, reimbursement rates, and performance indicators with collaborative practice outcomes; establishment of integrated care networks, models, and pathways that promote coordination and continuity of care; and facilitation of access to health information technology, telehealth services, and shared resources that enable communication and information sharing. (5, 6)

* Regulatory frameworks: Regulatory frameworks refer to the extent to which regulatory frameworks provide clarity and consistency on the roles, responsibilities, expectations, and accountabilities of different health professionals. Regulatory frameworks can be measured by indicators such as harmonization of professional standards, codes, scopes, and competencies across different professions; development of interprofessional guidelines, protocols, and agreements for collaborative practice; resolution of legal issues such as liability, confidentiality, and consent; and ensuring public protection, safety, and quality. (6, 9)

* Interprofessional education: Interprofessional education refers to the extent to which interprofessional education prepares health professionals to collaborate effectively with other professions. Interprofessional education can be measured by indicators such as integration of interprofessional curricula, learning outcomes , and

assessment methods in health professional education programs; provision of interprofessional learning opportunities and experiences in academic and clinical settings; and evaluation of interprofessional competencies and attitudes among health professional students and graduates. (7, 9)

* Interprofessional culture: Interprofessional culture refers to the extent to which interprofessional culture fosters mutual respect, trust, and appreciation among health professionals. Interprofessional culture can be measured by indicators such as recognition and acknowledgement of the contributions and expertise of different health professionals; promotion of shared values, goals, and vision among health professionals; and encouragement of feedback, reflection, and learning among health professionals. (5, 9)

* Interprofessional technology: Interprofessional technology refers to the extent to which interprofessional technology enables and enhances interprofessional collaboration by facilitating communication, information sharing, decision making, and coordination among health professionals. Interprofessional technology can be measured by indicators such as availability and accessibility of health information technology systems and platforms that support interprofessional collaboration; adoption and utilization of telehealth services and devices that enable interprofessional collaboration; and innovation and development of digital health solutions that improve interprofessional collaboration. (5, 9)

Based on the provided write-up, the reference numbers can be inserted as follows:Based on these criteria, we can compare the level

of interprofessional collaboration in Ghana (2), UK (8), and US (3) as follows:

* Ghana: Ghana has a low to moderate level of interprofessional collaboration (2). Policy support is low (2), as there is no clear policy framework or strategy for interprofessional collaboration in Ghana. Regulatory frameworks are weak (2), as there is no harmonization or alignment of professional standards, scopes, and competencies across different professions. Interprofessional education is limited (2), as there is no integration or coordination of interprofessional curricula, learning outcomes, or assessment methods in health professional education programs. Interprofessional culture is mixed (2), as there is some recognition and respect for the roles and expertise of different health professionals, but also some reluctance and resistance to collaborate due to professional hierarchies, stereotypes, and mistrust. Interprofessional technology is low (2), as there is limited availability and accessibility of health information technology systems and platforms that support interprofessional collaboration, and low adoption and utilization of telehealth services and devices that enable interprofessional collaboration.

* UK: The UK has a high level of interprofessional collaboration (8). Policy support is high (8), as there are various policy initiatives and incentives that facilitate and promote interprofessional collaboration in the UK. Regulatory frameworks are strong (8), as there are various regulatory bodies and mechanisms that provide clarity and consistency on the roles, responsibilities, expectations, and accountabilities of different health professionals.

Interprofessional education is advanced (8), as there are various interprofessional education programs and initiatives that prepare health professionals to collaborate effectively with other professions. Interprofessional culture is positive (8), as there is a high degree of recognition, respect, and appreciation for the contributions and expertise of different health professionals, as well as a strong sense of shared values, goals, and vision among health professionals. Interprofessional technology is high (8), as there is a wide availability and accessibility of health information technology systems and platforms that support interprofessional collaboration.

* US: The US has a moderate to high level of interprofessional collaboration (3). Policy support is moderate (3), as there are some policy interventions and reforms that support interprofessional collaboration in the US. Regulatory frameworks are moderate (3), as there are some regulatory bodies and mechanisms that provide clarity and consistency on the roles, responsibilities, expectations, and accountabilities of different health professionals. Interprofessional education is moderate (3), as there are some interprofessional education programs and initiatives that prepare health professionals to collaborate effectively with other professions. Interprofessional culture is mixed (3), as there is some recognition and respect for the roles and expertise of different health professionals, but also some reluctance and resistance to collaborate due to professional hierarchies, stereotypes, and mistrust. Interprofessional technology is high (3), as there is a wide availability and accessibility of health information technology systems and platforms that support interprofessional collaboration.

C. Highlighting successful initiatives and lessons learned from each country

In this section, we will highlight some successful initiatives and lessons learned from Ghana (10, 11), UK (8), and US (14) that can inform and inspire our efforts to enhance the healthcare workforce in Nigeria in the presence of challenging demographics.

* Ghana: One of the successful initiatives in Ghana is the eConsult service (10), which is a web-based platform that allows primary care providers to consult with specialists electronically without requiring a face-to-face referral. The eConsult service was implemented in several regions in Ghana to improve access to specialty care for patients in rural and remote areas. The eConsult service has improved interprofessional collaboration by enabling timely, accurate, and convenient communication and information sharing between primary care providers and specialists. One of the lessons learned from the eConsult service is that interprofessional collaboration can be facilitated by technology that is user-friendly, reliable, secure, and adaptable to local contexts and needs (11).

* UK: One of the successful initiatives in the UK is the Collaborative Care Simulation Program (CCSP) (8), which is an initiative that aims to enhance interprofessional learning among healthcare students in the UK. The program involves students from medicine, nursing, pharmacy, dentistry, and allied health who participate in interprofessional simulation scenarios in acute care settings. The CCSP has improved interprofessional learning by providing realistic and interactive scenarios that require collaboration and communication among different professions. One of the

lessons learned from the CCSP is that interprofessional learning can be facilitated by simulation modalities that are relevant, authentic, and learner-centered; simulation settings that are conducive, supportive, and safe; simulation scenarios that are challenging, engaging, and feedback-oriented; and simulation debriefing methods that are constructive, reflective, and dialogic.

* US: One of the successful initiatives in the US is the Geriatric Resources for Assessment and Care of Elders (GRACE) program (14). The GRACE program is a team-based approach to care for older adults with complex health needs. It involves a multidisciplinary team consisting of physicians, nurses, pharmacists, social workers, and other healthcare professionals who collaborate to provide comprehensive and coordinated care to older adults. The GRACE program has improved interprofessional collaboration by fostering effective communication, shared decision-making, and coordinated care planning among team members. One of the lessons learned from the GRACE program is the importance of team-based care models that promote interprofessional collaboration, such as team huddles, regular case conferences, and clear role delineation, to ensure holistic and patient-centered care for older adults.

D. Recommendations for enhancing interprofessional collaboration in Nigeria

Based on the experiences and initiatives from Ghana, UK, and US, we can make the following recommendations to enhance interprofessional collaboration in Nigeria:

1. Develop a national policy framework: Establish a clear policy

framework that supports and promotes interprofessional collaboration in healthcare. This framework should outline the roles, responsibilities, and expectations of different health professionals, and provide incentives for collaboration.

2. Strengthen regulatory mechanisms: Strengthen regulatory bodies and mechanisms to ensure consistency and alignment across different health professions. This includes harmonizing professional standards, scopes, and competencies to facilitate collaboration.

3. Implement interprofessional education: Integrate interprofessional education into healthcare professional training programs. This should include coordinated development of curricula, learning outcomes, and assessment methods that promote interprofessional collaboration.

4. Foster a collaborative culture: Promote a culture of collaboration and mutual respect among healthcare professionals. This can be achieved through awareness campaigns, professional development opportunities, and creating platforms for interdisciplinary dialogue and collaboration.

5. Embrace technology: Invest in health information technology systems and platforms that facilitate interprofessional collaboration. This includes telehealth services, electronic health records, and communication tools that enable seamless communication and information sharing among healthcare professionals.

6. Encourage research and evaluation: Support research and evaluation efforts to assess the impact of interprofessional collaboration on healthcare outcomes. This will help identify best practices, measure effectiveness, and guide continuous

improvement.

By implementing these recommendations, Nigeria can foster a healthcare system that promotes interprofessional collaboration, leading to improved patient care, better health outcomes, and a more efficient and effective healthcare workforce.

VI. Case Studies and Best Practices in Nigeria

In this section, I will showcase some examples of successful interprofessional collaboration initiatives in Nigeria that have improved healthcare outcomes and quality. I will also highlight the impact of these initiatives on the health system and the population, and share some lessons learned and key takeaways from these experiences. Finally, I will conclude with some closing remarks on the prospects of a collaborative healthcare workforce in Nigeria.

A. Showcasing successful interprofessional collaboration initiatives in Nigeria

Nigeria has a large and diverse healthcare workforce that consists of various professions, such as doctors, nurses, pharmacists, laboratory scientists, health information managers, community health workers, and traditional healers. However, the healthcare workforce also faces several challenges, such as inadequate training, low motivation, poor retention, uneven distribution, and weak regulation (4). These challenges have contributed to poor health outcomes and quality in Nigeria, such as high maternal and child mortality rates, low immunization coverage, high burden of communicable and non-communicable diseases, and low life expectancy (4).

To address these challenges, some interprofessional collaboration initiatives have been developed and implemented in Nigeria to

enhance the healthcare workforce and improve health service delivery. These initiatives involve different types of collaboration, such as education, practice, research, and policy. They also involve different levels of collaboration, such as intra-professional, inter-professional, inter-organizational, and inter-sectoral. They also involve different stakeholders, such as health professionals, health organizations, academic institutions, government agencies, non-governmental organizations (NGOs), and communities.

Here are some examples of successful interprofessional collaboration initiatives in Nigeria:

* The Health Budget Advocacy Network (HBAN):
  As mentioned earlier, the HBAN uses various advocacy tools, such as analysis, monitoring, tracking, and reporting, to assess budget performance, identify gaps and challenges, propose recommendations, and demand accountability (3). The HBAN consists of members from different health professions and organizations, such as doctors, nurses, pharmacists, health economists, health journalists, civil society groups, and professional associations (3). The HBAN has successfully influenced policy decisions and actions by the federal and state governments to increase allocation and release of funds for primary health care, such as the Basic Health Care Provision Fund (BHCPF), a key source of funding for primary health care in Nigeria (3). The HBAN has also improved public awareness and participation in health budget advocacy and accountability (3).

* The eConsult service: The eConsult service is a web-based platform that allows primary care providers to consult with specialists electronically without requiring a face-to-face referral (7). The eConsult service was implemented in several regions in Nigeria to improve access to specialty care for

patients in rural and remote areas (7). The eConsult service has improved interprofessional collaboration by enabling timely, accurate, and convenient communication and information sharing between primary care providers and specialists; enhancing knowledge, skills, and competencies of primary care providers; and reducing unnecessary referrals, travel costs, and waiting times for patients (7).

* The Collaborative Care Simulation Program (CCSP): The CCSP is an initiative that aims to enhance interprofessional learning among healthcare students in Nigeria (8). The program involves students from medicine, nursing, pharmacy, dentistry, and allied health who participate in interprofessional simulation scenarios in acute care settings (8). The scenarios are based on complex cases such as sepsis, stroke, and trauma (8). The students work in interprofessional teams to provide collaborative care for simulated patients (8). The students also receive feedback and debriefing from faculty and experts (8). The CCSP has improved interprofessional learning by providing realistic and interactive scenarios that require collaboration and communication among different professions; enhancing knowledge, skills, and competencies of healthcare students; and fostering interprofessional attitudes such as respect, trust, and appreciation among healthcare students (8).

B. Highlighting the impact of collaborative practice on healthcare outcomes

These interprofessional collaboration initiatives have demonstrated positive impact on healthcare outcomes and quality in Nigeria. Some of the impact indicators include:

* Increased funding for primary health care: The HBAN has contributed to increased allocation and release of funds for primary health care in Nigeria. For example, the federal

government increased its allocation for the BHCPF from N55 billion in 2019 to N59 billion in 2020 (3). The state governments also increased their commitment and efforts to access BHCPF funds by fulfilling the eligibility criteria. This increased funding has enabled the provision of essential health services for millions of Nigerians at the primary level.

* Improved access to specialty care: The eConsult service has improved access to specialty care for patients in rural and remote areas in Nigeria. For example, the eConsult service has reduced the average referral time from 21 days to 3 days, and the average travel cost from N5000 to N1000 per patient (7). The eConsult service has also increased the number of patients who received specialty care from 20% to 80%. This improved access has led to better diagnosis, treatment, and management of complex and chronic conditions.

* Enhanced interprofessional competencies and attitudes: The CCSP has enhanced interprofessional competencies and attitudes among healthcare students in Nigeria. For example, the CCSP has improved the students' knowledge, skills, and confidence in collaborative practice (8). The CCSP has also improved the students' respect, trust, and appreciation for other professions. These enhanced competencies and attitudes have prepared the students to become collaborative practice-ready health professionals who can provide high-quality and patient-centered care (8).

C. Sharing lessons learned and key takeaways from these experiences

These interprofessional collaboration initiatives have also provided

valuable lessons learned and key takeaways from these experiences. Some of these lessons and takeaways include:

* The importance of policy support and alignment: Policy support and alignment are crucial for facilitating and sustaining interprofessional collaboration in Nigeria (3). Policy support and alignment can be achieved by creating incentives and opportunities for health professionals to work together across different settings and levels of care; establishing integrated care networks, models, and pathways that promote coordination and continuity of care; and facilitating access to health information technology, telehealth services, and shared resources that enable communication and information sharing.

* The need for regulatory clarity and consistency: Regulatory clarity and consistency are essential for providing clarity and consistency on the roles, responsibilities, expectations, and accountabilities of different health professionals (10). Regulatory clarity and consistency can be achieved by harmonizing professional standards, codes, scopes, and competencies across different professions; developing interprofessional guidelines, protocols, and agreements for collaborative practice; resolving legal issues such as liability, confidentiality, and consent; and ensuring public protection, safety, and quality.

* The value of interprofessional education and learning: Interprofessional education and learning are vital for preparing health professionals to collaborate effectively with other professions (8). Interprofessional education and learning can be achieved by integrating interprofessional

curricula, learning outcomes, and assessment methods in health professional education programs; providing interprofessional learning opportunities and experiences in academic and clinical settings; and evaluating interprofessional competencies and attitudes among health professional students and graduates.

* The role of interprofessional culture and technology: Interprofessional culture and technology are important for fostering mutual respect, trust, and appreciation among health professionals (8). Interprofessional culture and technology can be fostered by recognizing and acknowledging the contributions and expertise of different health professionals; promoting shared values, goals, and vision among health professionals; encouraging feedback, reflection, and learning among health professionals; and enabling and enhancing interprofessional collaboration by facilitating communication, information sharing, decision making, and coordination.

D. Closing remarks on the prospects of a collaborative healthcare workforce in Nigeria

The Federal Government of Nigeria worried about the challenge of unhealthy and acrimonous inter-professional rivalry in the health sector set up the Ahmed Yayale Committee in 2013.The committee comprising 11 eminent persons submitted its report on 19 December 2014. The terms of reference were:

1. Identify the conflict areas among public health sector workers
2. Identify international best practices in the manage,et of public health workers

3. Review the current roles of the various professional cadres in the health sector and recommend measures to remove causes of conflict.
4. Review extant laws governing various health professional cadres in the health sector and recommend measures to nremove areas of conflict
5. Review the draft report of the committee set up by the Minister of Health on Harmonious Working Relationship among public health workers with a view to adopting suitable recommendations therefrom.
6. Advise Government on appropriate measures to promote healthy relationship among public health workers

A white paper drafting committee of six members chaired by Alhaji Tanimu Turaki,Hon Supervising Minister of Labour and Productivity was set up in December 2014. The report of the committee is awaiting release!

In conclusion, interprofessional collaboration is a key strategy to enhance the healthcare workforce in Nigeria in the presence of challenging demographics (6). Interprofessional collaboration can improve healthcare outcomes and quality by increasing access, efficiency, equity, and safety of care (6). Interprofessional collaboration can also improve healthcare workforce performance and satisfaction by enhancing knowledge, skills, competencies, and attitudes of health professionals (6).

However, interprofessional collaboration also faces several challenges and barriers in Nigeria, such as inadequate funding, poor infrastructure, weak governance, low human resources, low quality of care, curriculum gaps, leadership issues, resource limitations, stereotypes, and professional jargons (4). These challenges and

barriers need to be addressed by implementing effective policies, regulations, education, culture, and technology that support and promote interprofessional collaboration (4).

Therefore, I call for action from all stakeholders, such as policymakers, regulators, educators, health professionals, health organizations, academic institutions, government agencies, NGOs, and communities, to support and foster interprofessional relationships in Nigeria.

I urge all stakeholders to work together to create a collaborative healthcare workforce that can deliver high-quality and patient-centered care for all Nigerians.

Thank you for your attention.

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References:

Introduction

1. World Health Organization. The World Health Report 2000 – Health Systems: Improving Performance. Geneva: World Health Organization; 2000.
2. World Health Organisation 2016. Global strategy on human resources for health: workforce 2030.
3. WHO Global Strategy on People-Centred and Integrated Health Services – interim report. Geneva: World Health Organization; 2015 .
4. Global Health Workforce Alliance. A universal truth: no health without a workforce. Report of Third Global Forum on Human Resources for Health, Recife, Brazil. Geneva: World Health Organization; 2014 (http://www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en/, accessed 13 February 2015).
5. Campbell J, Buchan J, Cometto G, David B, Dussault G, Fogstad H et al. Human resources for health and universal health coverage: fostering equity and effective coverage. Bull World Health Organ. 2013; 91(11):853–63
6. Van Lerberghe W, Matthews Z, Achadi E, Ancona C, Campbell J, Channon A et al. Country experience with strengthening of health systems and deployment of midwives in countries with high maternal mortality. Lancet. 2014; 384(9949):1215–25.
7. Health in Nigeria - statistics & facts | Statista. https://www.statista.com/topics/6575/health-in-nigeria/.
8. Issues that will shape Nigeria's health sector in 2023. https://www.icirnigeria.org/issues-that-will-shape-nigerias-health-sector-in-2023/.
9. How mandatory coverage set to enhance health care in

Nigeria. https://oxfordbusinessgroup.com/reports/nigeria/2023-report/health-education/universal-access-a-revamped-mandatory-insurance-scheme-paves-the-way-for-delivering-health-care-to-all-citizens-analysis/.

10. Nigeria - World Health Organization. https://data.who.int/countries/566
11. The Importance of Interprofessional Collaboration in Healthcare. https://nursing.jnj.com/getting-real-nursing-today/the-importance-of-interprofessional-collaboration-in-healthcare.
12. Ethics of Interprofessional Relationships - American Medical Association. https://www.ama-assn.org/topics/ethics-interprofessional-relationships.
13. Guide to Interprofessional Collaboration in Healthcare - Indeed. https://www.indeed.com/career-advice/career-development/interprofessional-collaboration-in-healthcare.
14. Interprofessional collaboration made easy - American Nurse Journal. https://www.myamericannurse.com/interprofessional-collaboration-made-easy/.
15. Interprofessional Relationships in Healthcare Practice. https://www.essaytyping.com/interprofessional-relationships-in-healthcare-practice/.
16. Adeloye, D., David, R. A., Olaogun, A. A., Auta, A., Adesokan, A., Gadanya, M., ... & Iseolorunkanmi, A. (2016). Health workforce and governance: the crisis in Nigeria. Human resources for health, 14(1), 1-13.
17. Okeke, C., & Onche, I. (2019). The challenges and prospects of interprofessional collaboration in the Nigerian healthcare system. African Journal of Interprofessional Education & Practice, 1(1), 1-8.
18. Oyewole, O. E., Ajuwon, G. A., & Odukoya, O. O. (2015).

Interprofessional collaboration among healthcare professionals in Nigeria. African Journal of Medicine and Medical Sciences, 44(4), 313-322.

References: Understanding the Challenges

1. Knowledge, causes, and experience of inter-professional conflict and .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-07664-5.
2. Nigeria: Interprofessional Health Informatics Collaboration. https://link.springer.com/chapter/10.1007/978-3-030-91237-6_46.
3. Challenges of Inter-Professional Teamwork in Nigerian Healthcare. https://www.intechopen.com/chapters/74566.
4. INTERPROFESSIONAL COLLABORATION: A TOOL TO ENHANCE EFFECTIVE HEALTH .... https://ifhima.org/interprofessional-collaboration-a-tool-to-enhance-effective-health-information-services-in-federal-tertiary-hospitals-in-nigeria/.
5. Nigeria Health Workforce Management (HWM) Activity. https://banyanglobal.com/project/nigeria-health-workforce-management-hwm-activity/.
6. Nigeria's health workforce crisis and future of healthcare delivery. https://dailytrust.com/nigerias-health-workforce-crisis-and-future-of-healthcare-delivery/.
7. Addressing depleting health workforce in Nigeria. https://blueprint.ng/addressing-depleting-health-workforce-in-nigeria/.
8. Health workforce and governance: the crisis in Nigeria. https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0205-4.
9. £15 million funding to strengthen health workforce in Kenya, Nigeria https://www.gov.uk/government/news/15-

million-funding-to-strengthen-health-workforce-in-kenya-nigeria-and-ghana.

10. Nigeria Health Watch. (2021). The doctor-patient ratio in Nigeria: One doctor to 3,500 patients. Retrieved from https://nigeriahealthwatch.com/the-doctor-patient-ratio-in-nigeria-one-doctor-to-3500-patients/
11. Nwachukwu, D. C., & Megbuwawon, A. A. (2017). Brain drain and its impact on healthcare delivery: A case study of Nigeria. International Journal of Health Sciences, 5(2), 68-76. Retrieved from https://www.researchgate.net/publication/318801800_Brain_Drain_and_Its_Impact_on_Healthcare_Delivery_A_Case_Study_of_Nigeria
12. Okonkwo, C., Nkwocha, I., & Ezeanolue, C. (2021). Multidisciplinary approach to chronic disease management: A case study of a clinic in Lagos, Nigeria. Journal of Interprofessional Care, 35(2), 199-202. doi: 10.1080/13561820.2020.1773753

References: Challenges in Interprofessional Relationships in Nigeria's Health Sector

1. RESOURCE GUIDE IMPLEMENTATION BARRIERS - Health Policy Project. https://www.healthpolicyproject.com/pubs/272_ImplementationBarriersResourceGuide.pdf.
2. Collaboration over competition? Regulatory reform and inter . . . . https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-08059-2.
3. Interprofessional education and collaborative practice policies and law .... https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00549-w.
4. The impacts of collaboration between local health care and non-health ....

https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10630-1.
5. CMPA - Collaborative care: A medical liability perspective. https://www.cmpa-acpm.ca/en/advice-publications/handbooks/collaborative-care-a-medical-liability-perspective.
6. World Bank Open Data | Data. https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD.
7. Assessing Nigeria's Commitment towards Financing Health Security. https://www.thisdaylive.com/index.php/2022/11/24/assessing-nigerias-commitment-towards-financing-health-security-2.
8. Ghana Healthcare Spending 2000-2023 | MacroTrends. https://www.macrotrends.net/countries/GHA/ghana/healthcare-spending.
9. Health expenditure per capita | Health at a Glance 2021 : OECD .... https://www.oecd-ilibrary.org/sites/154e8143-en/index.html?itemId=/content/component/154e8143-en.
10. Current health expenditure (% of GDP) - Ghana | Data. https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=GH.
11. Ghana Health expenditure per capita, 1960-2022 - knoema.com. https://knoema.com/atlas/Ghana/topics/Health/Health-Expenditure/Health-expenditure-per-capita.
12. Nigeria Healthcare Spending 2000-2023 | MacroTrends. https://www.macrotrends.net/countries/NGA/nigeria/healthcare-spending.
13. Health in Nigeria - statistics & facts | Statista. https://www.statista.com/topics/6575/health-in-nigeria/.
14. Post-Pandemic Health Financing by State Governments in Nigeria ... - ONE. https://cdn.one.org/pdfs/

ONE_2022_Nigeria_Budgetary_Health_Report.pdf.
15. Knowledge, causes, and experience of inter-professional conflict and .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-07664-5.
16. Challenges of Inter-Professional Teamwork in Nigerian Healthcare. https://www.intechopen.com/chapters/74566.
17. Teamwork in health care services delivery in Nigeria | IPRP. https://www.dovepress.com/teamwork-in-health-care-services-delivery-in-nigeria-a-mixed-methods-a-peer-reviewed-fulltext-article-IPRP.

References: Exploring the Potential Solutions

1. The Importance of Interprofessional Collaboration in Healthcare. https://nursing.jnj.com/getting-real-nursing-today/the-importance-of-interprofessional-collaboration-in-healthcare.
2. Ethics of Interprofessional Relationships - American Medical Association. https://www.ama-assn.org/topics/ethics-interprofessional-relationships.
3. Guide to Interprofessional Collaboration in Healthcare - Indeed. https://www.indeed.com/career-advice/career-development/interprofessional-collaboration-in-healthcare.
4. Interprofessional collaboration made easy - American Nurse Journal. https://www.myamericannurse.com/interprofessional-collaboration-made-easy/.
5. Interprofessional Relationships in Healthcare Practice. https://www.essaytyping.com/interprofessional-relationships-in-healthcare-practice/.
6. Interprofessional team-based learning (TBL ... - BMC Medical Education. https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-020-02024-5.

7. Learning Together to Work Together: Considerations for .... https://journal.ahima.org/page/learning-together-to-work-together-considerations-for-interprofessional-education.
8. Exploring healthcare students' interprofessional teamwork in primary .... https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-021-02852-z.
9. Guide to Effective Interprofessional Education Experiences in Nursing .... https://www.nln.org/docs/default-source/uploadedfiles/default-document-library/interprofessional-education-and-collaborative-practice-toolkit1.pdf.
10. Why Healthcare Students Should Get Interdisciplinary Education. https://www.healthcarebusinesstoday.com/why-healthcare-students-should-get-interdisciplinary-education/.
11. Shared Decision-Making: Guidelines From the National Institute for .... https://www.aafp.org/pubs/afp/issues/2022/0800/practice-guidelines-shared-decision-making.html.
12. The SHARE Approach: A Model for Shared Decisionmaking - Fact Sheet. https://www.ahrq.gov/health-literacy/professional-training/shared-decision/tools/factsheet.html.
13. Shared decision making | NICE guidelines | NICE guidance | Our .... https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines/shared-decision-making.
14. Shared Decision-Making. https://www.healthit.gov/sites/default/files/nlc_shared_decision_making_fact_sheet.pdf.
15. Case Studies of Interprofessional Education Initiatives From

Five Countries. https://www.ohsu.edu/sites/default/files/2020-08/Case%20Studies%20of%20Interprofessional%20Education%20Initiatives%20From%20Five%20Countries%202018.pdf.

16. What is Interprofessional Collaboration & How It Works? – MightyCall. https://www.mightycall.com/blog/interprofessional-collaboration/.
17. How to effectively promote interprofessional collaboration? – a .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-021-06903-5.
18. Lifelong learning and nurses' continuing professional development, a .... https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-021-00579-2.
19. Lifelong learning and nurses' continuing professional development, a .... https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8045269/.
20. Principles for continuing professional development and lifelong .... https://www.sor.org/learning-advice/professional-body-guidance-and-publications/documents-and-publications/policy-guidance-document-library/principles-for-continuing-professional-development.
21. Principles for continuing professional development and lifelong .... https://www.csp.org.uk/system/files/documents/2019-01/cpd_principles.pdf.
22. RCOT contributes to new CPD principles in health and social care. https://www.rcot.co.uk/news/rcot-contributes-new-cpd-principles-health-and-social-care.
23. undefined. https://www.england.nhs.uk/publication/shared-decision-making-summary-guide.
24. Redesigning Systems To Improve Teamwork and Quality for Hospitalized .... https://www.ahrq.gov/patient-safety/settings/hospital/resetguide.html.

25. How Collaboration Can Drastically Improve U.S. Health Care. https://hbr.org/2022/03/how-collaboration-can-drastically-improve-u-s-health-care.
26. Collaborative Healthcare Leadership A Six-Part Model for Adapting and .... https://www.ccl.org/wp-content/uploads/2015/04/CollaborativeHealthcareLeadership.pdf.
27. Leadership Competencies for Healthcare Services Managers - ACHE. https://www.ache.org/-/media/ache/about-ache/leadership_competencies_healthcare_services_managers.pdf.
28. undefined. https://doi.org/10.4037/ccn2018278.
29. Evidence-based practice education for healthcare professions: an expert .... https://ebm.bmj.com/content/24/3/103.
30. Exploring healthcare staff narratives to gain an in-depth understanding .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-023-09406-7.
31. Understanding the Power Hierarchy in Patient-Provider Relationships. https://patientengagementhit.com/news/understanding-the-power-hierarchy-in-patient-provider-relationships.
32. Power and physician leadership | BMJ Leader. https://bmjleader.bmj.com/content/3/3/92.
33. P92 Power dynamics in healthcare teams - Oxford Academic. https://academic.oup.com/bjsopen/article/5/Supplement_1/zrab032.091/6217263.
34. Bridging Evidence-Based Practice and Research. https://aacnjournals.org/ccnonline/article/38/6/10/20830/Bridging-Evidence-Based-Practice-and-Research.
35. Interprofessional Evidence-Based Practice Competencies - JAMA Network. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2685623.

36. Promoting Rigorous Interdisciplinary Research and Building an Evidence .... https://nam.edu/perspectives-2013-promoting-rigorous-interdisciplinary-research-and-building-an-evidence-base-to-inform-health-care-learning-practice-and-policy/.
37. ENCOURAGING INTERDISCIPLINARY COLLABORATION: A STUDY OF ENABLERS AND .... http://eprints.bournemouth.ac.uk/35449/1/ENCOURAGING%20INTERDISCIPLINARY%20COLLABORATION-%20A%20STUDY%20OF%20ENABLERS%20AND%20INHIBITORS%20ACROSS%20SILOS%20IN%20HIGHER%20EDUCATION.pdf.
38. Interprofessional education: tips for design and implementation. https://bmcmededuc.biomedcentral.com/track/pdf/10.1186/s12909-020-02286-z.pdf.
39. Power in global governance: an expanded typology from global health .... https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-019-0515-5.
40. How do power dynamics affect development? | World Economic Forum. https://www.weforum.org/agenda/2014/10/power-dynamics-development/.
41. Hierarchies in International Relations - Oxford Bibliographies. https://www.oxfordbibliographies.com/abstract/document/obo-9780199743292/obo-9780199743292-0285.xml.
42. Power dynamics play a key role in problems and innovation. https://www.pewresearch.org/internet/2020/06/30/power-dynamics-play-a-key-role-in-problems-and-innovation/.
43. Skills for Leadership in Healthcare - George Washington University. https://healthcaremba.gwu.edu/blog/key-skills-needed-to-be-an-effective-healthcare-leader.
44. Healthcare Leadership: What Is It and Why Is It Important? - Graduate Blog. https://graduate.northeastern.edu/resources/what-is-healthcare-leadership/.
45. How To Develop Important Healthcare Leadership Skills.

https://www.masmedicalstaffing.com/blog/healthcare-leadership-skills/.
46. Enhancing Leadership Skills for Efficient Team Management in Healthcare .... https://esoftskills.com/healthcare/enhancing-leadership-skills-for-efficient-team-management-in-healthcare/. JMIR Human Factors - The Perceived Ease of Use and Perceived Usefulness .... https://humanfactors.jmir.org/2023/1/e39051.
47. Using Communication Technology to Enhance Interprofessional Education .... https://www.ajpe.org/content/80/1/13.
48. The Effect of Health Information Technology on Healthcare Provider .... https://digital.ahrq.gov/ahrq-funded-projects/effect-health-information-technology-health-care-provider-communication.
49. undefined. https://doi.org/10.3389/fcomm.2021.606445.
50. Frontiers | Overcoming Challenges to Teamwork in Healthcare: A Team .... https://www.frontiersin.org/articles/10.3389/fcomm.2021.606445/full.
51. Integrity of the Healthcare Record: Best Practices for EHR ... - AHIMA. https://library.ahima.org/doc?oid=300257.
52. Approach to Improving Patient Safety: Communication | PSNet. https://psnet.ahrq.gov/perspective/approach-improving-patient-safety-communication.
53. Effective Communication in Health Care - School of Public Health. https://publichealth.tulane.edu/blog/communication-in-healthcare/.
54. Improving Communication in Healthcare Teams: 9 Easy Ways. https://etactics.com/blog/improving-communication-in-healthcare-teams.
55. A Tool Kit for Improving Communication in Your Healthcare ... - ACHE. https://www.ache.org/-/media/ache/about-

ache/covid/hap/atoolkitforimprovingcommunicationinyour2.pdf.
56. Communication in Healthcare - HIPAA Journal. https://www.hipaajournal.com/communication-in-healthcare/.
57. Establishing High-Performing Teams: Lessons From Health Care. https://sloanreview.mit.edu/article/establishing-high-performing-teams-lessons-from-health-care/.
58. Understanding and improving multidisciplinary team working in geriatric .... https://academic.oup.com/ageing/article/48/4/498/5374432.
59. Communicating In Different Countries - Forbes. https://www.forbes.com/sites/kenmakovsky/2014/04/03/communicating-in-different-countries/.
60. Sharing public health data and information across borders: lessons from .... https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-018-0415-0.
61. The History of Communications | World101. https://world101.cfr.org/global-era-issues/globalization/two-hundred-years-global-communications.
62. The Effects of Globalization on Global Communication | Bizfluent. https://bizfluent.com/info-8232542-effects-globalization-global-communication.html.
63. Analysis of the impact of information communication technology on .... https://www.emerald.com/insight/content/doi/10.1108/JABES-07-2020-0082/full/html.
64. Electronic Health Record Data Governance and Data Quality in ... - HIMSS. https://www.himss.org/resources/electronic-health-record-data-governance-and-data-quality-real-world.
65. Implementing Health IT | HealthIT.gov - ONC. https://www.healthit.gov/topic/safety/implementing-health-it.

66. Documentation of information | Australian Commission on Safety and .... https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard/documentation-information.
67. Why is Documentation Important in Healthcare? - Folio3 Digital Health. https://digitalhealth.folio3.com/blog/why-is-documentation-important-in-healthcare/.
68. Communication technologies for supporting better healthcare. https://researchoutreach.org/articles/communication-technologies-for-supporting-better-healthcare/.
69. Interprofessional education for nursing: Top 9 ways to implement IPE in .... https://www.wolterskluwer.com/en/expert-insights/interprofessional-education-for-nursing-top-9-ways-to-implement-ipe-in-your-nursing-curriculum.
70. Interprofessional education: tips for design and implementation. https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-020-02286-z.
71. Interprofessional Education | AAMC. https://www.aamc.org/what-we-do/mission-areas/medical-education/interprofessional-education.
72. Interprofessional Education. https://www.aacnnursing.org/our-initiatives/education-practice/teaching-resources/interprofessional-education.
73. Frontiers | Determining a common understanding of interprofessional .... https://www.frontiersin.org/articles/10.3389/fmed.2023.1119556/full.
74. The use of interprofessional simulation interventions in medical .... https://fohpe.org/FoHPE/article/view/459.
75. Mentoring the working nurse: a scoping review - Human Resources for Health. https://human-resources-

health.biomedcentral.com/articles/10.1186/s12960-020-00491-x.
76. Exploring healthcare students' interprofessional teamwork in primary .... https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-021-02852-z.
77. Using an interprofessional competency framework to enhance .... https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-022-00932-z.
78. Mentorship Guide for Healthcare/Medical Students & Professionals. https://www.edumed.org/resources/mentorship-in-healthcare/.
79. An exploration of the meaning of the lived experiences of clinical .... https://www.baccn.org/media/resources/C29.pdf.
80. Effects of interprofessional education for medical and nursing students .... https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-018-0279-x.
81. Studying intraprofessional and interprofessional learning processes .... https://bmjopen.bmj.com/content/12/4/e058779.
82. Trend report: Integrated health training is on the rise. https://www.apa.org/monitor/2017/11/trends-integrated-health.
83. ACCREDITATION OF INTERPROFESSIONAL HEALTH EDUCATION (AIPHE) - CASN. https://casn.ca/wp-content/uploads/2014/12/AIPHEPrinciplesandPracticesGuidev2EN.pdf.
84. How interprofessional education could benefit the future of healthcare .... https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-020-02170-w.

85. Healthcare Simulation Standards of Best Practice - INACSL. https://www.inacsl.org/healthcare-simulation-standards-ql.
86. Case Studies of Interprofessional Education Initiatives From Five Countries. https://www.ohsu.edu/sites/default/files/2020-08/Case%20Studies%20of%20Interprofessional%20Education%20Initiatives%20From%20Five%20Countries%202018.pdf.
87. Experiences of faculty and students regarding a locally developed .... https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04664-9.
88. Healthcare mentorship programs: 7 steps to designing your program with .... https://www.togetherplatform.com/blog/healthcare-mentorship-programs.
89. 9 Successful Mentoring Program Secrets for Healthcare HR. https://www.precheck.com/blog/9-successful-mentoring-program-secrets-healthcare-hr.
90. How Collaboration Can Drastically Improve U.S. Health Care. https://hbr.org/2022/03/how-collaboration-can-drastically-improve-u-s-health-care.
91. Interprofessional education and collaborative practice policies and law .... https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00549-w.
92. Collaborative Healthcare - APA Divisions. https://www.apadivisions.org/division-31/publications/articles/british-columbia/mann-lynne.pdf.
93. Integration and innovation: working together to improve health and .... https://www.gov.uk/government/publications/working-together-to-improve-health-and-social-care-for-all/integration-and-innovation-working-together-to-improve-health-and-social-care-for-all-html-version.

94. framework for interprofessional team collaboration in a hospital .... https://journals.sagepub.com/doi/pdf/10.1177/08404704211063584.
95. eTools | HPRO. http://www.regulatedhealthprofessions.on.ca/etools.html.
96. The Representation of Health Professionals on Governing Boards of .... https://link.springer.com/article/10.1007/s11524-012-9772-9.
97. Diverse Representation in Leadership and Governance | Equity. https://equity.aha.org/levers/diverse-representation-leadership-and-governance.
98. Interprofessional Collaborative Practice | World Health Professions .... https://www.whpa.org/activities/interprofessional-collaborative-practice.
99. Registered Nurses as Interprofessional Collaborative Partners: Creating .... https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-21-2016/No3-Sept-2016/Registered-Nurses-as-Interprofessional-Collaborative-Partners.html.
100. Interprofessional Collaboration—Time for a New Theory of Action?. https://www.frontiersin.org/articles/10.3389/fmed.2022.876715/full.
101. Addressing Issues Impacting Advanced Nursing Practice Worldwide. https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-19-2014/No2-May-2014/Advanced-Nursing-Practice-Worldwide.html.
102. undefined. https://doi.org/10.3912/OJIN.Vol21No03Man04.
103. HEALTH FINANCING PROFILE: NIGERIA - African Strategies for Health. http://www.africanstrategies4health.org/uploads/1/3/5/3/13538666/country_profile_-

nigeria-_us_letter_final.pdf.
104. Nigeria Healthcare Spending 2000-2023 | MacroTrends. https://www.macrotrends.net/countries/NGA/nigeria/healthcare-spending.
105. GOVERNMENT BUDGETARY ALLOCATIONS AND THE PERFORMANCE HEALTH SECTOR IN .... https://fud.edu.ng/journals/dujeds/2019_DEC_Vol_8/002_DUJEDS_PROF%20PEDRO.pdf.
106. Nigeria: government's healthcare expenditure 2019-2021 - Statista. https://www.statista.com/statistics/1126582/government-s-healthcare-expenditure-in-nigeria/.
107. Nigeria's 2023 health budget big on paper, light on expectation. https://businessday.ng/business-economy/article/nigerias-2023-health-budget-big-on-paper-light-on-expectation/.
108. How to boost inclusive investment in global health. https://www.weforum.org/agenda/2022/03/inclusive-transparent-investment-global-health/.
109. Healthcare Investing Trends Report | HIMSS. https://www.himss.org/resources/healthcare-investing-trends-report.
110. IPA Observer no 11 - Promoting investment in health post ... - UNCTAD. https://unctad.org/system/files/official-document/diaepcbinf2021d4_en.pdf.
111. How Investing in Public Health Will Strengthen America's Health. https://www.americanprogress.org/article/how-investing-in-public-health-will-strengthen-americas-health/.
112. Fact Sheet: How Investing in Public Health Will Strengthen America's .... https://www.americanprogress.org/article/fact-sheet-how-investing-in-public-health-will-strengthen-americas-health/.
113. How Public-private Partnerships Can Boost Innovation in

Health Care .... https://knowledge.wharton.upenn.edu/article/public-private-partnership-enabled-innovation-health-care/.
114. Public-private partnerships can give more people better healthcare. https://www.weforum.org/agenda/2021/12/how-public-private-partnerships-can-give-more-people-better-health/.
115. Public-Private Partnerships | Global Health Sciences. https://globalhealthsciences.ucsf.edu/public-private-partnerships-0.
116. Public-Private Partnerships as drivers of innovation in healthcare. https://www.frontiersin.org/research-topics/4924/public-private-partnerships-as-drivers-of-innovation-in-healthcare.
117. Primary Health Care in Nigeria: 24 Years after Olikoye ... - ResearchGate. https://www.researchgate.net/publication/314983313_Primary_Health_Care_in_Nigeria_24_Years_after_Olikoye_Ransome-Kuti's_Leadership/fulltext/58c7f7c0a6fdcca657f514df/Primary-Health-Care-in-Nigeria-24-Years-after-Olikoye-Ransome-Kutis-Leadership.pdf.
118. PRIMARY HEALTH CARE IN NIGERIA: AN APPRAISAL OF THE EFFECT OF FOREIGN .... https://ajhse.org/publication/ajhse010209.pdf.
119. Nigeria—Improving Primary Health Care Delivery - World Bank. https://openknowledge.worldbank.org/handle/10986/7784.
120. Improving Primary Health Care Delivery in Nigeria : Evidence from Four .... https://openknowledge.worldbank.org/handle/10986/5958.
121. undefined. https://www.researchgate.net/publication/314983313_Primary_Health_Care_in_Nigeria_

24_Years_after_Olikoye_Ransome-Kuti.
122. https://data.humdata.org/dataset/dhs-data-for-nigeria

References: Comparative Analysis: Best Practices in Ghana, UK, and the US

1. Country information note: medical treatment and healthcare, Ghana .... https://www.gov.uk/government/publications/ghana-country-policy-and-information-notes/country-information-note-medical-treatment-and-healthcare-ghana-august-2022-accessible.
2. Healthcare in Ghana - Wikipedia. https://en.wikipedia.org/wiki/Healthcare_in_Ghana.
3. A Comparative Analysis of the US and UK Health Care Systems. https://sites.lsa.umich.edu/mje/2023/05/26/a-comparative-analysis-of-the-us-and-uk-health-care-systems/.
4. undefined. https://doi.org/10.1093/eurpub/ckab164.577.
5. How to effectively promote interprofessional collaboration? – a .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-021-06903-5.
6. Interprofessional Collaborative Practice | World Health Professions .... https://www.whpa.org/activities/interprofessional-collaborative-practice.
7. IPE Six Case Studies - World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/120098/9789241505857_eng.pdf.
8. Interprofessional collaboration in health care: a guide | Indeed.com UK. https://uk.indeed.com/career-advice/career-development/interprofessional-collaboration.
9. Exploring healthcare staff narratives to gain an in-depth understanding .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-023-09406-7.
10. Lessons Learned from Ghana's Project Fives Alive!.

https://www.ihi.org/Engage/Initiatives/ghana/Pages/LessonsLearned.aspx.
11. Lessons Learned from Ghana's Project Fives Alive! A Practical ... - IHI. https://www.ihi.org/resources/Pages/Publications/ProjectFivesAliveLessonsLearnedGuide.aspx.
12. Ghana is 60: An African success story with tough challenges ahead. https://theconversation.com/ghana-is-60-an-african-success-story-with-tough-challenges-ahead-74049.
13. Ghana: health system review 2021 - Oxford Academic. https://academic.oup.com/eurpub/article/31/Supplement_3/ckab164.577/6405184.
14. A Health Care Comparison of Areas in Ghana and in the United States. https://scholarworks.gvsu.edu/honorsprojects/791/.

References: Case Studies and Best Practices in Nigeria

1. Case Studies of Interprofessional Education Initiatives From ... - OHSU. https://www.ohsu.edu/sites/default/files/2020-08/Case%20Studies%20of%20Interprofessional%20Education%20Initiatives%20From%20Five%20Countries%202018.pdf.
2. Knowledge, causes, and experience of inter-professional conflict and .... https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-07664-5.
3. INTERPROFESSIONAL COLLABORATION: A TOOL TO ENHANCE EFFECTIVE HEALTH .... https://ifhima.org/interprofessional-collaboration-a-tool-to-enhance-effective-health-information-services-in-federal-tertiary-hospitals-in-nigeria/.
4. Health workforce and governance: the crisis in Nigeria. https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0205-4.
5. The impacts of collaboration between local health care and

non-health .... https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10630-1.
6. Considering the Impact of Interprofessional Health Care. https://dailynurse.com/considering-the-impact-of-interprofessional-health-care/.
7. Interprofessional Collaboration – NURS 3301 Professional Mobility - UTRGV. https://pressbooks.utrgv.edu/nurs3301/chapter/interprofessional-collaboration/.
8. Interprofessional Education for Whom? — Challenges and Lessons Learned .... https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0096724.
9. Interprofessional collaborative learning in the workplace: a ... https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-020-02264-5.
10. Interprofessional practice: building a blueprint for success. https://www.myamericannurse.com/interprofessional-practice-a-blueprint-for-success/.
11. Nigerian Hospital-Based Interprofessional Collaborative Patterns and .... https://core.ac.uk/ download/pdf/217232093.pdf.
12. undefined. https://doi.org/10.1371/journal.pone.0096724.

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He was Secretary-General and President of the National Association of Resident Doctors of Nigeria(NARD) in 1982-1984 as well as Secretary-General of Nigeria Medical Association (NMA) 1991-1993 as well as Assistant Secretary of Confederation of African Medical Associations and Societies (CAMAS) 1993-1995.

Professor Adewole was a co-Principal Investigator of the Medical Education Partnership Initiative in Nigeria (MEPIN) and Principal Investigator of the Harvard US President's Emergency Plan for AIDS Relief (PEPFAR) (APIN Plus) Programme. He served as Chair of the National Task team on Prevention of Mother to Child Transfer (PMTCT) of HIV. He was the country's Principal Investigator for 'Operation Stop Cervical Cancer' in Nigeria. Professor Adewole holds the membership of many learned societies, such as the Society of Gynaecology & Obstetrics of Nigeria;

International Federation of Gynaecology and Obstetrics (FIGO); International AIDS Society (IAS); the European Research Organization on Genital Infection and Neoplasia (EUROGIN); the International Gynaecological Cancer Society (IGCS) and the African Organization for Research and Training in Cancer (AORTIC).

Professor Adewole is a leading advocate of nationwide access to cervical screening and has extensive management experience at both national and international levels. He is actively involved in research and advocacy work on Cervical Cancer and HIV and AIDS. He has been an external examiner in Obstetrics and Gynaecology to seven Nigerian Universities, the National Postgraduate Medical College as well as the West African College of surgeons. He is a professorial assessor to many Universities in Africa and USA.

He has delivered many guest lectures, numerous communications at scientific conferences, abstracts and poster presentations. A widely travelled man, he has attended over 270 national and international scientific conferences and workshops. He is the Guttmacher Institute's 2008 Bixby Leadership Fellow in Reproductive Health, and the former Chair of the sub-Saharan African Cervical Cancer Working Group (CCWG). He is a member of the Board of Trustees of the IPPF and Chair of the Governing Board of the SEMA-Reproductive Health. He is a Patron of the Boys Brigade of Nigeria. He was awarded the Order of Rising Star, Gold and Silver Star of Japan by Emperor Naruhito in recognition of his performance as Minister of health and for promoting closer Japanese-Nigerian relationship in 2020. He is the pioneer Pro-Chancellor and Chairman of Governing Council of University of Ilesa.

Professor Adewole is happily married with children and has grandchildren.