



Role of the Nigerian Healthcare Professionals in Promoting Health and Wellness through Physical Activity

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Abstract

In Nigeria, awareness on the benefits of exercise is increasing among the populace, but the desired collaboration and commitment of the healthcare professionals is lacking. With a great proportion of the population attending healthcare services in health facilities, health professionals have a unique opportunity to increase exercise prevalence and use it as a tool for medication. This paper highlighted three key roles expected from healthcare professionals in Nigeria regarding physical activity: 1) offer advise or recommend physical activity 2) assess physical activity in each patient's visit, and or 3) conclude each visit with exercise prescription or referral to an exercise professional. To achieve this professional task, the researchers recommended that relevant professional bodies, such as the Health Promotion Research Association of Nigeria (HEPRAN) should collaborate to produce a working guideline for health professionals in Nigeria to use in exercise delivery. Other recommendations include professional certification of exercise specialists to ensure professionalism in exercise delivery; joint conferences that will provide opportunities for various specialists to discuss issues, progress and challenges in exercise delivery and ensure professional registration and monitoring of fitness and sports centers across the country.

Key Words: Roles, healthcare professionals, health promotion, physical activity and wellness

Introduction

Health promotion focused on preventive healthcare which occupy an important position in medical care and disease prevention through healthy living and lifestyle changes. The World Health Organization (WHO) defined health promotion as “the process of enabling people to increase control over their health and its determinants, and thereby improve their health” (WHO, 2010). Health promotion model requires medical and health workers to take more active roles in promoting health behaviours that will help patients across the health continuum to improve their health. The American College of Sport Medicine (ACSM) (2017) recommended that prescribing physical activity in the right “dosage” is highly effective in the prevention, treatment and management of more than 40 of the most common health conditions encountered in clinical practice.

The 21st century has witnessed high levels of urbanization and technological advancement. These changes have affected our lifestyle and promoted inactive lifestyle which in turn resulted in negative health outcomes. Major international health organizations recommended the promotion of “active lifestyle” as a solution to the increased global sedentary and consequent risks of negative cardio-metabolic outcomes, The World Health Organization (WHO) (2020) and the Centers for Disease Control and Prevention (CDC) (2020) in their latest scientific positions stressed the benefits of exercise on health and have since recommended doses for achieving overall health and fitness.

Health professionals operating in healthcare settings (medicine, surgery, dentistry, midwifery, pharmacy, psychology, nursing and allied health professionals) or at community level (health educators and local health officials) have a great role to play in encouraging active life style. In Nigeria, awareness on the benefits of exercise is getting a high momentum among the common populace, but the desired collaboration and commitment of the healthcare professionals are lacking (Adeogun et al., 2018). With a great proportion of the population attending healthcare services in health facilities, health professionals have a unique opportunity to increase the prevalence of exercise.

This paper is therefore intended to review the roles of health professionals in promoting health through physical activity.

Paradigm Shift in Healthcare Delivery

The modern world has witnessed paradigm shifts in all spheres of life, including medicine and human health in general. Understanding of the human health in the modern world has shifted its focus from specific biological analysis and pathological diagnostics to a more complex human interaction with the environment and with socio-political and economic processes. Medical science research has led to a number of paradigm shifts in the practice of medicine. Existing knowledge of the causes of diseases, measures that can be taken to prevent the common illness and to promote good health puts the owners of health on the individual. Hence, we are all responsible for our health and the diseases which we have suffered or are likely to suffer (Holmes & Wood, 2004; Jaffery, 2015; Shafiq, 2018).

Health promotion enhances the quality of life for all people and reduces the costs (both financial and human) that individuals, employers, families, communities and governments would spend on medical treatment. There are 5 pillars of health promotions according to World Health Organisation (WHO, 2010): build healthy public policy, create supportive environments, strengthen community actions, develop personal skills, and reorient health services. An important link between health promotion and the community is that health promotion programme has to deal with the common life of communities, and it tries to influence the determinants or main causes of bad health with an imminent task of constituting health promotion communities to lead the prevention of diseases to preserve the life of human beings. Lifestyle changes as a preventive measure from chronic diseases covers a wide range of healthy practices which include exercise and recreation. Research from 1950's to date has proven the positive role of exercise and recreation in prevention of diseases and promotion of health.

Physical Activity for Health and Wellness

Health is commonly viewed as the capacity to lead a satisfying life to fulfill ambition and accommodate change. This modern definition of health recognized that health is a dynamic, ever-changing process of trying to achieve one's individual potential. There are six dimensions of health: physical, social, mental, emotional, spiritual, and environmental. These dimensions are interdependent but interact and overlap with each other to produce health. Wellness is usually defined as the combination of health and happiness. It is the concept of achieving balance in one's mental, physical, emotional, social, environmental, and spiritual life. While physical activity is viewed as any movement carried out by the skeletal muscles requiring energy (Klavora, 2013).

Organized physical activity increase muscle tone, improves flexibility, enhances endurance, strengthen the heart and fights depression. Aerobic exercise also helps to achieve significant weight loss, prevents and modulates heart disease, reduces the risk of diabetes and metabolic syndrome. Currently, CDC "is working with states and communities to improve the built environment as part of Active People, Healthy nation- Creating an Active America" (CDC, 2020). The overall aim is to help 27 million Americans to become more physically active by 2027 to improve overall health and quality of life.

The World Health Organization (2010) and the CDC (2008) recommended a minimum of 150 minutes of moderate-to-vigorous physical activity per week in bouts of at least 10 minutes for adults to improve overall health. The ACSM and the American Medical Association (AMA) initiated the "Exercise is Medicine Model" (ACSM, 2017). The goals of the model are to encourage healthcare professionals, regardless of their speciality, to take the exercise as medicine pledge to assess and record physical activity as a vital sign during patients' visits and to conclude each visit with an exercise prescription and or referral. The therapeutic exercise specialist satisfies taking the patients or clients to the optimal level of performance and fitness to improve his quality of life.

Summary of Medical Benefits of Physical Activity

Many scholars have documented the benefits of regular exercise. Sulaiman (2016) summarizes the benefits of routine exercise of moderate intensity to include the following:

- It improves insulin sensitivity
- It improves glycemic control in persons with type 2 diabetes (and, hence decreases overall mortality)
- It decreases blood pressure
- It decreases low-density lipoprotein and triglycerides levels.
- It increases high-density lipoprotein levels
- It is associated with various indexes of psychological functioning
- It decreases colon cancer and endometrial cancer.
- It helps with osteoporosis and obesity
- It benefits persons with, migraine headaches and fibromyalgia.
- It improves metabolic and inflammatory markers as biological mechanisms



Defining Roles in Exercise and Wellness

It is recognized that the term “exercise” is often employed to refer to a specific form of physical activity, usually involving greater structure, discipline and with the specific dimensions of intensity, duration and frequency. Prescribing physical activity is probably more appropriate description, but common usage has determined the terms “exercise recommendation”, “exercise prescription” and exercise administration. Hence in this section, exercise is used to mean physical activity to go with the common usage. The fact is that a physical activity- exercise continuum exists. It demonstrates the specific nature of exercise and physical activity.

Exercise and wellness represent a wider field of endeavor that requires the services of different stakeholders to achieve community health promotion programme. The following paragraphs explained the role of four stakeholders and their contribution in the promotion of exercise as a standard in healthcare delivery:

Exercise recommendation

Exercise recommendation is different from exercise prescription, with the second being more specific and requires a certified or specialist from the sub-categories of exercise profession. Medical doctors usually encourage their patients to increase exercise and by so doing claim to have prescribed exercise. However, that is just a recommendation. Recommendation is a general advice given to a patient or client to include exercise or increase on the present state to complement medication and or improve a health condition. Research suggests that a firm advice from a general practitioner could motivate patients to exercise (British Heart Foundation, 1996).

Exercise prescription

Exercise prescription often referred as: “exercise on prescription”, “exercise is medicine”, “green prescription, or “exercise programming”, is a basic plan or programme of activity designed by professionals to enhance the wellbeing of a patient. How much activity, what type, how intense and how often one should exercise are all important questions that will be considered before any exercise programme is designed. Exercise prescription is considered to be like other medical prescriptions, with a type, dose, frequency, duration and therapeutic goal. An exercise prescription generally includes the following specific recommendation:

1. Type of exercise or activity (e.g. walking, swimming, cycling)
2. Specific workloads (e.g. watts, walking speed)
3. Duration and frequency of activity (e.g. 20 minutes per session)
4. Intensity guidelines: Target heart rate (THR) range and estimated rate of perceived exertion (RPE) (Sulaiman, 2016) are the most used ways to determine exercise intensity.

Moreover, need identification and fitness assessment usually preceded exercise prescription. Sometimes general medical clearance had to be sought to ensure patient readiness for exercise. Usually the following steps are followed to ensure right prescription and successful administration of an exercise programme for a patient or client:

Diagnosis: this includes physical examination, medical tests or other procedures to identify an illness or disorder in a patient or client. Once a test has been administered, the results may be evaluated to identify deficiency or weakness in the subjects. This is an important requirement especially for sedentary patients before increasing their physical activity level. This can be started by answering seven questions on the Physical Activity Readiness Questionnaire (PAR-Q). If one question is answered with “Yes”, advice of a physician is compulsory after subsequent evaluations.

Placement: One reason for testing and evaluation is for placement on the right dose of exercise and achieve gradual increment to meet the target health goal. Placement is highly individualistic especially when dealing with patients or special population such as the elderly or pregnant women.

Evaluation: Patients and clients on an exercise programme need to be evaluated during each hospital visit or periodically to ensure compliance and progress. Evaluation should include reviewing the effects and progress with possibility of making adjustment or changing the whole prescription. Sometimes complications and interaction with other patient’s drugs need to be monitored and considered to reduce effects of contraindication.

Exercise administration

This is the step of implementing the prescribed exercise. It involves regular conduct of the exercise sessions, monitoring and managing performance under a specialized trainer. Monitoring patient’s progress can be generally done in the practice setting by instruments such as 6- minute walk, shuttle walk and the Chester step test (Seth, 2014). The present practice in Nigeria is mostly unorganized with unspecialized trainers taking control of the fitness commercial centers. There were a number of causalities across our fitness centers resulting from

unskillful exercise administration and monitoring. Also majority of those who were told to exercise either by their doctors or friends, do so on their own without any guidance.

Exercise Service Provision

This includes hospital sections where trained physiotherapists and rehabilitation specialists work with patients to restore body functions, control weight and improve fitness level. Other service providers include commercial fitness centers that are dedicated to increasing exercise to achieve health/fitness goals. As indicated above, these centers supposed to be run and managed by specialists, however not in most of the places. Also, in Nigeria there is no control body that ensures quality through proper registration and monitoring. However, these centers contribute immensely in exercise delivery and motivate people to be active. Other places are open spaces, including stadium, playground and schools were people organized themselves for regular exercises on weekends and evenings. Here also rarely you find a specialist leading the exercise sessions. However, they were observed to have fewer casualties; possibly because they exercise naturally without machines that require a person to meet certain durations or frequencies. They also offer participants more chance to work according to their own capacity.

Expected Roles of Health Professionals in Exercise Delivery

Health professionals operate in healthcare settings or as community health experts working to improve health of the society such as health educators, have an important role in increasing the prevalence of exercise and thereby reduce health cost. This section attempts to provide guidelines for them to operate professionally. In many advanced countries like the United Kingdom and the United States, various schemes existed in which health professionals prescribe exercise as an alternative to medication. However, approved guidelines as to good practice exist.

Health professionals in Nigeria can take a more active role in increasing exercise prevalence, however, it requires rigorous efforts from the healthcare managers to standardize the procedures and draw boarder lines for a more professional service delivery to improve patients' quality of life. That does not mean that concerned health professionals willing to take up more active roles to support the populace should wait for such schemes and or bodily decisions. To ensure contribution of health professionals at different levels to increase exercise participation and achieve health benefits, the health professionals are expected to play the following roles:

1. Advise patients to consider regular exercise and or recommend a type of exercise.
2. Assess and record physical activity during patient visits just as the routine blood pressure measurement.
3. Conclude each visit with a prescription or referral to an exercise specialist or an approved service provider.

Where a health professional is not competent or trained to prescribe exercise for medical benefits, experts provide general guidelines including the following:

- ✓ The long-term effect of any physical activity programme is affected by compliance in today's mobile society; hence, an exercise prescription should include business trips and vacations.
- ✓ Plan exercise programme to meet the minimal intensity of 150 minutes per week set up by the WHO and CDC for maximum benefit.
- ✓ If the patient is on drugs like anti-hypertensive, obtain specific training guidelines for such a patient.
- ✓ Conduct exercise testing of functional capacity such as cardiopulmonary (CPX) and metabolic (CMET) in special populations, but are not necessary for primary preventions.
- ✓ Persons with influenza syndrome or respiratory illness such as Covid- 19, should decrease or stop exercise until they have recovered. If the recovery time is greater than 2-3 weeks, activity should be resumed at a lower level

Moreover, it should be noted that even in the developed countries like UK and US, schemes to include exercise as part of the routine clinical services have many challenges which include lack of knowledge on the subject matter and not having adequate unified materials to guide the practical aspects (Moore, 2014). However, exercise prescription services are already established in those countries in secondary care such as cardiac rehabilitation, but there is need to be greater link between these services and primary care health clinicians. The Swedish National Institute of Public Health (SNIPH) has produced a comprehensive guide for physicians and describes physical activity promotion as one of their main health care objectives. Hence, physicians are able to prescribe an individually adapted, written prescription of physical activity (Leijon et al., 2008). In US, the "Exercise is Medicine" initiative (ACSM, 2017) has provided a useful tool for reference in monitoring patients' progress. However, in many countries the dominant brief interventions (i.e discussion, negotiation or encouragement) and exercise referral schemes (patients being formally referred to a PA professional) are the two dominant approaches within primary care (Lion et al., 2019).



Challenges of Healthcare Professionals in Exercise Delivery

Healthcare professionals have a better role to play in increasing physical activity as a tool for health promotion. However, the evidence regarding the effectiveness and benefits the current forms of physical activity promotion are inconclusive as observed by Albert et al., (2020) in their systematic review. Another challenge outlined by researchers (Saridi et al., 2019; Uchendu et al., 2020) is the attitude of the healthcare providers themselves towards physical activity. Henceforth, According to a “system change” approach is necessary to spark the vital institutional and personal impetus for healthcare systems and providers (Lobelo et al., 2018).

In Nigeria, the challenges healthcare professionals would continue to face in exercise delivery include, but not limited to the following:

- 1) Lack of professional registration and certification of various exercise professionals to refer to or seek clarification
- 2) Lack of approved unified guideline for exercise delivery
- 3) Inadequate seminars and knowledge sharing on exercise as medicine
- 4) Inadequate referral centers and professionals
- 5) Lack of polices to protect and provide immunity for healthcare professionals in case of accidents

Concluding Remark and Recommendation

This paper intended to increase awareness on the need for exercise and to discuss the need for health professionals to include exercise specialist in the total care for health. It was concluded that the health professionals in Nigeria have a better role to play in making exercise a tool for medication. Based on the discussion, the following recommendations were drawn:

- 1) Stakeholders in healthcare delivery should collaborate to produce a working guideline for health professionals in Nigeria to use in exercise delivery. This must include prescription plan, assessment, monitoring, complications with various health conditions and referral systems.
- 2) Stakeholders should liaise with relevant professional bodies such as the Health Promotion Research Association of Nigeria (HEPRAN) to provide professional certification for exercise specialists and health professionals that will distinguish roles and ensure professionalism in exercise delivery. This may be achieved by establishing a registration council.
- 3) HEPRAN and other relevant bodies should organize joint conferences that will provide opportunities for various specialists to discuss issues, progress and challenges in exercise delivery. This does not only provide avenues for discussion but will enrich the participants on the global trends and developments in exercise delivery.
- 4) Register fitness and sports centers across the country and establish guidelines for professional running of those places, including types of registration, category of staff required, required facilities and training guidelines. There is also need for penalties and control of quacks to ensure boundary and professional service. This can be achieved under Federal Ministry of Health or Federal Ministry of Information, Youth, Sports and Culture.
- 5) Federal and State Ministries of Health should support hospitals to run fitness gyms to help discharged-patients to maintain fitness level and help create a healthy and less morbid society. This will surely cater for the professional need of handling patients with normal body function recommended to include or increase exercise.
- 6) Federal and state Ministries of Health should organize periodic training for healthcare providers on exercise counseling and prescription.

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