

Factors Involved in Evaluating Health Services and Products

Aleke Christian Okechukwu, M.Ed

Christian.aleke@yahoo.com

GSM NO. +2347030856506

Department Of Human Kinetics and Health Education
Ebonyi State University, Abakaliki

Kpe-Nobana Christiana Leesi, M.Ed

GSM NO. +2348037923544

Department of Human Kinetics, Health and Safety Education
Ignatius Ajuru University of Education, Rivers State

Nkiru Edith Obande-Ogbuinya, PhD

Department Of Human Kinetics and Health Education
Ebonyi State University, Abakaliki
GSM NO. +2348033181044

Abstract

Health services and products are of paramount importance at reforming and improving the performance of health system. The evaluation of health services and products should be based on the therapeutic needs of the health care system. This paper focuses on the factors involved in evaluating health services and products. Various ailments /indications, definitions and products recommendations were identified and some factors for evaluating various health products and health services were also reviewed. The individual, community, government, health care givers or professionals and the general public were advised to be equipped and guided by these factors involved in evaluating health services and products in order to achieve sound physical, mental, emotional and social well being. Claims about health products can be persuasive and misleading. This paper has been designed to help individual, community, health care givers or professionals, government and the general public learn to evaluate information about health products, especially those that target the youth market. Thus health services and products are those self growth tools for those seeking to improve their health and wellness through herbal supplement, over-the-counter drugs, mental enrichment, and physical fitness product (such as exercise cycle exercise), arthro-aquatic fitness system, treadmills, total-body elliptical cross-trainers, wheel chair bike. These groups of people highlighted above are consumers of a range of health products and services throughout their lives, hence, it is important that they gain the knowledge and skills to select and evaluate those that will best meet their health needs.

Key words: Factors, Evaluating, Health, Services, Products.

Introduction

In light of scientific and technology advancement, it is not surprising that many people believe that health is purchasable. The health market place abounds with products of every description to accommodate people's desire [1]. Factors involved evaluating health services and products are vital to the efforts directed at reforming and improving the performance of Health system [2]. Health services and products are essential self growth tools for those looking to improve their Health and wellness through physical fitness, herbal supplements and mental enrichment [3]. Evaluating health services and product plays vital roles such as, assuring the delivering of a high quality services and products; serving as a tool for monitoring care and controlling costs; promoting accountability for public and private programmed expenditures [4].

Factors for evaluate health services and products helps to increase professional health worker's knowledge of selected research findings and theories so that they may better understand why and under what conditions people take action to prevent, detect and diagnose disease [5]. Hence the individual has become consumers of a range of health products and services throughout their lives, it is important that they gain the knowledge and skills to choose those that will best meet their health needs. Claims about health products can be persuasive and misleading [6]. This paper has been, designed so that people can learn to evaluate information about health products and services, especially those that target the youth market.

Some factor has been reviewed in this paper to equip and increase awareness among individuals, government and professional health workers in evaluating health services and products that are preventive, curative, promotive, and rehabilitative service. Factors on the other hand can be regarded as issues, influence, features, aspect, reason, cause, dynamic, element, things, consideration circumstance, component, part or component that has to be considered in evaluating health services and products [7][8].

Evaluation is the collection of vital information to measure the relevance, progress, efficiency, effectiveness and impact of a programmed or project against set objectives [9]. Clement and Thomas [10] observed that, evaluation is a means by which a programmed, services, or a success in reaching predetermined goals. Evaluation are done for variety of purpose, to improve the delivery of care, to test an innovation, to determined the effectiveness of continuing or altering an intervention, or to compare health system effectiveness across nations [10].

Park [11] further noted three types of evaluation to include:

- Evaluation of "structure": This is evaluation of whether facilities, equipment, manpower and organization meet a standard accepted by experts as good.
- Evaluation of "process": This process of medical care includes the problems of recognition, diagnostic procedures, treatment and clinical management, case and prevention.
- Evaluation of "outcome": This is concerned with the end results, that is, whether persons using health services experience measurable benefits such improved survival or reduced disability.

Within the context of this paper, evaluation is the collection of vital information to measure the relevance, progress, efficiency, effectiveness and impact of health services and product. Service on the other hand refers to an individual, government or private organization that is responsible for a particular type of

activity, or for providing a particular health product or health services that people need [12]. Service delivery systems also consider the whole spectrum of care from promotion and prevention to diagnostic, rehabilitation and palliative care, as well all levels of care including self-care, home care, community care, primary care, long-term care, hospital care, in order to provide integrated health services throughout the life course. WHO is supporting countries in moving towards universal health coverage through improving the efficiency and effectiveness of their health service delivery systems.

WHO [13] defined health as a state of complete physical, mental, and social well-being of an individual, not merely the absence of disease or infirmity? Health is a qualifying factor for living [14]. The health of an individual is the sum total of a number of factors ranging from environmental, socio-cultural, political, genetic and behavioural, to health services [9]. Health services are those services that are and can be rendered within the communities by community care givers or health professionals [15]. These services are part of the primary health care programmes that are preventive, promotive, little bit of curative, rehabilitative and environmental health Services [15]. They maintained that services are rendered by community organizations working in the health sectors under the supervision of the health officials. Within the context of this paper, health services refer to the sum of all the units that deals with the health and disease of members of a community. The units included medical care services, public care services, health education, health promotion, research, preventive and curative health services as well as traditional health services.

Welfare Information Gateway [16] has noted the following types of health services as important for children, youth, and families. These includes: dental health services; Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services; HIV/AIDS care; American Indian health services; prenatal care; teen pregnancy prevention; and Women, Infants, and Children (WIC).

Factors involved in Evaluating Health Services

Park [11] has noted the following components of evaluation process:

Relevance: Relevance or requisiteness relates to the appropriateness of the service, whether it is needed at all [17]. If there is no need, the service can hardly be of any value. Example, vaccination against small pox is now irrelevant because the disease no longer exists.

Adequacy: It implies that sufficient attention has been paid to certain previously determined courses of action. For example, the staff allocated to a certain programmes may be described as inadequate if sufficient attention was not paid to the quantum of work-load and target to be achieved.

Accessibility: It is the proportion of the given population than can be expected to use a specified facility, services, etc. The barriers to accessibility may be physical (e.g. Distance, travel, time) economic (e.g. travel cost, fee charged), or social and cultural (e.g. caste or language barrier) [1984].

Availability: The percentage of the population to whom the services or intervention is available or designed for needs to be put into consideration [11].

Acceptability: Services are directly and permanently accessible with no undue barriers of cost, language, culture, or geography. Health services are close to the people, with a routine point of entry to the service

network at primary care level (not at the specialist or hospital level). Services may be provided in the home, the community, the workplace, or health facilities as appropriate. Alderson and Robin [19] observed that the services provided may be accessible, but not acceptable to all, e.g. male sterilization, screening for rectal cancer

Effectiveness: It is the extent to which the underlying problem is prevented or alleviated. Thus it measure the degree of attainment the predetermined objectives and targets of the programme, service or institution-expressed, if possible, in terms of health benefits, problem reduction or an improvement of an unsatisfactory health situation. The ultimate measures of effectiveness will be the reduction in morbidity and mortality rate [13].

Efficiency: It is a measure of how well resources (money, men, material and time) are utilized to achieved a given effectiveness [20]. The following examples will illustrate thus, the number of immunizations provided in a year as compared with an acceptance norm, the percentage of bed occupancy, cost per day in hospital, cost per patient treated, [21].

Impact: It is an expression of the overall effect of a programme, services or institution on health status and socio-economic development for example, as a result of malaria control in Nigeria, not only the incidence of malaria control in Nigeria, nor only the incidence of malaria dropped down, but all aspects of life-agricultural, industrial and social improvement [22].

Other factors involved in evaluating health services as identified by Cochrane [21]; Aral and Peterman [23]; WHO, [24]; WHO [25] and Harrison, et al [26] is as follows:

- **Comprehensiveness:** A comprehensive range of health services is provided, appropriate to the needs of the target population, including preventative, curative, palliative and rehabilitative services and health promotion activities.
- **Coverage:** Service delivery is designed so that all people in a defined target population are covered, i.e. the sick and the healthy, all income groups and all social groups.
- **Continuity:** Service delivery is organized to provide an individual with continuity of care across the network of services, health conditions, levels of care, and over the life-cycle.
- **Quality:** Health services are of high quality, i.e. they are effective, safe, centered on the patient's needs and given in a timely fashion.
- **Person-centeredness:** Services are organized around the person, not the disease or the financing. Users perceive health services to be responsive and acceptable to them. There is participation from the target population in service delivery design and assessment. People are partners in their own health care.
- **Coordination:** Local area health service networks are actively coordinated, across types of provider, types of care, levels of service delivery, and for both routine and emergency preparedness. The patient's primary care provider facilitates the route through the needed services, and works in collaboration with other levels and types of provider. Coordination also takes place with other sectors (e.g. social services) and partners (e.g. community organizations).
- **Accountability and efficiency:** Health services are well managed so as to achieve the core elements described above with a minimum wastage of resources. Managers are allocated the

necessary authority to achieve planned objectives and held accountable for overall performance and results. Assessment includes appropriate mechanisms for the participation of the target population and civil society.

Health Product

Product is a thing produced during a natural, chemical or industrial process [27]. Natural Health products [28] stated that product may be used as part of a meal or taken to replace a meal. Health product is a product or substance of nature that provide the nature the nutrient such as carbohydrate, protein , Dietary fiber, vitamins and minerals which contribute to normal health diet [29]. Health product is those product or substance of food nature that provide the nutrients such as carbohydrate, protein, dietary, fiber, vitamins and minerals which contribute to normal health diet [3]. Exercise product provides people with a practical learning experience in product benefit segmentation [30]. According to Rishma Walji [31] the following natural health product were highlighted as: Vitamins and minerals; Herbal remedies; Traditional medicines; Probiotics that is substances containing beneficial microorganism. Other products like amino acids and essential fatty acids. Natural Health product must be safe for consideration, as over-the-counter drugs are not requiring a prescription to be sold. Product requiring a prescription will continue to be regulated under the food and drug regulations [32].

The health product may be used as part of a meal or taken to replace a meal [30]. Example of products that can be taken as part of a diet includes: Energy food; essence of chicken/dunk/fish; herbal teas and drinks for general regular consumption; wine or vinegar drinks containing herbal ingredient commonly used in food. Merk [33] spelled out the following product that can be taken for a medical purpose to include: Singular, this is a prescription medicine that blocks substance in the body called leukotrienes. It does not contain a steroid. It prevents exercise induced asthma in adult and children; Tradition Indian medicines; Chinese proprietary medicines; Western pharmaceutical drugs (e.g. Synthetic Caffeine, Aspirin).

Product that can be taken for nutritional or functional benefits, particularly for specific nutrient deficiencies or in terms of stress when normal includes: Garlic (*allium sativum*) extracts e.g. oil and allicin; Ginger (*zingiberofficinallis*) extracts e.g. oils; Omega-3 or omega-6 oils e.g. Eicopentaenoic acid (Epa); Soya bean isolates; Amino acid e.g. Leycine, methionine; Tea tree extract and wild yam extracts.

Durable Medical Equipment [34] describes product for exercise as shown in table 1 below:

Table 1.

PRODUCTS	DEFINITIONS	MANUFACTURER
Facial-flex	Product for flexibility, to move or tense a muscle, Or become tense or contracted.	Facial-flex corporation
Tread mills	Exercise machine with an endless belt on which somebody can walk, jog or run, use for Exercise and stress testing.	Lifefitness.com.
Exercycle Exerciser	An apparatus for physical fitness	Exercycle corporation
Kneel/ankle mobilier	Machine used for movement of ankle/knees.	Hayes kam systems

Exercise bike	Exercise machine in the form of a stationary bicycle that is pedaled vigorously for exercise.	
Total body Elliptical	An exercise machine	Lifefitness.com
Cross-Trainers	Intended to develop many group of muscles.	
Wheel chair Bike	Life cycle exercise bike.	Chiefs manufacturing company
Motorized bicycle exercise Trainer	An exercise machine in the form of stationary bicycle that is pedaled for exercise	Lifefitness.com

Table 2: This Table below According to Vital Health food show a guide for selecting health services and products, Recommendation of various Ailments/indication “Vital Health food” (www.Vital.com).

Ailment	Definition	Product Recommendations
Acne	Acne is a common skin disease characterized by pimples on the face, chest, and back. It occurs when the pores of the skins become clogged with oil, dead skin cells and bacteria.	Multiline Hair, skin and nails, vitamin A&E, Vitamin E. Zinc, selenium complete, Garlic, Garlic & parsley, odourless Garlic Brewer's yeast.
Ageing	Ageing is associated with a slowdown in regeneration of body cells, Resulting in a gradual degeneration of body tissues. Poor blood circulation, wrinkling of skin and graying of hair are typical physical characteristics.	Multiline over 60's, multiline Eyes, Vitamin E, calcium, complete, selenium complete Ginkgo Biloba, omega 3 concentrate
Bladder	Bladder problems include cystitis, which is caused by a bacterial infection of the bladder. Resulting in a burning sensation while urinating.	Multitime woman, Bunch, zinc, Garlic & parsley odorless Garlic, kelp, Antioxidant.
Blood circulation	The heart is responsible to pump blood throughout the body, so that it circulates through all tissues and organs. Poor circulation is often caused by smoking cigarette, but is also associated with ageing and heart disease.	multitime heart, vitamin c, vitamine, folic complete, garlic, garlic & parsley, odorless garlic,ginkgo biloba, omega 3 & 6 concentrate, lecithin, antioxidant, evening, primrose oil
Bone Health	Calcium is the main structural mineral in bones and teeth. Calcium balance is maintained by in taken of sufficient calcium and supporting nutrient such as magnesium and vitamin D	Calcium complete , dolomite, multitimemenopausal women, magnesium
Candida	Candida albicans is a fungus naturally found in the body. Under certain circumstance, an overgrowth of Candida can result in vaginal thrush or Digestive complaints such as bloating	Brewer's yeast, vitamin B complex, maxi B, zinc, selenium complete, garlic, garlic & parsley odorless Garlic, Herb time immune system (Echinacea), Buchu.

Cholesterol	Cholesterol is a fatty substance present in the blood, which in high levels can increase the risk of heart disease by compromising blood circulation.	Multitime Heart, Garlic, Garlic & omega 3, salomn oil vitamin C, vitamin E maxi B , folic lecithin omega 3 concentrate.
Cold & Flu	Cold and flu are caused by viruses which infect the respiratory system, resulting in symptoms such as fever, blocked sinuses, catarrh, coughing sore throat and body aches.	Vitamin C, Vitamin A & D, Emulsion, zinc, selenium complete, viral Boost , Herbal time immune system (Echinacea), Garlic, Garlic & parsley, odorless Garlic, cod-liver oil, Garlic omega 3
Pre-menstrualTension	Pre-menstrual tension is caused by the hormonal fluctuations in the week before the one set of the menstruation. symptoms include breast tenderness, mood swing, and irritability and skin breakouts	Multitimewomen , vitamin B& 6 magnesium, Ginseng, Evening primrose oil, omega 3&6 concentrate
Concentration & Memory	The brain, aspart of the nervous system, is responsible for memory and concentration may be caused by stress, being overworked, insomnia; fatigue, ageing or certain medical conditions	Herbtime memory & contraction (Ginkgo biloba), Ginkgo Biloba, vitamin C large multiboost, kids time focus, vitamin E ,vitamin B complex, maxi B , lecithin, salmon oil, omega 3 concentrate.
Constipation	Constipation is characterized by a reduced frequency in bowel movements and difficulty in passing dry, hard stools.	Bio-fiber, colon complete, muesli, maxiB , magnesium, kelp , Brewer's yeast, Green tea, Rice, cakes
Cramps	Muscle cramps often occur during strenuous exercise, in which case they may be caused by the severity of the exercise, or by nutritional imbalances. Night time muscular cramps in the elders may be caused by deficiencies in calcium and magnesium.	Dolomite, calcium complete, molasses, vitamin B complex,Maxi B, vitamin C, vitamin E, salmon oil, Brewer's yeast, omega concentrate
Dry skin	Skin moisture is dependent on sufficient intake of skin nutrients such as vitamin E, omega 3 and omega 6 fatty - acid. dry skin can be aggravated by exposure to wind, sunlight and very cold or hot air	Vitamin E, multi-time Hair, skin & nails, omega 3 concentrate, wheat Germ oil, salmon oil , Evening primrose oil
Eyes	Optimal nutrient is essential for the maintenances of health eyesight, especially through the developmental childhood years and also with ageing	Multi-time Eyes, vitamin A&D, over 60', zinc, selenium complete Beta carotene, cold liver oil, omega 3 concentrate, Antioxidant

Fatigue	Fatigue is characterized by the feeling of low energy levels persistent tiredness, and inability to perform normal tasks. Fatigue is typically a symptom of being overworked, loss of sleep or medical disorder	Vitacharge, vitacharge multi boost, vita charge fizzy, vitamin B complex, magnesium, iron , ginsengs, Alfalfa, Antioxidant, green Tea, Day break Tea
Weight management	Slimming or weight loss is usually an attempt to loss excess body fat and is facilitated increasing energy output through exercise, as well as reducing in dietary intake.	Fat Burner, vital-slim capsules & vita-slim shakes, Apple cider Diet, Buchu, Kelp, vitamin B complex, maxi B, multitime women, multitime adults.

Table 3: This table indicates other Ailment/Indication and Product Recommendations

Ailment/ indication	Definition	Product Recommendations
Hair	Health hair requires sufficient intake of variety of essential vitamins, mineral and essential fatty acid. The condition of Hair is effected by nutrition, hair products, environment etc.	Multitime Hair, & vitamin A & D, vitamin B complex , maxi B, folic complete, Dolomite magnesium, zinc, Brewers, yeast, cod hair oil, salmon oil omega 3 concentrate.
Menopause	Menopause represents the end of reproductive cycle of a woman, which is characterized by cessation of menstrual cycle with accompanying symptoms such as mood swings, irritability, mild depression, insomnia and hot flushes.	Multi-time menopausal women, maxi B, vitamin B 6 & magnesium, calcium complete, Herb time mild Depression (st john worth) Evening primrose oil, omega 3& 6 concentrate.
Pregnancy	Optimal nutrition during pregnancy will optimize the healthy development of the baby, while preserving nutrient stores of the mother	Multitime pregnant women, calcium complete, omega 3 concentrate, vitamin B complex, maxi B, vitamin C, folic complete , magnesium , iron, zinc, salmon oil , Brewer's yeast.

Retrieved from <http://www.vital.co.za/index.php>

Factors Involved in Evaluating Health Product

Angela [35] identified the following factors and method to be used in evaluating health product:

- Is the health product effective for health condition
- What are the health benefits?
- Cost-effectiveness: Does the health product contain ingredients safe for human use and consumption?
- Is the health product reasonably priced?
- Are you getting value for money in purchasing the health product?

- Are there other similar and more affordable health products that guarantee the same results?
- Is the health product Safe for Consumption?
- Who can use health product and who cannot use it?
- How much or how many of the content can be used or consumed?

Obionu [36] further identified other factors to be included in evaluating healthproduct as follows:

- The product should be based on the therapeutic needs of the health care system of the individual's communities.
- The drug must be proven efficacy and safety.
- Side effect must be minimal,
- The quality and availability of dosage form should be assured,
- The dosage form should have reasonably long stability under the expected conditions of storage
- Tablets should be preferred to syrups and solutions because they can keep better.
- The drugs should be in generic names as much as possible
- They must be financially affordable.

According to Babalola [37] exercise product evaluated should help to enhance the following:

- Aiding circulation
- Increasing red corpuscles and hemoglobin
- Aiding the removal of waste from tissue
- Strengthening the muscular system
- Aiding digestions
- Improving mental health
- Improving the heart -regulating mechanism
- Facilitating relaxation and sleep.

Summary

A major point of emphasis is factors involved in evaluating health services and products. These factors are essential to the effort directed at reforming and improving the performance of health system. This has been reviewed in this paper together with various health product and services to equip and increase awareness among individuals, professional health workers and government at all level in evaluating health services and product that are preventive, promotive, curative and rehabilitative. Hence, Individuals, communities, government, health care givers or professionals and the general public were urged to be guided by these factors involved in evaluating health services and product in other to achieve sound physical, mental, emotional and social well being.

Conclusion and Recommendations

Health services and product are necessary for those seeking to improve their health and achieve wellness through physical fitness, herbal supplements and mental enrichment. Taking cognizance of those

factors involved in evaluating health services and products as stated in this paper will serve as a remedy to the menace involved during selection of various products. Based on this, the following recommendations were made:

- The Individual, The Government at all level, Health care givers or professionals should take cognizance of various factors involved in evaluating health services and product to ensure better preventive, promotive, curative and rehabilitative of health systems.
- That the individual communities, society and general public should be guided by those factors reviewed in this paper so as to enhance wise evaluation of each product.
- The individual communities, professional health workers or community health care givers should be guided by the national agency for food and drug administrative and control law in evaluating health services and product.
- The government at all level, health care givers or professionals, individuals, communities and society were urged to take cognizance of the NAFDAC numbers, manufacturing date and the expiration date.
- Policy makers should enact laws regulating standard of the environment in which product is manufactured, processed, packaged, stored, produced and sale, to avoid food or products contamination

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