



SELECTION OF HEALTH INDICATORS & OCULAR DISEASE

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Article Received on 18/06/2017

Article Revised on 08/07/2017

Article Accepted on 29/07/2017

INTRODUCTION

According to the World Health Organization (WHO), HEALTH is defined as a complete physical, mental social well being and not merely the absence of disease or infirmity. Also, the office of Health Economics states that, a "person is regarded as being healthy only if he can remain socially and economically active, even though he may have to suffer some health "disability or discomfort."

Health Indicators are standardized measures by which one can compare health status and health system performance. The primary goal is to support health regions in monitoring progress in improving and maintaining the health of the population and the functioning of the health of the population served and how it compares with other regions in the province and country over time. This also includes major non-medical determinants of health in the region together with the health services received by the region's residents.

The characteristics of the community health system and consultations continue with provincial and regional health authorities to ensure relevant data and consistent methods.

DETERMINANTS OF HEALTH INDICATORS

There are basically three (03) determinants of health indicators and these include:

- a) Social Health Determinants
- b) Health Risk
- c) Health Impact.

Social Health Determinants: These are determinants that affect the health status of the population and thus are predictors of future health outcomes. It evaluates public policies that addresses the social factors of the population.

Health Risk: These are determinants that measure health behaviours, availability, and accessibility to health care services/facilities, health personnel and workers as well as health conditions of the population.

Health Impact: These are indices that measure's the environmental conditions or intervention of health systems.

World Health Organization provided statistical information system (WHOSIS) for health indicators and these include: Demographic and Socioeconomic (Education, Economic) statistics, Mortality and morbidity, Health services coverage, Health system Resources, Risk factors (Chronic condition, Infectious Disease, Violence, Unintentional injury, Mental Health, Health behaviour), Inequities of Health care facilities available, Health care outcome, Health information system and communication technology available.

STATISTICAL INFORMATION SYSTEM OF HEALTH INDICATORS BY "WHO"

A. Demographic Indicators: These are the statistics of socioeconomic description of the population groups. It is classified by level of education, class, occupation income, gender, ethnicity, location, age and sex.

Some selected demographic indicators are:

- Total population of the state, nation, Region etc
- Proportion of the urban/rural population based on age (> 60<15yrs).
- Proportion of males/ females in the population.
- Change in population over a period of time
- Annual growth rate of the population.
- % registration coverage of births in the population.
- % registration coverage of death in the population.
- National income per capital.
- Total income per capital.
- Median/average household income.
- Unemployed annual average.
- Population living below poverty.
- Literacy rate
- Total school enrolment of males/females sand rate of dropouts.
- Types of education available and received within the population.

B. Mortality rate: This provides information on the rate of deaths in the population and the causes of death e.g proportion due to infectious diseases such as HIV/AIDS, TB e.t.c

Some selected indicators:

- Different age mortality rate (probability of dying) in every 5 out of 1000 live birth.
- Life expectancy at birth.
- Health expectancy.
- Maternal /neonatal mortality ratio.
- Leading cause of death by age group.
- Years of potential life lost to unintentional injuries (accidents) and intentional (violence) injuries

C. Morbidity: The state of being diseased that is being in poor health as a result of communicable /non communicable diseases. Communicable disease are those which are transmitted from one person to other, through contact, sneezing, coughing, etc. it could be through vectors (medium) e.g mosquito, blood transmission eg. HIV/AIDS, Body fluid (sex) e.g STD, Non communicable disease which are not infectious e.g genetic/congenital disorders, injuries, systemic/ocular disease, etc.

Some selected indicators:

The incidence (onset) of the diseases (communicable/non communicable) in the population, e.g HIV, TB, Glaucoma, cataract, diabetes, sickle cell anemia etc.

Prevalence (total number of affected person) with communicable/non communicable disease eg. HIV, TB, Glaucoma, cataract, diabetes, sickle cell anemia etc. in the population.

D. Health Coverage: This provides the information on the nature of health services, the health facilities and personnel available.

Some selected indicators:

- Antenatal coverage for at least 4 visits.
- Antiretroviral among HIV pregnant women.
- Birth attended by skilled Health personnel.
- Number of births by caesarean section.
- Types of attention received by children under age 5. E.g those treated with mosquito treated net, with ORT, ARI, vitamin A supplement etc.
- Prevalence of mothers that take contraceptives for prevention of pregnancy.
- % of children immunized against PAB, DTTP (diphtheria, tetanus toxoid, pertusis, Hepatitis B).
- % of women who does mammography.

E. Health system and public polices: This analyses and evaluates public health system in order to respond to the challenge of reducing health inequalities

Some selected indicators:

- Ratio of Community traditional Health workers per 10000 of the population.
- % expenditure on Health.

- % expenditure on hospital facilities e.g beds/10,000.
- Number of Health personnel's which includes Laboratory workers.
- Nurses/midwives, pharmacists, Optometrist/Ophthalmologists, Physicians e.t.c.
- No of environmental and public health workers.
- Out of pocket expenditure per capita total expenditure on health by government/private individuals
- Ration of health management and support workers to health services.
- Ratio of Nurses/Physician.
- Social security expenditure on health as % of general government expenditure on health.
- Total expenditure on Health as % of gross domestic product.

F. Risk Factors: Life style, eating habit, behaviour, access to health facilities, injuries (unintentional/intentional).

Some selected indicators:

- No of Neonates with low births.
- No of Over /under weight children <5yrs.
- No of those with stunted growth.
- Nutritional habits of the population as this can lead to nutritional optic neuropathy
- Prevalence of obese Male/Female adults in the population.
- Per capital recoded alcohol consumption among adult > 15yrs.
- % population using solid fuel in rural/urban area.
- Access to safe and clean drinking water in rural /urban areas.
- Access to good sanitary condoms in rural/urban areas.
- Prevalence of the use of condoms in the adult population
- Prevalence of tobacco consumption amongst the various age groups in the population as this can lead to toxic optic neuropathy.
- % Birth attended by skilled Health personnel based on the educational level of mother.
- Number of health facilities e.g hospitals/clinic available.
- Health care coverage and access to the health facilities.
- Availability of specialist e.g (Physician, Dentist, Ophthalmologist etc).

G. Psychological/emotional Street within the environment.

Some selected indicators:

- Suicide rate in a population.
- Suicide attempt rate in a population.
- Rates of hospital treatment for self inflicted injuries.
- Emotional stress in the environment.
- Ocular Disease is any deviation from the anatomical structure or physiological function of the eye. The

deviation can be due to a number of causes ranging from genetic disorders, systemic/ocular disease from infections, injury, psychological or emotional stress etc. it is manifested by a characteristic set of signs and symptoms with definite aetiology, pathology and prognosis.

Ocular Disease is any deviation from the normal anatomical structure or physiological function of the eye. The deviation can be due to a number of causes ranging from genetic disorders, infectious diseases of systemic/ocular structures, trauma, psychological or emotional stress etc. it is manifested by a characteristic set of sign and symptoms with definite aetiology, pathology and prognosis. Some of these **Infectious disease (communicable/ non communicable) include intrauterine/perinatal infections e.g toxoplasmosis, rubella, CMV inclusion diseases, Herpes Simplex and Syphilis. This occurs if the fetus is exposed in the uterus. Other examples include neonatal conductivities due toneisseria gonococcus.**

Some selected indicators:

- Determine the proportion of the population with Reportable systemic disease that results in ocular complication, e.g diabetic mellitus, hypertension. Sickle cell anemia, Retinopathy of prematurity, Sjogrens disease, Mysthenia gravis, Sarcoidosis etc.
- Proportion of persons with ocular infections disease such as trachoma, bacterial conjunctivitis, onchocerciasis, herpes simplex and herps zoster, Others may include HIV/AIDS infection, STD, measles etc. Tumours/eancers which can led to retinoblastoma, intracranial mass lesion.
- Epidemiological studies of the ocular diseases in any population involve the use of health indicators stated above as standardized measures to compare the health status of the population and health system performance. The primary goal is to support health regions in monitoring progress in improving and maintaining the health of the population and the functionality of the health system.

SIGNIFICANCE OF HEALTH INDICATORS

The benefits of health indicators include the following:

- 1) Health indicators decrease the morbidity and mortality of communicable diseases to the barest minimum and reverse the increasing prevalence of noncommunicable diseases.
- 2) It meets global targets on the elimination and eradication of diseases and significantly increases the life expectancy and quality of life of the Nigerian.
- 3) It determines the overall health of the population and serves the major non-medical determinants of health.
- 4) It also determines the types of Health services received by the population as well as the characteristics of the community.
- 5) It is an essential tool in policy making process and approaches to policy analysis evaluation, and research methods including qualitative and quantitative approaches.
- 6) It is useful in the development of different models of organization and the delivery of health services in a population.
- 7) It also provides the social determinants of health inequalities.
- 8) It make the impact of globalization on public health.
- 9) It establishes the principle of public health and the role of epidemiology within public health practice.

CONCLUSION

Health indicators are useful for local and state public health agencies, their communities and partners. The community assessment is the regular and systematic collection, analysis and dissemination of information on the health of the community. This also includes statistics on the health status; awareness of community health needs and the utilization of available expertise to understand this information.

Thus, Health indicators are relevant to established health goals based on standard (comparable) definitions and procedure broadly available and disseminated electronically across regional, provincial, and national level. It also provides the basic principles of health system funding.

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