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The Health of Nations

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J. Anthony Hellen

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Preface

The conference on Health Issues in Development of which the book is the outcome was organized at the University of Ibadan by Dr. B. Folasade Iyun under the auspices of the Commission on Health and Development of the International Geographical Union. We are indebted to the University of Ibadan for the hospitality. Sixty-six participants belonging to 20 countries attended the conference. Thirty seven papers were presented. A selection is published in this volume. A broad range of topics was covered. The papers are grouped into five sections corresponding to main themes of the geographical approach of health and development.

Environmental changes are one of the main health hazards occurring in developing countries. In the first section of the book, several aspects of health consequences of environmental changes are examined, such as the consequences of global climate change which would affect the distribution of tropical diseases. The problem of increasing agricultural production responding to the needs of a fast growing population is particularly acute in Africa. Its environmental consequences upon endemic diseases have been modelled and mapped. An example of a positive effect of rural development upon health is demonstrated in China (with the decline of endemic disease incidence in selenium deficit areas). The overwhelming problem of clean water supply in developing countries is illustrated by the case of guinea worm diffusion in West Africa.

Rapid urbanization is a major challenge, also for health. Housing conditions, sanitation, environmental problems constitute health hazards in many fast growing cities of the developing world. As a result, malnutrition, infectious and parasitic diseases are still high in the poor urban areas. Several examples are detailed in the second section of this book. Moreover, the epidemiologic transition diffuse from the big cities. Westernization of diet and life style initiate the increase of chronic diseases (cardiovascular and cancers). The consequences of changing life styles are the theme of the third section. Various aspects are examined: the increase of cardiovascular diseases in Nigeria, geopsychiatric problems

in the developing world, the changing health status in two traditional populations and the impact of tourism upon health. The particular relationship of women and health is approached in the fourth section.

The overwhelming importance of education and the role of women upon health need to be stressed. These features are analysed in the book: child health and its seasonal fluctuation, women and agricultural development and the problem of ageing.

Health care provision is a main problem. Spatial and social inequalities of health care remain. In the fifth section various aspects of drug use are examined. Health programmes are discussed such as the particular programme from mentally disadvantaged and the immunization programme.

Tackling health problems involves a human dimension. This means that besides the medical approach, also social, cultural, economic, and political factors have to be taken into account. For example, in health care planning, not only the physical accessibility is important, but economic, social, cultural and psychological factors influence the utilization of health services and medical consumption. The planning of health care delivery should take into account these elements. The contribution of medical geography has to be considered in the framework of health sciences in the perspective of applied medical geography. It can be a tool for health policy makers.

In disease ecology, the geographical approach consists of the spatial analysis of distribution patterns and the study of the relationship with environmental factors. Risk areas can be defined. Health, environment and development are intimately linked. The need for hygiene, sanitation and basic amenities is still a main concern in most of the developing countries. Health problems of the future should be faced. Growing life expectancy consequent upon the epidemiological transition will involve the problem of care for the elderly. The concept of avoidable deaths is worth considering. Disease control is not purely a matter of medical care. Multidisciplinary collaboration is necessary. We hope that this book will contribute to the goal of health for all.

Yola Verhasselt
Chair of the IGU Commission
on Health and Development

a context such as that of Jamaica in the decade towards the 21st century. The issue of developing a plural model of health care requires further research.

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21 The population of mentally disadvantaged in Nigeria: Health and development programme

E. A. Emeke and T. W. Yoloye

Summary

The paper considered the fact that the actual population of the mentally disadvantaged in Nigeria needs to be known, so that its economic importance on the overall development of the country can be assessed. By projection, and using comparative assessment methods from Nigeria and other countries, the writers estimated the population of the mentally disadvantaged in Nigeria to be 1.77 million, and submit that this has grave consequences on the health programme and the general development of the nation.

The writers contend that at present, Nigeria does not have adequate health facilities and programmes for its mentally disadvantaged citizens. However, attempts at provision of facilities can be found based in the homes of the mentally disadvantaged, in educational institutions, hospitals and at governmental level.

The productivity of the mentally disadvantaged is very low, and to provide food, water, shelter, and other amenities to almost 2 million mentally disadvantaged in a depressed economy will have a tremendously negative effect on Nigeria's development. The paper concluded that the situation can however be made better and the mentally disadvantaged can contribute their own quota to the per-capita earnings of the nation. This could be achieved by making them productive through adequate training and provision of educative health programmes that have legislative backing. More researches and the use of therapeutic methods could help the mentally disadvantaged to learn and cope with some life situations. Urban designs should accommodate the mentally disadvantaged and the social integration strategies should be more humane and all embracing.

Introduction

Although reliable statistics of the mentally disadvantaged and mentally ill people in many developing countries of Africa and Asia are not available, a cursory observation from the

street corners, health centres, mental homes, cheshire and other humanitarian homes indicate that the number is very high.

Mba (1986) reported that there were an estimated 857,007 children of the primary school age with behaviour disorder, 422,053 mentally disadvantaged and 182,749 with learning disability in Nigeria. Although there was no evidence about the procedure employed to arrive at these figures, however if one should observe the figures for the children of primary school age alone, then the figure for all groups of people on population of the country will be very high.

There are various ways in which the number of a smaller group e.g. mentally disadvantaged people could be known in any population. This could include the physical counting of the individual or a projection from a small sample to the total population.

In the 1991 census in Nigeria, the National Population Commission had the intention to have physical count of all individuals including the mentally disadvantaged and mentally ill. The mentally ill people were supposed to be counted at night. However due to some logistic problems like looking for 'mad people' at night the Commission decided to rely on projection.

It should also be noted, that there are differences between the mentally ill and mentally disadvantaged individuals. While the mentally ill individuals are those with mental or behaviour disorders, the mentally disadvantaged are those with slow mental or cognitive development. The mentally disadvantaged can be classified into two major classes, namely:

1. the organically pathological mentally disadvantaged whose IQ ranges between 0-70, and
2. the non-organically familiar mentally disadvantaged with IQ ranging between 50-70.

Whether, the Nigerian National Population Commission, takes this distinction into consideration or not we are not sure. It may even be of no interest to the Commission to think about the mentally disadvantaged people as those whose population needs to be known. However, it is our contention that through the adequate knowledge of the number of the disadvantaged , adequate planning and provision of health programmes can be done while the effect on the general development of the nation will be known.

Other problems could be lack of experts in the area of mentally disadvantaged who could help in classifying this group of people.

In as much as we are not pre-empting the outcome of the population count, we know that there are always conflicting reports among health practitioners on how to classify mentally disadvantaged people, and this could affect the outcome of any projection.

Over the years many workers in the area of mental handicap and mental health have focused on the issue of Intelligence Quotient (IQ) in classifying people as either normal or mentally disadvantaged. However, it is now known that the score of an individual on most of the measures and instruments on intelligence quotient could change most

especially between the infancy and early childhood. Studies like those of Haunt (1971) and Lewis (1976) have pointed to this.

Also the individual's environment and experiences in life could lead to mis-labelling and classification of an individual as having low IQ For example, a Nigerian child who could not recognise some of the items in Wechlers Intelligence Scale for Children (WISC), Bayley Scale of Infant Development, McCarthy Scales of Children Abilities and many more 'Western' standardised tests that are totally irrelevant to the child's background could not be said to have a low IQ The child could recognise such items at a later year once he has been exposed to such experiences.

Again, if a Nigerian child could not read at the age of six years, such a child could not also be classified as having low IQ because it is possible he could be able to read at a later stage in life.

Many Africans are born into predominantly illiterate homes. A World Bank Report (1988) put the highest percentage of literate adults as 82.8% for Mauritius and the least as 11.6% for Somalia. For Nigeria the percentage is 42.4. Lack of literate adults to stimulate and act as role models for the African child and indeed Nigerian child born into less privileged and illiterate homes would not facilitate their walking, talking, reading etc. early in life and not necessarily that they have low IQ

We should not therefore employ IQ alone for the classification of the mentally disadvantaged, rather we should incorporate social, psychological, psychomotor, motivational factors, experiences as well as cultural background into the classification framework.

Some questions that readily come to the mind at this juncture include how many mentally disadvantaged people are in Nigeria? What are the health programmes and treatments that are available to the disadvantaged? What are the effects of the number of the mentally disadvantaged on the health programmes and the development of the Nation?

Determining the number of mentally disadvantaged in a population

Experts in the area of demography and population know that projection could be used to determine population from a subset or sample. Using projection to determine the number of mentally disadvantaged in a population therefore may not be too difficult and out of place.

Difficulties only usually arise in determining the characteristics of the sample - in this case the mentally disadvantaged. This is where an expert in the area of mental health will be relevant in the identification of the sample. Inability to do this often leads to mislabelling of people. For example, homeless people, dirty mechanic and automobile workers who are neither ill or retarded could be classified thus by non experts in the area of mental health.

In order to determine the number of mentally disadvantaged in a population therefore, could be:

(a) The selection of the sample area within a population. This could be by random cluster sampling or random stratified sampling in order to have a wider sample or geographical spread and easy generalisation.
(b) Expert should identify the mentally disadvantaged.
(c) There should be physical counting of the mentally disadvantaged in the sampled areas.
(d) The number of the disadvantaged in the sampled area could be used to project the number in a population.
(e) Projection from other studies

There are many studies that have examined the number of mentally disadvantaged in populations all over the world and the percentage estimate ranged from 0.6% to 3.5%. This differential estimate may be due to the location of the study, the age of the sample used and the test employed to identify the mentally disadvantaged.

The result of some of the studies are presented in Table 21.1.

Table 21.1

Percentage estimate of mentally disadvantaged from samples

Researcher	Location	Sample	Test employed	% Estimate
Akesson	Sweden	All diversified ages	Stanford Binet	1.75
Birch et al. (1970)	Scotland	8-10 years	Moray test	2.74
Merces (1973)	California	Diversified ages	Stanford Binet L.M. & Kuhlaman Binet	2.14
Reschly and Jipson (1976)	Arizona	1st 3rd 5th and 7th graders	WISC-R	3.53
Hagberg et al (1981)	Sweden	8-12 Terman	Swedish WISC & Terman Mernu	0.67
Ad a (1989)	Nigeria	All diversified ages	Standford Binet and Physical count	2.0

As previously mentioned the differential percentage estimate of the mentally disadvantage could be due to a number of factors like location, age of sample etc. Also it could reop the debate about whether it is usually 1% or 3% of any population that are mentally disa ntaged.

Our contention is that sample and test administered should be related to the population and the cultural experiences of the sample. Also an estimate could be derived from all the six previous studies mentioned. Thus the number of researchers n = 6, the mean X = 2.13 and even the standard deviation is 0.96.

The mean score shows that there are 2.13% of the population from any of the nations sampled that are mentally disadvantaged. The assumption that 1% or 3% of any population is mentally disadvantaged may be baseless. After an extensive review of some prevalent studies, Zigler and Hodapp findings (1986) indicated that 2% to 2.5% of most population are mentally disadvantaged. Our findings of 2.13% support this view.

However, using Zigler and Hodapp findings (1986) and our own estimate of about 2%, then the projected estimate of the mentally disadvantaged people in Nigeria with a population of 88.5 million in accordance with the announced census figure of March, 1992 will be 1.77m or almost 2 million people. The problem therefore arises: how do we provide health programmes for the almost two million people? Are there enough health facilities and programmes in Nigeria?

Health programmes and treatment for the mentally disadvantaged In Nigeria

Many attempts and suggestions have been made in Nigeria to provide health facilities and treatment to the mentally disadvantaged. These attempts fall under four major categories namely:

1. The individual homes,
2. Educational institutions,
3. Hospitals and
4. Government level.

Home level

At the home level, the methods employed include:

(a) Taking the mentally disadvantaged to churches. Many Nigerians are religious and believe in the supernatural power of God to effect changes and healing in both themselves and their children, wards or relatives. It is against this background that one can understand the use of churches as healing/mediation centres for the mentally disadvantaged people at the home level.

(b) Taking the mentally disadvantaged to metaphysicists. This is still bordering to a larger extent on the religious tendency of Nigerians. Since not all are christians, others resort to metaphysicists who check the stars or crystal balls etc. to assess the cause of the problem and the possible way out.

(c) Taking the mentally disadvantaged to herbal homes. There are a good number of herbalists in Nigeria who use herbs and roots of plants to procure healing, and they claim they can heal any type of diseases and ailments.

Some if not all of the above-mentioned treatments at the home level have been said to be highly effective. But since the mechanism and scientific process are not easily known by us (the authors of this paper), we have scanty information. Also the percentage of those who preferred this method has not been investigated.

It must however be mentioned at this stage, that the attitude of many parents, other siblings and peer groups are negative and unfavourably disposed toward the mentally disadvantaged. There is social segregation and total lock up of the mentally disadvantaged in some homes. This negative attitude must be corrected.

Educational level

In the realm of education, attempt to provide health care and treatment for the mentally disadvantaged are in the area of researches, education and production of manpower.

In terms of research, many researchers from the universities, colleges of education and other research centres conduct and carry out researches in the area of mental handicapped and disadvantaged with a view to finding causes, possible physical and psychological treatments as well as suggestions to improve the health status of both the mentally disadvantaged and their parents/relatives.

The educational aspect is geared mainly towards education of others who are significant in the life of the mentally disadvantaged to accept the disadvantaged as individuals, improve their attitude towards them, teach them the very basic skills to practise with the disadvantaged as they grow up, and how to handle them generally. Counselling plays a major role in achievement of this education for the parents and guardians of the mentally disadvantaged.

In terms of manpower development, some of our universities and colleges of education are involved in the training of special education teachers and handlers who are later employed by state governments, charity homes and other social welfare organizations to teach and handle the mentally disadvantaged in the various areas. Though presently many schools and institutions produce special education teachers, it must however, be mentioned that the number of graduates produced from these institutions are inadequate. Adima (1988) even tried to prove that the special education and health workers who handle the mentally disadvantaged are those that have been rejected by other departments and fields. He also claimed that they are poorly prepared, due to lack of facilities in the various institutions.

Our finding on the cut-off points for admission into the University of Ibadan, College of Education, through the Joint Admission and Matriculation Board (JAMB) in Nigeria shows that the cut-off point for the Special Education Department is usually the lowest, followed by the Departments of Physical and Health Science Education, Adult Education, Arts Education, Educational Management and Guidance and Counselling. Thus a candidate with a score of 201 could be given admission to Special Education Department, while one with the score of 210 will not be able to get admission to the Department of

Educational Management or Guidance and Counselling because the mark is too low to the cut off point of 215.

The education and the production of health personnel for the mentally disadvantaged therefore needs to be improved upon in Nigeria.

Hospital level

Treatment and health provision at the hospital level focus on genetic treatment and use of exercises. In the case of genetic treatment, the use of drugs and vitamins to correct some defects in either the gene or physiological make up of the disadvantaged are often used. This method has been known to be highly effective with phenylketonuria (PKU).

The various organizations and mental health workers practise various exercise methods of treatment. This includes the Dorman Dalecto method. The method involves series of exercises and manipulations of limbs until correct neurological organization is achieved. For now, this method can be found in operation only in the Teaching Hospitals and a few other big centres. Another method, though not strictly located in a hospital setting is the use of music as embarked upon by Yoloye (1991).

Government level

The government is about the biggest single provider of the treatment and health provisions to the mentally disadvantaged.

Some of the methods employed at the government level include:

(i) Environmental treatment - The age-long dichotomy between the geneticists and environmentalists were common occurrences among the mental health social workers in Nigeria. While studies like those of Okoye (1985) and Anagbogu (1986) were in favour of the environmental determinant and treatment or remediation, Nwaogu (1988) advocated genetic counselling. Yoloye (1991) on his own part recommended a combination of both the genetic and environmental approaches. The environmental treatment include slum and shanties reclaiming, urban and environmental planning, provision of side walks, social and recreations facilities including parks. Even the provision of special schools, or special classes within the regular school systems will be credited to the government in its efforts to provide health requirement of the mentally disadvantaged.

(ii) Establishment of rehabilitation centres, mental homes, mental hospitals and social welfare centres. These are scattered all over the country and are few in number. The government needs to improve its contribution in this regard.

(iii) Provision of funds is a third major area where government comes in. Government provides funds and equipment to the mentally ill, mentally disadvantaged and other handicaps either at the government or private rehabilitation centres, hospitals, mental homes etc. The funds and facilities are however, grossly inadequate. For example, the Federal College of Education (Special) Oyo, could not move to its permanent site up till now since its inception in 1977. This is over a period of fifteen years.

There are very few empirical studies on the efficacy of most of these programmes and methods of treatment in Nigeria. This could be a challenge, to us as experts in the area of health and development. Also, the cost-effectiveness of these programmes should be examined to see the impact on the economy and development of Nigeria.

Mentally disadvantaged population, health programme and development

The health of the mentally disadvantaged does not differ sharply, organically speaking, from the health of the normal population. The mentally disadvantaged does not more often than not, have other organic malformation aside of the central one - the brain - which is what in fact placed him in the category under question - the mentally disadvantaged. To this end, the mentally disadvantaged is not more prone to say malaria, or any such common diseases than any member of the "normal" population. The great difference, however, is that he is not able to cope with his treatment and medication as a "normal" person can. He thus needs a lot of care and attention when he becomes ill or indisposed. But when it is considered that even mental disadvantage is itself a health problem, then it will be appreciated that the health of the mentally disadvantaged to that extent differs from that of the "normal" population.

Mental disadvantage cannot be cured once it occurs. The objective of the "health" care for the group is not remission or recovery from the condition itself, but it is rather an attempt at making the mentally disadvantaged a bit functional in living, lessening the burdens of his parents, of those in charge of his care, and making him able to use programmes and services which will help him to attain an optimum level of functioning within the limitations of his own intellectual functioning. In that way, he can contribute his own little quota to the development of his society.

There is no doubt, that with our projected population of almost two million mentally disadvantaged individuals in Nigeria, in a SAP economy with poorly trained health workers, poor programmes and facilities, the effect on development will be tremendously negative. Little wonder therefore that many people roam the streets and more charitable organisations are joining the government to provide education and facilities to this group of people.

To provide food, water, shelter and other amenities to two million people who are mentally disadvantaged alone apart from other groups of handicaps, mentally ill and even the jobless in a developing nation as Nigeria will certainly affect overall development.

The productivity of the mentally disadvantaged is very low and they may not contribute positively to the per capita earnings of the nation. Rather they will depend on other individuals and the government thereby decreasing the per capita earnings of the country. This will always be the case in such countries, like Nigeria where the health programmes and treatments are very inadequate.

The mentally disadvantaged could be productive if adequate training and health facilities are provided. The mentally disadvantaged should not be locked up. We should be more

humane towards them. The government should provide for them through adequate health programmes that have legislative backing. There should be more researches and therapeutic methods that could help the mentally disadvantaged to learn and cope with some situations.

It follows almost a cyclic sequence that if there is a well developed health programme and treatment methods the mentally disadvantaged will be able to develop coping mechanism, be productive and subsequently able to contribute to the development of the country.

The negative impact of poor health, education, social integration of the disadvantaged could be observed from the number of street beggars, poor sanitation and even urban slums in many cities in Nigeria. The effect is definitely negative on development.

As geographers, urban planners, educators, psychologists, social workers, government officials, our concern should be to know the number of mentally disadvantaged or any group and plan for them. Our urban designs should be one that should accommodate various groups, the education should be one that should make individuals to be more productive. The plans should provide for various groups in order to be able to develop and be more productive.

It is hoped that if this is done the seemingly high population of mentally disadvantaged will be provided for and the effect will not be drastic on the education, health and general development of the country.

Conclusion

There is no doubt that the number of the mentally disadvantaged in Nigeria is very high and the health programmes and treatments are not just poor but also include improper selection, training and funding of the programme and this has negative effects on the general development of Nigeria. However, it is our contention that through changes in the attitude of the parents, siblings, the general populace, positive changes in selection, training of personnel, adequate researches and health programmes, the poor situation could be changed to a positive one.

The mentally disadvantaged will be more productive and contribute their own quota to the development of the nation.

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