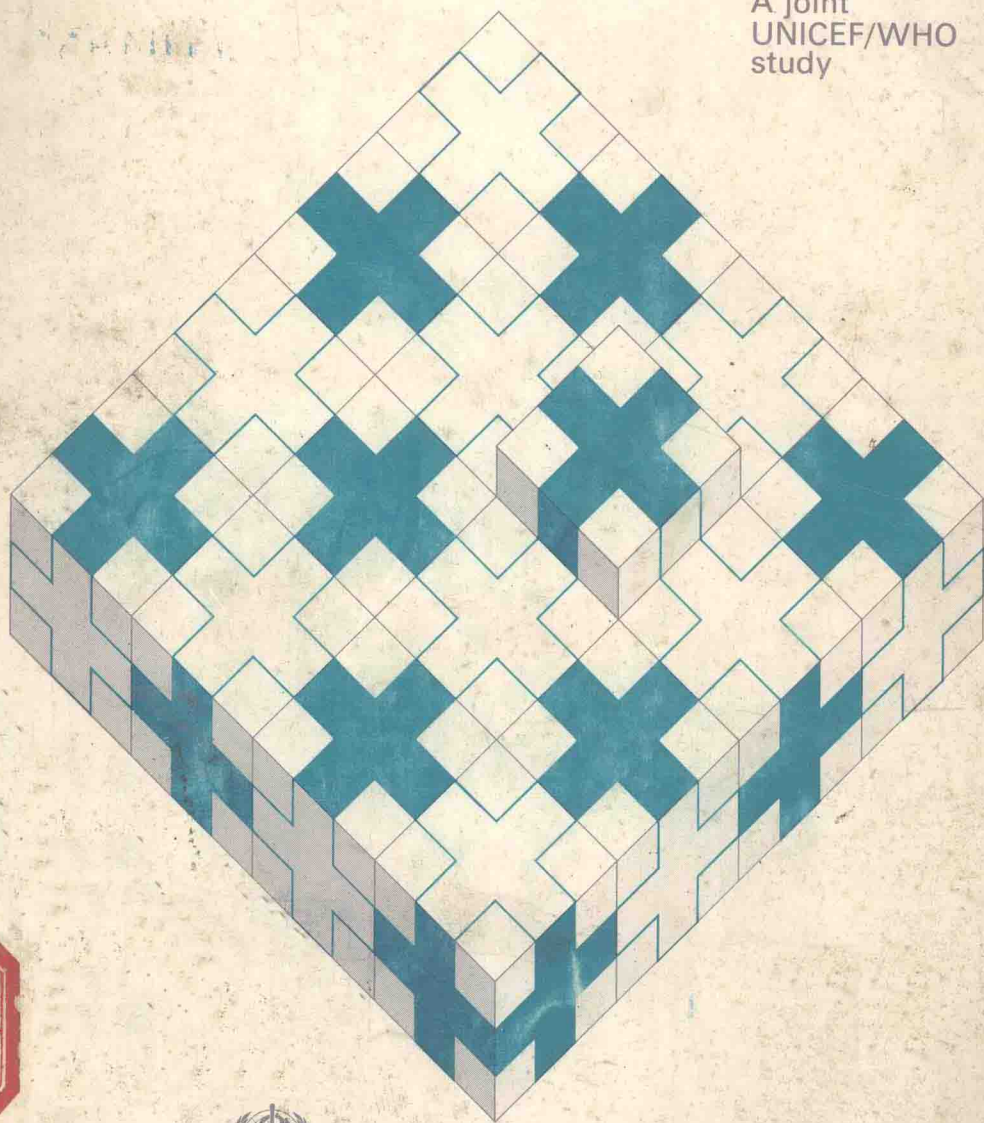


Editors :

V. Djukanovic
and E.P. Mach

Alternative approaches to meeting basic health needs in developing countries

A joint
UNICEF/WHO
study



World Health Organization

ALTERNATIVE APPROACHES TO MEETING BASIC HEALTH NEEDS IN DEVELOPING COUNTRIES



A joint UNICEF/WHO study



Edited by

V. DJUKANOVIC
Chief Medical Officer

E. P. MACH
Technical Officer

*Development of Health Services
Division of Strengthening of Health Services
World Health Organization
Geneva, Switzerland*

WORLD HEALTH ORGANIZATION

GENEVA

1975

ISBN 92 4 156048 7

© World Health Organization 1975

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention. For rights of reproduction or translation of WHO publications, in part or *in toto*, application should be made to the Division of Publications and Translation, World Health Organization, Geneva, Switzerland. The World Health Organization welcomes such applications.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The authors alone are responsible for the views expressed in this publication.

PRINTED IN SWITZERLAND

CONTENTS

	Page
Introduction	7
Background of the study	8
Objectives	8
Methods	9
I. World poverty and health	10
The underprivileged	11
The rural population	11
The nomads	12
Slums and shanty towns	12
The glaring contrasts in health	13
The obstacles to be overcome	14
Problems of broad choices and approaches	14
Problems of resources	17
Problems of the general structure of health services	20
Technical weaknesses	22
Selected bibliography for Part I	25
II. Main features of the case studies	26
Bangladesh : approach to the development of health services	27
Health care in the People's Republic of China	35
Cuba's health care system	50
United Republic of Tanzania : an innovative approach to the develop- ment of health services	57
Venezuela : the "simplified medicine" programme	62
The health programme in Ivanjica, Yugoslavia	67
Comprehensive rural health project, Jamkhed, India	70
Use of village health workers and trained traditional birth attendants in the Department of Maradi, Niger	78
Indigenous systems of medicine : Ayurvedic medicine in India	84
Nigeria : use of two-way radio in the delivery of health services	92
III. Conclusions	95
IV. Recommendations to WHO and UNICEF	104
Acknowledgements	107
Annex 1. WHO and UNICEF policies	108
Annex 2. Different types of health services adapted to different degrees of devel- opment	113

ALTERNATIVE APPROACHES TO MEETING
BASIC HEALTH NEEDS IN DEVELOPING COUNTRIES

ALTERNATIVE APPROACHES TO MEETING BASIC HEALTH NEEDS IN DEVELOPING COUNTRIES



A joint UNICEF/WHO study



Edited by

V. DJUKANOVIC
Chief Medical Officer

E. P. MACH
Technical Officer

*Development of Health Services
Division of Strengthening of Health Services
World Health Organization
Geneva, Switzerland*

WORLD HEALTH ORGANIZATION

GENEVA

1975

ISBN 92 4 156048 7

© World Health Organization 1975

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention. For rights of reproduction or translation of WHO publications, in part or *in toto*, application should be made to the Division of Publications and Translation, World Health Organization, Geneva, Switzerland. The World Health Organization welcomes such applications.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The authors alone are responsible for the views expressed in this publication.

PRINTED IN SWITZERLAND

CONTENTS

	Page
Introduction	7
Background of the study	8
Objectives	8
Methods	9
I. World poverty and health	10
The underprivileged	11
The rural population	11
The nomads	12
Slums and shanty towns	12
The glaring contrasts in health	13
The obstacles to be overcome	14
Problems of broad choices and approaches	14
Problems of resources	17
Problems of the general structure of health services	20
Technical weaknesses	22
Selected bibliography for Part I	25
II. Main features of the case studies	26
Bangladesh : approach to the development of health services	27
Health care in the People's Republic of China	35
Cuba's health care system	50
United Republic of Tanzania : an innovative approach to the develop- ment of health services	57
Venezuela : the "simplified medicine" programme	62
The health programme in Ivanjica, Yugoslavia	67
Comprehensive rural health project, Jamkhed, India	70
Use of village health workers and trained traditional birth attendants in the Department of Maradi, Niger	78
Indigenous systems of medicine : Ayurvedic medicine in India	84
Nigeria : use of two-way radio in the delivery of health services	92
III. Conclusions	95
IV. Recommendations to WHO and UNICEF	104
Acknowledgements	107
Annex 1. WHO and UNICEF policies	108
Annex 2. Different types of health services adapted to different degrees of devel- opment	113

INTRODUCTION

Despite great efforts by governments and international organizations, the basic health needs of vast numbers of the world's people remain unsatisfied. In many countries less than 15% of the rural population and other underprivileged groups have access to health services. More serious still, these people are both particularly exposed and particularly prone to disease. A hostile environment, poverty, ignorance of the causes of disease and of protective measures, lack of health services or inability to seek and use them—all may combine to produce this sorry situation.

To meet the main health needs of the underprivileged, who make up about 80% of the population in less developed countries, health services should seek out these people, find what they need and want, and protect, treat and educate them. The strategy adopted for this purpose by many developing countries has been modelled on that of the industrialized countries, but as a strategy it has been a failure. The tendency has been to create relatively sophisticated health services staffed by highly qualified personnel, in the hope of expanding them progressively as resources increased until the entire population was covered. The outcome has been quite different. The services have become centred largely on the cities and towns, are predominantly curative in nature, and are accessible mainly to a small and privileged section of the population.

The relative emphasis on programmes to control specific diseases may also have hindered the development of basic health services over the past 25 years. As early as 1951, when the efforts of many developing countries were centred on specialized mass campaigns for the eradication of diseases, the Director-General of WHO pointed out in his annual report^a that these efforts would have only temporary results if they were not followed by the establishment of permanent health services in rural areas to deal with the day-to-day work in the control and prevention of disease and the promotion of health.

The enthusiastic application of new knowledge and technology has not always achieved the results expected, and some of the consequences have been untoward. In sum, history and experience show that conventional health services, organized along "Western" or other centralized lines, are unlikely to expand to meet the basic health needs of all people. The human, physical and financial resources required would be too great and the necessary sensitivity to the special problems of rural or neglected communities would rarely be attained.

Clearly the time has come to take a fresh look at the world's priority health problems and at alternative approaches to their solution. This is not just a question of injecting a little more technical know-how. Some countries

^a WHO Official Records, No. 38, 1952, p. 2.

will need to make drastic or revolutionary changes in their approach to health services ; others, at the very least, radical reforms. The remodelled approach must be linked to the prevailing human attitudes and values, which differ from community to community, and it will require a clear motivation and commitment on the part of the people who have the knowledge and the political and economic power to introduce change.

Background of the study

The magnitude and gravity of the problems, compounded as they are by widespread poverty, ignorance and lack of resources, are daunting. Nevertheless, much can be done to improve the health of the people in the developing world. In a number of countries successful or potentially successful programmes meeting basic health needs have been set up. They range from innovative programmes covering limited areas to completely new health systems introduced in the wake of radical changes in the political and social system—for example, in China, Cuba and, to a certain extent, Tanzania.

WHO and UNICEF decided to carry out a study of some of these new approaches in the hope that an analysis of them and of the shortcomings of conventional systems would enable the two organizations to develop fresh policies and approaches that could be reflected in their assistance to countries.^a They realized that the study would not break new ground. The successful or promising approaches they examined are actual programmes, and some of them have already been studied and analysed.

The main purpose of the case studies described in Part II of this report was to single out and describe their most interesting characteristics and to enable them to be discussed openly and objectively. It is hoped that these discussions will encourage further studies and make the findings known to a wider public. The emphasis is not on further development of health services as they are now organized, but rather on new ways of identifying basic health needs and of providing simple preventive and curative health measures.

Objectives

Starting from the failure of conventional health services and approaches to make any appreciable impact on the health problems of developing populations, the study aimed at examining successful or promising systems of delivery of primary health care in order to identify the key factors in their

^a The development of health service systems designed to meet basic health needs, particularly in the developing countries, is a subject of major concern for WHO and UNICEF ; within this context, UNICEF has a special interest in children's health, which is one of its overall goals. The past policies of the two organizations on basic health services are outlined in Annex 1.

success, and at observing the effect of some of these factors in the development of primary health care within various political, economic and administrative frameworks.

Particular interest was taken in features that appear to play a real part in improving basic health coverage, the mobilization of resources, the utilization of services, understanding of health problems and health services, the quality of health care, and the satisfaction of consumers and providers with the care given.

In this connexion, it was felt that an adequate approach to meeting basic health needs must provide, *inter alia*: sufficient immunization; assistance to mothers during pregnancy and at delivery, postnatal and child care, and appropriate advice in countries that accept a family planning policy; adequate safe and accessible water supplies, sanitation, and vector control; health and nutritional education; and diagnosis and treatment for simple diseases, first-aid and emergency treatment, and facilities for referral. Not all of those services need be provided together, but they should be planned purposefully as a gradual expansion. The approach should also be applicable, or promise to be applicable within a reasonable time in countries of very limited resources, and should seek to provide at least 80% coverage for such socially or geographically remote populations as villagers, nomads, and peri-urban and slum dwellers.

In the selection of new approaches for detailed study, emphasis was placed (a) on actual programmes that are potentially applicable in different sociopolitical settings, and (b) on programmes explicitly recognizing the influence on health of other social and economic sectors such as agriculture and education.

Methods

Information was gathered from a wide range of sources, including members of WHO advisory panels, publications, the reports of meetings, studies by UNICEF, WHO, the United Nations and other international agencies, and the WHO regional offices, country representatives, and field staff. On the basis of this information, promising programmes were selected and studied at the actual site by working teams with the full cooperation of the governments in Bangladesh, Cuba, India, Niger, Nigeria, Tanzania and Venezuela. Early in December 1973 a team of senior WHO staff visited China, and its observations were used in conjunction with an independent survey of the Chinese health system. On UNICEF's recommendation a project in Ivanjica, Yugoslavia, was included.

The study report was originally drafted by the authors (including the authors of the case studies) in consultation with a representative of UNICEF. The draft was reviewed and commented on by a group of WHO and UNICEF consultants at a meeting held in Geneva in June-July 1974.

The report was then redrafted and presented to the twentieth session of the UNICEF/WHO Joint Committee on Health Policy in February 1975.^a

In May 1975, following its approval by the Joint Committee of the two organizations, the study was endorsed by the UNICEF Executive Board, which adopted its principles as UNICEF policy. Later in the same month the Twenty-eighth World Health Assembly considered the study, which was placed before it as a background document to serve as the basis for a major worldwide action programme for primary health care; this programme was approved by the Health Assembly in resolution WHA28.88.^b

I. WORLD POVERTY AND HEALTH

What we know as the developing world, far from being a single homogeneous entity, is made up of a great variety of widely differing countries and areas at different stages of development. Nevertheless, their progress is conditioned by certain factors in common, and in some cases it may be possible to consider common solutions to their problems.

These problems have complex political, social, cultural, and environmental roots. Extremely limited resources, poor communications, vast distances, individual and community poverty, and lack of education act and react upon one another in such a way as to maintain the developing countries in a perpetual state of poverty.

The most obvious economic signs of underdevelopment are low labour productivity, a low national product, and a low average income per person. The standard of living in developing countries is low for the great mass of the people, and life is beset by the problems caused by insufficient or faulty food intake, poor housing conditions, poor health, inadequate public and private provision for hygiene and medical care, insufficient communication, transport, and educational facilities, and systems of education and training that are ill adapted to the people's needs.

Although, owing to such factors as different price systems and inflation, per capita income can be misleading as an index of the standard of living, it is worth noting that in some Asian and African countries the daily per capita income is about 20–24 US cents, and in some of them it is less than 6 US cents for the poorest 20% of the population. Per capita consumption in a number of countries is under US \$94 a year. These figures compare starkly with an estimated per capita income in the USA of \$4980 and in France of \$3400 a year in 1972.

Low incomes defeat the desire of governments—which may be the only driving force able to introduce change—to provide public services, par-

^a The study as it is now presented is a somewhat shortened version of that report.

^b WHO Official Records, No. 226, 1975, p. 53.

ticularly social services, from national tax revenue for the poorest sector of the population.

Among the other obstacles to development, many countries have to contend with an unfavourable physical environment—poor soil, difficult terrain, lack of forest and mineral resources—and an adverse climate with periodic excessive rainfall, extremes of temperature, and droughts. These physical obstacles may be compounded by the insufficient or inappropriate application of modern science and technology and unfavourable international terms of trade.

The rapid increase in the world's population and its effect in defeating the efforts of developing countries to raise their standards of living have been emphasized often enough. In some developing countries it has more than cancelled out the increase in the gross domestic product, while per capita output has actually fallen.

According to estimates and projections for 1970–1980 in the United Nations *1970 Report on the World Social Situation*, the total population of the less developed regions may increase during the decade by 28%, the number of pre-school children by 21% and the number of school-age children by 28%. To provide this rapidly growing population with food, housing, education and employment, the developing world is faced with a task of daunting proportions. The challenge will become insuperable in the decades to come unless the present development strategy is radically changed.

The underprivileged

The rural population

In 1970, the rural population of the less developed regions of the world was estimated at 1910 million—75% of the total population. By the year 2000 it will probably have risen to 2906 million, despite wholesale migration from the country to urban areas.

At the same time, people in many rural districts are isolated and dispersed, so that public services of the conventional type, including health services, are difficult and expensive to provide. Isolation of a community from the outside world is bound to hamper communication and put a brake on the improvement of living standards. What is more, dispersal and isolation add to the difficulties of educating, training, and employing qualified manpower.

It is worth enumerating some of the characteristics of underdeveloped rural areas :

- economic stagnation
- cultural patterns that are unfavourable to development

- agricultural underemployment, and lack of alternative employment opportunities
- poor quality of life because of the scarcity of essential goods, facilities, and money
- isolation caused by distance and poor communications
- an unfavourable environment predisposing to communicable diseases and malnutrition
- inadequate health facilities and lack of sanitation
- poor educational opportunities
- social injustice, including inequitable land tenure systems and a rigid hierarchy and class structure
- inadequate representation and influence in national decision-making.

The nomads

There are some 50–100 million nomads and semi-nomads in the world. About 90% of them live in Africa or Asia, in the dry belt that circles the earth north of the Equator and includes the arid land from Senegal and the Sahel region of Africa through south-west Asia to Pakistan and India. In distinction to nomads, who depend on migration for their livelihood and have no fixed dwellings, semi-nomads, including transhumants, are periodic migrants with one or more fixed dwellings who often engage in some agricultural activity. Nomads usually keep domesticated animals—cows, camels, sheep, or goats—but some are hunters and collectors, as in Australia, the Kalahari desert, Amazonia, and the Arctic.

Nomads have their own needs and problems. As the present catastrophic drought in the Sahel region has shown, in nomadic life there is a narrow margin between survival and death. Because of their constant movement and dispersion, nomads are difficult to reach with health services, which tend as a result to neglect them. In some development plans they are ignored or wrongly included with the rural population. Their particular situation needs to be recognized and given separate attention.

Slums and shanty towns

During the last two decades there has been an enormous increase in the number of people living in slums and shanty towns in the poorer countries. This growth is continuing and perhaps accelerating. Today about one-third of city dwellers in the developing countries live in slums and shanty towns. The proportion is increasing and exerts a major influence on the city environment.

The main reason for this growth is that large numbers of people are moving from rural areas to the cities in search of work and a better life. This is not to say that work is easy to find in the cities. The urban population of developing countries is increasing much faster than the supply of jobs; even so, the situation is worse in rural areas. Urban poverty is often a reflexion of the overflow of rural poverty.

Almost half the people now living in slums and shanty towns are children. At current growth rates, their number will double by 1980. This is the most tragic aspect of the problem—the slum conditions mortgage the future of many of these children, especially the very young in their most formative period of growth. Child mortality and suffering in these communities are very high and life expectancy is low.

The glaring contrasts in health

Throughout the world, for lack of even the simplest measures of health care, vast numbers of people are dying of preventable and curable diseases, often associated with malnutrition, or survive with impaired bodies and intellects. There are striking differences in the vital statistics for the underprivileged and the developed world. According to 1971 data, the life expectancy at birth was 43 years in Africa and 50 years in Asia, compared with 71 in Europe and North America.

During the last decade, maternal and childhood mortality rates have been steadily decreasing in most parts of the world. In many developing countries, however, the levels of mortality remain high and less progress has been made in reducing morbidity and improving the health and quality of life of mothers, children and families.

The most serious health problems of mothers and children and the high rates of mortality and morbidity in the world as a whole result from various interrelated conditions: malnutrition, infection, and the consequences of ill-timed, closely spaced, and too frequent pregnancies, and the lack of health care and other social services, against a background of generally poor social and economic conditions.

Problems related to the first year of life must be considered in the context of the 120 million or so births a year in a world population of more than 3400 million. According to United Nations estimates for 1965–69, some 84% of all births during that period occurred in developing countries. The estimated annual number of infant deaths in those countries over the same period reached 14.2 million out of 101 million live births, as compared with 516 000 out of 19 million live births in developed areas. In the less developed regions the infant mortality rate was 140 per 1000 live births, dramatically higher than the rate of 27 per 1000 in the more developed regions; there was an enormous variation among countries, from an esti-