

Community-Based Initiatives for prevention of non-communicable diseases: Nizwa Healthy Lifestyle Project planning and implementation experience in Oman.

Abdelrahim Mutwakel Belal¹, MB BS, DPH, FCM, Halima Galam Al-Hinai², MD, DPH

1. In-charge of Community Based Initiatives Section, Community Based Initiatives Department, Ministry of Health, Sultanate of Oman.
2. Director, Community Based Initiatives Department, Ministry of Health, Sultanate of Oman.

Correspondence address: Dr Abdelrahim Mutwakel Belal, Community Based Initiatives Department, Ministry of Health, Muscat, Sultanate of Oman. PO Box 393 PC:113. Tel: office: +96824693416, Mobile: +96892257308, Fax: +96824694920. E-mail: mutwakel73@gmail.com

ABSTRACT: Nizwa Healthy Lifestyle Project (NHLP) is a five years community-based intervention project for primary prevention of non-communicable diseases (NCDs). The aim of the project is to reduce the NCDs common risk factors among the population. NHLP was started early in 2004 and will finish in 2008-2009. The objectives of this paper are; (1) to share the planning experience of NHLP with other countries, (2) documentation of the methodology used in planning and implementation of NHLP.

WHO MONICA (Monitoring trends and determinants for cardiovascular disease) protocol was used for the baseline survey in 2001. A total of 1511 individuals aged 20 years and above participated in the survey (803 female and 708 male). The results of the survey show high prevalence of NCDs and their risk factors in the community especially obesity and physical inactivity. According to the baseline survey results the interventions were planned. Five years strategic plan for the interventions was prepared using different strategies such as policy and legislation, community empowerment, health education and health workers capacity building and guidelines development. The intervention areas of the project were identified to be; Promotion of Physical activity and supportive environment, dietary habits, tobacco control and prevention and Road Traffic and domestic accidents. Monitoring and evaluation of the project were planned based on Countrywide Integrated Non-communicable Diseases Intervention (CINDI) guidelines. The initial experience of NHLP shows that implementation of CBI for prevention of NCDs is feasible in Oman and gulf countries context.

Key words: Community-based initiatives, non-communicable disease, physical activity, diet, tobacco control and Oman.

INTRODUCTION

Non-communicable diseases (NCDs) represent the major health burden in the industrialized countries and a rapidly growing problem in the developing countries. At the same time NCDs are an area where major health gains can be achieved. Many Developing countries currently face a double burden of infectious diseases and non-communicable diseases, the latter, including cancer, diabetes and cardiovascular diseases (CVDs), are fast replacing the traditional enemies of infectious diseases and malnutrition as the leading causes of disability and premature death. This trend will continue and by the year 2020, NCDs are expected to

account for seven out of every ten deaths in the developing regions, compared with less than half today ⁽¹⁾.

According to the WHO estimates, all NCDs, in many cases preventable, account for at least 40% of all deaths in developing countries and 75% in industrialized countries. There is still a wide-spread misconception that the problem of NCDs is not relevant for developing world, that it is a burden of affluent societies only. Surveys of indigenous populations in number of African countries indicate that hypertension rates on the rise, as is the prevalence of diabetes. In large percentage of affected individuals both conditions are being left untreated ⁽²⁾.

Chronic diseases such as cardiovascular, diabetes, cancer, renal, genetic and respiratory conditions are rising dramatically in the Eastern Mediterranean Region. Currently, 45% of the region's disease burden is due to non-communicable diseases. It is expected that this burden will rise to 60% by the year 2020. The impact of these conditions falls heavily on the region's poor and marginalized populations. Awareness among the general population of the adverse health consequences of the new behaviour and lifestyles is likewise inadequate largely because of the long delay between cause and effect, people tend to misjudge the hazards of these lifestyles ⁽¹⁾.

Given the present trends, scientist project an explosion of non-communicable diseases in developing countries between now and 2015. By then, for example, the ratio of deaths from NCDs to deaths from infectious and parasitic diseases will be 1:1 in Africa for both male and female, 1:1 and 1:2 in the Middle East, 4:1 and 4:1 in Asia, 6:1 and 4:1 in Latin America. According to these projections, in developing countries in general three times more people will die from NCDs than from infectious and parasitic diseases ⁽²⁾.

Research has already shown that non-communicable diseases have their roots in unhealthy lifestyles or adverse physical and social environments. Risk factors like unhealthy nutrition over a prolonged period, smoking, physical inactivity, excessive use of alcohol, and psychological stress are among the major lifestyles issues. While there is firm knowledge on "what should be done?" for the prevention of these diseases, the key question at the present is "How should it be done?" ⁽³⁾. How our existing knowledge of non-communicable diseases best be applied for effective prevention in real-life situations? Carefully planned community programmes are an important component of the strategy to help solve this problem.

DEVELOPMENT OF NCDS PREVENTION PROGRAM

After the main risk factors of non-communicable diseases had been identified in the beginning of the 70's, preventive studies and efforts were gradually started in the developed countries. Epidemiological research to prove causality had progressed from case-control and prospective follow-up studies to preventive trials with one or multiple factors ⁽⁴⁾.

Since the early 1970s, a number of community-based health intervention projects have started in developed countries. These projects were usually started in the field of cardiovascular disease prevention and emphasized the fact that merely providing risk-reduction measures for clinically high risk people in health services settings would have only have a limited impact on the whole population ⁽³⁾. The first community-based heart health intervention project was the North Karelia Project which started in 1972 ⁽⁵⁾. The very high CVD mortality in Finland in the early 1970s, together with the finding of earlier epidemiological research carried out in Eastern Finland in connection with the Seven Countries Study, was the background on which this project was started ⁽³⁾.

After North Karelia Project similar projects were launched in other countries. In USA, Stanford University carried out the so-called Stanford three-Community study (1972-75), which showed mass media vs. no intervention in high-risk residents to result in 23% reduction in CHD risk score. Subsequently, the National Institutes of Health (NIH) financed three major community-based intervention projects: the Stanford five-City Project (1980-86), which showed reductions in smoking, cholesterol, BP, and CHD risk, the Minnesota Heart Health Program (1980-88), which showed some increases in physical activity in women and reductions in smoking, and the Pawtucket Heart Health Program. Later, projects with various study designs were

launched e.g. German Cardiovascular Prevention Study, and the Norsjö Study in Sweden ⁽³⁾ and so on.

NON-COMMUNICABLE DISEASES SITUATION IN OMAN

The epidemiological and demographic transitions are now well underway in Oman unleashing a significant surge of NCDs and their risk factors, which is further fuelled by the rapid change in population life styles. The aetiology of these problems is complex and has strong socio-cultural roots. Work towards resolving these problems will be enhanced by strategies to push PHC provision closer and deeper in the community and by strengthening Community Based Activities and Initiatives ⁽⁶⁾.

The prevalence of diabetes mellitus, for example, has risen from 8.3% in 1991 to over 11% of the adult population in 2000. The prevalence of hypertension is 15% for adults aged 20 years and older (16.4% for men and 14.2% for women). Obesity is a major risk factor for non-communicable diseases throughout the country, especially in Dhofar, Muscat, Dhahira and Al Wusta regions where 50% of the adult population is overweight. High cholesterol (serum cholesterol > 5.2 mmol/L) is exceptionally high compared to other nations with a national prevalence of 40.6% ⁽⁷⁾.

COMMUNITY-BASED INITIATIVES (CBIs) APPROACH

The concept of health for all was adopted by the World Health Assembly in the late 1970s, and primary health care was adopted as the right approach for achieving the optimum level of health for each individual. The target of health for all could not be achieved due to strategic deficiencies—mainly a weak community role, poor intersectoral actions, a top-down approach to development, and focusing investment on physical infrastructure while neglecting the human

dimensions of development. To help bridging this gap WHO's Regional Office for the Eastern Mediterranean introduced the following community-based initiatives (CBI):

- Basic Development Needs approach (BDN),
- Healthy Villages Programme (HVP),
- Healthy Neighbourhood Programme (HNP),
- Healthy Cities Programme (HCP),
- Healthy Lifestyle Programme
- Women in Health and Development ⁽⁸⁾.

These community based initiatives provide a new stimulus for health and human development, and have initiated a transformation process whereby communities are playing an active role and multisectoral government functionaries are providing support for sustainable local development in order to improve the quality of life and health of the people.

How community-based initiatives bring about change

Changes take place through the following:

- Encouraging change in self and society
- Introducing intersectoral coordination and partnerships
- Breaking the vicious cycle of dependency through active community participation (community development for the people, by the people)
- Developing awareness among the masses concerning their needs and rights, coping with problems, practising healthy lifestyles and health care measures
- Encouraging decentralization and local empowerment for bottom-up planning and self management
- Mobilizing local and public resources
- Transforming the attitude of government functionaries to be more supportive of the community
- Improving health status through increased family income and self-care



- Reducing poverty and improving quality of life and health ⁽⁸⁾.

With its success in solving health-related issues in populations, community-based initiatives are known to widen the circle of partnership by involving non-governmental organizations and other key institutions outside the health sector.

Oman has presently implementing nine initiatives in five different regions. The table below show the details of these initiatives ⁽⁹⁾.