

CHAPTER I

Introduction

In Nepal, a total of 13.17 million people (out of total 20.32 million population) in 56 districts are considered to be at varying degrees of malaria risk. Among 75 districts malaria has been observed fully or partially in 67 districts. With the exception of 1991, when an increase in malaria in some districts resulted in 29,135 reported cases in the country, reported cases have declined from 22,856 in 1990 to 16,368 in 1993. The malaria situation in Nepal seems to be improved because the total reported cases throughout the country in the year 1994 and 1995 were 9467 and 9609 respectively in comparison to 1993 (Dept. of Health Services, 1996).

Malaria in Nepal is now limited to focal problem areas. At the present time, high-risk malarious areas include forest, forest-fringe and foot-hill areas. In those areas incidence of malaria is increasing every year. Those increases are believed to be related to socio-economic and human behavioral factors (Joint HMG/WHO/USAID Assessment Team, 1994). Malaria problem has been seen in those areas where there is frequent population movements, where there is movement of non-immune people from high mountain to receptive areas or where there is rapid socio-economic changes. Despite government efforts to control malaria transmission, every year

periodic epidemic outbreaks and persistent transmission have been seen in those areas (Joint HMG/WHO/USAID Assessment Team, 1994). A study, therefore, has been proposed in the following chapters to determine the socio-economic and human behavioral aspects of malaria transmission in a highly malarious area i.e., Panchkhal village, with an aim to select appropriate control measures.

The objectives of the study is to develop a socio-economic and human behavioral information profile of malaria in Panchkhal village of Nepal so that a suitable control measures could be recommended in order to interrupt the malaria transmission. An effort to determine information on socio-economic and behavioral aspect of malaria has been proposed for the study for the reason that there is no information profile at present on socio-economic and behavioral aspects of malaria transmission with Nepal malaria control program. It is obvious that one of the important aspect of any health program is availability of update information through which planners or administrators could be able to understand the problems for program. In the control of malaria, selection of an appropriate intervention calls for requirement of adequate and relevant information on all aspects of malaria epidemiology. A malaria control measures could not be successful if planners do not have sufficient information about distribution and intensity of malaria in a malarious area. That type of information is inherently essential for the reason that malaria is the disease the distribution and intensity of which is determined by several factors and vary from one place to other. For the malaria control, no single measure could be

prescribed or any fixed type of control measures have been recommended. Decisions to launch interventions depends on local socio-economic aspects, behavior of people, environment, responsible vectors, availability of health services etc.

It is well recognized that socio-economic factors such as occupations, housing conditions, patterns of migration and labor force movements, and elements of human behavior such as treatment seeking, personal and family protection measures against mosquito nuisance and behavior related with maintenance of surrounding environment influence transmission and control. Therefore, these factors should be taken under consideration while selecting interventions, otherwise control measures may not be successful. This study has been prepared viewing the above mentioned problem and necessities. The study focuses on the need of a community profile on socio-economic and human behavioral aspects of malaria transmission in order to improve malaria control in Nepal.

Second chapter of this thesis is the essay part which discusses about the lack of information profile on the above aspects. It also discusses about the concept of prevention and control of malaria and tools of interventions. Similarly, it gives an overview of required information for the selection of control measures. It also gives a brief review of socio-economic and behavioral factors of malaria transmission. Finally, it gives a glance of global malaria problem, Nepal malaria situation, problem and constraints and conclusion for the study.

Third chapter is the proposal part of the study which gives an overview about the introduction of rationale and methodology used in the study. It introduces with the background of the study area and the malaria situation of the area. It also discusses about problem statements, relevance of the problem, purpose statement of the study and field of application of research results. In the methodology section discussion have been done about conceptual framework, objectives of the study, and study design. The proposed study will be cross-sectional survey with a qualitative approach. The technique for the collection of required and relevant information will be interviews with key informants, semi-structured interviews with household member, observation of houses and village area and review of available documents and service statistics. Guideline questionnaire for interview, document review guidelines and observation checklists have been prepared which are given in appendices. Information will be collected based on those guidelines. Finally, this chapter gives a plan of activities to complete the study, manpower and budgetary requirements, ethical issue and limitation of the study.

Data exercise is the fourth chapter of this thesis. A field observation as a part of data exercise was done in two villages of Kanchanaburi Province, Thailand to test the appropriateness of data collection techniques i.e., pre-test of observation checklist. Similarly, questionnaire guidelines for key informant interviews was also tested through interviews with key informants at the Office of Vector Borne Disease Control Region 5, Ministry of Public Health, Thailand with a Malaria Research

Officer and with an Epidemiologist. During data exercise the questionnaire are found sufficient to collect information though some changes have been done in questionnaire in order to refine it, make it more understandable to the interviewees and make it more able to gather data. The techniques used for data exercise are found appropriate in the study and one data collection technique, i.e., semi structured interview with house member has been added to get more accurate information.

Chapter five contains the presentation, made during the thesis examination. It includes those transparencies that used during presentation in front of examination committee. The annotated bibliography, appendices and other information are given in other sheets following to this chapter. Finally, it is expected that this study will yield a clear picture of the socio-economic and behavioral factors of malaria transmission in Panchkhal village of Nepal based upon which a malaria profile of that village could be developed. It is also hoped that Nepal Malaria Control Program will be benefited from the research results and central, regional and district level planners will use this profile. The outcome of the research results will be presented to the planners and administrators of Nepal Malaria Control Program. They are expected to apply research results in the selection of suitable anti-malaria intervention in that area and will improve the situation.