# MEDICAL EDUCATION

# The Use of the Medical Student in Research in Sudan

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Expansion in the health services throughout the country during the last decade was not specifically directed towards problem solving of diseases that cause high morbidity and mortality. Research is needed in the control or eradication of certain diseases and the promotion of the individuals health. It is also needed to prepare medical staff able to deal with the rapid growth in the field of medical sciences.<sup>1</sup>

The Department of Community Medicine, Faculty of Medicine, University of Khartoum launched a programme for the training of medical and postgraduate students in research.

The programme starts in the fourth year medical school to complete in the fifth year.

It is recommended that utilisation of the available resources of the different bodies working in the field of health should be grouped together, so that efficiency and effectiveness of these resources can yield better results.

Sudan is a developing country, the available resources for the health services are quite limited. Priority in health care is given to the following diseases that cause

great morbidity and or mortality. (Malaria, Schistosomiasis, tuberculosis, gastroenteritis of children, kala-azar, communicable eye diseases, malnutrition and anaemia).<sup>2</sup>

During the last decade, the main obstacles encountered in solving these health problems can be considered as follows:

- The expnasion in the health services throughout the country during the last decade was not planned specifically for the solution of these diseases, but mainly for satisfying the peoples demands rather than needs.
- The large land area of the country with the widely scattered low population density tends to minimise the effect done in the field of health.
- Inequality of the distribution of all cadres of health staff throughout the country. (concentration of health staff in big towns and migration abroad, developed urban and rural areas from sufficient medical personnel and efficacy of health services).

#### **Need for Research**

The country is now undergoing a rapid agricultural

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and industrial development. The socio-economic impact and industrial development, leads to rising demands and expectation in the population, especially in the area of health. These factors along with rapid growth of biomedical sciences, requires a systematic approach to health problems, which should be guided by scientific research.<sup>1,3</sup>

# Why Research

Research should provide answers to achieve the following objectives.

- 1. To control and/or eradicate diseases and promote the health of the individual.
- To prepare medical staff, to become community and environment oriented and able to practice their knowledge and skills in the diagnosis, management and control or prevention of diseases. 1.2.3
- 3. To prepare new categories of medical staff able to deal with problems using the recent advances in medical science.<sup>3</sup>

## How to carry out a research

The medical student is considered in the department of community medicine, Faculty of Medicine, University of Khartoum, as an instrument and tool of research. The means for preparing the medical student for this task are uniquely designed to satisfy the institutional objectives of the faculty of medicine.

The department of community medicine in seeking to fulfill its responsibilities for the achievement of the institutional objectives of the Faculty of Medicine, designed a curriculum (theoretical and applied) extending from the fourth year to the fifth year of the medical course, with the facility of extending to the sixth year.

In the fourth year all the students are engaged in a summer (country wide) training in the field. Groups of students accompanied by staff members of the faculty of medicine, travel to different parts of the country for three weeks of field visit and training.

The objectives of this country wide field training programme in summer are aimed at preparing the student to be able to identify and discuss the role of the individual, the role of the community in health promotion, disease spread and organisation, the effect of the physical, biological and social environment on health and disease pattern, the effect of the individual on the environment and the community, the effect of the community on individual and the environment and the effect of the environment on the individuals and the community.

In the fifth year the student selects the subject for his project, and starts working on it under the supervision of a department staff member. Cosupervisors from the faculty of medicine or Ministry of Health are invited to join in the project supervision, if such need for thier collaboration is required. The results and findings of the research study are submitted to the department in a form of a dissertation which is evaluated as part of the promotion examination. These dissertations are kept in the department for future reference and use. Unfortunately results of most of the health problems investigated and studied by the student, are not utilised or considered as health indicators in real practice although such studies provided valuable information based on rigorous research methods.

Experience in the department of community medicine, has shown that the fifth year medical student is well prepared and experienced to perform systemic research in the field of health in the Sudan.

As the state Ministry of Health and the regional Ministries of Health are crippled by the limited financial resources and/or the limited manpower for indepth investigation and search for indicators for health problems throughout the Sudan, a new approach should be followed to solving and overcoming this dilemma.<sup>3</sup>

In conclusion the following benefits can be achieved:

- 1. The students will be able to utilise the different available and scattered resources in the country.<sup>5</sup>
- 2. The health authorities in the country will be able to delinate and sort out health problems which can be systematically investigated and solved.
- 3. The link between the medical student, the health authorities and the community will be strengthened and well conceived.<sup>6</sup>

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