

Current Research in the Faculty of Medicine University of Colombo.

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The research projects being carried out in the different departments of the Colombo Medical Faculty are summarized in this article. A considerable amount of variation exists between the work carried out, although in every case the accent is on topics of local importance.

Several research projects are being carried out in the Department of Biochemistry on the constituents of the coconut, such as the biochemistry of the coconut and the extraction of proteins and enzymes from the coconut. Studies on medicinal plants reputed to be of value in the treatment of diabetic states, the enzymes released from heart muscle and the mode of action of cobra and viper venoms are also being carried out.

In the Department of Physiology studies on physiological functions in human beings and animals are being conducted. Abnormal bladder functions in patients with spinal cord disease, assessment of human nerve function using experimental techniques, the value of growth hormones in the treatment of dwarfism, visual defects in school children and the effect of tetanus toxin and herbal extracts on the transmission of nerve impulses are all research projects which are being carried out. In view of the emphasis laid on family planning methods, the long term effects of vasectomy (male sterilization method) are being studied. In the field of animal physiology, research into the toxic effects of chillies on animals and the spinal reflexes in cats and dogs are current projects. Acupuncture has been advocated for many ailments, and experiments are being conducted to assess the value of acupuncture in the treatment of bronchial asthma. An unusual and rare mental phenomenon in the nature of a human calculating machine is an interesting subject which is also being investigated.

Diseases caused by parasitic and microbial agents are of importance in Sri Lanka and the Parasitology and Microbiology departments are engaged in research on the incidence, mode of spread and control methods in malaria and filariasis. The malaria problem in the Killinochchi area is the special project which is on hand at present. This is linked with attempts to evolve a mode of in vitro culture of

of the malarial parasite. The prevalence of eye and genital tract infection caused by micro-organisms, the causative agents in infection of the upper respiratory passages and bowel diseases in children, and the problems associated with German measles form an important part of the programme. Malignant disease of the female genital tract, its probable cause and methods of early detection and diagnostic procedures for viral diseases affecting the genital organs are also being studied.

Research being carried out in the Department of Pathology is centred mainly on malignant disease — the incidence of malignancy in different organs, early diagnosis, correlation of clinical features and laboratory findings — with a view to recognizing the pattern of malignant disease in Sri Lanka and thereby attempt to control it. Another aspect of malignancy that is being studied is the incidence of malignant tumours associated with pregnancy and the factors which predispose to their occurrence. Chronic liver diseases and kidney diseases are also being studied.

The Department of Forensic Medicine is engaged in conducting research into School Health Education in developing countries and Appropriate Technology for Sri Lanka.

In the Department of Pharmacology most of the current research is directed towards the effect of drugs. Clinical trials of combination drug therapy in filariasis, mass treatment of worm infestation with a single dose of a drug followed by a combination of drugs, the effect of polpala on the kidney and its diuretic functions, studies on the concentration of anti-epileptic drugs in the blood of Sri Lankans and the cholesterol content of Sri Lanka fish are the projects receiving attention.

Research in the Department of Community Medicine is related to the health of the community and occupational health hazards, nutritional problems and mortality rates in the newborn and infants. The projects vary from studies on pesticides and contamination of food with such substances to their effect on workers exposed to them and the incidence of disease among workers in particular occupations.

Nutrition studies on adults and infants in relation to changing socio-economic conditions, the problem of heart disease in the community, mortality rates in newborn children in Sri Lanka and field research in Management Studies are part of the research programme.

In the Department of Medicine, research studies are being conducted into the pattern of asthmatic disease in Sri Lanka, the clinical and pathological features of kidney disease as seen here and the incidence of the Australia antigen in such cases and the interesting "irritable bowel" syndrome. Studies to establish norms for blood protein levels in Sri Lankans is another study being carried out.

The Department of Paediatrics is studying the

problems involved in the feeding of young children and perinatal mortality in Sri Lanka.

Psychiatric problems are assuming larger proportions in Sri Lanka and the research work in this field includes studies on the symptoms of depression in Sri Lankans, the incidence and causes related to attempted suicide among patients in the Colombo General Hospital, and behavioural problems in school children.

From the above account it will be evident that the current research in this Faculty is related to problems of topical interest and oriented to suit local needs and conditions in every instance.