COMMUNITY-BASED PHARMACOLOGY TEACHING

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Summary

The revised curriculum of Kathmandu University is student centred, problem based, integrated, community oriented, electives embodied and systematic. The Institute of Medicine, Kathmandu, Nepal conducts a one-month field placement for community diagnosis and health action. In Pharmacology, understanding the essential medicines concept, selecting personal drugs for common diseases and verifying the suitability of personal drugs in individual patients are important.

Many medical schools all over the world have started community-based education programmes. To ensure availability of essential drugs in primary health facilities, community drug programmes have been introduced in Nepal. Medical students should familiarize themselves with the working of the community drug programme and learn to audit prescribing practices using drug use indicators by visiting health facilities. They should develop a capacity for self-audit in their future practice.

Students should be oriented towards rural communities and problem-based pharmacotherapy teaching should be based on essential drug lists and standard treatment guidelines. Medicines use from a family perspective is important. These programmes may be integrated with those carried out by the department of community medicine.

Key words: Community drug programme, Drug use indicators, Essential drugs, Primary health care,

Kathmandu University has the mission to develop an awareness of the role of sciences and its application in the understanding of problems of contemporary society [1]. The curriculum for the undergraduate medical course (MBBS) is student centred, problem based, integrated, community oriented, electives embodied and systematic.

Community-based programme:

A community-based programme is one where the community plays an important role in determining its own needs and solving its own health problems, as well as assisting students to attain their educational objectives [2]. Students are advised to learn from the community what the community already knows about health, illness and survival. At the Institute of Medicine (IOM), Kathmandu there is a one-month field placement for Community diagnosis and health action [2[. The students live for a month in a village community and plan short-term micro-health projects which they carry out and evaluate with the support of the community members.

Teaching and learning of pharmacology:

In pharmacology, the students learn to choose and prescribe essential medicines rationally. Understanding the essential medicines concept, selecting personal or P drugs for common diseases, verifying the suitability of P-drugs for an individual patient and analyzing rationality of prescriptions using the World Health Organization (WHO)/International Network for Rational Use of Drugs (INRUD) drug use indicators are important practical exercises. In pharmacology and therapeutics, solving simple problems in therapeutics, prescribing appropriate drugs for a disease condition and delivering drug and disease-related information in a meaningful way to the patient are considered as key 'transferable skills' [3].

Community-based education programmes:

Recently a number of medical colleges have opened in Nepal [4[. The colleges admit students from Nepal, India, Sri Lanka and other countries for the MBBS course. Medical schools in many countries are switching over to community-based medical education programme [5,6]. At the UNITRA medical school in South Africa, there is an emphasis on patient-centred care, preventative medicine and communication skills [5[. Participation in community surveys and involvement in community projects are encouraged. In the United Kingdom, a medical school has introduced a community-based interprofessional education (IPE) program for medical, nursing and dental students [7]. The community-based IPE program offers an innovative and enjoyable learning experience. However, community placement was perceived as a 'low status' learning activity.

Health Services in Nepal:

In Nepal, there was a lack of coordination between the hospitals which provide curative services and the district public health offices which are responsible for health protection and promotion [8[. The health services were restructured and the district health office now provides curative, preventive and other services. The policy stresses on the development of a sub-health post (SHP) in each village development committee, one primary health centre (PHC) in each electoral constituency and a district-level hospital in

each district. To meet the shortage of essential drugs in primary health care facilities, community drug programmes (CDP) have been introduced [9]. These programmes ensure availability of essential medicines and improve patient attendance and satisfaction.

Medical students and primary health care:

Medical students as future primary care providers should be conversant with the mechanism of working of the CDP. Nepalese doctors will be key members of the committees involved in the management of health facilities and students from other countries can consider implementing similar schemes in their working areas or can fit into existing programmes. Students should visit SHPs, health posts (HPs) and PHCs and become familiar with the working of CDP on the ground.

Drug use indicators:

The revised curriculum of Kathmandu University emphasizes auditing of prescribing practices using the WHO/INRUD indicators. The core drug use indicators are divided into prescribing indicators, patient care indicators and facility indicators [10[. The prescribing indicators are based on the practices observed in a sample of clinical encounters taking place at outpatient health facilities. The encounters can be observed retrospectively from patient records or can be observed prospectively among a group of patients attending the clinic [10]. The patient care and facility indicators can only be studied prospectively at health facilities. The aim is to make students aware of these indicators and create in them a capacity for self audit in their future practice. The students can stay in the primary health facilities and get acquainted with their day-to-day working.

Orienting students to rural communities:

Medical students in Nepal come predominantly from urban backgrounds and the economically stronger sections of society. The self-financing students from other countries are from privileged backgrounds. Visits to rural areas, long stays and involvement in community health projects will serve as an introduction to rural life. Lack of doctors in rural areas is a major problem in South Asia and orienting medical students towards rural communities can be helpful.

Problem-based pharmacotherapy teaching:

Educating students through problem-based pharmacotherapy teaching has been suggested to improve the use of medicines [11]. Teaching about essential medicines and standard treatment guidelines (STGs) is important. In Nepal, the standard drug treatment schedule (SDTS) for health posts was first published in 1988 and was revised in 1993. In 1999, the SDTS was renamed as the Standard Treatment Schedule (STS). All medical students should be familiarized with the STS and should observe the working of the STS in primary care facilities. Copies of the National STGs and Essential drug lists should be available to all students.

Medicine use from a family perspective:

During the family studies in Community Medicine, the students can also learn about the medicine use pattern of the family. Self-medication by the family members and reasons for self-medication can be investigated. The beliefs and perceptions of the

community regarding different medicines are important as it can influence compliance with the prescribed course of treatment. The future doctors should also investigate the cost of prescribed medicines and of a course of treatment and its effect on the family finances. In a medical school, an initiative was undertaken to meet the learning needs of senior citizens and nursing students through a community-based exercise [12]. During family studies, medical students can be trained to serve as sources of drug information for families. This will provide the students with an opportunity to apply the knowledge learned in classrooms.

Sessions on community-based pharmacology learning can be considered for medical students. These programs can be integrated with the field visits, community projects and family studies carried out by the department of Community Medicine.

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