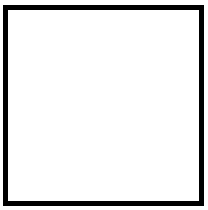

Rational drug use workshops for consumers in Nepal

Mohan P. Joshi[1]
Sharad Onta[2]
Balkrishna Khakurel[3]
Komal Bhattarai[4]

ABSTRACT

Between June 1997 and March 1999, a non-government organization called Resource Centre for Primary Health Care carried out a series of six workshops for consumers on issues related to drug use. The workshops, conducted at Kathmandu, Biratnagar, Birgunj, Gorkha, Mahendranagar and Dang, covered all the five Development Regions of Nepal and included a total of 168 participants representating school teachers, journalists, grass-root health workers, non-government organization staff, members of consumer groups, the general public, and drug retailers. The overall objective of the workshop series was to bring consumers and consumer interest groups together to discuss issues that help promote rational drug use. The specific objectives were to sensitize the target audience regarding: the problem of irrational drug use and unethical drug promotion; appropriate purchase and storage of medicines; correct use of medicines including those that require special techniques of use; responsible self-medication; and rights & responsibilities of consumers for appropriate drug use. The methods included interactive presentations by resource persons followed by extensive floor discussions and group works. Handouts, graphic presentations, real medicine samples, posters, bulletins and pamphlets were liberally used. Results of anonymous questionnaire surveys, done at the end of each workshop, indicated that the workshops were perceived to be useful and interesting by the vast majority of participants.

[1] MBBS, MSc, MD, Head, Department of Clinical Pharmacology, Maharajgunj Campus and Doctor In Charge, Drug Information Unit, TU Teaching Hospital, Institute of Medicine, PO Box 3578, Maharajgunj, Kathmandu, Nepal.

[2] MD, MPH, PhD, Lecturer, Department of Community Medicine and Family Health, Maharajgunj Campus, Institute of Medicine, PO Box 1524, Maharajgunj, Kathmandu, Nepal.

[3] MPharm, MSc, National Operations Officer, HMG/WHO Collaborative Essential Drugs Programme, WHO, UN Building, Pulchowk, Kathmandu and President, Nepal Pharmaceutical Association, PO Box 5061, Kathmandu, Nepal.

[4] PCL Pharm, BL, MDA, Publication Officer, Resource Centre for Primary Health Care, GPO Box 117, Kathmandu, Nepal.

Address for Correspondence: Resource Centre for Primary Health Care (RECPHEC), GPO Box 117, Kathmandu, Nepal. Tel: 977-1-243891, Fax: 977-1-225675. Email: Recphec@npl.healthnet.org

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INTRODUCTION

Nepal, an agrarian himalayan Kingdom, is situated between India and China. This landlocked country has a total area of 147,181 sq km and an estimated population of 21.1 million (1996).[1] Geographically, the country has mountains, hills and Terai (the flat plain). There are five Development Regions – Eastern, Central, Western, Mid-Western and Far-Western.

Nepal is a developing country with a low pace of development.[2] Adult literacy rate is 52.6%, with only 37.8% among women.[1] Health service facilities are grossly inadequate for the population. Nearly 60% of the households, as they perceive, do not have adequate access to health services. The proportion of households with inadequate access to health services in the Far West Region is as high as 75%.[2] These attributes have resulted in poor health status of the Nepalese people. This is reflected in low life expectancy at birth – 56 years,[3] high maternal mortality - 539 per 100,000 live births,[4] and high infant mortality - 82 per 1000 live births.[5] About 90% of the total population in Nepal still live in rural areas.[5]

Just as the health sector in general, the pharmaceutical sector is also weak in Nepal. Although many encouraging activities have been done to rationalize this sector, many pitfalls still exist in the production, supply, storage, stock control, dispensing, sale and distribution, quality control and use of drugs.[6-8]

The current annual consumption of drugs in Nepal is estimated to be worth over 3000 million Nepalese Rupees, with an estimated 28.5% rate of increase in consumption every year.[9] Domestic companies produce only about 20% of all the drugs consumed in the country; the rest 80% are imported.[8,10]

Tendencies towards less appropriate use of drugs and frequent use of antibiotics, including newer ones, have been observed.[6,11-16] Prescribing by brand names is widespread.[11,15,17] There are also problems of cross practice in terms of prescribing modern medicines by traditional practitioners and Ayurvedic medicines by doctors of modern medicine without adequate knowledge and training.[6,17]

Insufficient availability of medicines in the public sector is a chronic problem.[8,17] A large proportion of people lack regular access to essential drugs but the market is filled with many non-essential products.[8] Liquid vitamins and tonics represented the highest-selling items in 1991-92.[18] Self-medication is quite common in Nepal.[8,19] Prescription-only-medicines are often freely available over-the-counter. About 90% of drug sale occur through the private sector.[8] Due to lack of pharmacy-trained staff, drugs are mostly sold in the private shops by people who have done only a 72-hour orientation course for drug retailers and wholesalers.[8] There is evidence that many retail drug shops are not even registered with the Department of Drug Administration and that many unauthorized persons are selling drugs.[20] Unhealthy practices of substitution of drugs and bonus to drug retailers for selling particular brands exist.[7,9,10,21] Some retailers examine patients and prescribe drugs.[7] This is of concern because they are not trained for this job. There are also problems of selling unregistered products[10] and expired items.[21] Lack of adequate number of inspectors is hampering drug inspection

activities. Pharmaceutical companies carry out unregulated promotional activities. Effective mechanism to control drug prices is not yet in place. These realities indicate a lack of standards in pharmaceutical care and practices.

There are, however, many noteworthy efforts that have been made to rationalize the pharmaceutical sector in Nepal. The Drug Act was implemented in 1978, National Health Policy in 1991, and National Drug Policy in 1995. The National List of Essential Drugs[22] and Standard Treatment Schedule for Health Post and Sub-Health Posts[23] have been published and revised several times. Nepalese National Formulary has also been published recently.[24] Several cost-sharing and cost-recovery schemes have been tried.[8,25] Other noteworthy activities include efforts at improving drug logistics management, drug registration database, the capacity of Royal Drugs Research Laboratory, drug use in public health facilities, and drug information.[8] The Ministry of Health, Tribhuvan University Institute of Medicine, Kathmandu University, WHO, UNICEF, USAID, JICA, GTZ, Nippon Foundation, JICWELLS, USP, MSH, KFW, JSI, NPA, INRUD, RECPHEC, PHON, NCDA, GPAN, as well as others are contributing to these endeavors.

In the past very little work had been done in Nepal with regard to consumer education, but, encouragingly, some activities have happened in this area as well in recent years.[26-29] But they have not been regular and sufficiently comprehensive. Resource Centre for Primary Health Care (RECPHEC), a non-government organization devoted mainly to community health, realized this deficiency and took an initiative to carry out a series of rational drug use workshops for consumers and consumer interest groups from across the country.

METHODOLOGY

Planning Group and Facilitators

Right from the inception of this project, a small core group planned the activities and executed them. The group represented a collaborative effort of people working at drug regulatory authority of the government, university hospital and non-government organization (NGO). For all the six workshops, the core planning group consisted of two doctors (one clinical pharmacologist and one public health specialist), two pharmacists and one manager with several years of experience in running health-related NGOs. Before each workshop, the group met several times and worked on all components of logistics, including participant selection. The existing infra-structure of RECPHEC and past experience of this organization in conducting workshops made it easy for the group to carry out the activities without major difficulties.

The facilitators who helped in conducting the workshop sessions were mainly clinical pharmacologist, pharmacist, and public health specialist. In the workshop held in Kathmandu, an Indian doctor with several years of experience in advocacy for consumers and a journalist were also involved as facilitators.

Workshops and Participants

From June 1997 to March 1999 a total of six workshops were conducted. The first one was the national workshop held in Kathmandu. Of the subsequent five workshops, one each was held in the five Development Regions of Nepal (Figure 1). The title of all the workshops in the series was "Rational Drug Use in Nepal: Role of

Consumers". Each workshop was of two days duration.

Figure 1: Workshop sites in the five Development Regions of Nepal.

In each Regional Workshop, there were participants from several districts, mostly from within that Region (Table I). The present workshop series could provide exposure to participants from a total of 31 districts of the country. The majority of participants for each of these Regional Workshops were identified with the help of local organizations operating within that Region.

The total number of participants during the six workshops was 168, of which 116 were males and 52 females. They included NGO representatives (n=58), school teachers (n=39), consumer group representatives (n=22), drug traders (n=14), general public (n=13), grass-root health workers (n=12), and journalists (n=10).

Table I: Workshop venues, dates, and participants.

S. No	*Workshop Venue, Development Region, Workshop Dates*	*Total no. of Participants*	*Participants' districts*
1	Kathmandu (National Workshop) Central Region 16-17 June 1997	35 (Female 18, Male 17)	Banke, Bardia, Bhaktapur, Gorkha, Kathmandu, Lalitpur, Morang, Nawalparasi, Udayapur
2	Biratnagar Eastern Region 23-24 October 1997	26 (Female 6, Male 20)	Dhankuta, Jhapa, Morang, Saptari, Sunsari
3	Birgunj Central Region 26-27 October 1997	27 (Female 11, Male 16)	Bara, Makwanpur, Parsa, Rautahat
4	Gorkha Western Region 09-10 May 1998	29 (Female 5, Male 24)	Chitawan, Gorkha, Kaski, Lamjung, Nawalparasi, Parbat, Tanahu, Udayapur

5	Mahendranagar Far Western Region 11-12 November 1998	23 (Female 0, Male 23)	Baitadi, Bajura, Dadeldhura, Darchula, Doti, Kailali, Kanchanpur
6	Tulsipur, Dang Mid Western Region 18-19 March 1999	28 (Female 12, Male 16)	Banke, Bardia, Dang, Kathmandu, Pyuthan

Principal Workshop Themes

The topics included in the workshops were selected and decided on the basis of suggestions made by the members of the planning group and several other drug-related experts who were invited in the initial planning meetings. Some of the themes were also based on an already existing consumer education booklet in Nepali language.[29]

The main topics included in the workshops were:

- Basic facts about proper use of medicines (120 minutes)

  Basic do's and don'ts while using medicines; drug use during pregnancy and breast-feeding; drug-drug and drug-alcohol interactions; things to look for in medicine labels; things to remember while buying medicines; storing drugs properly; and communicating with health workers about the drugs prescribed.

- Correct use of some special dosage forms of medicines (120 minutes)

  Correct method of using eye drops, eye ointment, ear drops, nasal drops, inhalers, rectal cream, suppository, and vaginal cream/pessary.

- Self-medication (90 minutes)

  Consumer-related aspects of some drugs commonly used by the public for self-medication such as para-cetamol, anti-cold medicines, aspirin, ibuprofen, pheniramine, prometha-zine theoclate, antacids, and 'Jeevan Jal' (oral rehydration solution).

- Irrational and rational use of medicines in Nepal (120 minutes)

  Overview of the world drug situation; drug situation in Nepal including the existing pitfalls in the production, quality control, advertisement, storage, dispensing, sale-distribution and use of drugs; National Drug Policy; Drug Act of Nepal; efforts that have been made to improve drug use in Nepal; strengths and weaknesses of the existing drug regulatory system

- Ethics in drug use (90 minutes)

  Unethical practices of drug manu-facturers, traders and prescribers; ways to improve the situation

- Group work and presentation by participants (180 minutes)

  Rights and responsibilities of the public in drug use; self-medication; and packed convenience foods.

Workshop Process

The entire workshop was conducted in Nepali language. In each session, there was an interactive presentation by the resource person, which was followed by extensive floor discussion. Overhead projectors and board papers were extensively utilized during the presentations. Posters,

bulletins and information leaflets were distributed. Graphic presentations such as pictures and drawings were liberally used during most of the sessions. Real medicine samples, inhalers, applicators for vaginal or rectal medicines, and measuring cups/spoons were also used for practical demonstrations. In addition, for all the sessions handouts prepared in Nepali language were distributed to all the participants.

Group Work

In each workshop of this series, the second half of day two was devoted for group work. During this session the participants were divided into three working groups (A, B, & C) at all the six sites of this workshop series. In each of the six workshops, *Group A* worked on the topic "consumer's rights and responsibilities for rational drug use in Nepal", *Group B* on the topic "self-medication" and *Group C* on the topic "packed convenience food." Several potential topics for group work were identified by the planning group members and invited experts during the initial meetings before the start of the workshop series. Out of these several topics, the above-mentioned three topics were finally chosen by consensus for group work. Although the topic “packed convenience foods” is not directly relevant to the main theme of the series, it was included because of the emerging problem of their increased usage.[30] The planning group thought that contact with so many participants during these workshops offered a good opportunity to create sensitization about this emerging consumer issue.

At each workshop, the group work continued for one and a half-hour. During this time the group members discussed in a highly participatory manner and prepared write-ups for presentation. Following the group work, there was a 15-minute presentation by each group. Each presentation was followed by discussion for another 15 minutes.

The major issues, irrationalities and activities identified by the groups working on the respective topics during the six workshops of this series are given below.

Group A

Consumer's rights and responsibilities for rational drug use in Nepal

The group participants highlighted that consumers are generally ignorant of their rights and responsibilities regarding drug use. They opined that illiteracy and lack of access to right information are the major reasons for the existing situation.

Regarding the rights of consumers, the participants identified rights to:

- get information from government, manufacturers, health workers and drug sellers on issues such as price, quality, quantity, standards, and safe use
- know the qualification and expertise of the treating health workers
- have access to package inserts carrying information in easily understandable language
- have prescriptions that are written in legible handwritings
- have safety / security of health and life from unnecessary hazards related to drug, technologies and health practices
- have forums operating for protection of consumer rights

- have consumer pressure or lobby groups
- have access to qualified pharmacy counselors in hospitals and other health facilities
- get safe, effective and good quality medicines at reasonable price from health facilities
- have medicines dispensed with labels bearing information on price, expiry date and other instructions in Nepali language
- deny substituted medicines
- get receipt/bill of the medicines purchased
- have information through public media on drugs that are banned or restricted in the country
- have consumers' self-esteem respected by health workers
- choose services from among the options available and take informed decisions
- have quality health care available at village levels
- have standard pharmacy services, such as dispensing and counseling, delivered by qualified pharmacy personnel both in the public and private sectors
- receive compensation if damages occur through negligence in service or inappropriate therapy
- receive education on health and medicines at schools
- have essential drugs available in adequate quantities in both the public and private sectors.

With regard to the responsibilities of consumers, the main views of the participants were as follows:

- make the habit of reading information given in the medicine pack or label and try to comply with the instructions
- keep prescriptions and medical records safely for future reference and use
- get health-related information regularly
- communicate fully with health workers
- ask doctors and other health workers without any hesitation about the medicines prescribed
- check whether the medicine dispensed is right
- store and use medicines judiciously
- refrain from taking medicines without consulting qualified practitioners
- disseminate information on drugs to other people
- alert all parties related to drugs when there is a need
- remain vigilant about manufacture, import, sale-distribution, prescribing of wrong kinds of medicine
- try to help make health and treatment independent of different influencing factors
- ask for receipt/bill of the medicines purchased
- make the habit of staging consumer awareness campaigns against any events with negative consequences on public health
- work to decrease unethical advertise-ments
- act against those practicing medicine illegally
- assist in checking cross-border transport of drugs with abuse potential.

Regarding the future efforts by the group members, the following activities were envisaged:

- try to include topics on rational drug use during training/education programs for the public
- put pressure for price control
- disseminate knowledge and information gained about drugs to social workers, students, teachers, village communities and other social organizations
- facilitate direct interactions amongst manufacturers, distributors and consumers
- demand for proper distribution of health care facilities and health workers to rural communities based on population density
- create pressure to stop the sale-distribution of insecticides, food items and medicines from the same shop
- put pressure for proper enforcement of the related Acts
- encourage women towards drug awareness programs
- work to change patronizing attitude of health workers towards patients
- assist in reducing the practice of quackery
- plan and conduct health programs at community level
- work towards obtaining counseling services on drug therapy from trained personnel at health facilities
- demand for having prescriptions, labels and other counseling instructions in Nepali language
- work towards having regular consumer education programs on drug use.

Group B

Self-medication

The existing trend, as highlighted by the participants of group work, is that self-medication in urban setup is increasing and quite a sizable proportion of population are regularly self-medicating with drugs. Self-medication often occurs without regards to information need for safe use. Pain killers, antipyretics and cold preparations, vitamins/ tonics, and antibiotics are commonly used for self-medication.

Some of the irrationalities that have been seen are:

- use of medicines just on the basis of information gained from neighbors
- hoarding of drugs and later giving to others
- storing drugs improperly
- use of codeine-containing cough mixtures for psychological effect
- buying incomplete courses of medicines
- not paying attention to issues such as expiry date and quality of medicines.

Some of the contributing factors to irrational self-medication include:

- difficult access to health workers for consultation due to their limited number or high fee
- free availability of even prescription-only-medicines
- fear of disclosure of the disease by health workers to other people

- over-reliance on medicines for management of illnesses
- weak government policies and inade-quate administrative capabilities
- lack of interaction between health workers and consumers
- lack of quality service from health workers
- over-prescribing of drugs by health workers
- tendency to go for symptomatic relief
- promotion of vitamins for weak and lean persons
- misconception that medicines promote physical and mental growth
- free availability and use of traditional medicines
- glamour created by health workers and manufacturers for costly and new medicines
- misuse and abuse of therapeutic agents for recreational or psychological purposes
- irresponsible prescribing and sale-distribution of drugs
- exploitation of consumers by drug sellers
- negligence and lack of knowledge in consumers
- inability to pay the high fees for consulting doctors
- lack of time for health check up
- advertisements by drug companies
- push sale by drug dealers driven from profit motives.

Measures that help promote rational self-medication include:

- doing self-medication in a responsible manner for minor ailments only
- doing self-medication only for short time, not for prolonged periods
- using medicines only after gathering the required basic information from dependable sources
- self-motivated and active effort on the part of the public to obtain consumer-related information on drug use
- increased utilization of newspapers, TV, radio and other influential media for dissemination of information on responsible self-medication
- dispensing and proper counseling by adequately trained pharmacy personnel.

Regarding future activities of the group members, the following commitments were expressed:

- encourage and help health workers, drug sellers and consumers interact frequently
- pressurize drug sellers not to sell prescription-only-medicines without prescription
- encourage teachers to give information about drugs in their schools
- launch regular consumer education campaigns through different approaches
- monitor practices of health workers
- emphasize increased availability of health workers in health facilities
- call NGOs/INGOs to involve more and more in public education campaigns
- help in the effort to prevent infiltration of baned drugs into the country

- help control false and misleading advertisements
- help control sale-distribution of medicines from outlets other than registered pharmacies
- lobby for increased measures towards regulatory compliance and implementation of government policies
- put pressure on drug dealers to impart more information on drugs at the time of dispensing
- mobilize school and college students for promoting awareness
- publish leaflets, posters and other information materials for distribution to consumers
- demand for increased involvement of pharmacy personnel in sale-distribution of drugs
- demand for labeling of drugs and writing of prescriptions in Nepali language.

Group C

packed convenience food

The group members felt that the trend in using packed convenience foods is rapidly increasing. They also pointed out the problem of manufacturing such items without regard to standards and quality control.

The main reasons behind the popularity of packed convenience foods, as identified by the group members, are as follows:

- attractive presentation/packing, easy availability, easy preparation, diverse taste and flavors, easy to carry, long life
- saving of time
- imitation of what others do
- catchy/effective advertisement and other promotional tricks including incentive schemes
- perceived as symbol of social status and urban life-style, which is gradually expanding even towards rural communities
- acceptance as snacks, and sometimes even as main meals, for family members and also for guests
- especially targeted for children.

The negative consequences associated with the use of packed convenience foods, as reported by the group members, are:

- health hazards due to use of preservatives, colors, chemicals and other adulterants
- lack of quality standards
- laziness in people and poor knowledge of cooking
- increased cost
- erosion of traditional food habits and socio-cultural practices
- lack of information about contents, and other general use aspects
- use of expired and duplicate stuffs
- risk of malnutrition with use of only packed foods in excess.

The following suggestions were provided by the groups working on this topic:

- encouraging healthful and cost-effective eating practices that utilize local vegetables, legumes, fruits and other fresh foods

- utilizing mass media for dissemination of information on proper food habits
- organizing training workshops in districts and villages on healthful eating habits and negative impacts of packed conve-nience foods
- lobbying for and contribution towards effective implementation of Consumer Act
- lobbying for effective regulation on misleading advertisements of packed foods.

WORKSHOP EVALUATION BY THE PARTICIPANTS

Of the total 168 participants of the workshops, 143 participated in filling up the evaluation forms. Anonymity of the respondents was ensured. Analysis of the completed questionnaires showed that the workshops were perceived well by the responding participants.

Of the total 143 respondents, 135 (94%) indicated that the workshop was useful, including 98 (69%) who expressed that the workshop was very useful. Similarly, 133 (93%) respondents recorded that the workshop was in general interesting, including 64 (45%) who recorded it to be very interesting (Table II).

Table II: Evaluation of the workshops by participants

Center and Number of Responders / Questions Asked	Kathmandu (Responding participants = 25)	Biratnagar (Responding participants =26)	Birgunj (Responding participants =26)	Gorkha (Responding participants =24)	Mahendranagar (Responding participants =20)	Tulsipur, Dang (Responding participants = 22)	Total responding participants = 143
How useful?							
Very useful	14	19	20	16	13	16	98
Useful	11	5	6	5	4	6	37
Slightly useful	-	2	-	-	-	-	2
Not useful	-	-	-	-	-	-	-
No response	-	-	-	3	3	-	6
How interesting?							
Very interesting	6	9	21	8	9	11	64
Interesting	19	14	5	13	7	11	69
Slightly interesting	-	2	-	-	4	-	6
Not interesting	-	1	-	-	-	-	1
No response	-	-	-	3	-	-	3

Did the group discussion help the participants in sharing their feelings/ opinions?							
Helped well	20	24	25	14	19	21	123
Helped partly	1	-	1	1		-	3
Did not help	2	1	-	1	1	-	5
No response	2	1	-	8		1	12

In response to a question as to how much the group discussion helped the participants to express their ideas and opinions, 123 (86%) said that it helped them well. Three respondents said that it helped them partly and another five said it did not help. Twelve participants did not answer this question (Table II).

Regarding the style of presentation of the different sessions, the responses were: simple/clear (n=74 respondents); good/ interesting (n=36); not good (n=7). The remaining respondents did not give any feedback on the style of presentation.

Responses regarding the language used were as follows: simple/clear (n=90 respondents); satisfactory (n=28). The remaining respondents did not give any feedback on the language of presentation.

Forty-four respondents felt that the time given for the different sessions was adequate while another 60 commented that it was inadequate. The remaining respondents did not provide answer to this question.

Participants were asked as to which sessions they found to be particularly useful. The main sessions identified were: all sessions (n=50 respondents); basic facts about proper use of medicines (n=25); correct use of some special dosage forms of medicines (n=22); details of some popular drugs used by consumers for self-medication (n=21); and ethical issues related to medical and pharmaceutical practice (n=15).

Following are the topics that some of the participants thought to be useful but were not included in the workshop: role of manufacturers, traders and health workers in proper drug use; AIDS; hepatitis B; Nun-Chini-Paani (oral rehydration solution); drug and other substance abuse; traditional healer-related issues; naturopathy & household remedies; first aid; details of family planning methods; tuberculosis; mother and child health; immunization; sexually-transmitted diseases; acute respiratory infection; diarrheal diseases; adverse effects of drugs; misuse of diagnostic tests; highlights on *Bhalakusari*; Drug Information Network of Nepal; RECPHEC; classification of drugs; Ayurvedic medicines; relationship between drug sellers and consumers.

Suggestions provided by the participants for making this type of workshop more effective in future included the following:

(a) *Related to the conduct of sessions:*

- need to use more of different training methodologies such as role plays, illustrations and posters to increase effectiveness of workshop
- need to have more discussions/ interactions
- better to have more topics for group discussions
- need to have a break in between sessions
- need to include practical sessions
- useful to distribute the Drug Act
- need to improve the mode of presentations
- trainers not to conduct the sessions in hurry

(b) *Related to planning and management:*

- need to conduct such workshops in remote rural communities
- need to increase the duration of workshop
- need to do timely selection of, invitation to and communication with participants
- Government also to conduct such workshops
- need to have follow up after the workshop
- need to strengthen the management aspects of training
- need to involve more facilitators
- need to arrange better workshop halls in advance
- need to start the program on time
- provision of better allowances

c. *Related to participants:*

- need to include legal practitioners, political party representatives, house-wives, female journalists, laborers, farmers, intellectuals, patients, and drug manufacturers
- include participants from tribal and backward communities
- need to include prescribers and other health workers such as ANM, MCHW, and VHW
- increase number of female participants
- conduct such workshops within programs and organizations such as adult literacy programs, women's organizations, schools and colleges
- assist in enabling participants to organize similar workshops in their communities

DISCUSSION

Irrational drug use is a common problem.[31-39] Factors that contribute to this problem include unmindful prescribing behavior of physicians, irresponsible and aggressive promotional activities of pharmaceutical companies, unethical practices of traders, weak enforcement of drug rules and regulations and, last but not the least, ignorance on the part of consumers.

There are problems of misconceptions about and misuse of drugs by consumers.[36] Patients often do not know about the medicines they take.[38] Many people like to take medicines and have a notion that there is a pill for every ill.[34] A number of diseases are

self-limiting in nature and do not require drug treatment but throughout the world unnecessary drugs are used for such conditions. Self-care, including self-medication, is common. In many developing countries of the world more than 80% of all the drugs purchased by people are without a prescription.[40] On many occasions patients and the public demand multivitamins and tonics, which are usually wasteful. Many persons have got 'antibiotic mentality' and consider them to be 'wonder drugs'. Reports indicate that injections are popular and are often overused and unhygenically used.[41-43]

In developing countries, there is generally a gap in communication between the public who consume medicines and those who prescribe, dispense, administer and regulate drugs.[38,44] The situation is not different in Nepal. A study done in 1997 at Bir Hospital in Kathmandu indicated that there was inadequate communication from the prescribing doctor to the patient/caretaker. Patients (n=221) and caregivers in case of child patients (n=19) coming out of the out-patient departments of this hospital were interviewed and their prescriptions analyzed. Twenty two per cent of the patients/caregivers claimed that the prescribing doctors gave no verbal information whatsoever on the drugs prescribed.[45] In another study, 102 new patients who were prescribed anti-tuberculosis drugs were interviewed when they were coming out of health institution. The results showed that only 56% of these patients had correct knowledge of dosage of the drugs prescribed. The same study also showed that none of the drugs dispensed were labeled adequately.[46]

For improvement in drug use, efforts should be made on all fronts. Activities directed towards consumer awareness are an important component of such efforts. The Alma Ata Declaration states, "People have the right and duty to participate individually and collectively in the planning and implementation of their health care."

It is true that public education alone cannot put all things right, but it can certainly make a significant contribution towards achieving better drug use.[47] Adequate public information and education can have beneficial effects not only at individual level but also at community and national levels. At individual level it provides the consumers necessary knowledge and skills that help them make informed choices; behave as active partners in therapeutic process; make appropriate judgment about direct-to-the-consumer drug claims; and, above all, know the limitation of modern medicines and appreciate that there is no pill for every ill. At a more general level public education campaigns contribute towards achieving the objectives set in a country's national drug policy.[36,48]

Without consumer education as one of the integral and vital components, no national drug policy can achieve full success.[48] It is, therefore, important that all the concerned actors such as the govern-ment, health institutions, prescribers, consu-mer groups, national and international non-governmental organizations, development partners and pharmaceutical companies play supportive roles in creating public education activities on drug use and in forming networks.[36]

Coalitions and partnerships amongst the key players help in learning from each other's experiences and in maximizing the chances of success.

Long and continued commitment is necessary on the part of program implementers and funding agencies because public education campaigns may not yield quick and quantitatively measurable result.[36] Community education and empowerment is very often a long-term process.

Although the need for public education on drug use is now reflected in most of the national drug policy documents, generally low priorities are given when it comes to actual implementation. Such low priorities may be related to (1) doubts about the value of pubic education itself, (2) paternalistic attitudes of health professionals, who may think that the role of patients and public is to "comply" with the instructions, and (3) belief that commercial information provided by the drug industry adequately meets consumer needs. Opposition by vested interests may also make it difficult to gain support for activities. Moreover, there is a major problem of lack of availability of qualified personnel in the field of public education, particularly in developing countries.[36] Because of these reasons, the planning of activities as well as their implementation and evaluation may suffer from weaknesses. Such weaknesses in turn lead to further difficulties in obtaining support and funding for future activities. There is thus a need for much advocacy at national, regional and international level to increase the level of support for such activities. Operations research, development of effective training documents/tools, and technical assistance are other important requirements for the success of public education programs.[49]

In Nepal, too, very little had been done until the recent past regarding public education on how to use drugs wisely. Although slow, there is now a growing realization of the importance of such work and some activities have recently been initiated.[26-29] The present series of workshops by Resource Centre for Primary Health Care (RECPHEC) represents an additional effort in this important but largely unattended area.

RECPHEC is a non-profit making NGO concerned mainly with educational support and awareness-generating activities for front-line health workers and for consumers in Nepal in issues related to health.[50] Since its establishment in 1989, the Centre has been committed to activities promoting better drug use by the public. It is a member of Drug Information Network of Nepal (DINoN), which was established in 1996 with the assistance of USAID/USP/MSH.[51-54] RECPHEC's documentation and information cell has many drug information books and bulletins. The Centre has also produced a bibliography on drugs.[55] The Centre regularly publishes a bimonthly bulletin called Bhalakusari,[56] which has a 2-page write-up on rational drug use in every issue. It has also produced several educational materials such as posters and brochures on proper drug use. In 1992 RECPHEC conducted a training workshop for primary health workers on issues related to irrational and rational drug use in Nepal.[57] In the recent past, the Centre carried out an interaction program with journalists on issues related to drug use.[58] RECPHEC has also

recently initiated a once-a-week half-hour discussion program on health and drug use through an FM channel in Kathmandu. By using such a mix of channels, the Centre hopes to achieve a wide exposure to messages.

The present series of workshops by RECPHEC, conducted at all the five Development Regions of Nepal, included a total of 168 participants. Of the total 75 districts in the country, the workshop series could include participants from 31 districts. The vast majority of participants were persons who had some strategic advantage in terms of their potential for dissemination of information to other people in the community and society. The participants included representatives of NGOs and consumer associations, school teachers, front-line health workers, journalists, drug traders and the general public. NGOs are important partners for public education. The importance of consumer associations is increasingly being recognized; such associations are rapidly increasing not only in size and number but also in capacity and influence.[49] Similarly, there is a growing recognition of the importance of education of school children through school teachers. The value of journalists in creating public awareness and alertness is immense.[59] Front-line health workers, because of the nature of their job, are usually in a position to educate a large number of people in the community. Drug retailers sell drugs to consumers and it is important that they are properly sensitized about consumers' perspectives in drug use.

The facilitating factors of this workshop series were: availability of funds from international donor as well as from the organizing NGO itself; continued commit-ment of the members of core planning group; and the existing infrastructure and experience of RECPHEC. The constraining factors included difficulty in timely coordination and communication with local people at sites where the Regional Workshops were held and also lack of suitable halls and regular electricity supply at some sites.

The ultimate goal of communication and education is to bring about appropriate behaviour changes in the public. However, it does not happen as one step. It takes place along a continuum, of which the beginning lies in the creation of awareness.[36] The expected outcome of the present workshop series was creation of such desirable initial awareness. Awareness in itself is not sufficient to produce a positive behavior change. Nevertheless it is a fundamental prerequisite.

Public education activities need to be developed in the local context. They should use local language. The graphics and examples used should be culturally specific. The present workshop series considered these aspects carefully.

In the present workshop series, the second half of day two was allocated for group work and its presentation. Participants of the different groups suggested many useful ideas and expressed commitments for future activities.

Evaluation showed that the workshops were perceived to be interesting and useful by the vast majority of respondents. Many useful suggestions were also provided for improving

such workshops if carried out in future. The limitation of the evaluation was that it was only a process evaluation, not an impact evaluation. It is important that further evaluation is now carried out to assess the real impact of this workshop series.

A recent WHO/DAP survey report indicates that there is a major problem of under-reporting of activities related to public awareness on rational drug use[36] and points out the need for adequate emphasis on write-up and publication. The present workshop series is thus documented here with a view to sharing our experiences and exploring the possibility of partnership with other interested colleagues.

In conclusion, public education on rational drug use is essential for the success of any national drug policy. All key players need to support and contribute to this task. Non-government organizations can and should be an important partner in this endeavor. This is well reflected in the 1995 National Drug Policy of Nepal, which states, under Section 4.3.2, that non-government organizations will also be encouraged to participate in providing information about rational use of drugs to the public.[60] The present workshop series by RECPHEC represents an additional NGO-initiated effort in this direction in Nepal. It is important to continue follow up activities and start new interventions to achieve wider success in this endeavor.

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