

# EFFECTING ATTITUDINAL CHANGE TOWARDS RATIONAL DRUG USE

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## ABSTRACT

*Attitudes of 40 interns towards rational drug use (RDU) were assessed, using a standardized Likert type scale. The assessment was repeated after 4 months to evaluate the effect of usual working conditions of the hospital. After this period, the attitudes had slid towards negative side ( $p < 0.01$ ). At this point, an intervention in the form of a workshop was provided for half the group while other half served as control. A repeat assessment after another period of 4 months revealed that the attitudes of test group returned towards positive side ( $p < 0.01$ ) while control group maintained its negative attitudes.*

**Key words:** *Rational drug use, Attitudes, Medical Curriculum, Internship.*

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Attitudes have a very strong influence on the behavior of a person. In spite of having knowledge, the behavior may be unacceptable if the attitudes are unfavorable(1). This is specially so where desirability of an action is subject to variable interpretation. Rational drug use (RDU) is one such area where attitudes of the prescribing doctor can have a very significant effect on the quality of the prescription.

A lot of ways and means(2) have been proposed to promote rational drug use—however, many of these measures are coercive in nature and are likely to be only partially successful if at all, in promoting the concept of RDU. What we should strive for is to have a positive attitude towards RDU so that self imposed discipline replaces the need for any externally imposed measure.

Further, the earlier in life positive attitudes are formed, more enduring and effective they are likely to be(3). From this point of view, internship provides an ideal period to promote positive attitudes. In the present communication, attitudes of Interns towards RDU and effect of an intervention in modifying those attitudes is described.

## Material and Methods

The study material was formed by 40 interns of CMC Ludhiana. Their attitudes towards RDU were assessed at the beginning of internship using a prevalidated questionnaire. The questionnaire contained statements on various aspects of RDU including promotional activities of drug companies. The questionnaire had a reliability of 0.63 ( $p < 0.01$  at 8 df). The mean attitude scores were calculated using a differential scaling technique(4), on a 5 point scale, viz., Strongly agree, Agree, Can't say, Disagree and Strongly disagree. This was designated as Test I.

The questionnaire was readministered to them after they completed 4 months of internship (Test II) to assess the change in attitudes as would happen under normal working conditions (*e.g.*, effect of consultants, promotional material, *etc.*). The interns were then randomly allocated to 2 groups of 20 each. An intervention was provided to Group A in the form of a workshop (described below) while no-input was provided for Group B. After another period of 4 months, the questionnaire was administered once again to both the groups (Test III).

The results was statistically evaluated to find the significance of the differences. The format of questionnaire used for attitude assessment is detailed in the *Appendix*.

#### *Description of the Workshop*

The workshop was devised on accepted training principles(5) and included topics like concept of essential drugs and RDU, rational antibiotics use, drug combination preparations, tonics and vitamins, promotional strategies, psychological aspects of consumer behavior and critical analysis of promotional instruments. The topics were spread over 5 sessions of 3 hour each. Lecturing was kept to a minimum and more emphasis was laid on group discussions. Simulated and actual prescriptions were used for the purpose. Role playing excercises were used for topics like interaction with medical representatives. Where appropriate, consultants from other clinical disciplines were also involved in the process.

#### **Results**

The mean attitudes scores were  $3.68 \pm 1.23$  at Test I and  $2.84 \pm 0.83$  at Test II. The difference between the two tests is statistically significant ( $p < 0.05$ ). The mean scores on Test III were  $3.89 \pm 1.71$  for Group A

and  $2.82 \pm 1.13$  for Group B. This difference is also significant. However, the difference between scores of Test II and Test III for Group B ( $2.84 \pm 0.83$  vs  $2.82 \pm 1.13$ ) was not significant.

#### **Discussion**

No one can underestimate the importance of rational drug use for safe and effective practice of medicine. Till now, the subject has been rather neglected and it is only recently that the importance of RDU is being realized in undergraduate medical curriculum.

A medico enters practice during internship and it is during this time that he develops prescribing habits. These are influenced by many factors including the prescribing habits of his teachers and colleagues. In addition, this is the time when he starts coming in contact with medical representatives who try to change his prescribing habits using various techniques of salesmanship and at times by offering free samples, gifts and medical literature. It is thus logical to presume that our efforts to promote RDU should also begin at this period. The attitudes of young doctors also need to be developed positively so that they can analyse the information and check things for themselves. Once we are able to inculcate this attitude in young doctors, half of the battle against irrational drug use will be already won.

The results of attitude assessment show an interesting pattern. Test I, *i.e.*, the one administered at the beginning of internship showed that in general, interns had a positive attitude towards RDU. As they were exposed to the usual working of hospital, the attitudes slided towards negative side ( $3.68 \pm 1.23$  vs  $2.84 \pm 0.83$ ,  $p < 0.05$ ). Test III, which was given after 4 months of the

workshop further showed that attitudes had once again changed towards positive side ( $2.84 \pm 0.83$  vs  $3.89 \pm 1.71$ ,  $p < 0.05$ ). There was no significant change in the attitudes of group, which was not covered by the workshop and they continued to be negative. This suggests that by providing an intervention we were able to bring back the attitudes on the positive side at a level, which was higher than Test I also. The intervention was deliberately planned after 4 months of internship to study the influence of various factors. However, we are sure that if such a

programme is conducted at the beginning and reinforced mid way through, the results would be even better.

To conclude, we can state that the workshop was able to alter the attitudes of interns towards RDU. Considering the fact that RDU is not formally covered in medical curriculum, we strongly recommend that each medical college should formulate similar programmes to ensure that every doctor leaving the campus has a positive attitude towards rational drug use.

#### APPENDIX-Statements Used for Assessment of Attitudes

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1. Medical representatives (MRs) are a source of getting correct information about the new drugs.
  2. MRs influence doctors to prescribe many irrational drugs.
  3. MRs are helpful because they inform the doctors about the new drugs.
  4. MRs succeed in drug promotion because they give good gifts to the doctors.
  5. Doctors should cross check the information provided by the MRs.
  6. MRs misguide the doctors for their own benefit.
  7. MRs do a great service for updating doctors knowledge.
  8. Doctors need special training so that they are not misguided by the MRs.
  9. Drug promotion materials provided by the MRs are reliable.
  10. MRs are often the only source of drug information for the doctors.
  11. Doctors should listen to the MRs- but do what they think appropriate.
  12. Film shows arranged by drug companies are aimed at promoting their own drugs rather than imparting knowledge.
  13. MRs provide selective information and tend to hide negative information about their products.
  14. Drug advertisements in journals contain unjustifiable claims.
  15. MRs are encouraging doctors to give up their critical faculties.
  16. Doctors must judge for themselves the studies quoted by MRs in support of their products.
  17. Doctors uncritically accept the drug advertisements because drug companies use good advertising techniques.
  18. Much of the information which doctors regularly receive about drugs comes directly or indirectly from the pharmaceutical industry.
  19. If the offerings of gift and samples is legally stopped, the patient's health cost will decrease,
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$r = 0.63$ ;  $p < 0.01$  df 8.

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