



Knowledge, attitude and practice of community towards adverse drug reaction (pharmacovigilance) in Lucknow city

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ABSTRACT

Adverse drug reactions (ADR) are one of the leading causes of mortality and morbidity in India. Community are first to report and also in contact with patients around them, so assessing their knowledge, attitude and practice towards adverse drug reactions is very helpful. To assess knowledge, attitude and practices of community of Lucknow City towards adverse drug reactions (ADR). Cross-sectional study was conducted at Lucknow City during the period of June 2015 to November 2015 among 150 community members. We had interviewed them with questionnaire which included 8 questions related to knowledge, 6 questions related to attitude and 6 questions related to practice towards adverse drug reaction (ADR). Community members had poor knowledge and practice but good attitude towards adverse drug reactions (ADR). Our findings suggested the need for positive, evidence based educational and managerial interventions regularly to improve ADR reporting.

Key-words: Knowledge, Attitude, Practice, Adverse drug reactions



INTRODUCTION

At present one can't ignore adverse drug reactions (ADR) as one of the leading causes of morbidity and mortality [1, 2, 3] which leads to too much health care costs [4,5,6]. Each and every ADR can't be documented by the manufacturer via early safety studies, so it is very much essential to monitor ADR after marketing of drugs [3, 7]. The catastrophe of thalidomide adverse reaction has awakened many countries to establish Pharmacovigilance (PV) systems for detecting ADR [8]. According to World Health Organization (WHO) definition, an ADR is any noxious, unintended, and undesired effects of a drug, which occurs at doses used in humans for prophylaxis, diagnosis, or therapy [9]. Among various methods of detecting ADR, spontaneous reporting has contributed drastically in superior levels of pharmacovigilance in many countries [10, 11]. None reporting or under reporting of ADR is a key barrier for the evolution of pharmacovigilance programs [12]. Strong association between ADR reporting and knowledge, attitude and practice (KAP) of community pharmacists had been documented by various studies [3, 13, 14, 15, 16,17]. So improvement in the KAP of community is important for pharmacovigilance program in any country [18,19]. In the present study, we had selected community members as the study

population and the objective of the study was to determine the knowledge, attitude and practice of ADR.

MATERIAL AND METHOD

Cross-sectional study was conducted at Lucknow City during the period of June 2015 to November 2015. The study population was 150 community members. Selection of the study population was random but we had included only those who gave voluntary informed written consent. A well-structured validated and self-administered questionnaire was used to assess the knowledge, attitude and practice [20]. The questionnaire was pretested and verified for errors. [21, 22, 23] Questionnaire included 8 questions related to knowledge, 6 questions related to attitude and 6 questions related to practice towards adverse drug reaction (ADR). We had interviewed community members and collected the data. After that each participant had been given time of 20 minutes to fill the questionnaire and later they were analyzed

RESULTS

Out study population included 75.68% male and 24.32% female community members. There were 8 questions for assessment of **knowledge** of community members about ADR. Among 150 respondents, 47 (31.33%) were aware of

terminology ADR. Only 23 (15.33%) of the community members were aware of national pharmacovigilance centre and programs. Total 90 (60%) of community members were telling all herbal products were free from ADR. Similarly 38 (25.33%) of community members knew about location of nearest pharmacovigilance centre. Total 101 (67.33%) respondents believed that ADR should be reported only when they were grave and endanger to life.

There were 6 questions related to the attitude of community members towards ADR. Though the respondents had poor knowledge, they had good attitude towards ADR. Nearly more than two third of community members (83.35%) agreed that they should be involved in ADR reporting process.

There were 6 questions related to practice of community members towards ADR. As compared to good attitude of the respondents, they had poor practice. Only 57 (38%) of community members had reported any serious ADR during their occurrence. Total 38 (25.33%) had consulted the doctor to report to the manufacturer. Similarly only 51 (34%) of community members went for counselling of patients regarding ADR. All these results showed that community members had poor knowledge and practice but good attitude towards ADR.

DISCUSSION

ADR has significant role in morbidity and mortality of health set up with its associated monetary penalty [9, 24]. To recognize ADR causing drugs, many countries have initiated pharmacovigilance programs in the recent past. It is advisable for each country to establish their own pharmacovigilance programs because of individual variation in drug response, different prescription habits, regulatory body for drugs, drug availability etc. [9].

Under reporting of ADR is one of the serious problem for various pharmacovigilance programs which are good enough to improve drug use patterns [25]. It is essential to improve the knowledge, attitude and practices (KAP) of the community members towards ADR reporting and Pharmacovigilance for better improvement of reporting rate. Members have better knowledge about drugs and they are also close to patient in the society and thus they can contribute significantly in ADR reporting. Present study suggested that people had poor knowledge towards ADR reporting pharmacovigilance activity, which is comparable with other previous studies [15,26,27].

Present study showed that 82 (54.67%) community members don't know how to report ADR. Similar observations had been noted in China [28] where most participants had poor knowledge on how to report ADR. On the opposite side, various studies conducted at UK [29] and Australia [30] showed adequate knowledge among participants on how to report ADR. Rajesh, et al. [31] showed that educational support significantly increased knowledge, attitude and practice of pharmacovigilance among health care providers. These findings suggested need for awareness programs for the pharmacists about ADR reporting

Present study showed good attitude of the community members, though the knowledge was poor. The findings of our study were consistent with other studies of UK [13,30] where members showed positive attitude towards ADR reporting but different from the study done at New Zealand, where members showed negative attitude [32]. In the present study, practice towards ADR was also very poor.

Overall poor KAP score was noted during present study which suggested there is need to improve the ADR reporting. For the same certain steps like improvement in ADR reporting in future to reduce the incidence of clinical practice and reduction in health care costs. Promotion of patient self-reporting is also an important step [33, 34]. Patient self-reporting can play complimentary role to increase ADR reporting in developing country such as India. It was also opined that reporting of serious ADR should be prioritized. Reporting should be made easy and convenient by e mail or website, telephone, fax etc., which can improve speed and quality of reports.

Patient safety and better community is the prime goal which can be achieved by active and voluntary participation of community members in the pharmacovigilance program. However, pharmacovigilance center has to keep up positive attitude of the people, make them understand value of reporting in morbidity and mortality reduction by reporting and by updating them regarding pharmacovigilance news time to time.

CONCLUSION

We identified the knowledge, attitude and practice of the community members regarding ADR monitoring and pharmacovigilance. Overall the knowledge, attitude and practice scores were low. Our findings suggested the need for positive evidence based educational and managerial interventions regularly.

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