

Study on the Knowledge, Attitude And Practice of Adverse Drug Reaction (ADR) Reporting Among Intern Doctors in a Tertiary Care Hospital of Assam.

¹Dr Monami Das, ²Dr Polash Sonowal

¹Post Graduate trainee, Department of Pharmacology, Assam Medical College, Dibrugarh

²Post Graduate Trainee, Department of Pharmacology, Assam Medical College, Dibrugarh.

DOI: 10.29322/IJSRP.8.8.2018.p8091

<http://dx.doi.org/10.29322/IJSRP.8.8.2018.p8091>

Abstract:

Aims& Objective: The main objective of our study was to evaluate the Knowledge , Attitude and Practice on ADR reporting among the intern doctors in Assam Medical College & Hospital, Dibrugarh, a tertiary care hospital of Assam.

Materials & Method: A cross-sectional questionnaire based study was carried out among the intern doctors of Assam Medical College & Hospital, Dibrugarh. The questionnaire was designed to assess the Knowledge, attitude and practice of ADR reporting. The Intern doctors working in Assam Medical College during the study period were included in the study. A prior written informed consent was taken from the intern doctors. Only those who gave consent to participate were included in the study. The data of the completely filled up questionnaire was analyzed by using the Statistical Package of Social Sciences (SPSS) statistical software, version 16.

Results: 150 pretested questionnaire were distributed among the intern doctors and out of which 110 responded with completely filled up questionnaire. 23.63% of the intern doctors gave the correct definition on pharmacovigilance. Among the intern doctors, 76% of them have experienced adverse drug reaction in patients but only 13.63% have ever reported the adverse drug reaction to the Pharmacovigilance reporting centre indicating a poor practice. However 40.90% of the intern doctors were aware of the pharmacovigilance programme in India and 64.54% of them agreed that adverse drug reaction reporting is one of their professional obligation.

Conclusion: Our study demonstrated that though adverse drug reaction reporting is gradually increasing , however unfortunately the pace of ADR reporting is largely deficit. Hence steps should be taken to increase awareness of ADR reporting among them even in the undergraduate curriculum.

Keywords: Knowledge, Attitude, Practice, ADR, Pharmacovigilance.

INTRODUCTION: Adverse drug Reaction (ADR) is a global health problem affecting people of all ages leading to significant morbidity and mortality¹. According to the WHO, ADR is defined as “A response to a drug which is noxious and unintended, which occurs at doses normally used in man, for the prophylaxis, diagnosis, or therapy of disease, or for the modification of physiological functions”². In India the Pharmacovigilance programme was started in July 2010, with the primary objective of safeguarding people’s health and thereby reducing the global burden of disease³. The Pharmacovigilance Programme in India (PvPI) has established many ADR reporting centres throughout India for the successful reporting of the ADR by the health care professionals as well as the public but it is seen that the actual practice

of ADR reporting is largely deficit⁴. This could be due to the lack of knowledge, Attitude and practice of the health care workers towards the ADR reporting. Since the intern doctors would be the future health care professionals and would influence the society in many ways, hence this study was undertaken.

ADRs are regarded as a major threat to patient's health and the quality of life and thereby also increasing the health care cost considerably⁵. With the passage of time, there is a tremendous increase in the usage of drugs leading to several adverse drug reactions⁶. Hence a proper monitoring and reporting of the ADR is of utmost importance. In India all the health care professionals can report an ADR by filling up an ADR reporting form of the Central Drugs Standard Control Organization⁷. However they should know how to report and when to report an ADR to improve their ADR reporting⁸.

In India, the national Pharmacovigilance Programme of India (PvPI) was established by the Central Drugs Standard Control Organization (CDSCO) in 2004 to monitor ADRs and to provide drug safety reports to the WHO-ADR monitoring center in Uppsala, Sweden⁹. To coordinate ADR monitoring throughout India, the Drug Controller General of India (DCGI) and Indian Council of Medical Research (ICMR) have established many peripheral PV centers in various hospitals located in major Indian cities¹⁰. But despite of the constant endeavor of the PvPI, there is a lack in the spontaneous reporting of the ADRs¹¹. Such under reporting of the suspected ADRs by the health care professionals has become a major problem in India¹².

2. METHODOLOGY:

This cross sectional questionnaire based study was carried out among the intern doctors of Assam Medical College and Hospital who were working during the study period. The total number of intern doctors who participated in the study were hundred and ten. A prior written informed consent was obtained from the intern doctors before conducting the study. The aims and objectives of the study was explained to them before distributing the questionnaire. Any clarification needed in understanding the questionnaire was provided. The questionnaire consisted of four sections. The first section consisted of the demographic information of the participants , the second section consisted of questions on knowledge relate to ADR reporting, the third section consisted of questions related to the attitude towards ADR monitoring and finally the fourth section consisted of questions with the help of which practice of ADR reporting could be determined amongst the intern doctors. The data was collected and analysed using the statistical package for social sciences (SPSS).

3. RESULTS:

3.1 Demographic characteristics:

In the present study a total of 150 questionnaires were distributed among the intern doctors, out of which 110 responded with completely filled up questionnaire, giving a response rate of 73.33%. 78(70.90%) of the intern doctors were females and 32(29.1%) were males. The mean age of the intern doctors were 24.

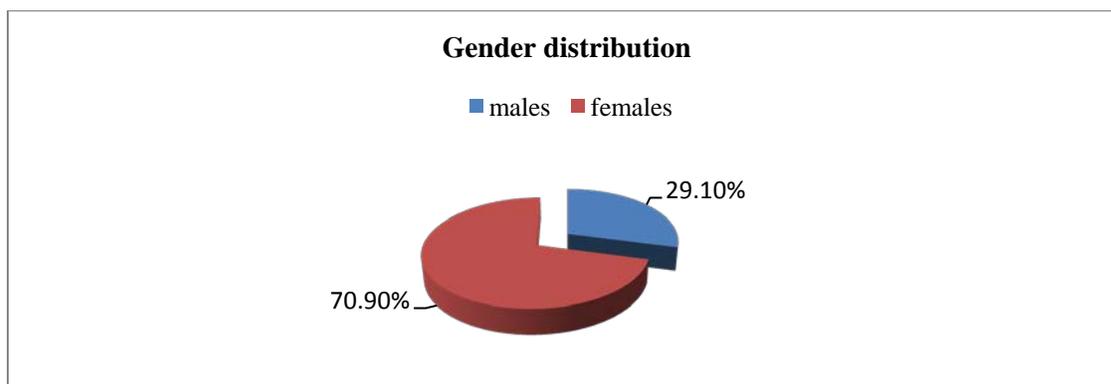


Figure 1 : Gender distribution

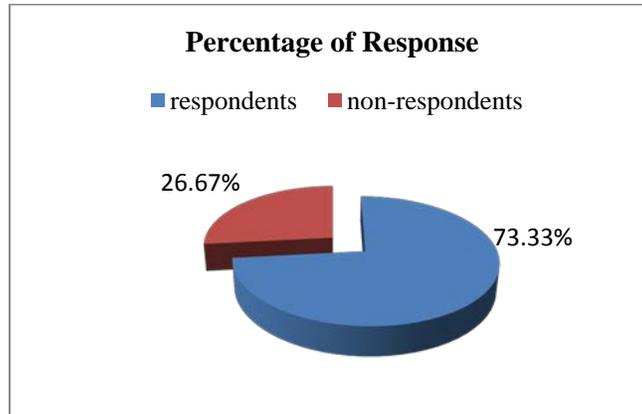


Figure 2: Percentage of response of the participants

3.2 Description of knowledge regarding ADR:

There were 10 questions on assessing the knowledge of ADR among the intern doctors. 26(23.63%) knew the term pharmacovigilance 34(30.90%) of the intern doctors were aware of an adverse drug reaction (ADR). However only 19(17.27%) knew about the different types of ADR respectively. 20 (18.18%) knew about the WHO Upassala Monitoring Centre (UMC), online database for adverse drug reaction reporting, while 45(40.90%) knew about the Pharmacovigilance Programme in India (PvPI). The majority of the respondents 69.09% gathered information about ADR through the internet, 22.71% from seminars, journals, 8.2% from text books and journals directly. Among the respondents 35(31.81%) believed that all the adverse drug reactions seen in the patients should be reported immediately.

Knowledge on Pharmacovigilance

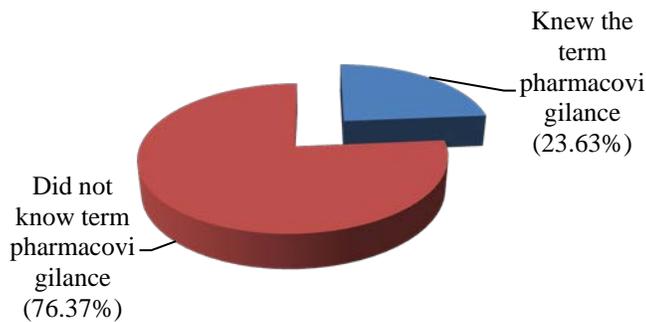


Figure 3: Respondents familiar with the term Pharmacovigilance

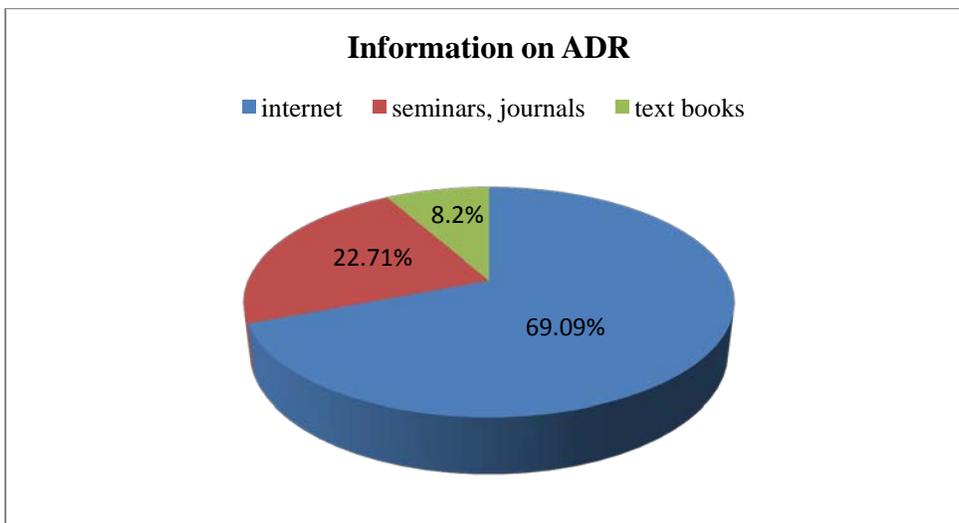


Figure 4: Information on ADR of the respondents

3.3 Description of attitude regarding ADR:

The majority of the respondents 78(70.90%) strongly agreed that ADR reporting is of utmost importance, 71(64.54%) strongly agreed that ADR reporting is one of their professional obligation and should be made mandatory. 68 (61.81%)) strongly agreed that by reporting an ADR patient's health can be safeguarded. However 70(63.63%) of the intern doctors were of the attitude that ADR reporting is time consuming and a tedious process. Overall most of the intern doctors 65.75% showed a positive attitude towards ADR reporting whereas only 34.25% showed a negative attitude.

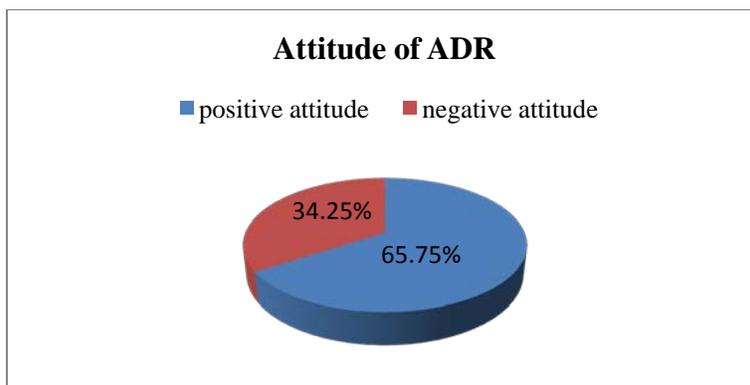


Figure 5: Attitude of the respondents towards ADR

3.4 Description of practice regarding ADR:

Despite having heard of the ADR reporting system, only 15(13.63%) out of 110 intern doctors have ever reported an ADR.. 96(87.27%) out of 110 intern doctors have never attended any seminars or CME regarding pharmacovigilance and ADR reporting indicating a lack of awareness among them. The main factors discouraging the respondents to report an ADR are did not know how to report an ADR(36.3%), donot think it important to report(33.4%), busy schedule(26.11%)

not knowing where to report(19.3%),inability to diagnose ADR(18%),managing patient was more important(13.63%),
lack of access to ADR reporting form(7.2%).

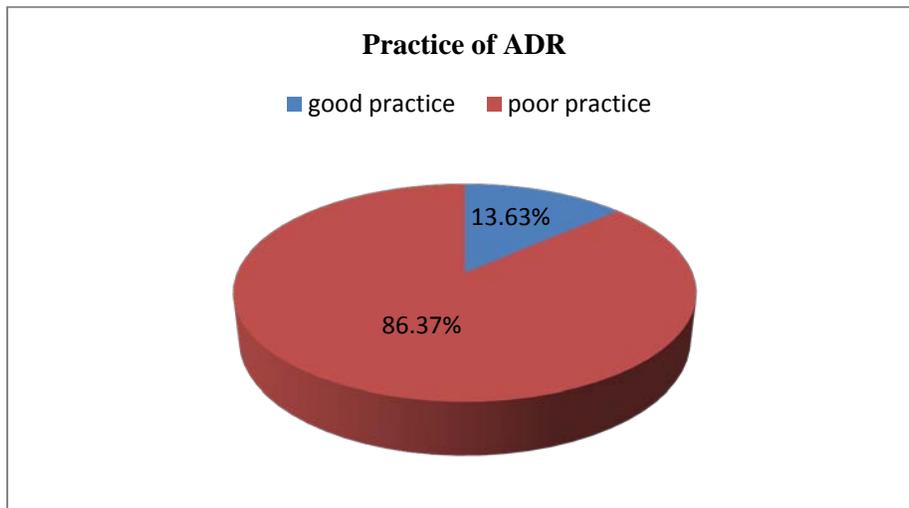


Figure 6: Practice of ADR reporting by the respondents

Factors discouraging the respondents to report an ADR:

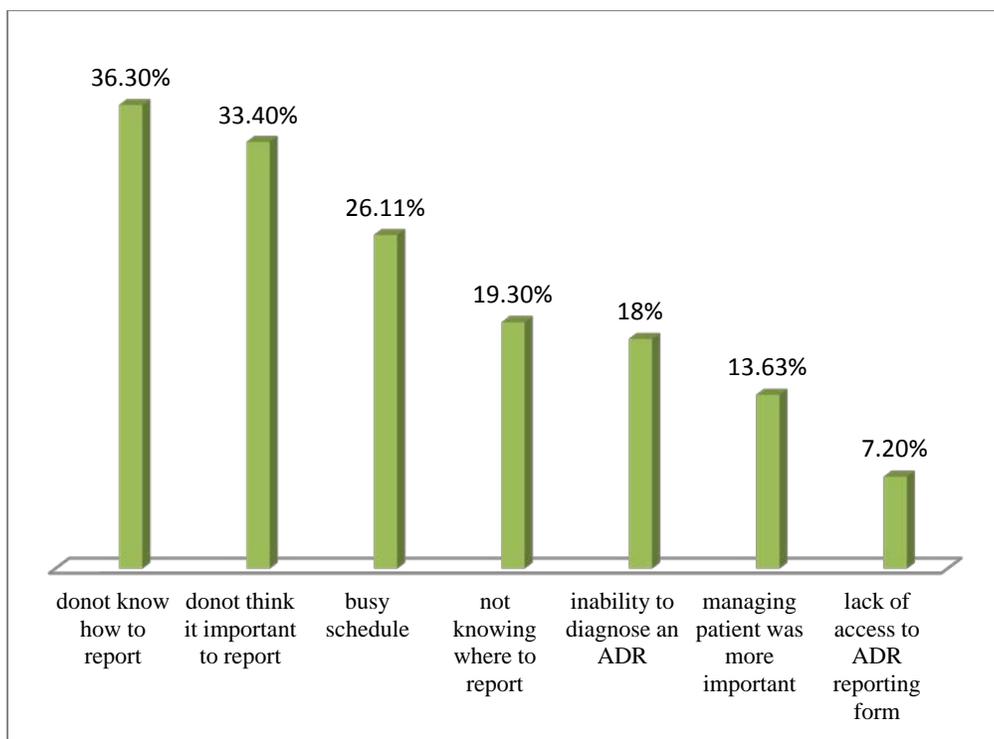


Figure 7: Factors discouraging ADR reporting

DISCUSSION:

Various studies have shown that underreporting of ADR exists as an inherent problem affecting people's health¹³. This study was therefore undertaken to evaluate the knowledge, attitude and practice of ADR reporting among the intern doctors. Our study showed that despite of having an adequate knowledge and attitude among the intern doctors, only 13.62% of them have ever reported an ADR, indicating a poor practice. Though most of the respondents strongly agreed that ADR will improve the healthcare of the patients, however it was seen that factors like unavailability of ADR reporting forms, contact numbers & addresses of report agencies, lack of knowledge of how to report an ADR, an lack of enough time to report an ADR etc were the major causes of the underreporting of ADR.

In conclusion, our study has shown that though the level of ADR reporting and the attitude towards it was adequate among the intern doctors, yet they showed a poor practice of ADR reporting. Hence it is of utmost importance to create awareness on ADR reporting among the intern doctors as they are the future health care professionals through continuous medical education (CME), seminars, by providing adequate training to the doctors on how to report an ADR and also including pharmacovigilance awareness programmes in the undergraduate curriculum.

REFERENCES:

1. Shubha Praveen *et al.* Adverse Drug Reaction reporting among medical and dental practitioners: a KAP study. Indian Journal of Medical Specialities 2013; 4(1):10-15.
2. Kumar G Chhabra *et al.* Knowledge, Attitude, and Practices regarding Pharmacovigilance and Adverse Drug Reaction reporting among Dental Students in a Teaching Hospital, Jodhpur, India: A Cross-sectional Study. The Journal of Contemporary Dental Practice, 2017;18(10):964-969.

3. Ahmad A *et al.* An evaluation of knowledge, attitude and practice of Indian pharmacists towards adverse drug reaction reporting : A pilot study. *Perspectives in clinical research.* 2013;4(4):204.
4. Bhati N *et al.* Assessment of KAP of Health Professionals Towards Adverse Drug Reactions (ADRs) and Pharmacovigilance in a Tertiary Hospital of North India. *International Journal of Advances in Medical Research (JAMR)* Vol. 1 No. 1, May 2014.
5. Kamtane *et al.* Knowledge, Attitude And Perception of Physicians Towards Adverse Drug Reaction (ADR) Reporting: A Pharmacoepidemiological Study. *Asian Journal of Pharmaceutical and Clinical Research,* 2012;5(3):210-214.
6. Lohit K *et al.* development and Validation of Questionnaire to assess the Knowledge, Attitude and Practice towards Adverse Drug Reactions reporting among Healthcare Professionals. *Journal of International Medicine and Dentistry.* 2016;3(2):63-72.
7. Reddy *et al.* Assessment of Knowledge, Attitude and Perception of Pharmacovigilance and Adverse Drug Reaction (ADR) Reporting among the Pharmacy Students in South India. *Journal of Pharmacy and Biological Sciences.* 2014;9(2):34-43.
8. Thomas TM *et al.* Knowledge, attitude and practice of adverse drug reaction reporting among doctors in a tertiary care centre in South India. *International Journal of Pharmacology and Clinical Sciences.* 2013;2(3):82-88.
9. Karande VB *et al.* Knowledge, attitude and practice of adverse drug reaction reporting among teaching and nonteaching hospital physicians. *International Journal of Basic & Clinical Pharmacology.* 2016;5(4):1337-1342.
10. Keerthana.R *et al.* Attitude and Practice of Adverse Drug Reaction Reporting Among Prescribers. *International Journal of Pharmacy & Technology.* 2017;9(4):6555-6562.
11. Ravinandan *et al.* Study of Knowledge, Attitude And Practice Of Pharmacist Towards Adverse Research. 2015;8(3):262-265.
12. Rathod K *et al.* Knowledge, attitude and practice of community pharmacists of Gujarat towards adverse drug reaction. *International Archives of Integrated Medicine.* 2014;1(1):18-25.
13. Radhakrishnan Rajesh *et al.* An Educational Intervention to assess Knowledge Attitude Practice of Pharmacovigilance among Health care professionals in a Indian tertiary care teaching hospital. *International Journal of Pharm tech Research.* 2011;3(2):678-692.