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**Knowledge, attitude and practice of undergraduate medical students towards pharmacovigilance in India: A meta-analysis of observational studies**

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**A**dverse drug reactions (ADRs) have captured the imagination of everyone associated with the health care because of the enormous threat it poses. Underreporting of ADR is a major cause of concern and a bottleneck in the successful implementation of pharmacovigilance (PV) program. The undergraduate medical students are tomorrow's doctor. Hence, adequate knowledge and positive attitude towards PV among them is essential to make pharmacovigilance program widespread and successful. Reviewing the literature can give a better perspective of their involvement in pharmacovigilance activities.

**Objectives:** To analyze the various knowledge, attitude and practice studies in pharmacovigilance (PV) and ADR reporting carried out among undergraduate medical students in India.

**Methods:** A systematic review was done through Pub Med, Scopus, and Google Scholar scientific databases. All relevant studies carried out between 2005 to 2017 to assess the knowledge, attitude, and practice (KAP) of PV and ADR reporting among undergraduate medical and dental students were included. Quantitative meta-analysis was performed and adjusted pooled estimate of proportion and log odds ratio was calculated by using inverse variance method.

**Results:** A total of 12 studies with a total population of 1466 were included in the final analysis. All together 56% (CI 0.61- 6.83), (OR:1.68 CI 0.41- 6.83) of the students responded correctly query "Definition of Pharmacovigilance". 43% (0.28 -0.60),(OR:0.58 CI 0.15- 2.19) of the students recognized ADR reporting as professional obligation whereas overall only 12 % (95 % CI 0.06-0.22)(OR:0.02 CI 0.00-0.08) of the students had received any kind of training in reporting ADR.

**Conclusion:** There was a lack of satisfactory knowledge regarding pharmacovigilance and ADR monitoring among the undergraduate medical students. They had exhibited poor attitude and practice towards ADR monitoring and PV. So, there should be an urgent need to feel the gap in KAP regarding the same by including it in the study curriculum. Apart from this Pharmacovigilance Program of India (PvPI) can organize continuous medical education (CME) activities for the undergraduate students to increase their participation in ADR reporting.