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Short Communication

Role of pharmacy teachers in promoting pharmacovigilance awareness among healthcare students

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ABSTRACT

Monitoring adverse drug reactions (ADRs) and guaranteeing drug safety depend heavily on pharmacovigilance (PV). In order to properly contribute to patient safety as future healthcare professionals, students need to be well-versed on PV principles and practices. Pharmacy instructors are in a unique position to raise healthcare students' understanding of pharmacovigilance and encourage an ADR reporting culture. This message highlights the critical role that educators play in bridging the gap between theoretical knowledge and real-world application by examining the tactics, difficulties, and results related to incorporating pharmacovigilance into pharmacy education.

1. Introduction

A key component of efficient healthcare delivery is the safe use of pharmaceuticals. However, there are major obstacles to drug safety due to the growing complexity of medication regimens and the increasing incidence of polypharmacy. Strong pharmacovigilance systems are necessary because adverse drug reactions (ADRs) continue to be a major cause of hospital admissions and mortality globally. The science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problems. Pharmacovigilance is a crucial component of patient safety, according to the World Health Organization (WHO). Despite its significance, healthcare students frequently lack enough knowledge of pharmacovigilance and ADR reporting procedures. This disparity emphasizes the necessity of focused educational initiatives, in which pharmacy instructors are essential. In order to raise knowledge of pharmacovigilance and develop future medical professionals who can make valuable contributions to drug safety systems, pharmacy educators can act as catalysts.[1,2]

1.1. The need for pharmacovigilance awareness

One major obstacle to efficient ADR reporting and medication safety monitoring is a lack of knowledge about pharmacovigilance. Research shows that pharmacovigilance ideas, reporting protocols, and the significance of ADR documentation are frequently not well understood by healthcare students, including pharmacy, medical, and nursing students. Underreporting, postponed interventions, and jeopardized patient safety can result from this disparity. As future specialists in medications, pharmacy students need to be prepared to recognize, report, and address drug-related issues. By integrating pharmacovigilance into the curriculum and encouraging a drug-safe culture among students, pharmacy teachers play a critical role in meeting this requirement.[3]

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2. Role of Pharmacy Teachers[4,5]

2.1. Curriculum integration

Pharmacovigilance courses must be created and implemented by pharmacology teachers as part of the curriculum. Core ideas including ADR categorization, causality evaluation, signal detection, and the regulatory framework for drug safety should all be covered in these sessions. To make sure that students comprehend the importance of pharmacovigilance to their professional practice, educators might incorporate it into already-existing pharmacology, clinical pharmacy, and therapeutics courses.

2.2. Experiential learning opportunities

By giving students practical learning opportunities, pharmacology instructors can raise students' understanding of pharmacovigilance. Students might be exposed to practical pharmacovigilance activities through partnerships with hospitals, regulatory bodies, and the pharmaceutical industry. Case-based discussions, simulated ADR reporting, and causality tests are examples of practical exercises that can help close the gap between theory and practice.

2.3. Emphasizing the importance of ADR reporting

Teaching students the value of ADR reporting is one of the main duties of pharmacy educators. Instructors can stress the importance of healthcare workers in ensuring patient safety and the repercussions of underreporting by using case studies and real-world examples. Students might be further inspired to engage in pharmacovigilance activities by promoting a non-punitive attitude to ADR reporting.

2.4. Promoting interdisciplinary collaboration

Because the field of pharmacovigilance is a multidisciplinary, healthcare professionals must work together. By planning workshops, seminars, and cooperative projects with students from the pharmaceutical, medical, and nursing fields, pharmacy instructors can encourage interdisciplinary learning. These programs encourage cooperation and help students understand that maintaining medication safety is a shared responsibility.

2.5. Research and publication

By incorporating students in projects pertaining to medication safety, ADR surveillance, and pharmacovigilance systems, pharmacy educators can encourage them to participate in pharmacovigilance research. Presenting findings at conferences or publishing student-led research in publications can deepen their understanding and promote involvement in the area.

2.6. Use of technology and digital tools

In today's pharmacovigilance education, utilizing technology is crucial. Students can be introduced to pharmacovigilance databases, mobile applications for medication safety monitoring, and ADR reporting software by pharmacy instructors. Students are better prepared for the digital age of pharmacovigilance when they are taught how to use these technologies.

3. Limitations & Challenges in Promoting Pharmacovigilance Awareness[4,5]

Pharmacy teachers play a crucial role in raising awareness of pharmacovigilance, although they confront a number of obstacles:

3.1. Limited curriculum time

It can be difficult to fit extra material into pharmacy programs that are already overly full. Pharmacovigilance themes must be balanced with other important courses taught by teachers.

3.2. Lack of trained faculty

The quality of instruction varies since some pharmacy educators lack the necessary pharmacovigilance training.

3.3. Perception of students

Pharmacovigilance may be seen by students as a theoretical topic that has little bearing on their future work. Real-world examples and creative teaching strategies are needed to change this view.

3.4. Resource limitations

Opportunities for experiential learning may be hampered by restricted access to pharmacovigilance resources, such as ADR databases and reporting systems.

3.5. Evaluation challenges

It is difficult and resource-intensive to gauge the long-term effects of pharmacovigilance training on professional practice and ADR reporting rates.

4. Outcomes and Impact[4,5]

Numerous studies have shown that efforts by pharmacy instructors to raise knowledge of pharmacovigilance have produced favorable results.

4.1. Higher ADR reporting rates

Research has linked educational initiatives run by pharmacy educators to higher ADR reporting rates among medical

practitioners and students.

4.2. Better knowledge and attitudes

Students who get pharmacovigilance training show improved knowledge and more favorable attitudes about the reporting of adverse drug reactions.

4.3. Improved patient safety culture

By including pharmacovigilance education, students are guaranteed to prioritize drug safety in their professional practice, fostering a culture of patient safety.

4.4. Contribution to national and international PV systems

By reporting adverse drug reactions and taking part in drug safety campaigns, educated pharmacy students can help to improve national pharmacovigilance systems.

5. Recommendations for Effective Pharmacovigilance Education [4,5]

The following suggestions should be taken into account by pharmacy teachers in order to optimize the effects of pharmacovigilance education:

5.1. Comprehensive curriculum design

Make pharmacovigilance a required part of pharmacy education, making sure it is incorporated into various levels and courses.

5.2. Faculty training programs

Offer pharmacy educators training courses to improve their teaching abilities and understanding of pharmacovigilance.

5.3. Active learning strategies

To successfully engage students, use active learning techniques including case studies, problem-based learning, and simulation activities.

5.4. Cooperation with regulatory authorities

Assist students with practical pharmacovigilance systems and procedures by collaborating with regulatory agencies.

5.5. Feedback and assessment

To pinpoint areas for improvement, evaluate the efficacy of pharmacovigilance education on a regular basis using learning outcomes and student feedback.

6. Conclusion

Healthcare students' awareness of pharmacovigilance is greatly increased by pharmacy instructors. Teachers may equip students to be active participants in drug safety systems by including pharmacovigilance into the curriculum, offering experiential learning opportunities, and encouraging multidisciplinary collaboration. Pharmacovigilance education will be much more effective if obstacles are addressed and creative teaching techniques are used. The ability of the healthcare workforce to guarantee medication safety and enhance patient outcomes will ultimately be strengthened by the work of pharmacy teachers.

7. Source of Funding

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8. Conflict of Interest

None.

References

1. WHO. Medication Safety in Polypharmacy. Available from: https://www.who.int/docs/default-source/patient-safety/who-uhc-sds-2019-11-eng.pdf.
2. The Importance of pharmacovigilance Safety Monitoring of medicinal products. Available from: https://iris.who.int/bitstream/handle/10665/42493/a75646.pdf.
3. García-Abeijon P, Costa C, Taracido M, Herdeiro MT, Torre C, Figueiras A, et al. Factors Associated with Underreporting of Adverse Drug Reactions by Health Care Professionals: A Systematic Review Update. *Drug Saf*. 2023;46(7):625–36.
4. Hadi MA, Neoh CF, Zin RM, Elrggal ME, Cheema E. Pharmacovigilance: pharmacists' perspective on spontaneous adverse drug reaction reporting. *Integr Pharm Res Pract*. 2017;6:91–8. doi:10.2147/IPRP.S105881.
5. & Beckmann J, Hagemann. Teaching Pharmacovigilance: the WHO-ISoP Core Elements of a Comprehensive Modular Curriculum. *Drug Saf*. 2014;37(10):743–59. doi:10.1007/s40264-014-0216-1.

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