International Journal of Risk & Safety in Medicine 27 (2015) 101–102
DOI 10.3233/JRS-150647
IOS Press

Letter to the Editor

Is there a need of dedicated training hours on Pharmacovigilance in Nursing Curriculum in India?

Sir,

Pharmacovigilance is presently an immensely growing concept in relation to patient safety. Pharmacovigilance Programme of India (PvPI) expects nurses to report ADRs; however data regarding awareness among nurses about PvPI and the reporting structure is scarce. No evidential data was found for nurses in eastern India. Moreover this vital aspect of patient safety is lacking in our nursing curriculum. Hence this study was conducted to assess the knowledge and attitude of nurses in a tertiary hospital in Kolkata, India regarding PvPI and to find out the effectiveness of a planned training program on their knowledge and attitude, with an aim to strengthen pharmacovigilance in India and ensure patient safety.

A prospective interventional study using dedicated hours of pharmacovigilance training was conducted to investigate the level of awareness regarding PvPI among 410 nurses from a tertiary care hospital in Kolkata using non-probability convenient sampling method. A questionnaire was developed to assess the knowledge, attitude and practice before and after a planned training program by a pre validated training module. Post-training, awareness about PVPI among the nurses increased from 34.39% to 89.78% ($P < 0.001$) and 71.86% of nurses also felt that pharmacovigilance should be incorporated into the nursing curriculum to improve ADR reporting in India ($P = 0.00082$).

In Nigeria, 42.9% of doctors and 35% of nurses had knowledge regarding ADR reporting [1] whereas in China, only 2.7% of doctors and 1.6% of nurses had correct knowledge of ADRs [2]. In India too, insufficient knowledge regarding ADR reporting poses a major threat to the successful implementation of PvPI. Ekman et al. in 2010 [3] in Sweden established significant role of nurses in pharmacovigilance which was emphasized by the present study.

The impact of training on awareness among nurses regarding pharmacovigilance was reflected in the results of the study. A study done by Rajesh et al. in south India, also showed positive impact of educational intervention on pharmacovigilance among physicians, pharmacists and nurses [4]. Hanafi et al. in Iran in 2012 [5] found that 91% of the nurses had never reported an ADR. Similarly, in our study 22.20% nurses had no idea about ADR reporting methods. In a study done in by Padmavathi et al. in 2012 [6], only 40.54% of nurses were found to know the broad meaning of pharmacovigilance and very few of them were aware about ADR reporting methods and centres. In our study too, 45.70% nurses were able to define pharmacovigilance pre training which increased to 90.73% post training hence proving a statistically significant difference.

Fifty-two percent of nurses felt that ADR reporting is a professional obligation in pre-test which improved to 90% in post test which was supported by Rajesh et al. [4]. Nurses' opinion regarding the need of ADR reporting shifted from 75.06% to 82.93% after the motivational training. But only 1.5% of them had exposure of ADR. Muraraiah et al. also reported similar findings [7]. This reflects the urgent need for motivating and training nurses on pharmacovigilance.

Factors that discourage ADR reporting by nurses in our hospital were mainly lack of knowledge (63.66%), lack of time (22.20%), no extra remuneration (9.27%) and lack of motivation (4.88%). Studies done by Li et al. [2], Muraraiah et al. [7] and Gupta [8] also reported lack of facilities and knowledge to be the main reasons for not reporting ADR.

This pilot study proved the urgent need of educating nurses in India on pharmacovigilance. Curriculum incorporation, continuous training and motivation as well as appreciation of ADR reporting incidents may help to improve the status of pharmacovigilance activities in India.

Dr. Subhrojyoti Bhowmick
Consultant Clinical Pharmacologist and Medical Superintendent, Peerless Hospitex Hospital and Research Center Limited, Kolkata – 700094, West Bengal, India
Tel.: +91 9830204863, E-mail: kolkataresearcher@gmail.com
Ms. Panchali Pal
Associate Professor, Peerless College of Nursing, Kolkata, India
Ms. Banani Chakraborty
Deputy Nursing Superintendent, Peerless Hospitex Hospital and Research Center Limited, Kolkata, India
Ms. Shreya Sikdar
Ex-Executive – Clinical Research, Peerless Hospitex Hospital and Research Center Limited, Kolkata, India
Ms. Sumitra Chakraborty
Principal, Peerless College of Nursing, Kolkata, India
Ms. Meena Banerjee
Chief Nursing Superintendent, Peerless Hospitex Hospital and Research Center Limited, Kolkata, India
Dr. A. Kundu
Guest Faculty, Calcutta University, College Street Campus, Kolkata, India

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