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Short Commentary

Nursing Leadership Role in Pharmacovigilance Needs Impetus

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The World Health Organization (WHO) definition of an adverse drug reaction (ADR), is "a noxious and unintended response of a drug, which occurs at a dose normally used in humans for prophylaxis, diagnosis, or therapy" [1]. ADRs are known to wreak serious effects on patients and put a strain on the resources of health services. Past documentation in the medical literature have unraveled that 7-11.2% of ADRs culminate in hospitalization [2-4]. The financial burden imposed by ADRs with consequent hospitalization was computed to be about Euro 11,357 per hospital bed per year [4]. The financial implication of ADRs in the United States has been put at 30 billion dollar per year [5]. The percentage of ADRs deemed to be avertible is roughly 80% [4]. Geriatric patients who have been prescribed multiple medications simultaneously due to long-standing afflictions are known to suffer from higher ADR rates [6]. A leading issue in detecting fresh and potential ADRs is under-declaring amidst healthcare providers. A systematic review has disclosed that only 6% of all ADRs are actually documented [7]. A perpetual issue is under-reporting of ADRs: variously ascribed to: inability or lack of knowledge (in terms of skill) to discern mild or moderate ADRs; fear of being interrogated; vacillation; hard-pressed for time; inefficient reporting processes; ambiguity that the adverse event is relatable to a prescription medication; and the commonly perceived impression that prescribed drugs are primarily safe and are devoid of adverse effects [8]. Nurses are in a distinctive position to oversee the patient's reactions to drugs and, thereupon, where needed, detect and document probable ADRs [9-11]. A recent study has documented that freshly graduated nurses were deficient in terms of possessing the requisite pharmacological knowledge and skills in detecting adverse drug effects [12]. Betterment of one's own capability in ADR declaring is a nurse's responsibility. Two studies [13,14] reported that nurses can commit their efforts quantitatively and qualitatively to ADR reporting and therefore, augment drug-related safety. It has been noted that the nurse's involvement in ADR declaring is still minimal in many nations like Portugal (0.55%), Sweden (12%) and Italy (2.6%) [15-17]. In a recent study from India it was noted that the average knowledge score of the respondents was 43% on ADR reporting and 16.5% on ADR burden, indicating that there is still much to be done to educate the nurses regarding ADR reporting [18]. ADR red-flagging and documenting is a mandatory precondition for efficiently and promptly tackling medication-associated issues [19], and ADR monitoring and reporting programmes determine and lessen avertible ADRs, while aiding professionals to combat ADRs skillfully [20].

Nurse-led monitoring and intervention has proven to be a convincing, economical, relatively safe and suitable approach for both service users and professionals, with promise for cost cutting and enhanced quality and safety of care [21]. Many observational studies and randomised controlled trials determined that meticulously planned nurse-led medicines' monitoring tackles issues pertinent to ADRs, promote the quality of prescribing and pain management and direct attention to patients' impressions and reports of adverse events [21-26]. The nurse-managed West Wales Adverse Drug Reaction (WWADR) Profiles were effectively employed by nurses within their usual work schedules [21,23,26,27]. They extend a rigorous and comprehensive check-list for possible medication-induced damage, the hazard of over-detection being surpassed by the identification of potentially manageable problems of ambiguous aetiology. Novel educational paradigms, like case histories of ADRs [28], can enhance knowledge of ADRs and antecedent hazard factors, like hypersusceptibility to "allergic" reactions, age, polypharmacy, and co-morbid renal, hepatic or cardiac afflictions, which could induce perturbations in drug distribution, metabolism and elimination [29,30]. Nurses' collaboration is a crucial modality to track ADRs, as they oversee vital data about patient care, wellbeing, and administration of medications and can identify (red-flag) and document ADRs. A workable modality could be that ADR details (organized into structured checklists) of conceivable ADRs put together by nurses may be set-up prior to scheduled appointments and brainstormed with prescribers and pharmacists [21]. Nurse leadership could steer strategic planning and policy development to revamp practice and enhance quality and safe use of healthcare through utilization of practice guidelines, alteration, elucidation and catering towards motivation for ADR documenting; and providing help and evaluation to nurses to bolster the monitoring and control of ADRs

[31]. Presently, all professionals, patients, their families, and friends are permitted to relay ADRs to the regulatory authorities. This modality opens up a window of opportunity for nurses to evolve and advance their roles [22]. Apellation of committed nurses to function as "ADR advocates" and connect with a stated prescriber or pharmacist, would boost overseeing and control of ADRs [32]. A number of ADRs could be obviated by improved medication monitoring. The best control of ADRs in healthcare systems necessitates nurses to bear professional authority to determine and detail problems and to alert the prescribers. Since nurses are the professionals most intricately dedicated to hands-on patient care and put in maximum contact time with patients, they are the ideal professionals to strategically red-flag ADRs [33]. Nurses should be supported to boost their engagement and bear responsibility for customarily determining ADRs [33]. However, to develop nurses for these roles necessitates educational backing and making provision for structured training, as provided by ADR monitoring profiles with standardized protocols [21,26]. Such strategies offer leadership possibilities to nurses, juxtaposing them as the pivotal professionals networking amongst patients and their pharmacists, prescribers to assure that ADRs are determined and resolved at the earliest [34,35]. Policy makers and nurse administrators have the occasion to develop, apply and edict structured medication monitoring systems.

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