MEASURING THE IMPACT OF HOSPITAL PHARMACIST PRESCRIPTION REVIEWING IN AN ONCOLOGY SETTING ON THE PHARMACOVIGILANCE REPORTING IN A COMPREHENSIVE CANCER CENTRE

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Background and importance The reporting of suspected adverse drug reactions (ADRs) in the National Pharmacovigilance Network (NPN) in our country can be done by different professionals (doctor, lawyer, pharmacist, nurse, health worker, etc) or by the patient themselves. However, historically, the physician is the person that most often intercepts and reports ADRs. The total number of ADRs reported in the NPN in Italy from 1 January 2015 to 31 January 2019 was 198 284, of which only 20 068 (10.10%) were reported by pharmacists.

Aim and objectives The aim of the study was to verify the impact of the hospital pharmacist on the number of ADR reports when involved in the review of prescriptions in a comprehensive cancer centre.

Material and methods Data on ADRs reported in our institute between 1 January 2015 and 31 January 2019 were extracted from the NPN and linked to an internal database in Access. The reports were analysed by age, gender, suspect drug, professionals reporting, apparatus involved and type of reaction.

Results The total number of reports was 600, of which 569 were reported by a hospital pharmacist, 30 by the physician, 1 by a pharmaceutical company and none by patients or nurses. The age range most represented was 46–56 years and 78.5% of were related to female patients. The ADRs reported most often by pharmacists were those affecting the haematopoietic and lymphatic systems (375 reports), followed by gastrointestinal disorders (104 reports) and nervous system disorders (70 reports).

The active ingredients with at least one report were 66; the first four actives were paclitaxel, cyclophosphamide, carboplatin and epirubicin. The first reaction among the haematopoietic and lymphatic systems report was neutropenia, while the most reported non-haematologic events were transaminitis and asthenia followed by nausea, skin toxicity, diarrhoea, mucositis and paraesthesia.

Conclusion and relevance The hospital pharmacist, when involved in the prescription review, reported ADRs 19 times more frequently than the physician. Because the hospital pharmacist in our country does not visit the patient but only has access to the doctor visit letter and to the laboratory parameters, the pharmacist’s reports are more often related to events detectable by blood examination.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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PHARMACEUTICAL INTERVENTIONS IN PARENTERAL NUTRITION FOR CRITICALLY ILL PATIENTS

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Background and importance Underreporting in oncology practice is a known phenomenon linked to the predictable toxicity of these drugs. Reporting indicators are often calculated on very large catchment areas and this limits the capacity for self-assessment of the performances in each hospital.

Aim and objectives The purpose of the study was to evaluate the feasibility of the underreporting rate index in a single cancer centre as a process indicator.

Material and methods Reports of adverse drug reactions (ADRs), from 1 January 2018 to 31 January 2019 in our institute (230), were collected in a database. The nine most active ingredients reported were subjected to an indepth analysis and their reporting rates were calculated using the formula (number of drug reports X/number of patients treated with drug X)×100 and (number of drug reports X/number of drug administrations X)×100. The expected value was calculated using the formula (expected frequency×number of patients treated with the drug X)/100, where the expected frequency was calculated by the summary of product characteristics. The rate of underreporting was calculated as a ratio (missing episodes/expected episodes) ×100. Only the results of paclitaxel (the most reported drug) are reported in this abstract as an example.

Results In the period January 2018 to January 2019, paclitaxel related ADRs were 51 in 412 patients treated (3293 total administrations). The reporting rate for the number of patients treated was 12.4% while the reporting rate by number of administrations was 1.5%. Severe neutropenia represented the main toxicity with an expected incidence of 39%, while the reported incidence was 6.41%.

The underreporting rate of ADRs related to paclitaxel were: neutropenia 82.17%, febrile neutropenia 97.22%, transaminitis 94.49%, thrombocytopenia 98.46% and diarrhoea 91.02%. Some gastrointestinal and musculoskeletal system reactions were very common reactions (≥1/10) but there were no reports.

Conclusion and relevance The indicator allowed better identification of the area of underreporting over time in a more precise way than the absolute number of reports. It is feasible, but when the expected frequency of the event decreases to below 10%, the indicator loses reliability for samples <1000 patients. It is therefore mainly a quantitative indicator of frequent events.

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