NP-018

BUILDING CAPACITY WITHIN A HEPATITIS C TREATMENT MODEL. THE VALIDATION PROCESS FOR A HEPATITIS C PRE-TREATMENT PHARMACIST ASSESSMENT COMPLEX INTERVENTION TOOLKIT

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Background and importance The pre-treatment pharmacist assessment is a complex intervention toolkit (CIT) which has been designed to support devolvement of Hepatitis C (HCV) treatment to primary care providers including pharmacists. It combines all aspects of pre-treatment assessment into a proforma to ensure optimum HCV treatment selection.

Aim and objectives To assess the validity of the PTPA via a matched cohort study.

Material and methods Pharmacists were invited to participate in this study to review HCV case vignettes. Participants were divided into two groups using a concealed randomisation method (Group A = CIT use; Group B = case review as per current standard practice). A random sample of anonymised cases were selected from the Irish HCV treatment registry using selected co-variables (eg, fibrosis stage). A sample size of 56 cases per group was calculated. The primary endpoint was selection of the optimum treatment regimen. Secondary endpoints included time to completion, detection of drug-drug interactions (DDIs) and patient interventions. Statistical analysis was completed to assess variation between groups.

Results A total of 56 cases were completed per group. CIT use was associated with selection of optimum HCV treatment in 92.9% of cases, compared with 60.7% of cases in group B ($p < 0.05$). DDI detection rates increased with CIT use (74.8% vs 47.1%; $p < 0.05$). CIT users proposed an average of 3.5 interventions per case versus 2 interventions per case in Group B. The CIT was associated with a longer median completion time (20 versus 15 minutes, however this difference was not statistically significant ($p = 0.06$)).

Conclusion and relevance The findings of this study confirm the effectiveness of the CIT. The potential for pharmacists working in all practice environments in Ireland to make a robust contribution to HCV treatment, can be supported using this CIT. This type of capacity building is key to upscaling the model of care to achieve elimination targets.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Zhou K, Fitzpatrick T, Walsh N, Kim JY, Chou R, Lackey M, *et al.* Interventions to optimise the care continuum for chronic viral hepatitis: a systematic review and meta-analyses. *The Lancet Infectious diseases* 2016.
2. Meyer JP, Moghimi Y, Marcus R, Lim JK, Litwin AH, Altice FL. Review: Evidence-based interventions to enhance assessment, treatment, and adherence in the chronic Hepatitis C care continuum. *International Journal of Drug Policy* 2015;**26**:922–35.
3. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ (Clinical research ed)*. 2008;**337**: a1655.
4. Campbell NC, Murray E, Darbyshire J, Emery J, Farmer A, Griffiths F, *et al.* Designing and evaluating complex interventions to improve health care. *BMJ (Clinical research ed)*. 2007;**334**(7591):455–9.

NP-019

DEVELOPMENT OF A CONVERSION FACTOR BETWEEN DEFINED DAILY DOSES OF ADULTS AND NEONATES

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Background and importance Absence of a standardised method to measure antimicrobial consumption in the neonatal population

Aim and objectives Establish a conversion factor that makes possible to relate the defined daily dose (DDD) of the adult population and the DDD of the neonatal population.

Materials and methods National, multicentre and retrospective study. It had the participation of 10 third-second level hospitals and a multidisciplinary team: hospital pharmacists, paediatricians, neonatologists and infectious disease experts.

First, after selecting the antimicrobials for study based on the literature and routine clinical practice, the Delphi methodology was used to agree on the recommended dose for its most common indication in the neonatal population. Two rounds of consultation with the group of experts were carried out. For those antimicrobials whose dose was not agreed upon, the dose established in Pediamecum was selected.

The weight and gestational age of the neonates (<1 month) admitted to 6 hospitals during 2018 were collected through the admission records or own records of the pharmacy or neonatology services of these hospitals. The mean, median, standard deviation and maximum and minimum of each of the variables were calculated.

Subsequently, the DDD in grams of each antimicrobial were calculated.

Finally, the conversion factor was obtained by comparing the DDD designed for neonates (DDDn) with the DDD validated by the WHO for adults (DDDa).

For the analysis of the results, the statistical package IBM SPSS Statistics version 19 was used.

Results 4820 neonates were selected. The mean weight was 2687 g(6080–440).

The conversion factor (DDDn/DDDa) of the parenterally administered antimicrobials were: amikacin (0.04), amoxicillin (0.03), amoxicillin-clavulanate (0.09), ampicillin (0.04), liposomal amphotericin B (0.38), azithromycin (0.05), aztreonam (0.06), cefazolin (0.04), cefepime (0.07), cefotaxime (0.07), ceftazidime (0.07), ceftriaxone (0.07), ciprofloxacin(0.05), erythromycin(0.13), fluconazole(0.08), gentamicin (0.04), imipenem-cilastatin (0.07), linezolid (0.07), meropenem (0.04), metronidazole (0.03), micafungin (0.05), penicillin G sodium (0.03), piperacillin-tazobactam (0.04), teicoplanin (0.04), and vancomycin (0.04)

Those obtained from oral antimicrobials were: amoxicillin (0.05), amoxicillin-clavulanate (0.08), azithromycin (0.09), cefadroxil (0.04), cefixime (0.05), ciprofloxacin (0.05), clindamycin

(0.03), cloxacillin (0.07), erythromycin (0.13), fluconazole (0.08), Fosfomycin (0.09), itraconazole (0.04), linezolid (0.07), metronidazole (0.04) and vancomycin (0.05).

Conclusion and relevance Analysing the demographic characteristics of the neonatal population, the DDD of the antimicrobial group can be standardised, this allows establishing a conversion factor with respect to the adult DDD. A new study to confirm the validity of designed neonatal DDD and hence the conversion factor between neonatal DDD and adult DDD is underway.

NP-020

ANTINEOPLASTIC AND OTHER HAZARDOUS DRUGS: RISK POTENTIAL AND EXPOSURE – LESS IS MORE!

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Background and importance Chemicals are subject to mandatory requirements for hazardous substances (GHS; Globally Harmonized System of Classification and Labelling of Chemicals). By contrast, references to measures to protect hospital staff from the hazardous aspects of drugs such as cancerogenicity, mutagenicity or reproductive toxicity (CMR) in the summaries of product characteristics (SPCs) are meagre; intuitive concepts for nurses in a hospital are scarce.

Aim and objectives The aim of this project was first to establish a concept, which assessed the hazards to staff while handling CMR-drugs and second to define appropriate measures based on this, which minimise the exposure to substances with CMR-potential.

Materials and methods To achieve this, an assessment of the intrinsic risk potential of the substances used therapeutically in

the hospital was conducted (1; 2). After this, the activities using the different dosage forms of CMR-drugs were evaluated and measures for exposure minimisation were specified accordingly.

Results The drugs with CMR-potential have been marked in the drug administration guides provided by the hospital pharmacy of the hospital pharmacy. Additionally, the activities, paired with the diverse dosage forms, have been classified in risk categories from 1 (highest) to 6 (lowest) (own classification; presented as pyramid and flow-chart).

Measures to minimise the risk for staff while handling CMR-drugs were specified according to the STOP principle: substitution, technical/organisational/personal protection measures. The latter are dependent on the classification of the 'dosage form/activity' in the risk categories determined by the hospital pharmacy.

Conclusion and relevance This procedure for the risk assessment of drugs with CMR-potential and the introduction of safety measures depending on the classification of dosage form/activity in risk categories results in a minimisation of the risk to staff while handling these drugs. The risk, which is per definition the product of the risk potential and exposure, tends towards zero with the introduced measures.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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1. IARC. Agents Classified by the IARC Monographs. volumes 1-123. [Online] <https://monographs.iarc.fr/list-of-classifications-volumes/>.
2. National Institute for Occupational Safety and Health (NIOSH). List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings. [Online] 2016. <https://www.cdc.gov/niosh/docs/2016-161/>.