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Letter to the Editor

A robust tool for recording pharmacist's interventions in a low-resource setting

Dear Editor,

Yailian et al., [1] describe the medical and pharmaceutical staff perspectives of pharmacist's interventions in a clinical rheumatology setting in France. Interventions were classified according to a classification system that denoted drug-related problems (e.g. untreated indication) and the types of intervention thereafter (e.g. drug switch). A scale was used that categorised the potential clinical impact as minor, significant, major, critical or catastrophic. On evaluating the scale, there was found to be agreement between the rheumatologist and pharmacist in terms of clinical relevance for about half the items rated. We were interested to read this article as we have recently piloted the introduction of an existing pharmacist's intervention tool previously reported on [2,3] in Namibia.

Like many sub-Saharan African countries, Namibia continues to struggle to combat the HIV and tuberculosis (TB) epidemics – among many other health challenges – with scant resources particularly in human capacity and expertise. Recent analysis of programmatic TB control in Namibia, for example, suggests that World Health Organization targets cannot be achieved through existing national strategy and recommends a better focus on preventive measures. [4] However, these challenges are likely to be resolved by increasing the quantity and quality of human resources for health through the first ever in-country training of medical and pharmacy practitioners beginning in 2010. This undergraduate level training includes a strong interprofessional element, early clinical exposure, and research focus. More recently, new postgraduate programmes have been introduced including clinical pharmacy training that is developing the role of the clinical pharmacist as part of the multidisciplinary team. [5] The training is work-based requiring enrolled pharmacists to be practicing in a clinical context. Student learning must be evidenced – in part – through portfolios and appropriate tools are provided to enable this process. For example, students are required to write up pharmaceutical care plans conducted, submit clinical case reviews, various work-based assessment forms, error and interventions logs. In order to improve recording of interventions and to encourage a culture of reporting and auditing interventions as part of quality improvement, we selected an intervention reporting tool in use that documents what intervention has taken place, classifies the intervention as either an error or medicines optimisation, and thereafter rates the potential impact of the intervention (low-moderate-high-life threatening/life saving). The tool provides for the recording of some basic information of the pharmacist and context, as well as a possible outcome of the intervention. This reporting tool was created in electronic form through a free mobile application developed for data recording (EpiCollect5). [6] The application was chosen for its robust nature allowing entries to be uploaded onto a central platform but without the requirement of internet access at the point of data entry; internet access cannot always be relied upon 'live' in Namibia. Most students enrolled on the clinical degree had smartphones that is necessary for data collection, and training was provided on use of the tool in face-to-face sessions as well as appropriate scenarios of medicines errors, medicines optimisation, and differentiating between them.

Data were audited after one year of use; thirteen individuals recorded 95 interventions representing about half of the enrolled student group. Interventions were categorised as roughly equal numbers of errors (50.5%) and optimisations (49.5%). The majority of interventions were scored as 'moderate' (56.8%) with 16 (16.8%) recorded as 'high' impact and two (2.1%) as potentially 'life changing'. An outcome was recorded for most of the interventions (98%), which was most commonly that a change was made by the doctor (62.1%%) or pharmacist (20.0%). This – in part – validates the intervention tool in that action was taken in response to interventions. To complement the audit data, we sought feedback from students and received a modest response ($N = 10$). However, all students reported that this tool could be used routinely in its current form. When asked about the value of the tool responses related to the ease of use and convenience of entering through a smartphone, that it advocated routine documentation of prescription screening and inter-professional relationships, improving patient care, service improvement and informing research future questions, valuing clinical pharmacist activities, and providing evidence of direct pharmacist-patient interaction. However, improvements to the tools were suggested to include a better description and categorization of different pharmacy interventions, that action over interventions could be shared to learn from the process, the registration process could be simplified, including the wider pharmacist population, to have all fields in the tool on one page (one screen), and to create a universal global tool that could be used internationally.

Learning from Yailian et al., [1] further work could focus on validating the tool from the medical clinicians perspective to better understand whether self-reported interventions are correctly categorised and rated. Also, the pilot can be extended for use among practicing pharmacists beyond the clinical trainees, and data derived should inform attention and training on the most common or most impactful errors or optimisation opportunities. The tool we have piloted to record and measure pharmacists interventions appears appropriate for the setting and was well reported on.

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