

DEFINING PRESCRIBING ERRORS IN GENERAL PRACTICE FOR THE HOSPITALS IN PAKISTAN

Abstract

Objectives: To reach consensus on a definition of prescribing errors and different scenarios representing prescribing error situations in general practice by a Pakistani panel of expert judges. Later this definition and scenarios will be used for evaluating prescribing practices in hospitals.

Study Design: The study was designed to be conducted in a Two-Round Delphi Technique though a questionnaire to be delivered hand-by-hand to each member of the panel.

Place and Duration of study: This was a prospective study conducted in Lahore and Bahawalpur from May 2006 to July 2006.

Material and Methods: A questionnaire in a two-round Delphi technique was followed to gauge consensus on a definition and 46 scenarios proposed to be representing prescribing error situations.

Results: Consensus was reached to agree upon a definition of prescribing errors, 33 (71.7%) scenarios were considered prescribing errors, 8 (17.4%) scenarios were excluded and 5 (10.9%) were partially agreed upon to be considered depending on the individual situation.

Conclusion: The Pakistani panel of expert judges agreed upon the definition and scenarios to be considered prescribing errors. The definition and scenarios can also be used for future research on prescribing errors in Pakistani hospitals.

INTRODUCTION

Medical error is considered a major killer even in developed countries. In the United States, it was placed among the top five killers [1]. Prescribing error is a sub-umbrella under medical error; accounts for errors occurring during the prescribing stage. The prescribing stage is the most error-susceptible stage as compared with administration, dispensing, and transcribing stages and prescribing errors are the most attributable errors among other medical errors [2]. Hospitalized patients are exposed to multiple drug treatment often involving potentially harmful drugs. The number of drugs marketed is substantial and super specialization of clinicians is increasing. Consequently, clinicians' knowledge and clinical experience with prescribed drugs is declining [3]. Situations considered to be prescribing errors were a hot debate subjects by prescribers and other healthcare professionals since long time. A few researchers have conducted studies to identify these situations, while those identified situations were subjects to critique and rejection by prescribers and other healthcare practitioners. Differentiation between generally practiced routine and error situation is still difficult in the absence of a generally accepted definition. A well-established widely accepted definition of prescribing errors in general practice is non-existent for Pakistan hospitals. Similarly in UK, the definition of prescribing error reached consensus recently in 2000, while a consensus on prescribing errors in pediatric practice was reached in 2005 [4,5].

Objectives

To reach consensus on a definition of prescribing errors and scenarios representing error situations by a Pakistani panel of expert judges composed of fifty members widely selected from multidisciplinary medical professionals. Later this definition and scenarios will be used as basis for the evaluation of prescribing practice and identification of prescribing errors in public hospitals in Pakistan.

METHODOLOGY

This was a prospective study conducted at various hospitals of Lahore and Bahawalpur from Ist May 2006 to 31th July 2006.

Definition and Scenarios

An extensive literature survey was followed to identify several definitions of prescribing errors and different scenarios representing them. The most inclusive definition of prescribing errors was developed by Dean et al and the same definition was reinforced by Ghaleb et al [4,5]. the definition states that "A clinically meaningful prescribing error occurs when, as a result of a prescribing decision or prescription writing process, there is an unintentional significant reduction in the probability of treatment being timely and effective or increase in the risk of harm when compared with generally accepted practice". Many situations when a prescribing error occurs could be represented by "scenarios", forty three scenarios were taken from previous studies which were conducted abroad, and never been subjected to a Pakistani panel of expert judges; the present study presented three more "scenarios" that were not included in any study before [6-12]. Some of these scenarios were rephrased to increase their comprehensibility by a panel composed of wide range of medical professionals.

Table-1: Demographic details of the 50 expert judges

No.	Profession	Grade	Specialty	Employer
1	Pharmacist	Senior	Clinical Service	Children Hospital
2	Pharmacist	Lecturer	Quality control	University
3	Pharmacist	Lecturer	Bioavailability	University
4	Pharmacist	Senior	Clinical Service	Cardiac Hospital
5	Pharmacist	Scholar	Pharmaceutical technology	University
6	Pharmacist	Lecturer & Researcher	Bioequivalence Studies	University
7	Pharmacist	Junior	Retail & marketing	Retail Pharmacy
8	Pharmacist	Senior	Retail pharmacist	Chain Pharmacy
9	Pharmacist	Lecturer	Bioavailability	University
10	Pharmacist	Senior	Hospital pharmacist	General Hospital
11	Pharmacist	Senior	Clinical service	Children Hospital
12	Pharmacist	Senior	Retail & marketing	Chain Pharmacy
13	Pharmacist	Senior	Retail & marketing	Chain Pharmacy
14	Pharmacist	Manager	Retail & marketing	Chain Pharmacy
15	Pharmacist	Lecturer & Researcher	Bioequivalence Studies	University
16	Pharmacist	Assistant professor	Pharmaceutics	University
17	Pharmacist	Senior	Clinical Service	Children Hospital
18	Pharmacist	Senior	Pharmacologist	Cardiac Hospital
19	Pharmacologist	Senior	Hospital pharmacist	Cardiac Hospital
20	Pharmacist	Lecturer	Bioavailability Studies	University
21	Pharmacologist	Assistant professor	Pharmacology	University
22	Risk manager	Lecturer	Risk management	University
23	Risk manager	Lecturer	Health safety	University
24	Nurse	Senior	Public health nursing	Nursing School
25	Nurse	Senior	Public health nursing	Nursing School
26	Nurse	Senior	Cardiology nursing	Nursing School
27	Nurse	Senior	Cardiology nursing	Nursing School
28	Nurse	Senior	Community health	Nursing School
29	Doctor	Assistant professor	Diabetes medicine	Teaching Hospital
30	Pharmacologist	Associate professor	Clinical pharmacology	Medical College
31	Doctor	Junior	Cardiology	Cardiac Hospital
32	Doctor	Senior registrar	Medicine/ cardiology	Cardiac Hospital
33	Doctor	Professor	Pediatrics	Teaching Hospital
34	Doctor	Assistant professor	Pediatrics	Teaching Hospital
35	Doctor	Assistant professor	ENT	Teaching Hospital
36	Doctor	Consultant	Gynecology	Teaching Hospital
37	Doctor	Head of department	Psychiatry	Teaching Hospital
38	Doctor	Senior	Urology	Teaching Hospital
39	Doctor	Consultant	Psychiatry	Teaching Hospital
40	Doctor	Senior registrar	Medicine	Teaching Hospital
41	Doctor	Senior registrar	Diabetes medicine	Teaching Hospital
42	Doctor	Head of department	Gynecology	Teaching Hospital