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The study official title:

A comparative prospective interventional study shows the impact of the clinical pharmacists' role in the emergency department in medication reconciliation upon patients' admission to reduce the medication discrepancies.

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Title

A comparative prospective interventional study shows the impact of the clinical pharmacists' role in the emergency department in medication reconciliation upon patients' admission to reduce the medication discrepancies.

Background:

Hospital admission is a process which carries a high risk of medication discrepancies. This usually occur due to lack of information about patients' drug history. So one of the important roles of the clinical pharmacists in the emergency department is medication reconciliation on admission to establish a complete medication history list .Many studies found that medication reconciliation will reduce medication errors and achieve significant clinical and economic outcomes.

Aim of the study:

The aim of the study is to calculate the total number of medication discrepancies recorded by the clinical pharmacists after medication reconciliation, to classify these medication discrepancies using Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation, to calculate the proportion of the patients detected with one or more medication discrepancies and to calculate the total number of complete medication history lists established after the clinical pharmacists medication reconciliation.

Patients and methods:

Approval of the medical ethics committee of Alexandria faculty of Medicine will be taken.

.No informed consent will be taken as medication reconciliation is considered to be an essential role of clinical pharmacists upon patients' admission.

It is comparative prospective interventional study during the period from 1 January 2020 to 29 February 2020 in emergency department in Alexandria Main University Hospital.

-Three/ four well trained emergency clinical pharmacists will start medication reconciliation on admission during the morning and evening shifts.

-A full diseases and preadmission medications history will be taken from the patients or the family through interviews, revising previous prescriptions and hospital records.

- Preadmission medication history will include medications trade names, doses, frequency and rout of administration and treatment duration and also will include the consumption of vitamins or herbs.

-The detection of medication discrepancies will be done through a comparison between each patient drug history already presented in the profile and drug history taken by the clinical pharmacists.

- Establishment of a complete medication history list in each patient profile and discuss it with the physicians to rearrange the treatment plan will be done.

Inclusion criteria:

1- Patients with one or more chronic disease / drug.

Exclusion criteria:

Patients who cannot communicate or have no family members.

Outcomes:

1- to calculate the total number of medication discrepancies recorded by the clinical pharmacists after medication reconciliation,

2- to classify the medication discrepancies using Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation.

3- to calculate the proportion of the patients detected with one or more medication discrepancies

4- to calculate the total number of complete medication history lists established after the clinical pharmacists medication reconciliation.

Results:

The results obtained in this study will be tabulated, correlated and statistically analyzed.

DISCUSSION

The results of this work will be analyzed and discussed in the view of the achievement of the aim, their significance and comparison with other studies carried out by other investigators.

Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation

Agency for Healthcare Research and Quality

Category	Description
A	No error, capacity to cause error
B	Error that did not reach the patient
C	Error that reached patient but unlikely to cause harm (omissions considered to reach patient)
D	Error that reached the patient and could have necessitated monitoring and/or intervention to preclude harm
E	Error that could have caused temporary harm
F	Error that could have caused temporary harm requiring initial or prolonged hospitalization
G	Error that could have resulted in permanent harm
H	Error that could have necessitated intervention to sustain life
I	Error that could have resulted in death

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