PP23

INCREASING PATIENT SAFETY THROUGH REDUCTION OF ACTUAL MEDICATION ERROR

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Selection of Opportunity for Improvement

Medication error is defined as any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient or consumer.

In 2019, a total of 31 medication errors were reported at Bagan Specialist Centre (BSC), of which 22 were documented by Pharmacy Services. The errors was committed by doctors, pharmacists, and nurses. The major cause identified were due to checking not been conducted as per requirement stated in the policy and procedure.

This potential adverse drug event poses a patient safety risk if it is not averted from the outset, hence this study aimed to reduce these errors in order to improve patient safety.

Key Measures for Improvement

The indicator used refers to the number of medication errors which includes errors in labelling, medication, strength, verification, quantity, and dose in Pharmacy Services. The target was set as 0 medication errors in the Pharmacy Services.

Process of Gathering Information

Data was collected through departmental data collection and incident reports. Data was analysed and validated. Audits were used to check on the compliance of intervention activities.

Analysis & Interpretation

Out of the 12 medication errors recorded till June 2019, the most common reported medication errors were wrong verification (4 cases) and wrong medication (2 cases). Strategies were implemented in July 2019 with monthly audits done throughout the year. The post-intervention evaluation was carried out throughout 2020 and 2021.

Strategies for Change

Pharmacy revised all drug descriptions in system and printed drug label by prioritizing brand name followed by ingredients:

BEFORE	AFTER
TRANEXAMIC ACID **100MG/1ML** INJECTION (TREN)	TRANEXAMIC ACID **500MG/5ML** INJECTION
DEXAMETHASONE **2MG/1ML (2ML/AMP)** INJECTION (DECAN)	DECAN **4MG/2ML** INJECTION (DEXAMETHASONE)

Pharmacy revised all drug description of injection by prioritizing the strength followed by total volume of injection:

BEFORE	AFTER
CLOPIDOGREL 75MG **(KOGREL)**	KOGREL 75MG **(CLOPIDOGREL)**
CLOPIDOGREL 75MG **(PLAVIX)**	PLAVIX 75MG **(CLOPIDOGREL)**

Strategies for Change (Cont'd):

Pharmacy developed EMR Verification Assessment for 150 items, OPD Accuracy Check Assessment for 100 items to all pharmacy staff. All pharmacy staff are passed this assessment without any error.

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ACCURACY CHECKING COMPETENCY ASSESSMENT RECORD

Name of Pharmacy Staff: _____ Employee Number: _____

Date	Time	Assessed by	Total of no of items checked	Number of errors spotted	Follow steps and sequence stated in policy (Y/N)	Other remarks

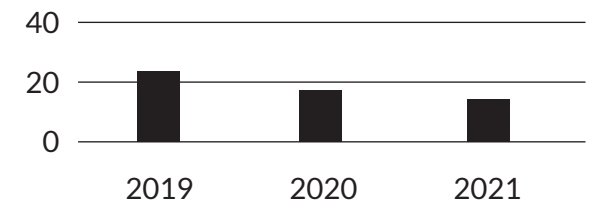
BSC/PHAR/003B/REV01(OCT 2019)

Effect of Change

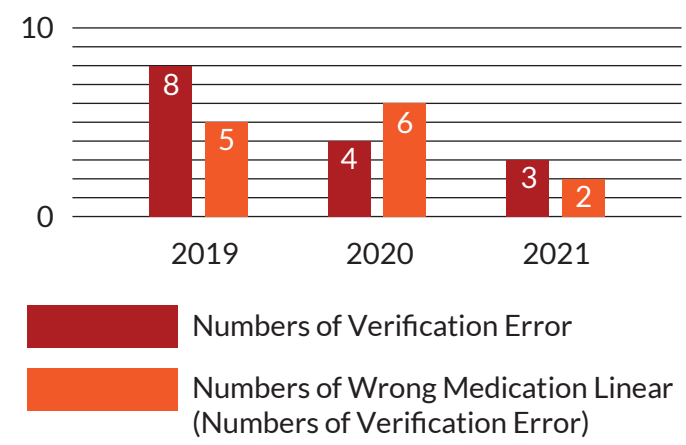
YEAR	ACTUAL MEDICATION ERROR
2019	22
2020	19
2021	12

Numbers of actual medication error reduced significantly and proven with the downward trend in Year 2021 compared to Year 2020 and 2019.

NO OF ACTUAL MEDICATION ERROR



NUMBERS OF VERIFICATION AND WRONG MEDICATION ERROR



The verification error and wrong medication showed a downward trend after the implementation of the interventions. Pharmacy Department successfully achieved 0 case actual medication error in certain months in year 2021.

The Next Step:

For further improvement, the interventions shall focus on the reducing human errors by enhancing the staff competency. Staffs will undergone accuracy checking competency by pharmacists and to continue monitor on the type of actual medication error and it causes, in order to appropriate address the preventive actions.

This poster was prepared for presentation at the 11th National QA Convention, 4-6 October 2022, Pulau Pinang.