

National Medication Utilization Evaluation Program in Saudi Arabia

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ABSTRACT

The national Medication Utilization Evaluation Program at the Ministry of health in Saudi Arabia with complimentary of physician order techniques is new system founded in the Kingdom of Saudi Arabia. The programming part of pharmacy strategic planning and national pharmacy practice at health care services at the Ministry of health. The Medication Utilization Evaluation program started with evidence-based medicine guidelines. The new project of Medication Utilization Evaluation physician order was one the outcome of the program. The program steps development through central committee by Pharmacy department at the most prominent hospital crossover regions in Saudi Arabia. The project is complementary of pharmaceutical concept and alerting system of misuse of medications and subsequences medication-related problems and avoids the unnecessary economic burden on the healthcare system. The new national Medication Utilization Evaluation project is new in Saudi Arabia, Gulf, and Middle East counties.

Keywords: Medication, Utilization, Evaluation, Ministry of health in Saudi Arabia, Ministry of Health, Saudi Arabia.

INTRODUCTION

The medication use evaluation program is very beneficial system of awareness of misuse of medications and economic burden of healthcare services in Saudi Arabia.^[1,2] The American of Health System Pharmacist (ASHP) and the *Society of Hospital Pharmacists of Australia* (SHPA) released the standard of medications use evaluation program.^[3,4] The General Administration of Pharmaceutical care implementation, the national medication use evaluation program stated in 2014 among several national pharmacy practice program at Ministry of Health institutions.^[5,6] The program followed the previous both international hospital societies. Several studies showed the percentage of implementation of medications use evaluation at Saudi Arabia. The program found at 60 % of hospitals, 41.4 % of clinical pharmacist activities, and only 36 % hospital had clinical pharmacist specialized in Medications use Evaluation.^[6,7] In addition, the DUE committee founded at 43.2 % hospital only, and 52.6 % of implementation of DUE standard.^[6,8] The new updating national medication use evaluation program with physician order techniques is seldom find in the Saudi Arabia, Gulf and Middle East countries. The goal of the mini-review to explore the National Medication Utilization Evaluation Program at Ministry of health in Saudi Arabia.

Medication Use Evaluation order in Saudi Arabia

The Medication Use Evaluation physician order form consisted of patient demographic data, the diagnosis, criteria's for indications, Critical (Process) Indicators, the general dosing for each

indications, the adjusting dose if, the monitoring parameters, the duration of therapy, time of administration of medications, and prescriber name and clinical pharmacist for follow up. The form may quickly convert to the electronic format in the computer pharmacy system as explored in appendix 1, appendix 2, appendix 3, and appendix 4. The forms missed the Complications standards, Critical Preventative/Responsive Management, and Outcome Measures. All missing points should cover through clinical pharmacist follow up drug therapy. Another method of physician order consisted of treatment of diseases as clinical pathway as explored in other references.

SWOT Analysis

The Strength, Weakness, Opportunities, and Threats (SWOT) analysis used for the project. The strong points of the project were, easy way to implement Medication Use Evaluation program, it is easy way to collect the data of Medication Use Evaluation, it is a clinical pathway of Medication Use Evaluation, educational tool for new staff; it fit the accreditation and requirements of national organizations of accreditation health care institutions, it is control of hospital formulary and prevents miss-use if medications. The forms not covered all medications, and it was not an electronic format, and not covered Complications standards, Critical Preventative/Responsive Management, and Outcome Measures. The opportunities points were part of accreditation requirements, and threads points were it not followed by healthcare staff, the new updating of the Medication Use Evaluation.

Implementations steps of Medication Use Evaluation Program at Ministry of Health Institutions

The central committee of medication use evaluation implemented the program through the following steps: Identification of drug use process of evaluation. Target areas for evaluation may include individual drugs, drug classes, or Therapeutic indication which includes: Drugs known to be associated with adverse event or poor patient outcome, Drug used in high risk patient, Drug with high-unit or high volume cost, Drugs or processes where its suboptimal use is likely to have negative effect on patient outcomes or system cost, and Adverse medication event as a sign of treatment. Assembling the medication use team, Approval of the study from director of pharmacy, Development of criteria and measurement instruments, Data collection (retrospective / concurrent / prospective), Evaluation with pre-determined criteria and analysis of the results, Reporting and having a feedback from those concerned, Designing and implementation of intervention strategies, and Reassessment and revision of problem. The general administration of pharmaceutical care at MOH sent a memo in early May 2014 to each region to started and implement the program

Implementations steps of Medication Use Evaluation physician Oder

It is evidence-based medication use evaluations at cross over of hospital at Ministry of Health in Kingdom of Saudi Arabia. The Medication Use Evaluation physician Oder based on evidence based on current and update literatures and American Food and Drug Administration

(FDA), and Saudi Food and Drug Authority (SFDA) (3)(4). It designed through Medication Use Evaluation committee and headed by the author. The committee consisted of head of national drug information center, drug information pharmacist or Medication Use Evaluation from each regions overall kingdom of Saudi Arabia. The first draft finished by the committee members and revised by the first author and other members. The committee made several discussion and final agreement. Each of the head of hospital pharmacy submit to the pharmacy and therapeutic for revision and final approval. The Medication Use Evaluation physician order implemented through several education session with hospital staff. The manual physician order sent to information technology to convert as electronic physicians order entry for each institution.

CONCLUSION

The National Medication Utilization Evaluation Program at Ministry of health in Saudi Arabia with new system of physician order is new Saudi Arabia and first services in Gulf and Middle East counties. It had several advantages for clinical and economic patients and health-care services outcomes in Kingdom of Saudi Arabia.

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None.

CONFLICT OF INTEREST

None.

ABBREVIATIONS

ASHP: American of Health System Pharmacist; **SHPA:** Society of Hospital Pharmacists of

Australia; **SWOT:** Strength, Weakness, Opportunities, and Threats; **KSA:** Kingdom of Saudi Arabia; **MOH:** Ministry of Health.

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