Research Policy: Narrative Review in Pharmacy Practice

Yousef Ahmed Alomi*, BSc. Pharm, MSc. Clin Pharm, BCPS, BCNSP, DiBA, CDE
Critical Care Clinical Pharmacists, TPN Clinical Pharmacist, Freelancer Business Planner, Content Editor, and Data Analyst, Riyadh, SAUDI ARABIA.

Amal Hassan Al-Najjar, BSc, MSc, Drug and Poison Information Center, Security Forces Hospitals, Riyadh, SAUDI ARABIA.

Maha Hussein Almadany, Bsc. Pharm.
Health Care Quality Management Professional Diploma (HCQM), Pharmacy Quality Department, King Salman bin Abdulaziz Medical City, Al Madina Al Monwarah, SAUDI ARABIA.

Abeer Hussin Almasoudi, Bsc. Pharm
Director, Administration of Research and Studies, Ministry of Health, Tabuk, SAUDI ARABIA.

Correspondence:
Dr. Yousef Ahmed Alomi, Bsc. Pharm, msc. Clin pharm, bcps, bCNSP, DiBA, CDE
Critical Care Clinical Pharmacists, TPN Clinical Pharmacist, Freelancer Business Planner, Content Editor and Data Analyst, P.O.BOX 100, Riyadh 11392, Riyadh, SAUDI ARABIA.

Phone no: +966 504417712
E-mail: yalomi@gmail.com

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ABSTRACT
Objectives: This study illustrates the Research policy of narrative review design in pharmacy practice as a new initiative in Saudi Arabia. **Methods:** This article is a narrative review of pharmacy research. Litterateur researched specific research policies and procedures in pharmacy practice using a variety of databases, including PubMed, Medline, and Google Scholar. The period covered for the search is from the 1960s to October 2021. The terms used are English and encompass systemic reviews, meta-analyses, narrative reviews, and guidelines. The search term includes all hospital and community pharmacy-related services. Besides, there are national and international guidelines for conducting general research in hospital and pharmacy practice. The committee of narrative review pharmacy research committee was formed. It consisted of numerous expert members, including clinical pharmacists, drug information pharmacists, and clinical research specialists. A member drafted the policy's guidelines, which were then reviewed and corrected by another member. The research specialist made the third revision. The topic emphasizes the Pharmacy Research policy of the narrative review model. **Results:** Pharmacy Research's policy on the narrative review model in pharmaceutical care services covered various topics, including the advantages and disadvantages of narrative review, the steps involved in conducting a drug review model, the steps involved in conducting disease drug therapy, and the steps involved in operating a new project in pharmacy practice. **Conclusion:** The narrative review policy for pharmacy research is a new initiative within pharmacy research. The narrative review pharmacy policy facilitates communication between healthcare professionals regarding recent drug reviews and disease-specific drug therapy. Besides, the pharmacy is embarking on a new endeavor with a healthcare organization. Therefore, all narrative review models in pharmacy research policy are highly recommended for the careers of Saudi Arabian pharmaceutical professionals.
Keywords: Research, Policy, Pharmacy, Narrative review, Drug review, Disease drug therapy, New project, Saudi Arabia.

INTRODUCTION

The litterateur on drugs is classified as primary, secondary, tertiary, and others.[1-2] The primary literature is divided into descriptive and evaluative studies. Case reports, clinical series, pharmaceutical practice, and program descriptions were included in the descriptive essays.[1-2] Review articles, practice guidelines, and textbooks comprised the tertiary litterateur. The other litterateur included a section devoted to expert communication. Narrative reviews can be conducted on publications, pharmaceutical practices, or programs.[1-2] The narrative review can be limited to disease alone, disease management, or drug evaluation. Numerous regulations discussed the distinction between the narrative review and systematic review or meta-analysis.[3-5] The narrative review is concise and summarises recent literature.[6-7] It benefits students and emerging healthcare professionals, including pharmacists. However, the narrative review's policy and procedures were not discussed. The authors are unfamiliar with previous literature concerning narrative review policies and procedures in pharmacy practice. The current project aims to declare narrative review policies and procedures in pharmaceutical care services.

MATERIALS AND METHODS

It's a narrative review of narrative review pharmacy research and related policy and procedures. Litterateur searched for specific topics related to narrative review in pharmacy research in various databases. That included PubMed, Medline, Academic Microsoft, and Google Scholar. The time frame for the search is from the 1960s until October 2021. The terms used were in English and included various research designs. For instance, systemic review, Meta-analysis, narrative review, and guidelines or regulations. In a search term, all hospital or community pharmacy services are included. Most pharmaceutical care services included inpatient, outpatient, ambulatory, extemporaneous preparation, repackaging units, satellite pharmacy, drug information center, clinical pharmacy, and pharmacy store services. Moreover, the National and international guidelines for general research in hospital and pharmacy practice as guided in writing the narrative review policy and procedures.[8-21] That's included) the Saudi Food and Drug Authority (SFDA),[9-10] the European Medicine Agency,[14] the American Society of Health-System Pharmacist (ASHP),[15] and the World Health Organization (WHO) guidelines,[12] and other literature.[22-25] The committee of pharmacy research emphasized narrative review was formed

and comprised numerous expert members. It includes clinical pharmacists, drug information pharmacists, and clinical research specialists. One member drafted the policy guidelines, another member reviewed and corrected them, and a research specialist revised them for the third time. The topic covered various areas, including Case reports, case series, Cross-sectional studies, Case-control studies, Cohort studies, and Randomized controlled trials (RCT). The current review emphasized narrative review policy and procedures. It was reported in accordance with the internationally adopted Appraisal of Guidelines, Research, and Evaluation (AGREE) standard.[26]

Search: **pharmacy research policy[Title/Abstract]** Filters: **Full text, Humans, English**

(("pharmacie"[All Fields] OR "pharmacies"[MeSH Terms] OR "pharmacies"[All Fields] OR "pharmacy"[MeSH Terms] OR "pharmacy"[All Fields] OR "pharmacy s"[All Fields]) AND "research policy"[Title/Abstract]) AND ((fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy: «pharmacie"[All Fields] OR "pharmacies"[MeSH Terms] OR "pharmacies"[All Fields] OR "pharmacy"[MeSH Terms] OR "pharmacy"[All Fields] OR "pharmacy's"[All Fields]

Search: **pharmaceutical research policy[Title/Abstract]** Filters: **Full text, Humans, English**

(("biopharmaceutics"[MeSH Terms] OR "biopharmaceutics"[All Fields] OR "pharmaceutic"[All Fields] OR "pharmaceutics"[All Fields] OR "pharmaceutical preparations"[MeSH Terms] OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields]) OR "pharmaceutical preparations"[All Fields] OR "pharmaceutical"[All Fields] OR "pharmaceuticals"[All Fields] OR "pharmaceuticals"[All Fields] OR "pharmaceutically"[All Fields]) AND "research policy"[Title/Abstract]) AND ((fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

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pharmaceutical: «biopharmaceutics»[MeSH Terms] OR "biopharmaceutics"[All Fields] OR "pharmaceutic"[All Fields] OR "pharmaceutics"[All Fields] OR "pharmaceutical preparations"[MeSH Terms] OR ("pharmaceutical"[All Fields] AND "preparations"[All Fields]) OR "pharmaceutical preparations"[All Fields] OR "pharmaceutical"[All Fields] OR "pharmaceuticals"[All Fields] OR "pharmaceutical's"[All Fields] OR "pharmaceutically"[All Fields]

Search: **investigational drug policy[Title/Abstract]** Filters: **Full text, Humans, English**

("investigational"[All Fields] AND "drug policy"[Title/Abstract]) AND ((fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **clinical trial policy[Title/Abstract]** Filters: **Full text, Humans, English**

("clinical trial policy"[Title/Abstract]) AND ((fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **narrative review policy[Title/Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

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narrative: «narration»[MeSH Terms] OR "narration"[All Fields] OR "narrative"[All Fields] OR "narratives"[All Fields] OR "narrative's"[All Fields] OR "narratively"[All Fields] OR "narrativity"[All Fields]

Search: **review policy[Title/Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

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Search: **narrative review procedure[Title/Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

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Search: **pharmacy narrative review[Title]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

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Translations

pharmacy:«pharmacie"[All Fields] OR "pharmacies"[MeSH Terms] OR "pharmacies"[All Fields] OR "pharmacy"[MeSH Terms] OR "pharmacy"[All Fields] OR "pharmacy's"[All Fields]

Search: **Drug review design[Title/Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

("Drug"[All Fields] AND "review design"[Title/Abstract]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **Drug review design[MeSH Terms]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

(Drug review design[MeSH Terms]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Drug review **design**[MeSH Terms]

Term not found: design

Search: **Drug review[MeSH Terms]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

(Drug review[MeSH Terms]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline[Filter] OR review[Filter] OR systematicreview

[Filter]) AND (fft[Filter]) AND (humans [Filter]) AND (english[Filter]))

Drug **review**[MeSH Terms]

Term not found: review

Search: **new project design[Title/ Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

("new"[All Fields] AND "project design"[Title/ Abstract]) AND ((y_10[Filter]) AND (guideline [Filter] OR meta-analysis[Filter] OR practiceguideline[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **new project[MeSH Terms]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

(new project[MeSH Terms]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline [Filter] OR review[Filter] OR systematicreview [Filter]) AND (fft[Filter]) AND (humans [Filter]) AND (english[Filter]))

new **project**[MeSH Terms]

Term not found: project

Search: **Disease Drug therapy[Title/ Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

("disease drug therapy"[Title/Abstract]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline [Filter] OR review[Filter] OR systematicreview [Filter]) AND (fft[Filter]) AND (humans [Filter]) AND (english[Filter]))

Search: **Drug therapy policy[Title/ Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

("Drug"[All Fields] AND "therapy policy" [Title/Abstract]) AND ((y_10[Filter]) AND (guideline[Filter] OR meta-analysis[Filter] OR practiceguideline[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **Drug therapy procedure[Title/ Abstract]** Filters: **Full text, Guideline, Meta-Analysis, Practice Guideline, Review, Systematic Review, in the last 10 years, Humans, English**

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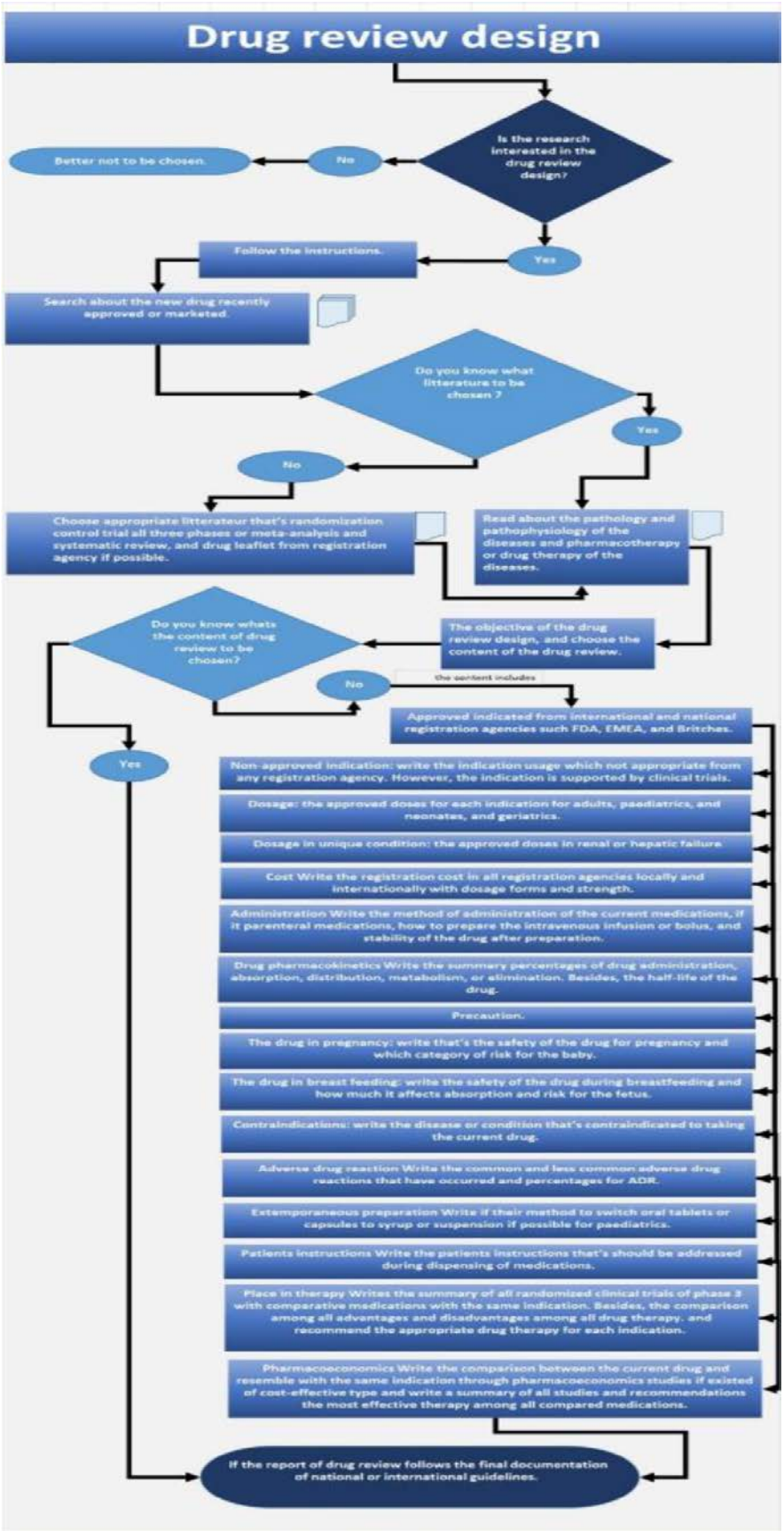

Figure 1: Drug review design procedures flow chart.

OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

RESULTS AND DISCUSSION

The following text contains policies and procedures and flow charts (Figures 1, 2, 3) for drug review and new pharmacy practice projects.

Drug review design[3-5,24-25,29-31]

1. Assume the research is concerned with the design of drug reviews. Then it is preferable to adhere to the instructions as addressed in Figure 1.
2. Search for information about a new drug recently approved or marketed in various databases such as PubMed, Scopus, Web of Science, Google Scholar, academic Microsoft, Science Direct, and other searching databases.[27-28]
   a. Select appropriate litterateurs, such as randomization control trials encompassing all three phases, meta-analyses, systematic reviews, and drug leaflets from the registration agency.
2. Read about the pathology and pathophysiology of diseases and their pharmacotherapy or drug therapy.
3. Define the purpose of the drug review and select the review's content.
4. The following are the contents of the drug review.
   a. Approved by international and national regulatory bodies such as the SFDA, FDA, Medicine and Healthcare products regulatory agency in the United Kingdom, and EMEA.
   b. Non-approved indication: Indications that any registration agency does not approve: list the indications that any registration agency does not approve. Clinical trials, however, support the indication.
   c. Dosage: the recommended doses for adults, pediatrics, neonates, and geriatrics.
   d. Dosage in unique condition: the recommended doses in renal or hepatic failure.
   e. Cost Indicate the registration cost with all local and international registration agencies, including dosage forms and strengths.
   f. Administration: Write the administration method for the current medications, including whether they are parenteral medications, how the intravenous infusion or bolus

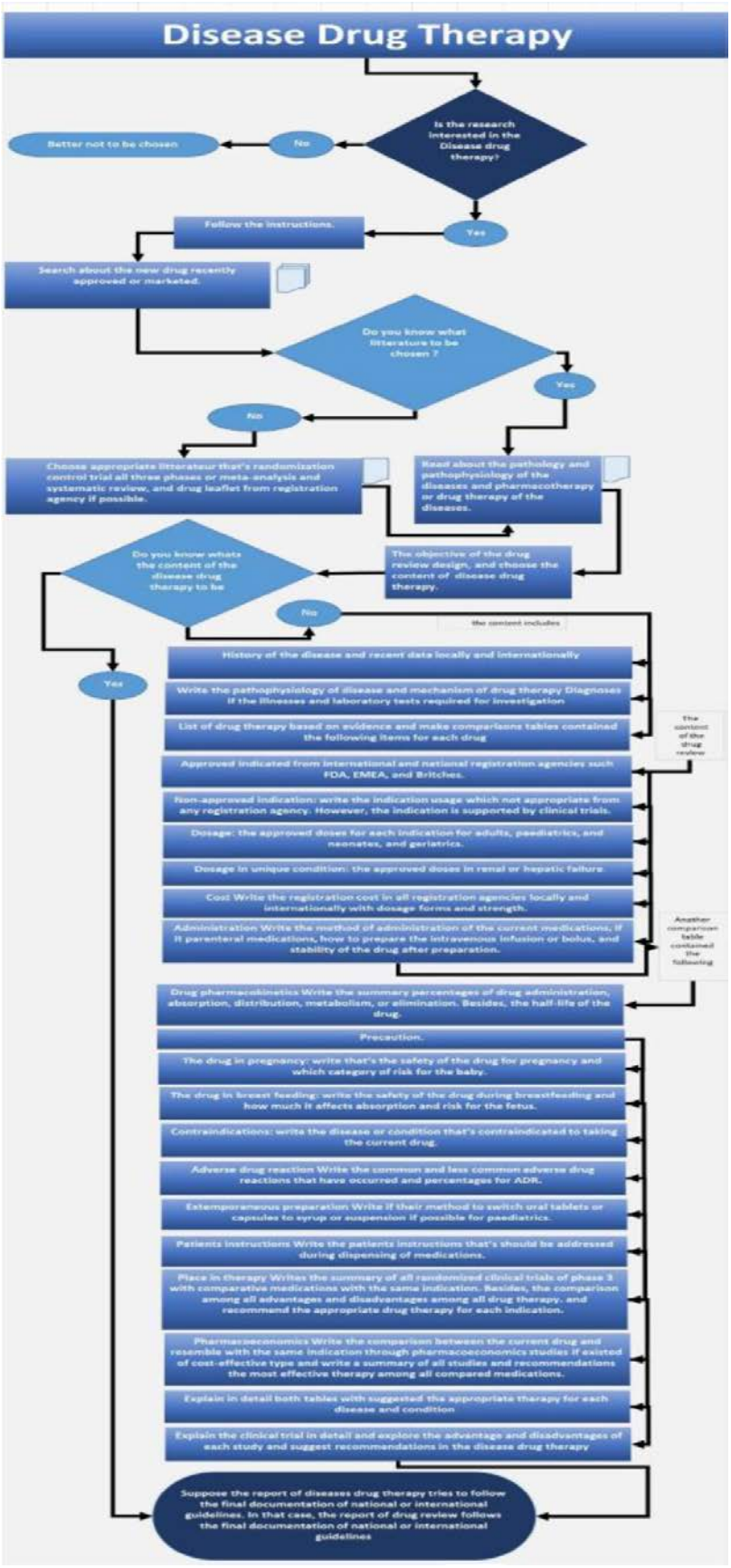

Figure 2: Diseases drug therapy procedures flow chart.

is prepared, and the drug's stability following preparation.

g. Pharmacokinetics of drugs Summarize the percentages of medications administered, absorbed, distributed, metabolized, and eliminated. Additionally, the drug's half-life.

h. Precaution.

i. The drug during pregnancy: state the drug's safety during pregnancy and the risk category for the baby.

j. The drug in beast feeding: describe the drug's safety during breastfeeding and the extent to which it affects absorption and poses a risk to the fetus.

k. Contraindications: specify the disease or condition for which the current drug is contraindicated.

l. Adverse drug reaction: Indicate the most common and least common adverse drug reactions and the corresponding percentages.

m. Improvised preparation: If possible, describe their method for switching oral tablets or capsules to syrup or suspension for pediatrics.

n. Instructions to patients: Create a list of the patients' instructions that should be followed during a medication dispensing.

o. Place in therapy: Prepare a summary of all phase 3 randomized clinical trials involving comparable medications for the same indication. Additionally, a comparison of the benefits and drawbacks of all drug therapies. And make appropriate drug therapy recommendations for each indication.

p. Pharmaco-economics: Write a comparison between the current drug and a similar one for the same indication using pharmacoeconomics studies, if any exist, and a summary of all studies, recommending the most effective therapy among all compared medications.

5. The drug review report is in accordance with the final documentation of national or international guidelines.[29-31]

Disease drug therapy.[3-5,24-25,30-31]

1. Assume the research is focused on disease-related drug therapy. Then it is preferable to adhere to the instructions.
2. Search for new disease management strategies or drugs that have been recently approved or marketed or based on recent guidelines in various databases such as PubMed, Scopus, Web of Science,

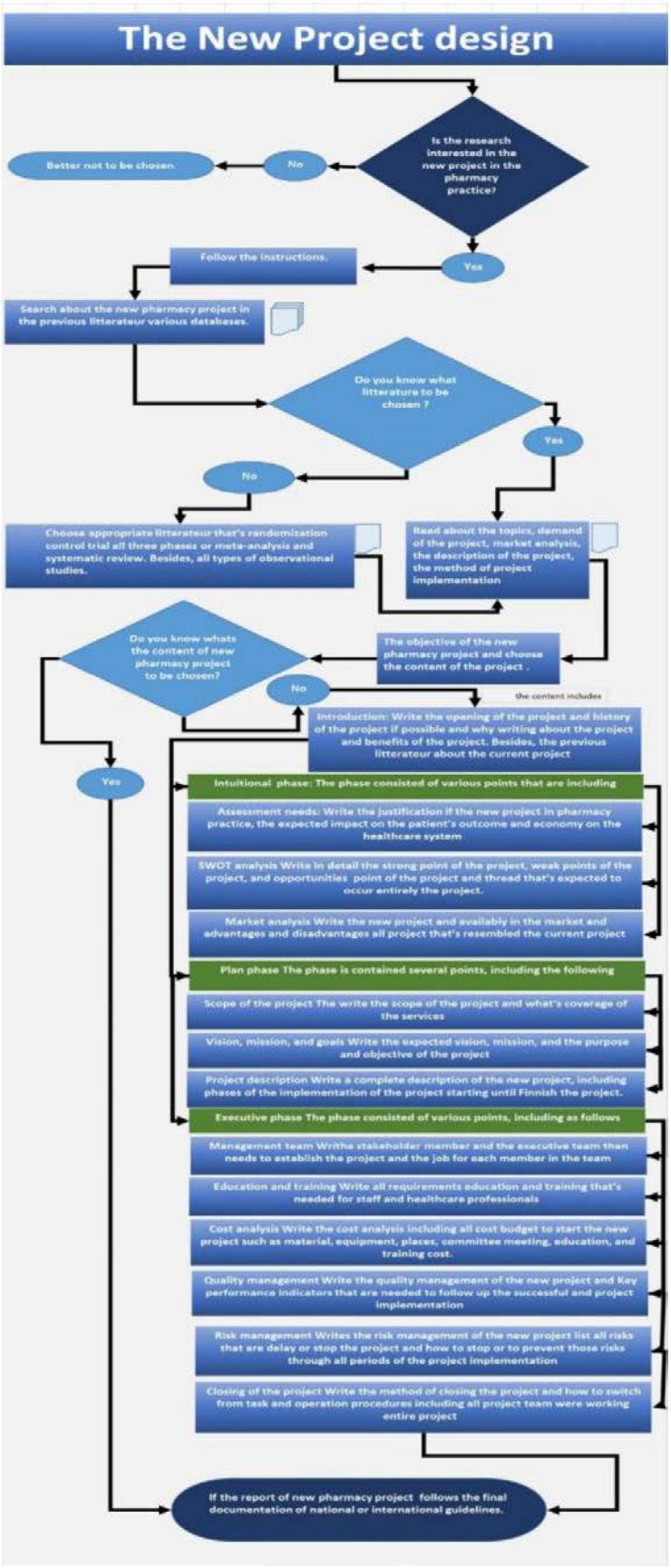

Figure 3: New project design procedures flow chart

Google Scholar, and academic journals. Microsoft, Science Direct, and other searching databases.[27-28]

3. Select appropriate literature, such as randomized control trials encompassing all three phases, meta-analyses, systematic reviews, and practical or clinical guidelines from the registration agency, if available.
4. The drug review's objective is to design and select the content of disease drug therapy. The following is the content of the disease drug therapy:
    1) Write the disease's history and recent data locally and internationally.
    2) Write the disease's pathophysiology and drug therapy mechanism. Diagnoses and laboratory tests necessary for investigation
    3) List of drug therapy based on evidence and make comparisons tables contained the following items for each drug:

The drug review's content includes the following:

a. Approved by international and national regulatory bodies such as the SFDA, FDA, Medicine and Healthcare products regulatory agency in the United Kingdom, and EMEA
b. Non-approved indication: Indications that any registration agency does not approve: list the indications that any registration agency does not approve. However, clinical trials support the indication.
c. Dosage: the approved doses for adults, pediatrics, neonates, and geriatrics.
d. Dosage in unique condition: the approved doses in renal or hepatic failure.
e. Cost Indicate the registration cost with all local and international registration agencies, including dosage forms and strengths.
f. Administration: Write the administration method for the current medications, including whether they are parenteral medications, how the intravenous infusion or bolus is prepared, and the drug's stability following preparation.

5. Another table of comparison contained the following:
    a. Pharmacokinetics of drugs: Summarize the percentages of medications administered, absorbed, distributed, metabolized, and eliminated. Additionally, the half-life of the drugs.
    b. Precaution
    c. The drug during pregnancy: state the drug's safety during pregnancy and the category of risk to the baby
    d. The drug during breastfeeding: state the drug's safety during breastfeeding and the extent to which it affects absorption and risk to the fetus
    e. Contraindications: state the disease or condition that precludes taking the current drug
    f. Adverse drug reaction: state the adverse drug reaction. Indicate the most common and least common adverse drug reactions that have occurred and the corresponding percentages for ADR
    g. Extemporaneous preparation: Indicate if their method of switching oral tablets or capsules to syrup or suspension is appropriate for pediatrics
    h. Patients instructions: Create a list of the patients' instructions that should be followed during a medication dispensing.
    i. Place in therapy: Prepare a summary of all phase 3 randomized clinical trials involving comparable medications for the same indication. Additionally, a comparison of the benefits and drawbacks of all drug therapies. And make appropriate drug therapy recommendations for each indication
    j. Pharmacoeconomics: Write a comparison between the current drug and a similar one for the same indication using pharmacoeconomics studies, if any exist, and summarize all studies, recommending the most effective therapy among all compared medications.
6. Describe in detail both tables, including the recommended therapy for each disease and condition.
7. Describe the clinical trial in detail, weigh each study's benefits and drawbacks, and make recommendations regarding disease drug therapy.
8. Assume that the disease drug therapy report adheres to the final documentation of national or international guidelines. In this case, the drug review report is written in accordance with the final documentation of national or international guidelines.[3,30,31]

The new project design.[3-5,24-25,34]

1. Assume the researcher is interested in a novel project in pharmacy practice. Then it is preferable to adhere to the instructions.
2. Conduct a literature search on the new pharmacy project using databases such as PubMed, Scopus, Web of Science, Google Scholar, academic Microsoft, Science Direct, and other searching databases.[27-28]
3. Select an appropriate litterateur, such as a randomization control trial that includes all three phases or a meta-analysis and systematic review. Additionally, all forms of observational studies
4. Research the topics, the project's demand, market analysis, the project's description, and the project's implementation method.
5. Define the purpose of the new pharmacy project and select the project's content

The new pharmacy project's content includes the following:

5.1. Introduction: Write the project's introduction and history, if possible, and why you're writing about the project and its benefits. Additionally, the previous litterateur has written about the current project.

5.2. Phase of intuition: The phase encompassed several distinct points, which included the following:

a. Assessment requirements: Provide justification for a new pharmacy practice project, including the anticipated impact on patient outcomes and cost savings to the healthcare system.
c. Analysis of the firm's strengths, weaknesses, and opportunities Describe in detail the project's strengths, weaknesses, and options and the thread expected to run throughout the project.
d. Market Analysis: Write the new project and its availability in the market and the benefits and drawbacks of any project that is similar to the current one.

5.3. Phase of planning: The phase is divided into several sections, which include the following:

a. The project's scope: Then, specify the project's scope and the extent to which the services are covered.
b. Mission, vision, and objectives: Create an outline of the project's anticipated vision, mission, purpose, and objective.
c. Project description: Create a detailed description of the new project, including all implementation phases, from start to finish.

5.4. Phase of administration: The phase included the following points:

a. Management team: The stakeholder member and executive team must establish each team member's project and job descriptions.
b. Education and training: Write all requirements for education and training for staff and healthcare professionals.
c. Cost analysis: Write the cost analysis, including all costs associated with starting the new project, such as material, equipment, locations, committee meetings, education, and training.
d. Quality control: Prepare a quality control plan for the new project and Key performance indicators required to monitor the success and implementation of a project
e. Management of risks: The risk management plan for a new project should include a list of all risks that could cause the project to be delayed or halted and strategies for mitigating or preventing those risks throughout the project's implementation.

5. Closure of the project: Describe how the project will be closed and how the task and operation procedures will be switched off while the entire project team is working.
6. The report on a new pharmacy project adheres to the final version of national or international.[3,33,34]

CONCLUSION

Case reports or case series are primary pharmacy research documents on drug-related issues. The approach encourages pharmacies to increase their reporting of drug-related misadventures. Besides, the policy initiates steps toward discovering new indications for medical care. As a result, a case report approach is recommended for pharmacy organizations regarding research and development performance and activities in pharmaceutical care services.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

Funding

None

Consent For Publications

Informed consent was obtained from all the participants

Ethical Approval

This research was exempted from the research and ethical committee or an institutional review board (IRB) approval.

https://www.hhs.gov/ohrp/regulations-and-policy/decision-charts-2018/index.html

ABBREVIATIONS

KSA: Kingdom of Saudi; **SFDA:** Saudi Food and Drug Authority; **EMEA:** European Medicine Agency; **WHO:** World Health; **WHO:** World Health Organization; **ASHP:** American Society of Health-System Pharmacists; **RCT:** Randomized controlled trials; **AGREE:** Appraisal of Guidelines, Research, and Evaluation.

ORCID ID

Yousef Ahmed Alomi https://orcid.org/0000-0003-1381-628X

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