



Problem Statement

- Breast cancer was life threatening a decade ago, however, now with the improvement in treatment the survival rate has increased considerably. Avoidable adverse effects accompany these treatments.
- Medication safety is an important factor to be considered during treatment.
- Information system would potentially reduce medication errors, like prescription of unsuitable medication.

Background

- The risk of acute and chronic adverse effects caused due to treatment greatly influence the quality of life in breast cancer survivors
- Information system can reduce the avoidable ADR, thus, improving the decision making during patient encounters.
- It makes the access to the information easier for the clinicians.

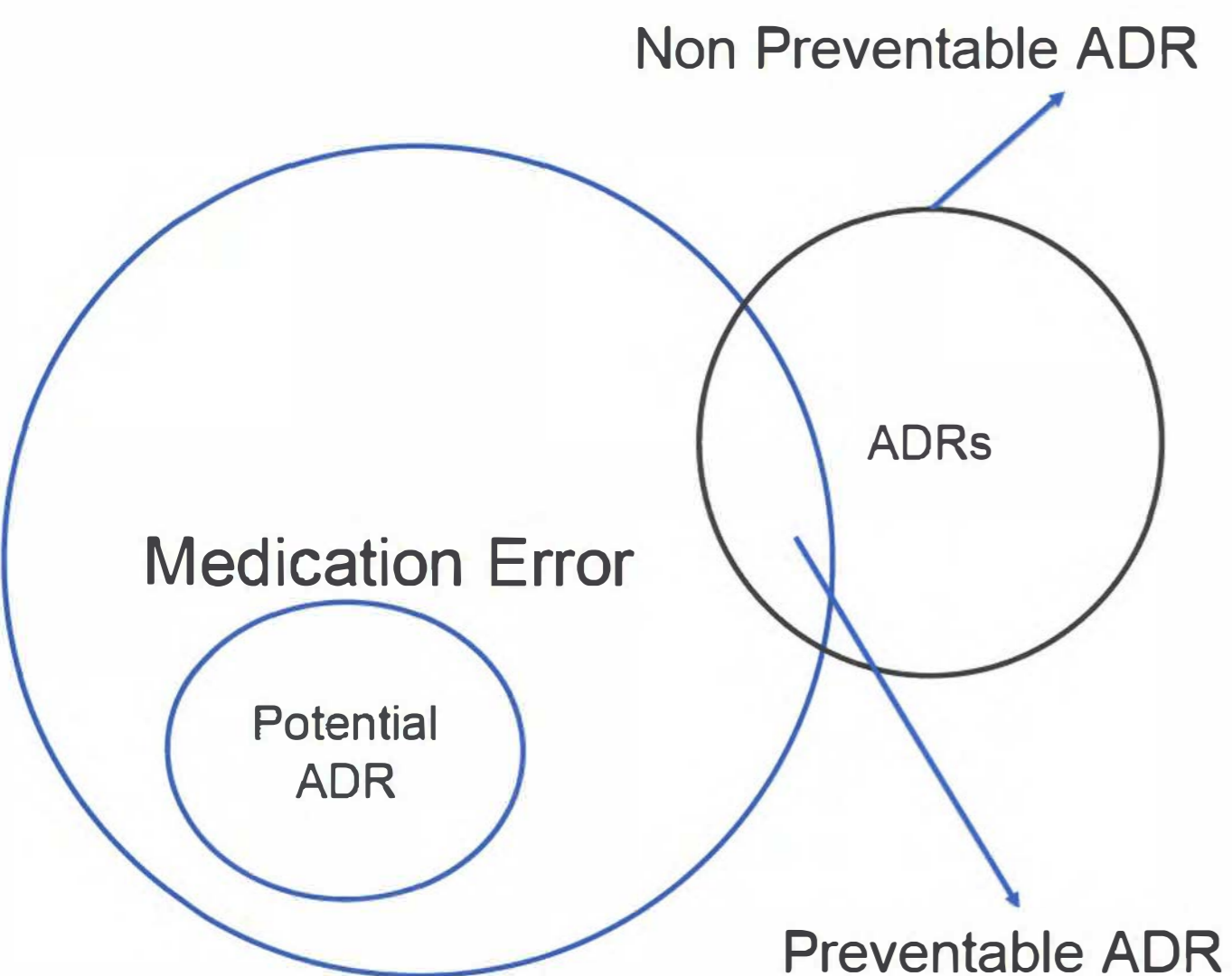


Figure1: Preventable ADRs

Objective

- Identify adverse effects and drug interactions
- Transforming information into an expandable database, thus assisting in information retrieval.
- This can be integrated with CDSS

Research methodology

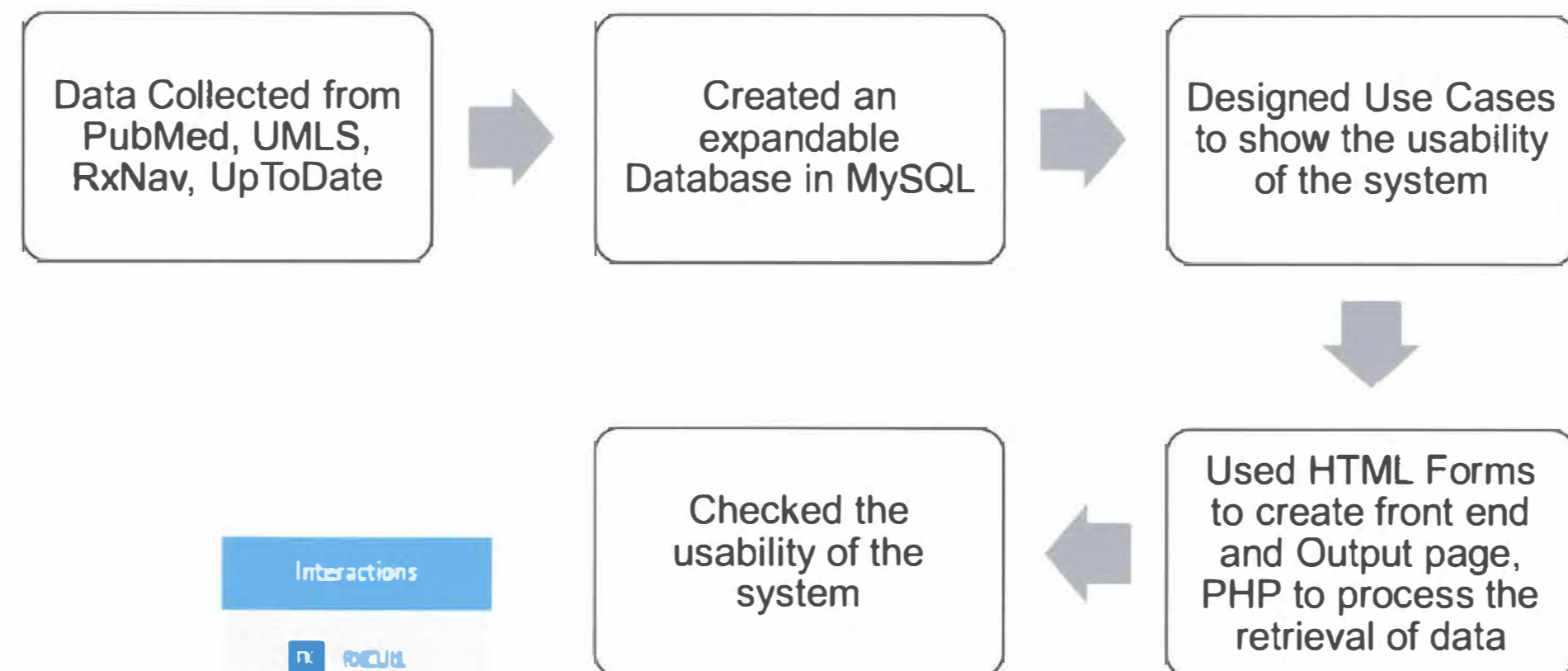


Figure 2: Steps in Creating Information System

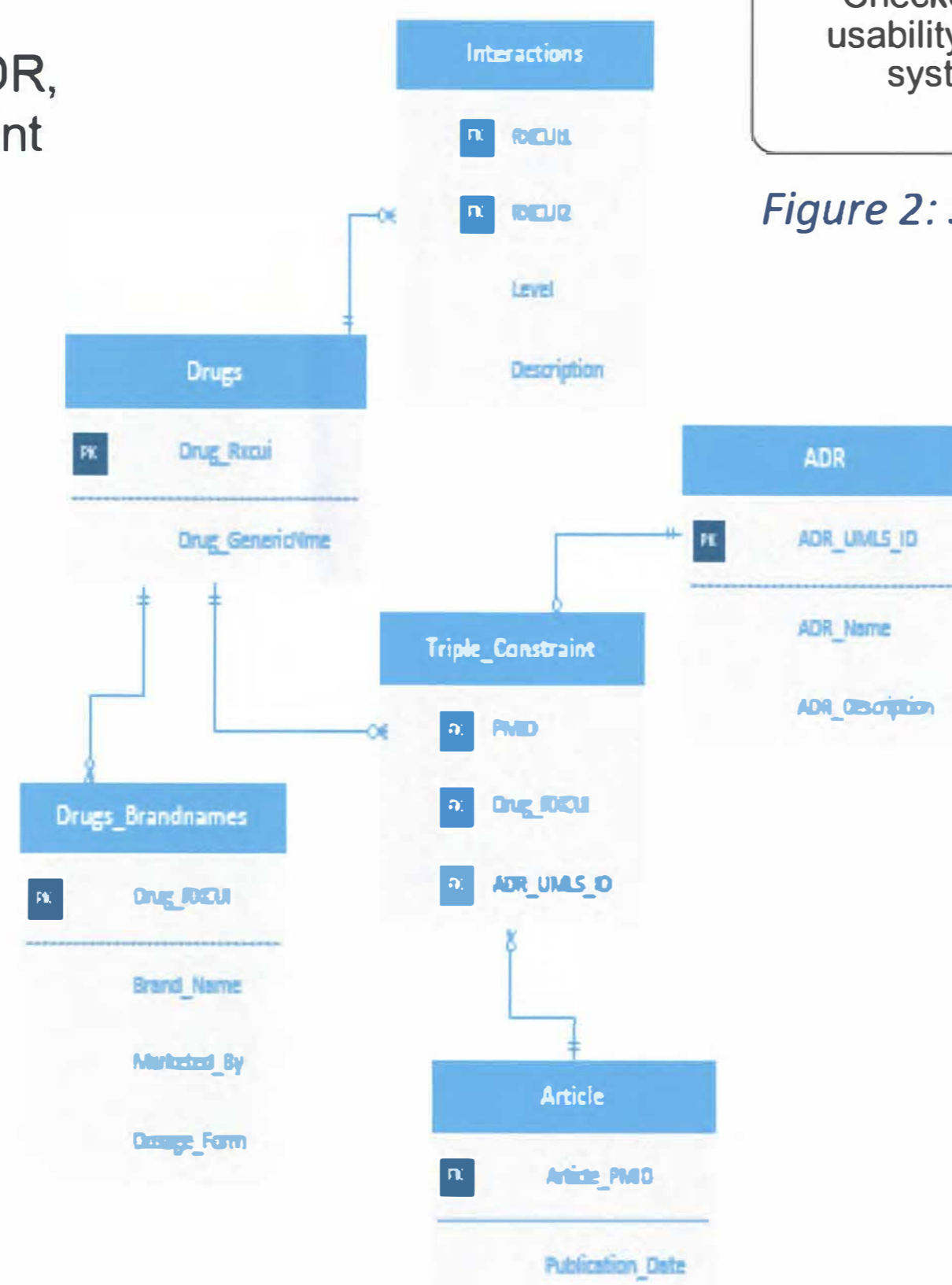


Figure 4: ERD for Database

Result

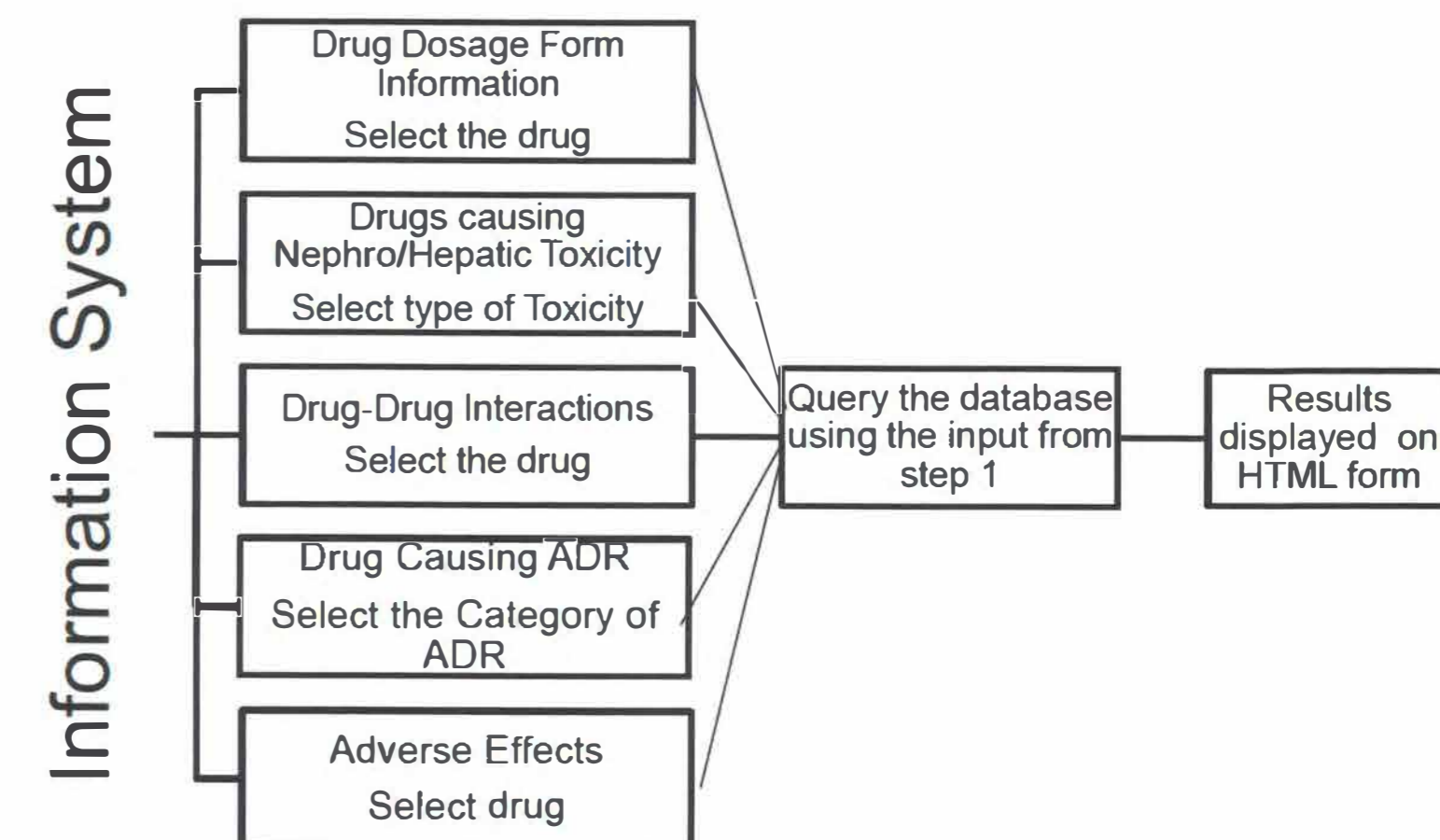


Figure5: Diagrammatical representation of working of this system.

- Each Use case retrieved information as expected.

Conclusion

- This information system can positively impact the healthcare system and patientcare outcomes by decreasing the medication errors.
- Can increase the time of physician patient interaction
- Reliable, cost efficient system

Future Scope

- This system can be expanded by adding different drugs based on the usability in the specialty
- This system can be integrated with CPOE to further assist in Clinical Decision Support System

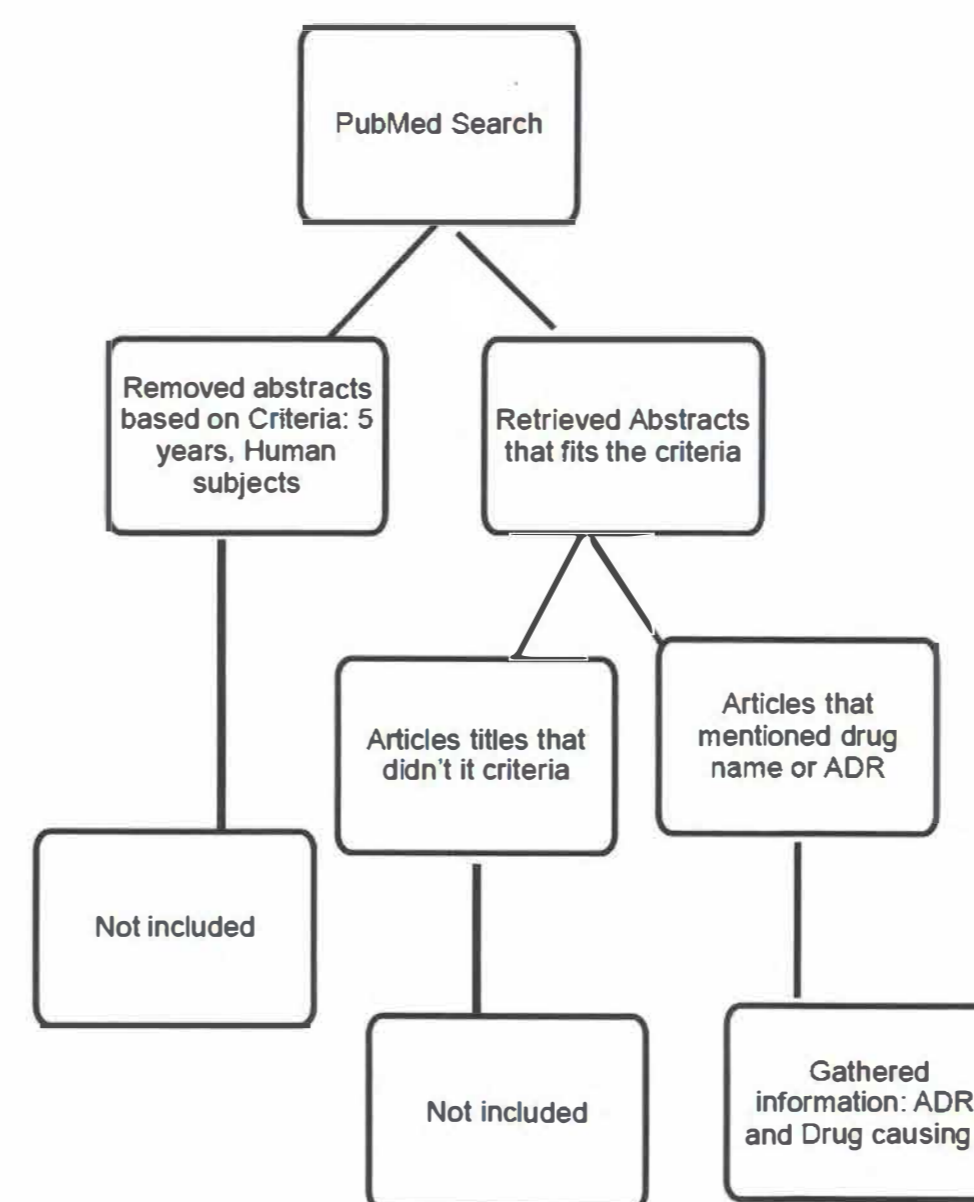


Figure3: Literature Inclusion Criteria