COST OF ILLNESS OF DIABETES MELLITUS IN INDONESIA: A SYSTEMATIC REVIEW

Yohana Febriani Putri Peu Patty¹, Mufarrihah², and Yunita Nita²

¹ Master of Pharmacy Program, Faculty of Pharmacy, Airlangga University
² Department of Pharmacy Practice, Faculty of Pharmacy, Airlangga University

BACKGROUND

- There were 463 diabetic worldwide in 2019 and will increase to 758 - 700 million by 2030 and 2045 respectively.
- The highest prevalence of diabetes mellitus in Indonesia was experienced by woman, urban residents, and groups aged between 30 - 75 years.
- The cost of treating diabetes in 2019 was USD 760 billion.

STUDY OBJECTIVES

- Summarize important findings from previous studies about COI DM in Indonesia.
- Provide an overview of the economic burden caused by DM for the government, health care providers, and for the community.

METHODS

- **Database**
  - PubMed, DOAJ, Scopus, ScienceDirect, Google Scholar
- **Keywords Search Terms**
  - "economics", "cost", "cost of illness", "cost of disease", "cost analysis", "diabetes", and "Indonesia".
- **Inclusion Criteria**
  - Published in English or Indonesian.
  - Studies in diabetes type 1 and / or type 2, and / or gestational diabetes.
  - Direct and / or indirect cost was presented in the results section.
- **Exclusion Criteria**
  - Review papers, conference abstracts, case reports, editorial letters to the editor.
  - Only an abstract was available or the full text could not be retrieved.

RESULTS

- 1022 records retrieved through database searching
  - 1530 records from PubMed
  - 1379 records from Google Scholar
  - 15 records from Scopus
  - 1581 records identified through database searching
  - 1751 records screened by title and abstract
  - 1462 records excluded
    - 691 not in Indonesian
    - 506 not related to the cost study
    - 265 conference abstract / review article / book chapter / encyclopedia
  - 52 articles assessed for eligibility
  - 35 articles excluded, with reasons:
    - 30 no COI study
  - 18 Studies included in qualitative synthesis

CONCLUSIONS

- Diabetes mellitus creates an economic burden on health-care system.
- Drugs and complications imposed the largest burden on total cost of DM.
- Indonesia still lacks and future needs many more research in the field of pharmacoconomics about cost of illness in DM.

LIMITATIONS

- The cost data reviewed were derived from different methodologies of each study. Several studies did not specify which cost components were included in their analyses.
- Future studies about COI DM should focus on increasing the methodological principles and carried out on a large scale, especially at the national level.

REFERENCES