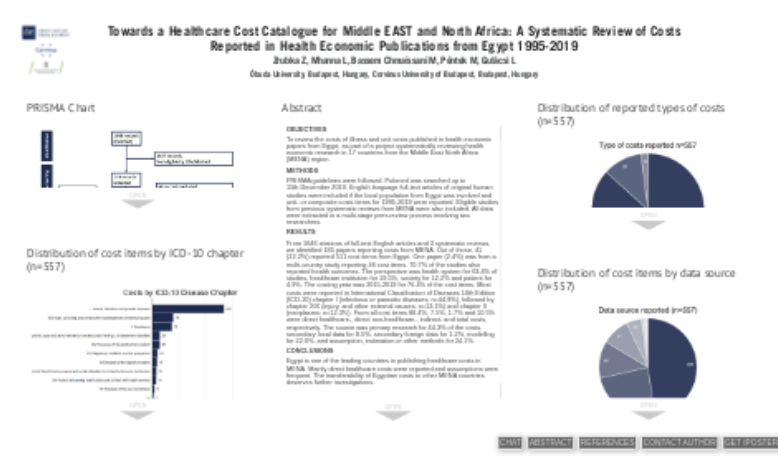
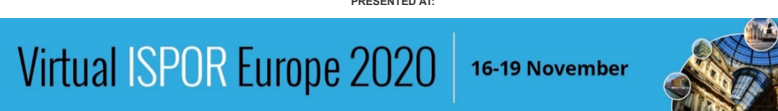


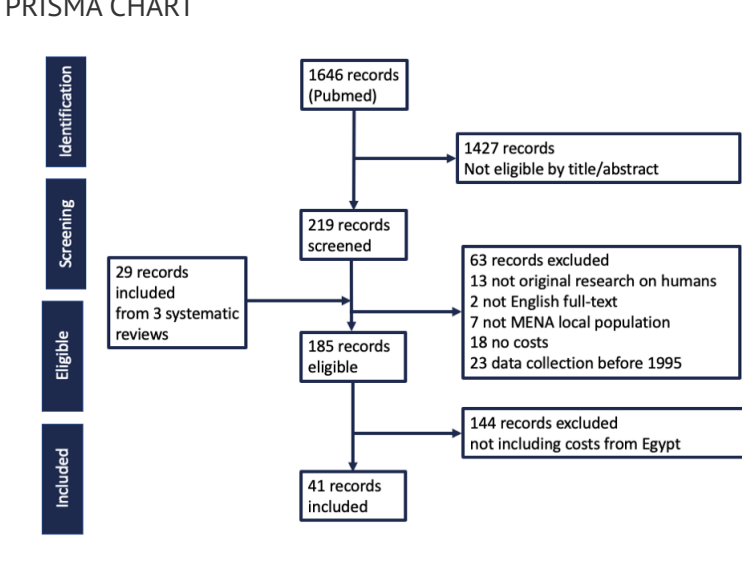
# Towards a Healthcare Cost Catalogue for Middle East and North Africa: A Systematic Review of Costs Reported in Health Economic Publications from Egypt 1995-2019



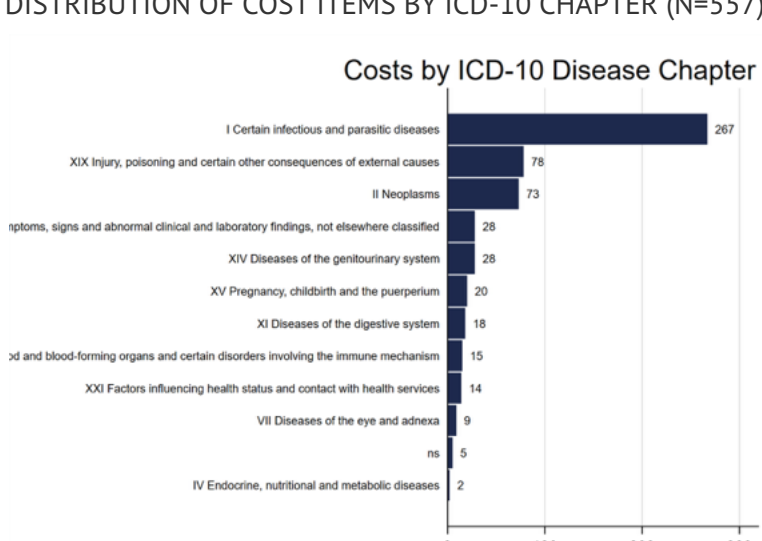
Zrubka Z, Mhanna L, Bassem Chmaissani M, Péntek M, Gulácsi L  
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## PRISMA CHART



## DISTRIBUTION OF COST ITEMS BY ICD-10 CHAPTER (N=557)



## ABSTRACT

### OBJECTIVES

To review the costs of illness and unit costs published in health economic papers from Egypt, as part of a project systematically reviewing health economic research in 17 countries from the Middle East North Africa (MENA) region.

### METHODS

PRISMA guidelines were followed. Pubmed was searched up to 15th December 2019. English language full-text articles of original human studies were included if the local population from Egypt was involved and unit- or composite costs items for 1995-2019 were reported. Eligible studies from previous systematic reviews from MENA were also included. All data were extracted in a multi-stage peer-review process involving two researchers.

### RESULTS

From 1646 citations of full-text English articles and 3 systematic reviews, we identified 185 papers reporting costs from MENA. Out of those, 41 (22.2%) reported 511 cost items from Egypt. One paper (2.4%) was from a multi-country study reporting 46 cost items. 70.7% of the studies also reported health outcomes. The perspective was health system for 63.4% of studies, healthcare institution for 19.5%, society for 12.2% and patient for 4.9%. The costing year was 2015-2019 for 76.4% of the cost items. Most costs were reported in International Classification of Diseases 10th Edition (ICD-10) chapter I (infectious or parasitic diseases; n=44.8%), followed by chapter XIX (injury, and other external causes; n=13.1%) and chapter II (neoplasms; n=12.3%). From all cost items 80.4%, 7.5%, 1.7% and 10.5% were direct healthcare-, direct non-healthcare-, indirect- and total costs, respectively. The source was primary research for 44.3% of the costs, secondary local data for 8.5%, secondary foreign data for 1.2%, modelling for 22.0%, and assumption, estimation or other methods for 24.1%.

### CONCLUSIONS

Egypt is one of the leading countries in publishing healthcare costs in MENA. Mainly direct healthcare costs were reported and assumptions were frequent. The transferability of Egyptian costs to other MENA countries deserves further investigations.

### REFERENCES

Al-Aqeel, S. A. "State of Health Economic Evaluation Research in Saudi Arabia: A Review." *Clinicoecon Outcomes Res* 4 (2012): 177-84.

Ejlilany, I., F. El-Dahiyat, L. E. Curley, and Z. U. Babar. "Evaluating Quantity and Quality of Literature Focusing on Health Economics and Pharmacoeconomics in Gulf Cooperation Council Countries." *Expert Rev Pharmacoecon Outcomes Res* 18, no. 4 (Aug 2018): 403-14.

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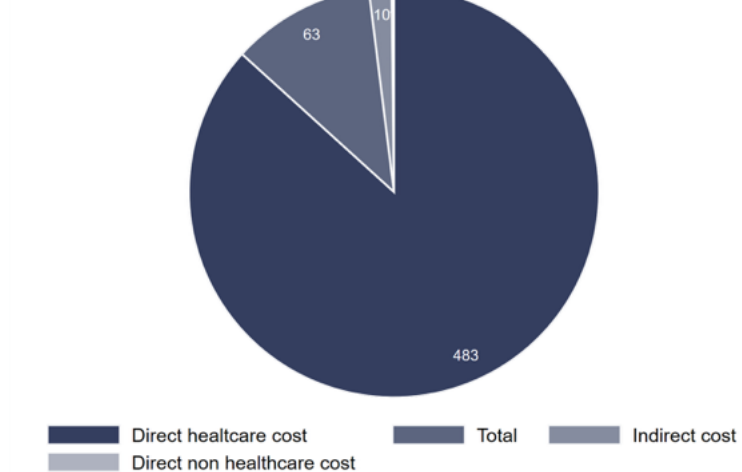
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### ACKNOWLEDGEMENT

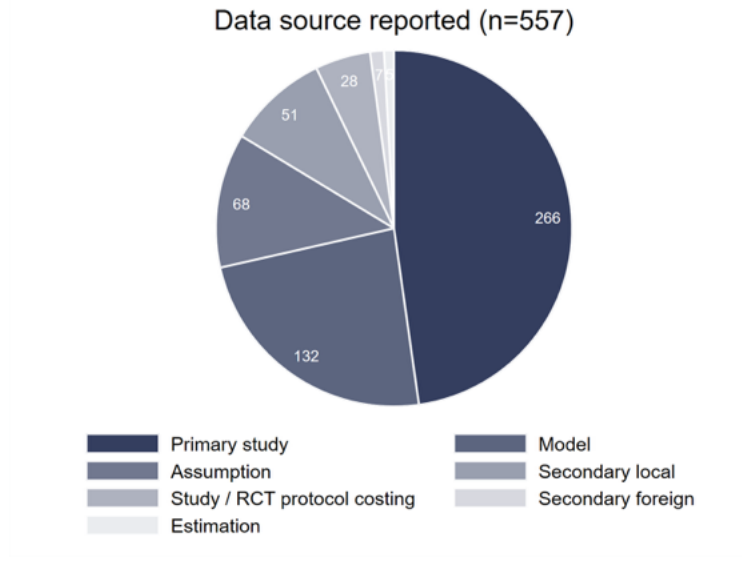
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## DISTRIBUTION OF REPORTED TYPES OF COSTS (N=557)



Legend: Direct healthcare cost, Total, Indirect cost, Direct non healthcare cost

## DISTRIBUTION OF COST ITEMS BY DATA SOURCE (N=557)



Legend: Primary study, Assumption, Study / RCT protocol costing, Estimation, Model, Secondary local

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## ABSTRACT

**OBJECTIVES** : To review the costs of illness and unit costs published in health economic papers from Egypt, as part of a project systematically reviewing health economic research in 17 countries from the Middle East North Africa (MENA) region.  
**METHODS** : PRISMA guidelines were followed. Pubmed was searched up to 15th December 2019. English language full-text articles of original human studies were included if the local population from Egypt was involved and unit- or composite costs items for 1995-2019 were reported. Eligible studies from previous systematic reviews from MENA were also included. All data were extracted in a multi-stage peer-review process involving two researchers.  
**RESULTS** : From 1646 citations of full-text English articles and 3 systematic reviews, we identified 185 papers reporting costs from MENA. Out of those, 41 (22.2%) reported 511 cost items from Egypt. One paper (2.4%) was from a multi-country study. 70.7% of the studies also reported health outcomes. The perspective was health system for 63.4% of studies, healthcare institution for 19.5%, society for 12.2% and patient for 4.9%. The costing year was 2015-2019 for 76.4% of the cost items. Most costs were reported in International Classification of Diseases 10th Edition (ICD-10) chapter I (infectious or parasitic diseases; n=44.8%), followed by chapter XIX (injury, and other external causes; n=13.1%) and chapter II (neoplasms; n=12.3%). From all cost items 80.4%, 7.5%, 1.7% and 10.5% were direct healthcare-, direct non-healthcare-, indirect- and total costs, respectively. The source was primary research for 44.3% of the costs, secondary local data for 8.5%, secondary foreign data for 1.2%, modelling for 22.0%, and assumption, estimation or other methods for 24.1%.  
**CONCLUSIONS** : Egypt is one of the leading countries in publishing healthcare costs in MENA. Mainly direct healthcare costs were reported and assumptions were frequent. The transferability of Egyptian costs to other MENA countries deserves further investigations.

## REFERENCES

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