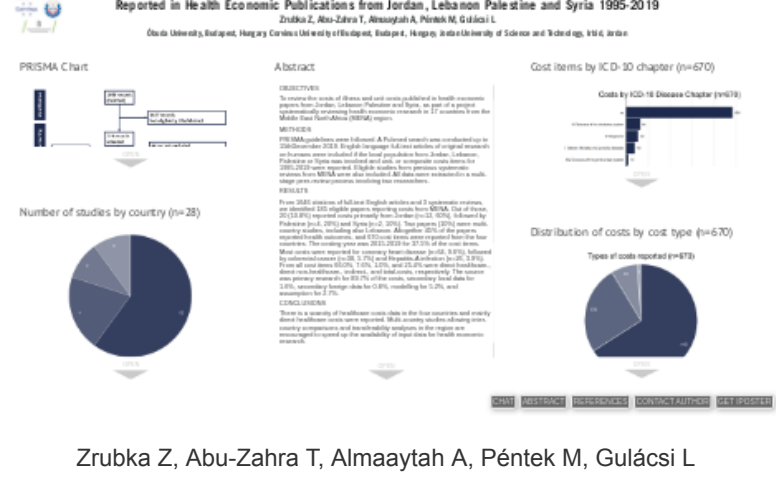


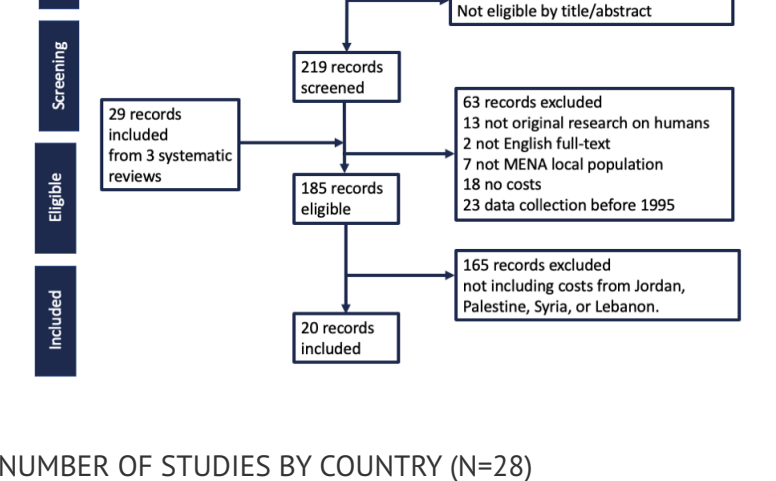
Towards a Healthcare Cost Catalogue for Middle EAST and North Africa: A Systematic Review of Costs Reported in Health Economic Publications from Jordan, Lebanon Palestine and Syria 1995-2019



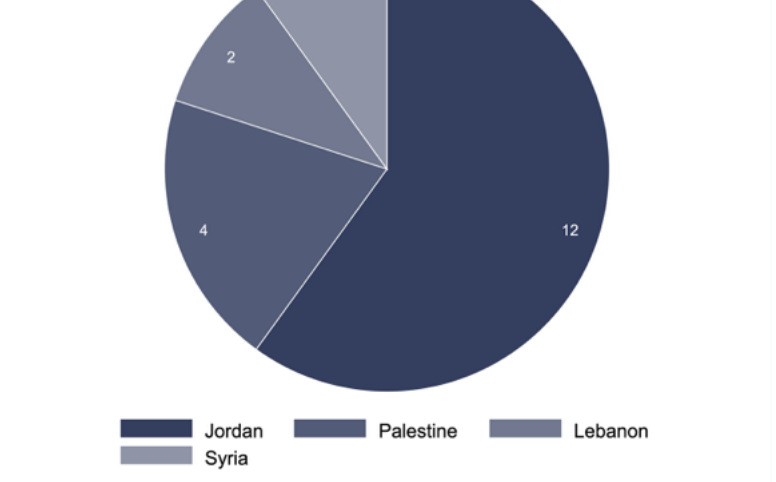
Zrubka Z, Abu-Zahra T, Almaaytah A, Péntek M, Gulácsi L
Óbuda University, Budapest, Hungary; Corvinus University of Budapest, Budapest, Hungary; Jordan University of Science and Technology, Irbid, Jordan



PRISMA CHART



NUMBER OF STUDIES BY COUNTRY (N=28)



ABSTRACT

OBJECTIVES

To review the costs of illness and unit costs published in health economic papers from Jordan, Lebanon Palestine and Syria, 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. A Pubmed search was conducted up to 15th December 2019. English language full-text articles of original research on humans were included if the local population from Jordan, Lebanon, Palestine or Syria 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 eligible papers reporting costs from MENA. Out of those, 20 (10.8%) reported costs primarily from Jordan (n=12, 60%), followed by Palestine (n=4, 20%) and Syria (n=2, 10%). Two papers (10%) were multi-country studies, including also Lebanon. Altogether 45% of the papers reported health outcomes, and 670 cost items were reported from the four countries. The costing year was 2015-2019 for 37.5% of the cost items. Most costs were reported for coronary heart disease (n=64, 9.6%), followed by colorectal cancer (n=38, 5.7%) and Hepatitis-A infection (n=26, 3.9%). From all cost items 66.0%, 7.6%, 1.0%, and 25.4% were direct healthcare-, direct non-healthcare-, indirect-, and total-costs, respectively. The source was primary research for 89.7% of the costs, secondary local data for 1.6%, secondary foreign data for 0.8%, modelling for 5.2%, and assumption for 2.7%.

CONCLUSIONS

There is a scarcity of healthcare costs data in the four countries and mainly direct healthcare costs were reported. Multi-country studies allowing inter-country comparisons and transferability analyses in the region are encouraged to speed up the availability of input data for health economic research.

REFERENCES

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

Eljilany, 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.

Farid, S., M. Elmahdawy, and D. Baines. "A Systematic Review on the Extent and Quality of Pharmacoeconomic Publications in Egypt." Clin Drug Investig 39, no. 2 (Feb 2019): 157-68.

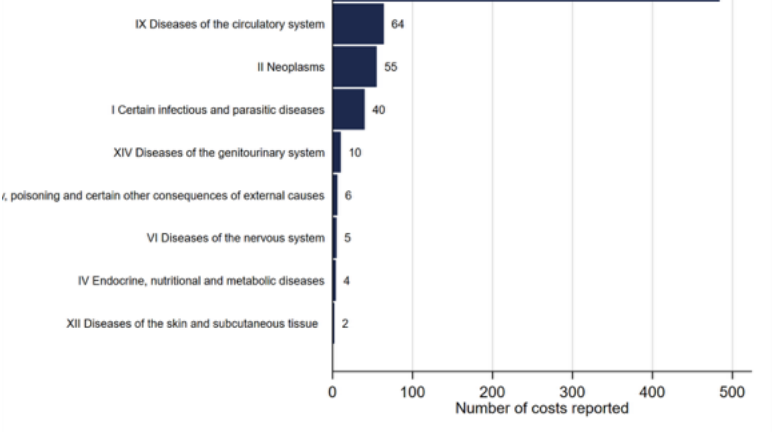
Moher, D., A. Liberati, J. Tetzlaff, D. G. Altman, and Prisma Group. "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The Prisma Statement." BMJ 339 (Jul 21 2009): b2535.

Zrubka, Zsombor, Omar Rashdan, and László Gulácsi. "Health Economic Publications from the Middle East and North Africa Region: A Scoping Review of the Volume and Methods of Research." Global Journal on Quality and Safety in Healthcare 3, no. 2 (2020): 44-54.

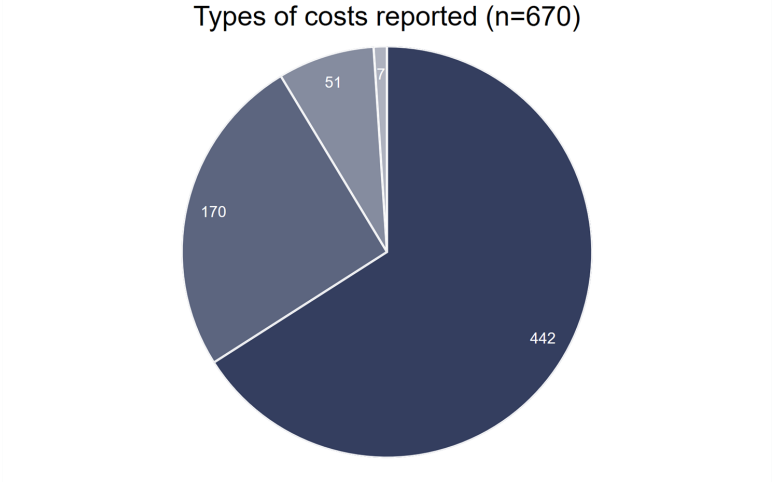
ACKNOWLEDGEMENT

This publication was supported by the Higher Education Institutional Excellence Program of the Ministry of Ministry for Innovation and Technology in the framework of the 'Financial and Public Services' research project (NKFIFH-1163-10/2019) at the Corvinus University of Budapest.

COST ITEMS BY ICD-10 CHAPTER (N=670)



DISTRIBUTION OF COSTS BY COST TYPE (N=670)



AUTHOR INFORMATION

First author

Presenting Author

Zsombor Zrubka, MD, MBA, PhD
Assistant Professor
University Research, Innovation and Service Center
Óbuda University
Bécsi út 96/b
Budapest, PE, 1093
Hungary
Phone Number: +36302029415
Email Address: zsombor.zrubka@uni-corvinus.hu
* Membership Number 39568

Second author

Teebah Abu-Zahra, BSc
Student
Health Policy, Planning and Financing Master's Programme
Corvinus University of Budapest
Fővám tér 8.
Budapest, 1084
Hungary
Phone Number: 0036706722758
Email Address: teebah-az91@hotmail.com
* Membership Number 3130774

Third author

Ammar Almaaytah, PhD
Associate Professor
Jordan University of Science and Technology
Irbid, 22110
Jordan
Email Address: amalmaaytah@just.edu.jo

Fourth author

Márta Péntek, MD, PhD, Habil
Professor
Department of Health Economics
Corvinus University of Budapest
Fovam ter 8
Budapest, 1093
Hungary
Email Address: marta.pentek@uni-corvinus.hu
* Membership Number 8613

Fifth author

László Gulácsi, MD, PhD, DSc, Habil
Professor
University Research, Innovation and Service Center
Óbuda University
Bécsi út 96/b
Budapest, 1034
Hungary
Email Address: laszlo.gulacsi@uni-corvinus.hu

ABSTRACT

OBJECTIVES : To review the costs of illness and unit costs published in health economic papers from Jordan, Lebanon Palestine and Syria, 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. A Pubmed search was conducted up to 15th December 2019. English language full-text articles of original research on humans were included if the local population from Jordan, Lebanon, Palestine or Syria 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 eligible papers reporting costs from MENA. Out of those, 20 (10.8%) reported costs primarily from Jordan (n=12, 60%), followed by Palestine (n=4, 20%) and Syria (n=2, 10%). Two papers (10%) were multi-country studies, including also Lebanon. Altogether 45% of the papers reported health outcomes, and 670 cost items were reported from the four countries. The costing year was 2015-2019 for 37.5% of the cost items. Most costs were reported for coronary heart disease (n=64, 9.6%), followed by colorectal cancer (n=38, 5.7%) and Hepatitis-A infection (n=26, 3.9%). From all cost items 66.0%, 7.6%, 1.0%, and 25.4% were direct healthcare-, direct non-healthcare-, indirect-, and total-costs, respectively. The source was primary research for 89.7% of the costs, secondary local data for 1.6%, secondary foreign data for 0.8%, modelling for 5.2%, and assumption for 2.7%. **CONCLUSIONS** : There is a scarcity of healthcare costs data in the four countries and mainly direct healthcare costs were reported. Multi-country studies allowing inter-country comparisons and transferability analyses in the region are encouraged to speed up the availability of input data for health economic research.

REFERENCES

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

Eljilany, 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.

Farid, S., M. Elmahdawy, and D. Baines. "A Systematic Review on the Extent and Quality of Pharmacoeconomic Publications in Egypt." Clin Drug Investig 39, no. 2 (Feb 2019): 157-68.

Moher, D., A. Liberati, J. Tetzlaff, D. G. Altman, and Prisma Group. "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The Prisma Statement." BMJ 339 (Jul 21 2009): b2535.

Zrubka, Zsombor, Omar Rashdan, and László Gulácsi. "Health Economic Publications from the Middle East and North Africa Region: A Scoping Review of the Volume and Methods of Research." Global Journal on Quality and Safety in Healthcare 3, no. 2 (2020): 44-54.