

Figure 1: Chart of the article selection process

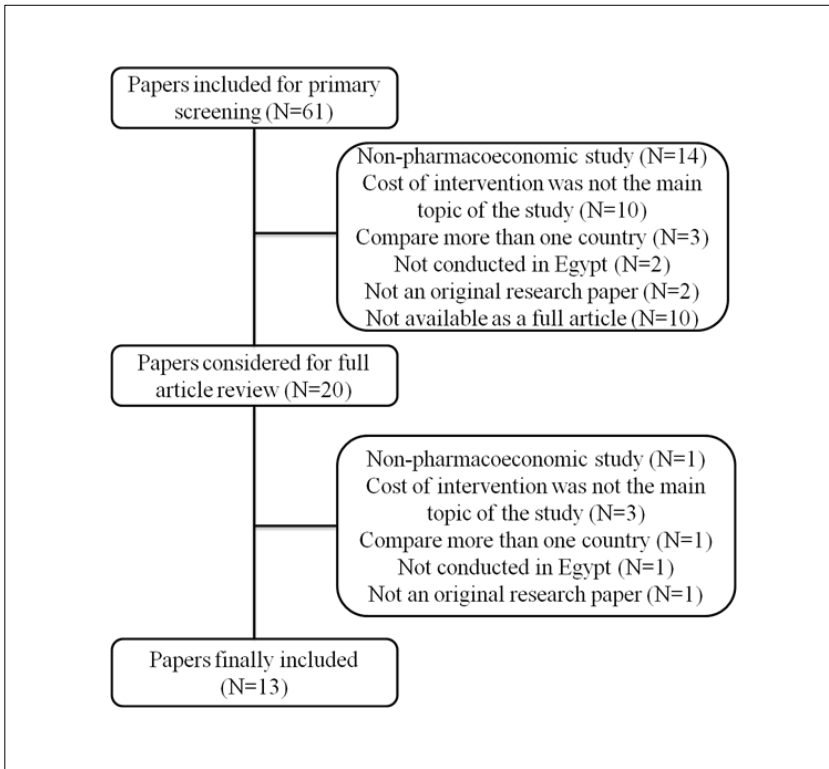


Figure 2: Chart of the number of included articles arranged by years

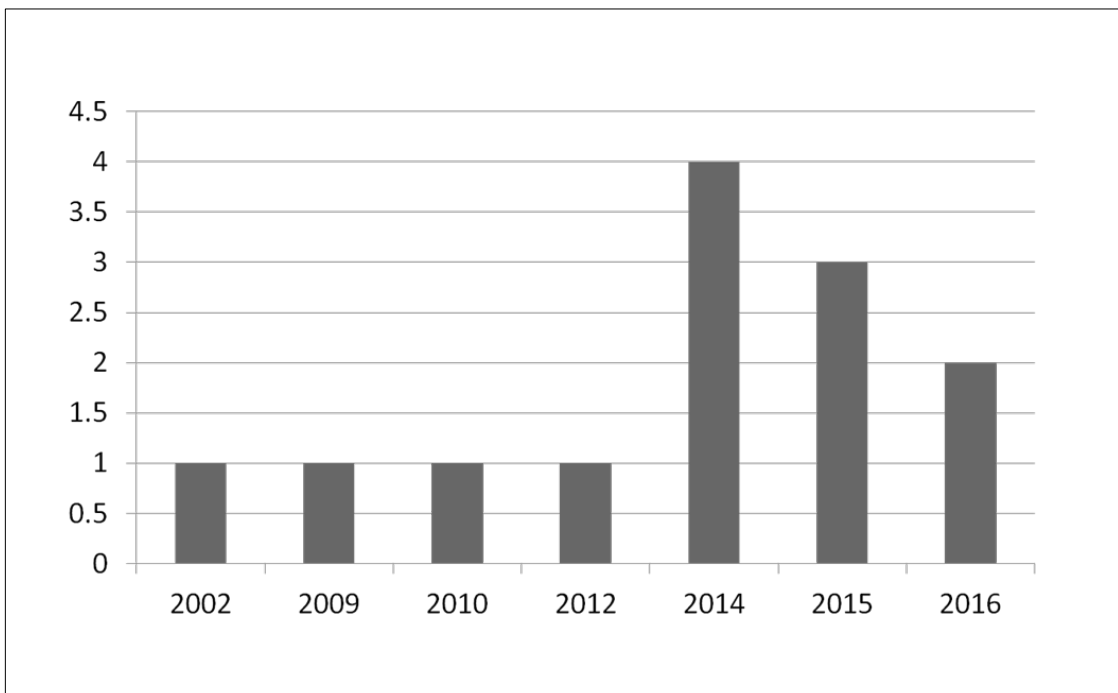


Table 1: General information of the included publications represented as numbers (percentages)

Parameter	Categories	N (%)
Country of residence of the primary author	Egypt	8 (61.5)
	Other countries*	5 (38.5)
Type of publication	Medical	11 (84.6)
	Medical economic	2 (15.4)
Country of the publishing journal	United Kingdom	5 (38.5)
	United States	2 (15.4)
	Scandinavia	2 (15.4)
	Netherlands	1 (7.7)
	Egypt	1 (7.7)
	New Zealand	1 (7.7)
	Edinburgh	1 (7.7)
* Lebanon, United States, France and Netherlands		

Table 2: Economic data of the included papers represented as numbers (percentages)

Parameter	Categories	N (%)
Costs considered	Direct costs only	10 (76.9)
	Direct and indirect costs	3 (23.1)
Method of economic evaluation*	CEA	8 (61.5)
	CBA	4 (30.7)
	CUA	2 (15.4)
	CMA	1 (7.7)
Study design*	Randomized controlled trial	4 (30.7)
	Prospective cohort	4 (30.7)
	Retrospective database	1 (7.7)
	Modeling	5 (38.5)
Type of studied intervention*	Prevention	6 (46.1)
	Treatment	7 (53.8)
	Diagnosis	1 (7.7)
Type of data	Primary	9 (69.3)
	Secondary	4 (30.7)
Funding source	Stated	7 (53.8)
	No funds received	1 (7.7)
	No statement	5 (38.5)
Modeling	Yes	5 (38.5)
	No	8 (61.5)
Abbreviations: CBA, cost-benefit analysis; CEA, cost-effectiveness analysis; CMA, cost minimization analysis; CUA, cost-utility analysis * More than one category is included in the same study.		

Table 3: General information of the included papers

First author	Disease investigated	Perspective	Outcome Measures	Interventions	Main results
Atiyeh, 2002 [31]	Burns	NA	Costs	They compared MEBO against the standard local therapy	MEBO was more cost effective
Ortega, 2009 [32]	RV Vaccinations	Ministry of health and population and societal	BCR DALY	Cost-benefit and cost-effectiveness analysis of a national rotavirus immunization program in Egypt	Although the introduction of RV vaccine to the national immunization program may not be cost-saving, the potential benefits of long-term health and economic gains from reduced mortality and morbidity, decreased direct costs of care for families, and indirect societal costs should be considered
Gheith, 2010 [33]	Renal transplant	NA	Clinical outcome, costs	Steroid withdrawal against a maintenance steroid dose in the control group	Steroid avoidance was associated with lower total cost despite comparable immunosuppression cost, which was attributed to the lower cost of associated morbidities
Connolly, 2012 [34]	RV Vaccinations	Limited Societal, governmental	Costs	Vaccinating children against RV versus No Vaccination	Both short- and long-term economic benefits from investing in RV vaccination can be achieved by the Egyptian government
Sibak, 2014 [35]	Pneumonia vaccination	Governmental and selected public health providers	ICER	General vaccination of children < 5 years with the 13-valent pneumococcal conjugate vaccine (PCV13), using a three-dose schedule without booster versus no vaccination	PCV13 introduction would be a good value for money from the government perspective
Kim, 2014 [36]	HCV	Societal	Cost QALY ICER	Use the case of Egypt to estimate the cost-effectiveness of an intervention to provide one-time screening and follow-up treatment for HCV infection, compared with the current strategy of no screening.	Implementation of screening and treatment programs for HCV in Egypt can be cost-effective methods to reduce the burden of liver disease
Obach, 2014 [37]	HCV	Modified Societal	QALY ICER and life expectancy	Immediate versus delayed treatment of HCV-infected patients with pegylated interferon and ribavirin	Immediate treatment of patients with fibrosis stages F1–F3 is more cost effective than delaying treatment
Harwan, 2014 [38]	Pneumonia	NA	Costs	Antibiotic regimen containing fluoroquinolone vs. antibiotic regimen not containing fluoroquinolone	Non-significant difference in the number of days in ICU and the overall costs was observed between the two groups
EL Sabaawy, 2015 [39]	HCV	NA	QLYG QALY Cost/QALY (ICER)	Comparing treatment with three variants of PEG-IFN plus RBV in order to develop recommendations for clinical practice	Treatment of genotype 4 chronic HCV infection with Pegasys and RBV treatment is largely the most cost-effective
Eltabbakh, 2015 [40]	HCC	NA	QLYG Cost/QLYG	Assessment of patients for the development of HCC for at least 18 months using both ultrasound examination and AFP level assay	Prospective screening programs of cirrhotic patients by either ultrasound alone or combined with AFP are feasible, highly cost-effective and have an effect in diagnosis of HCC at early stages in developing countries and resource-limited settings

Kamal, 2015 [41]	HCV	NA	Costs	Compare All-HCV core antigen assay protocol and a hybrid (qtHCV RNA PCR and HCV core Ag assay) protocol to the standard All-qtHCV-PCR protocol patients treated with pegylated interferon and RBV.	Each of the All-HCV core assay and the hybrid protocols is associated with significant cost saving compared with the standard All HCV-PCR protocol
El-Hamamsy, 2016 [30]	Heart valve prostheses	Egyptian health sector	QALY ICER	The combined use of aspirin and warfarin therapy versus warfarin alone.	Adding aspirin to warfarin therapy is more cost effective than treatment with warfarin alone.
Abdel-Raheem, 2016 [42]	Scabies	NA	Cure rate Costs	Comparison of four drugs for treatment of scabies (Benzyl benzoate versus ivermectin versus permethrin versus sulphur preparations)	Benzyl benzoate was more cost effective than ivermectin. Permethrin and sulfur preparations were the most expensive
Abbreviations: AFP, alpha-fetoprotein; BCR, benefit-cost ratio; DALY, disability-adjusted life-years; HCC, hepatocellular carcinoma; HCV, hepatitis C virus; ICER, incremental cost-effectiveness ratio; ICU, intensive care unit; LYG, life years gained; NA, not available; PCR, polymerase chain reaction; QALY, quality-adjusted life-years; QLYG: Quality-adjusted life year gained; RBV, ribavirin; RV, rotavirus; USD, united states dollars					

Table 4: The comparison of QHES scores (presented as mean \pm SD) among different variables of the studies

Parameter	Categories	QHES score	P-value*
Country of residence of the primary author	Egypt (8) Other countries (5)	64.4 \pm 18.7 77.9 \pm 25.3	0.293
Number of authors	< 7 authors (5) \geq 7 authors (8)	57.6 \pm 12.3 77.1 \pm 23.3	0.116
Type of publication	Medical (11) Medical economic (2)	66.8 \pm 22.1 85.2 \pm 10.6	0.285
Costs considered	Direct costs only (10) Direct and indirect costs (3)	69.9 \pm 20.2 68.6 \pm 30.9	0.933
Type of data	Primary (9) Secondary (4)	61.6 \pm 20.3 88.8 \pm 7.6	0.025*
Modelling	Performed (5) Not performed (8)	89.85 \pm 7.04 57.03 \pm 17.24	0.002*
* Independent sample t-test, P-values < 0.05 are statistically significant.			