VPS Systematic Reviews/Meta-Analysis

Education/Training

185E. The role of mentorship programs on pharmacy education: a systematic review of observational studies. Rasha Abdelsalam Elshenawey, BCPS AQ-ID, M.Sc. of Clinical Pharmacy, SIDP, CPHQ, Tanta University Hospitals, Egypt[1], Fatma Elzahraa Ahmed, M.Sc. of Clinical Pharmacy, CPHQ, BCPS, Member of FADIC, UAE[2], Heba-t-Allah Matar Ali Matar, BCPS, M.Sc. of Clinical Pharmacy[3], Heba Sayed Yousef, M.Sc. of Clinical Pharmacy, Cairo University BCPS, Member of FADIC, CPHQ, PHS, UAE; [1]FADIC, Makkah, Saudi Arabia [2]FADIC, Abu-Dhabi, United Arab Emirates [3]FADIC, Cairo, Egypt [4]Dubai, United Arab Emirates

Health Services Research

186. Systematic review for development of a medicinal products and medical devices prioritization framework. *Alberto Frutos Pérez-Surio*, Mercedes Gimeno-Gracia, María Aránzazu Alcácera-López, Mª Asunción Sagredo-Samanes, Mª del Puerto Pardo-Jario, Mª del Tránsito Salvador-Gómez; Pharmacy Department, University Clinical Hospital "Lozano Blesa", Zaragoza, Spain
BACKGROUND: The purpose of the research question is to develop an explicit priority setting methodology to support decision-making regarding Medicinal Products and Medical Devices to be included in hospital pharmacy practice. The development of a comprehensive prioritization system is the outcome essential for an important benefit to the healthcare system. The aim of this paper is to identify and analyze the processes and decision criteria used internationally for priority setting in order to establish a comprehensive set of strategic criteria for starting point for the development of a Medicinal Products and Medical Devices prioritization framework.
METHODS: A systematic search of the literature was carried out in December 2017, in the main biomedical electronic databases: Medline/PubMed, Embase, Centre for Reviews and Dissemination (CRD), and Cochrane. Eligibility criteria for inclusion were based on set of predefined criteria. Systematic reviews and/or qualitative studies (interviews, surveys, expert consensus, etc) that aimed to identify prioritization criteria or develop general operational frameworks for the selection of health priorities were included. Data of the studies were analyzed and synthesized qualitatively.
RESULTS: A total of 17 documents complied with eligibility criteria, 15 were published in scientific journals and 2 were identified through web pages. The studies showed great heterogeneity. A total of 56 potentially relevant priority setting criteria were identified, which could be grouped in 8 categories: 1) Need for intervention; 2) Outcomes of intervention; 3) Type of benefit; 4) Economic consequences; 5) Existing knowledge/quality of evidence and uncertainties; 6) Implementation complexity/feasibility; 7) Priority, justice and equity; and 8) Context.
DISCUSSION: There are no standardized processes for priority setting, despite the fact some general consensus and common trends have been identified regarding criteria, models and strategies, and key actors. This research provides a thorough analysis of these approaches and offers recommendations for implementing successful prioritization approaches.
OTHER: Authors declare no COI nor funding.

Pharmacoepidemiology

187. A systematic review of economic evaluation studies of ophthalmic drugs. *Inês Ribeiro, Pharm.D.*, Francisco Batel-Marques, Pharm.D., Ph.D., Carlos Alves, Pharm.D., Ph.D.; Centre for Health Technology Assessment and Drug Research, AIBILI - Association for Innovation and Biomedical Research on Light and Image, Coimbra, Portugal
BACKGROUND: The number and the importance of economic evaluation studies of ophthalmic drugs have been growing. This study aims at reviewing economic evaluation studies of ophthalmic drugs and identifying the sources of effectiveness measures used.
METHODS: A systematic search, according to PRISMA orientations, was conducted in Medline and Embase from its inception until June 2017. Only full studies were included, therefore cost-minimization analyses were excluded. Therapeutic areas, interventions, type of analysis and sources of effectiveness measures were identified. The methodological-quality of the economic studies was evaluated according to the British Medical Journal (BMJ) checklist.
RESULTS: Eighty-six studies were included. Forty-three (50%) were cost-utility analysis, 28 (33%) cost-effectiveness analysis and 15 (17%) simultaneously cost-effectiveness/cost-utility analysis. The main therapeutic areas were age-related macular degeneration (n=35; 40.7%), glaucoma/ocular hypertension (n=19; 22.1%) and conjunctivitis (n=7; 8.1%). Biologic agents (n=57; 39.3%), verteporfin (n=11; 7.6%), and bimatoprost (n=11; 7.6%) were the most evaluated drugs. Of the 43 cost-utility studies, 18 (41.9%) retrieved effectiveness measures exclusively from observational studies, 9 (20.9%) exclusively from experimental studies, and four (9.3%) from both. Of the 28 cost-effectiveness studies, 15 (53.6%) retrieved effectiveness measures exclusively from experimental studies, four (14.3%) exclusively from observational studies, and one (4.2%) from both. Of the 15 cost-effectiveness/cost-utility studies, nine (60%) retrieved effectiveness data from both experimental and observational studies, and one (6.7%) exclusively from experimental studies. All studies demonstrated methodological-quality limitations.
DISCUSSION: Cost-utility analysis was the most used technique to assess the pharmacoeconomic value of ophthalmic drugs, frequently using observational data sources. However, a great methodological heterogeneity was found among studies.
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Pharmacogenomics/Pharmacogenetics

188. Pharmacogenetics of warfarin dose requirements in the African continent: a systematic review. *Ahmed Salem, B.Pharm, MSc.*[1], Ibrahim Abdelgawad, B.Pharm[1], Mahmoud Tammam, B.Pharm, BCPS[2], Mohamed Solayman, B.Sc Pharm, M.Sc Pharm, Ph.D.[1]; [1]Department of Clinical Pharmacy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt [2]IQVIA, Cairo, Egypt
BACKGROUND: Warfarin is a widely prescribed oral anticoagulant especially in populations with low socioeconomic status. Different populations demonstrate inconsistencies in the pharmacogenetic determinants of warfarin dose requirements. Moreover, there is a paucity of the pharmacogenetics studies conducted on the genetically diverse African populations. Hence, herein, we systematically evaluated the availability and utility of genetic and non-genetic factors affecting warfarin dosing in Africa.
METHODS: Systematic comprehensive search for relevant studies was conducted in PubMed, Scopus, and Web of Science, using appropriate search keywords. The date of last search was November 2017. We included observational pharmacogenetic studies performed on patients from any of the African countries who were on stable warfarin dose for sufficient time. Quality of the included studies was assessed using "Strengthening the Reporting of Genetic Association studies (STREGA)" guidelines.
RESULTS: We included 14 observational studies conducted on four different populations: Ghanaian, South African, Sudanese, and Egyptian in whom ten of the studies were conducted. Among the commonly studied genetic variants, *VKORC1* rs9923231 and