

chronic health conditions and as an additional element in multi-component intervention programs. However, these conclusions are not definitive due to the low number of studies available for each health condition and their high or unclear risk of bias.

PP21 Efficacy And Safety Of Aromatherapy: An Overview Of Systematic Reviews

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Introduction. Aromatherapy is the field of herbal medicine that uses essential oils distilled from flowers, roots, and herbs and other plant compounds to promote physical and psychological well-being. Essential oils are absorbed into the body in different ways, with the inhaled and topical routes being the most widely used. The aim of this review was to critically evaluate and synthesize the available scientific evidence on the efficacy and safety of aromatherapy for the management of any therapeutic indication. This report was requested by the Spanish Ministries of Health and Science and Innovation.

Methods. An overview of systematic reviews (SRs) was performed. The MEDLINE, Embase, CINAHL, and PsycINFO databases were searched for literature published from January 2006 to August 2021. SRs reporting the efficacy and safety of aromatherapy were included. We applied no restrictions in terms of administration route or essential oil used. Two reviewers independently performed screening and selection, data extraction, and quality assessment.

Results. We included 74 SRs covering a wide variety of populations and settings. The most reported outcome was anxiety, followed by pain, and the most commonly used essential oil was lavender. Fifteen SRs reported mild adverse events with aromatherapy. Only 11 SRs assessed the certainty of evidence using the GRADE approach. Aromatherapy reduced heart rate and likely reduces anxiety and breathing rate in patients with cardiovascular diseases. Aromatherapy probably also reduces pain in women with primary dysmenorrhea. Additionally, it may reduce blood pressure, acute pain, subjective stress, and the need for antiemetic drugs after surgical procedures. However, the evidence was very uncertain regarding the effect of essential oils on anxiety, pain, and quality of life in patients with cancer, anxiety and pain after a caesarean section, and dental anxiety.

Conclusions. Aromatherapy may be useful for managing psychological and physical symptoms in different settings. However, the conclusions of this review are not definitive because of the moderate to high risk of bias in many of the primary studies included in the SRs.

PP22 A Lifecycle Approach To The Use Of Real-World Evidence In HTA Submissions And Resubmissions: A Decade's Experience

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Introduction. Health technology assessment (HTA) bodies worldwide recognize the importance of real-world evidence (RWE) in addressing uncertainties around the effectiveness of new drugs at the time of launch and as part of resubmissions. We assessed the use and acceptability of RWE by analyzing HTA recommendations.

Methods. We analyzed 24,841 HTA reports, including original submissions, resubmissions, extensions of original indications, and renewals, published from January 2011 to October 2021 from more than 100 HTA agencies across 37 countries.

Results. Our analysis showed that 3,820 (15%) reports mentioned RWE. Between 2011 and 2021 there was an eight-fold increase in the use of RWE, from 4 percent in 2011 to 34 percent in 2021. RWE was most commonly included in HTAs in oncology (26%) and endocrine and metabolic diseases (13%). The main areas supported were effectiveness (40%), safety (38%), and epidemiology (35%). RWE supplemented evidence on survival and quality of life as well as resource utilization, proxy comparators, and utility. Based on an analysis of the 1,474 reports that mentioned RWE, effectiveness was mainly supported by cohort (22%) and observational studies (13%), safety was mainly derived from pharmacovigilance data (9%), and epidemiology data were collected from registries (23%). The top five HTA bodies mentioning RWE in their reports were from France, Germany, Poland, and the United Kingdom (n=2). RWE was most accepted when it supported safety and epidemiological considerations, and to a lesser extent when it was used for effectiveness aspects or understanding management pathways.

Conclusions. The inclusion and acceptability of RWE in HTA recommendations varies between HTAs according to their data requirements and assessment methods. While it is not always specified how RWE was considered, there is a clear tendency for its increased use and acceptability, albeit not in all areas. Greater use of and transparency around RWE are likely to continue as multiple RWE initiatives emerge globally.

PP23 Lost In Translation? The Differences In The Use Of Real-World Evidence Across Key Markets

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Introduction. Health Technology Assessment (HTA) agencies have recognized the importance of real-world evidence (RWE) to inform access decision-making and different HTA agencies establish distinct requirements for their local jurisdictions. The objective of this study is to understand the differences of RWE included in HTA reports and HTA agencies' perception of RWE.

Methods. HTA reports from agencies in France, Germany, Spain, Italy, United Kingdom (UK), Canada, Australia and South Korea from January 2011 to November 2021, including original submissions, resubmissions, extensions of original indications and renewals were analyzed.

Results. Across the eight countries, RWE has been used in nineteen percent of all HTA reports (N=2,960/15,561), with an exponential increase observed between 2019 and 2021. RWE on clinical effectiveness was mostly used in HTA submissions in the UK (twenty-two percent), with twenty-six percent perceived with full acceptance. In contrast, RWE on safety and epidemiology was reported widely in HTA reports in France and Germany (83% and 87%), respectively. Ninety-three percent of RWE received full acceptance in France, followed by forty-four percent in Germany. A mixed picture of the types of RWE included in HTA reports was observed in the other countries, with high variance of acceptance (between 5 to 37%).

Conclusions. France, Germany, and the UK are the top three countries with a large proportion of HTA reports where RWE was mentioned. The type of RWE used is related to a large extent to the local evidence requirements. For example, RWE around epidemiology was included widely in Germany due to the needs of providing local data for budget impact analyses required by the Federal Joint Committee (G-BA); RWE on tolerability as reported in periodic safety update reports (PSURs) needs to be included in French HTA submissions. RWE on clinical effectiveness has been evaluated the most by the UK HTA bodies.

PP24 Organizing Outpatient Parenteral Antibiotic Therapy: Lessons from Denmark

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Introduction. Outpatient Parenteral Antibiotic Therapy (OPAT) is a complex medical treatment used to treat patients with severe infections. OPAT is provisioned outside hospitals. There is wide variation in the use and organization of OPAT in Denmark. OPAT is increasingly used in Danish regions and municipalities, however, there is limited knowledge on the clinical, economic and organizational consequences of this technology. The purpose of the project was to establish an evidence base for decision-making prior to any further prioritization of OPAT as an alternative to intravenous antibiotic treatment in the hospital (IPAT). The HTA was produced at the request of the Health Directors in the Danish Regions to examine the consequences of using OPAT compared with IPAT.

Methods. The results were based on a systematic literature review and qualitative interviews with leaders (n=5), administrative

employees (n=5) and health professionals (n=13) involved in the delivery of OPAT. Furthermore, a micro-costing analysis based on interviews with clinical experts was conducted.

Results. The use of OPAT led to similar or better clinical results when compared with the use of IPAT. Current evidence supports OPAT as a safe model for intravenous antibiotic treatment. The organization of OPAT varied in Denmark as well as internationally. The selection of suitable patients for the different OPAT models was crucial for a successful treatment. Insight into patients' understanding of the pros and cons of the technology indicated that most patients preferred treatment at home. In a Danish context the microeconomic analysis showed that different OPAT models generally led to a reduction in costs compared with IPAT.

Conclusions. The project contributes to practice and political decision making by identifying challenges and opportunities associated with OPAT. There is no one-size-fits-all solution. The choice of OPAT model must be based on careful clinical considerations. Coordination and communication across municipalities and hospitals is challenging. Reducing organizational complexity is necessary to achieve a more standardized practice.

PP25 Brazilian Collaborative Network For COVID-19 Modeling: Successful Experience Of Using Real-Time Science To Support Evidence-Based Decision-Making

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Introduction. Modeling is important for guiding policy during epidemics. The objective of this work was to describe the experience of structuring a multidisciplinary collaborative network in Brazil for modeling coronavirus disease 2019 (COVID-19) to support decision-making throughout the pandemic.

Methods. Responding to a national call in June 2020 for proposals on COVID-19 mitigation projects, we established a team of investigators from public universities located in various regions throughout Brazil. The team's main objective was to model severe acute respiratory syndrome coronavirus 2 transmission dynamics in various demographic and epidemiologic settings in Brazil using different types of models and mitigation interventions. The modeling results aimed to provide information to support policy making. This descriptive study outlines the processes, products, challenges, and lessons learned from this innovative experience.