SYSTEMATIC REVIEW OF ECONOMIC EVALUATIONS IN MULTIDISCIPLINARY PAIN MANAGEMENT SERVICES FOR MANAGING PEOPLE WITH FIBROMYALGIA OR CHRONIC WIDESPREAD PAIN

OBJECTIVES: The objective of this literature review was to explore the existing evidences regarding the economic evaluation of multidisciplinary pain management services in managing people with fibromyalgia or chronic widespread pain.

METHODS: Electronic search of Embase, MEDLINE, PsychINFO, NHS EED, JBI, and Cochrane database was performed. Studies published from the time of the respective database inception to April 2015 were considered for inclusion in this review. The quality of studies was assessed using the Cochrane Back Review Group and the Consolidated Health Economic Evaluation Reporting Standards (CHEERS).

RESULTS: The literature review allowed retrieving 620 studies of which 6–8, 7, and 6 published in 2004, 2009, and 2015, respectively. All included studies were randomized clinical trials published between 1996 and 2015. Two were from the UK, two from Spain, and two from the Netherlands. Risk of bias was high in two studies. The intervention, comparators, disciplines involved, and number of sessions were well described in most of the studies. Variation between the included studies was in type of interventions, length of administration, follow-up period, and outcome measured. None of the studies met all CHEERS quality criteria.

In five studies, multidisciplinary pain management services were cost-effective at short-term follow up; however, this was not always maintained in long-term follow up.

CONCLUSIONS: Due to the high level of heterogeneity among selected studies, we were unable to make a definitive conclusion about the cost-effectiveness of pain management services in managing people with fibromyalgia or chronic widespread pain. Multidisciplinary pain management services trials must be based on high methodological and economic quality to determine the cost-effectiveness of multidisciplinary pain management services.

COMPARISONS OF FACTOR CONSUMPTION FOR ROUTINE PROPHYLAXIS AND BLEEDING DURING EPISODIC THERAPY WITH RECOMBINANT FACTOR VIII FC FUSION PROTEIN AND CONVENTIONAL RECOMBINANT FACTOR VIII (FVIII)

OBJECTIVES: To better understand the impact of new extended-half-life recombinant factor VIII (rFVIII) treatments relative to conventional rFVIII, we indirectly compared published clinical study results of the factor consumption (FC) and number of injections to treat a bleed during episodic therapy and the FC and annualized bleeding rates (ABR) during prophylaxis with rFVIII fc fusion protein (rFVIIIcFc) and conventional rFVIII (rFVIII). A systematic review of simulated adherence scenarios was conducted to determine if the new recombinant prophylaxis in previously treated adults and adolescents with severe haemophilia A for comparison with rFVIIIcFc (Mahlangu 2014, Arm 1, individualized prophylaxis). Comparisons were based on the simple differences between studies in median weekly FC, mean prophylaxis ABRs, and the median FC and numbers of injections per bleed. Median weekly FC was reported or estimated from the reported dose and weekly number of injections; FC per bleed was estimated from the reported dose and number of bleedings per patient. The number of injections per bleed was calculated from the reported breakdown of bleeds by required number of injections or the total number of injections divided by total bleeds. RESULTS: Four conventional rFVIII studies were included: Tarantino 2003, Tarantino 2012, Tarantino 2014, and Lambert 2007 (BeneF8X® and Windygra 2014 (Rixubis®)). During prophylaxis, the mean ABR was comparable or lower and FC was lower with rFVIIIcFc compared with rFVIII (weighted average ABR with rFVIIIcFc was 4.1 vs. 5.2 in Arm II, and weighted average FC per bleed was 1.7 vs. 2.4 in the Arm II). ABR was lower in Arm I and II with rFVIIIcFc than in Arm II with rFVIII. FC per bleed was lower with rFVIIIcFc than with rFVIII (weighted average number of injections with conventional rFVIII was 4.0 vs. 5.2 in Arm II, and weighted average increase in median weekly FC with rFVIII=24%). The number of injections and FC per bleed were comparable or lower with rFVIIIcFc vs. each rFVIII study (weighted average number of injections with rFVIII=1.4 vs. 1.2 with rFVIIIcFc; weighted average increase in median weekly FC with rFVIII=24%)

COMPARISON OF NETWORK META-ANALYSIS AND TRADITIONAL META-ANALYSIS FOR PREVENTION OF RELAPSES IN MULTIPLE SCLEROSIS

OBJECTIVES: Several new agents have shown positive results in clinical trials for prevention of relapses in multiple sclerosis. The objective of this study was to compare network meta-analysis results with traditional meta-analysis.

METHODS: A systematic literature search for randomized clinical trials for multiple sclerosis was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar and Cochrane. Data was collected for the study type, methods, country and key findings. Studies included those that included study for patients with relapse-related outcomes. A bayesian random effects network meta-analysis (NMA) model was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar and Cochrane. Studies published from 2009 to 2018 were included. All included studies were randomized clinical trials published between 1996 and 2015. Two were from the UK, two from Spain, and two from the Netherlands. Risk of bias was high in two studies. The intervention, comparators, disciplines involved, and number of sessions were well described in most of the studies. Variation between the included studies was in type of interventions, length of administration, follow-up period, and outcome measured. None of the studies met all CHEERS quality criteria.

In five studies, multidisciplinary pain management services were cost-effective at short-term follow up; however, this was not always maintained in long-term follow up.

CONCLUSIONS: Due to the high level of heterogeneity among selected studies, we were unable to make a definitive conclusion about the cost-effectiveness of pain management services in managing people with fibromyalgia or chronic widespread pain. Multidisciplinary pain management services trials must be based on high methodological and economic quality to determine the cost-effectiveness of multidisciplinary pain management services.