

## **Bahrain Branch of Cochrane Collaboration: Six Years of Achievement**

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### **Introduction**

The Bahrain Branch was the first Cochrane Collaboration branch in the Middle East and was established on the 17th March 2005. Its reference Centre is the UK Cochrane Centre, based in Oxford, UK. Since it was established, the Bahrain Branch has served as a focal point for people in Arabic speaking countries and coordinated the development and provision of training and support to Cochrane review authors in these countries. One of the most important aims of the branch was to ensure effective, consistent and efficient communication and it has been the principal route through which communication from and to the wider Collaboration has been channeled.

### **Review Production and Updating**

Over the six year period since the inauguration of the branch, periodic progress reports have outlined the activities and the achievements of branch members in carrying out its core functions. These achievements have included the combined publication of 42 completed Cochrane reviews and protocols, which currently exceeds the total number by any single country in the region and indeed many of the EEC countries. These reviews have covered healthcare interventions in: ENT, Eyes and Vision, Dermatology, Upper Gastrointestinal and Pancreatic Diseases, Genetic diseases, Colorectal Cancer, Cardiovascular diseases, Neonatal Diseases, Menstrual Disorders and Subfertility, Movement Disorders, Multiple Sclerosis, Hematological Malignancies and Oral Health. A significant majority of these reviews has Bahraini lead authors and in particular reviews that investigate treatment options and management strategies for sickle cell disease, beta thalassaemia major and cystic fibrosis.

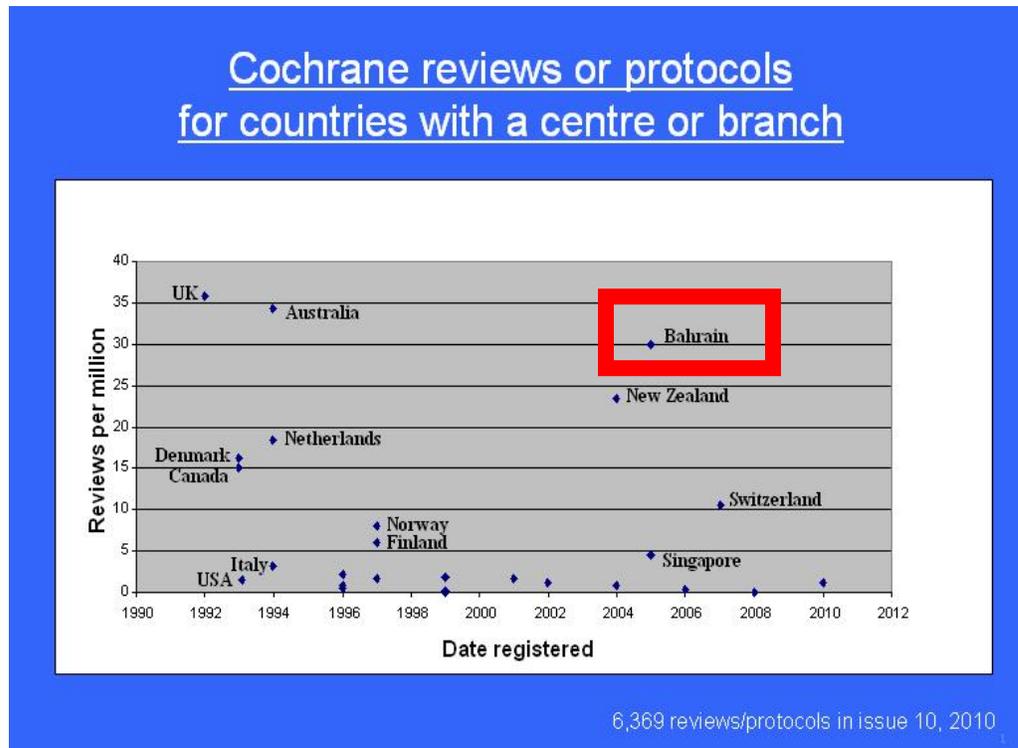
Co-authors on all of these reviews include colleagues from UK, USA, Turkey, Jordan, Kuwait, Oman, UAE, Lebanon, Norway, Germany, Australia, Iran, China, Singapore, India, Switzerland, Sri Lanka and Brazil.

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In November 2010, Bahrain was ranked number three at global level in terms of its Cochrane review production, placing it only marginally behind the UK and Australia, see figure 1.



**Figure 1: Cochrane Review Output/Million Head of Population**

Branch members have published widely in a number of leading peer reviewed journals, the Journal of the Royal Society of Medicine, the WHO journal (EMHJ), the Saudi Medical Journal, Annals of Saudi Medicine, the BMJ, Journal of the American Dental Association, Journal of Endodontics, AGD General Dentistry, Journal of Evidence-based Dentistry, Indian Pediatrics, Oral Surgery Oral Medicine Oral Pathology and Endodontics, Archives of Iranian Medicine and Acta Medica Iranica. Several branch members regularly contribute a column ‘Best Evidence from the Cochrane Library’ for the Bahrain Medical Bulletin. One Cochrane Review with a Bahraini lead author was recently highlighted by the internationally recognised Evidence-Based Child Health Journal and its clinical recommendations have now been incorporated into the WHO Model List of Essential Medicines. Almost all of the Cochrane Reviews that have been published by the Bahrain Branch have been included in the UK NHS Clinical Knowledge Summaries Database and are being used for clinical decision making and in some instances in UK NHS policy making.

Research work has been presented as oral or poster presentations at regional and international venues, on systematic review methodology in addition to the identification, quantifying and quality assessment of the randomised controlled trials which have been published in regional journals.

Podcasts in the English, Arabic, Portuguese and Spanish languages of several of our reviews are available on the main Cochrane website and these are being added to at each issue of The Cochrane Library.

Over the last year, the branch has successfully completed 16 reviews in different specialties including, ENT, dermatology, obstetrics and gynecology, cardiovascular system, genetic diseases, neurologic diseases and oral health. Several of these reviews are expected to have an important impact on the management of specific healthcare problems, such as, the reviews on 'Vitamin K supplementation for cystic fibrosis' and 'Vitamin D for the management of multiple sclerosis', or on healthcare policy making 'Enhanced external counterpulsation for chronic angina pectoris'.

Five new protocols are in press with an expected publication date of early 2011, recombinant growth hormone therapy for cystic fibrosis, prurigo nodularis, two in oral health and a further one on routine neo-natal circumcision for the prevention of urinary tract infection in children. Three further reviews in oral health are in final editorial peer review as well as several others in menstrual disorders and subfertility as well as in the effective practice and organization of care (EPOC); all of which are expected to be published towards the middle of 2011.

### **Training and Support**

Bahrain branch members have conducted training workshops both in and outside Bahrain: in Brazil, India, Sudan, USA, Dubai, Qatar, Saudi Arabia, UK, Turkey, Iran and Pakistan. They have also attended and actively contributed at Cochrane Colloquia in Ottawa in 2004, Melbourne 2005, Dublin 2006, Brazil 2007, Freiburg 2008, Singapore 2009 and USA 2010. Training provided has included protocol development and review completion and in the handsearching and quality assessment of randomised controlled trials.

The Cochrane Introductory leaflets have been translated from English into Arabic, the first such translation of these leaflets was completed by the branch translation coordinator and these translated documents were posted on the main Cochrane website in 2007, and the links to them have been distributed via the EMR WHO listserv.

The Bahrain branch website is now Arabic language 'enabled' and translation of key words from English into Arabic to allow navigation of the website has been completed. The index page of the Cochrane Collaboration website has been translated into Arabic and is available from the main Cochrane Collaboration webpage.

### **Handsearching of Regional Journals**

Handsearching of regional journals for reports of randomised controlled trials is a key core function of the Bahrain branch and substantial progress has been made in the identification of previously inaccessible trials. The Bahrain Branch is working in

collaboration with a group of handsearchers in the region to systematically handsearch all regional healthcare journals. Handsearching has been completed and is up to date for most of the indexed regional journals and many of the non-indexed journals, which are published throughout the Eastern Mediterranean Region. The number of registered handsearchers allied to the Bahrain Branch has increased to 13 with the addition of one Bahraini and Omani colleague.

### **List of Journals being Handsearched**

Annals of Saudi Medicine, Bahrain Medical Bulletin, Eastern Mediterranean Health Journal, Emirates Medical Journal, Journal of the Bahrain Medical Society, Journal of the Saudi Heart Association, Kuwait Medical Journal, Neurosciences, Pan Arab Journal of Neurosurgery, Saudi Journal of Gastroenterology, Saudi Journal of Kidney Diseases and Transplantation, Saudi Medical Journal, DARU, Acta Medica Iranica, Journal of Dentistry of TUMS, Archives of Iranian Medicine, Iranian Journal of Medical Sciences, Iranian Journal of Pediatrics, Urology Journal, Medical Journal of Islamic Republic of Iran, Iranian Heart Journal, Iranian Journal of Allergy, Asthma & Immunology, Journal of Research in Medical Sciences, Journal of Dental Medicine of TUMS and Shahid Beheshti University Dental Journal. An additional 20 journals are being handsearched in Brazil by Brazilian associate members of the Bahrain branch.

Healthcare consumers are represented in the branch through Alison Thomas and a network of individuals from the internationally based Cochrane Consumer Network (CCNet). These colleagues are continuing to provide consumer input into a wide range of healthcare topics and interventions for Cochrane reviews, Clinical Knowledge Summaries (CKS) NHS/UK and NICE guidelines.

### **Informing Health Policy**

The Bahrain branch has been routinely requested to provide reliable 'evidence' for the effectiveness or otherwise of healthcare interventions. These evidence-based summaries have been developed from the conclusions and recommendations of Cochrane Systematic Reviews and other similar sources. The principal aim is to guide healthcare policy at the ministry of health. Topics covered include:

- Comparative effectiveness of Rosiglitazone in Type 2 Diabetes
- high flux versus low flux membranes in renal dialysis
- hyperbaric oxygen therapy
- Breast screening and mammography
- Guidelines on a number of non-communicable diseases

The branch has also served as a resource for information on a range of other healthcare issues, the effectiveness of antivirals in the management of H1N1, avian flu.

At regular intervals requests received from the Central Drug Committee to provide information on the comparative effectiveness of new drugs to be added to the formulary.

## **Contributors to the Work of the Bahrain Branch**

These include co-authors, handsearchers and consumers based in most of the GCC countries in addition to the UK, USA, Iran, Egypt, Brazil, Argentina, South Africa, Switzerland, Germany, Holland and Russia. The level, nature and extent of contribution includes: co-authoring of Cochrane reviews and other publications, translation of documents and clinical trials from and into the English Language, handsearching, co-facilitation with workshops and content expert or peer referee support.

## **Future Goals of the Bahrain Branch**

The branch has ambitious plan for the next 5 years which will include building research capacity in systematic reviews covering major health issues of relevance to Bahrain and the region, such as, hereditary blood diseases and diabetes. Moreover, the branch aims to take proactive steps in expanding its remit to cover comparative effectiveness research (CER) which involves not only the assessment of randomized controlled trials but also other types of research that could provide evidence in the field of general clinical practice. This would allow patients, clinicians, health care purchasers and policy makers to make informed decisions on a wider range of health care issues.

Raising awareness of evidence based medicine among health care professionals, students and the public is a further important priority for the branch.

The Cochrane Collaboration has recently been accepted as an NGO by WHO, a move which will closely align the objectives of both organisations and progress the future role of the Bahrain Branch as a WHO Collaborating Center.

## **Acknowledgment**

We are very grateful to the Ministry of Health of Bahrain for embracing the branch, and owe a special debt of gratitude to Dr Fawzi Amin the Assistant Undersecretary for Training and Planning for his strong support, input, helpful comments and insightful guidance over the years.