First impressions at the Edinburgh Colloquium

The Cochrane Colloquium is an annual event, bringing people together from around the world to discuss putting research into important global health questions and promoting evidence-informed healthcare. This year the theme was ‘Cochrane for all – better evidence for better health decisions’.

We asked two Cochrane SA staff members for their impressions of their first colloquium.

**Ameer Hohlfeld**

It was indeed an honour to present a long oral including a poster at the 25th Cochrane Colloquium. The adrenalin of attending a Cochrane Colloquium started to kick in once I arrived in Edinburgh and settled into the hotel. Before the trip, I made sure to study the programme highlighting the exciting workshops and presentations that would be of most benefit to me to ensure that I acquire new skills and expand my knowledge. Deciding on which sessions to attend proved to be a difficult task as there were many to chose from, so, unfortunately, I had to make some tough decisions.

The workshops I attended assisted me immensely in improving my skills through the interactive environment that encouraged active participation and teamwork from not only the facilitators but also the participants. Also, having the chance to link with like-minded individuals during these sessions who are all seeking to increase the quality of how research is conducted was truly inspirational. Furthermore, the plenary speakers provided captivating and fascinating presentations that centred around the colloquium’s theme ‘Cochrane for all – better evidence for better health decisions’.

Being granted the opportunity to contribute to and participate in this event was invaluable to me. It was a learning experience that has thus far been unmatched, and it gave me the opportunity to advance my research skills.

**Duduzile Ndwandwe**

My experience of attending the 25th Cochrane Colloquium for the first time was one of mixed emotions. The colloquium was hosted by Cochrane UK at the Edinburgh International Conference Centre in Scotland. I have attended many conferences in biomedical research but was a bit nervous that I would not understand the complex statistical methods used in systematic reviews. This is partly because I am still new in this field of research. I was very excited when I saw that this year’s theme was ‘Cochrane for all – better evidence for better health decisions’ which eased my anxieties a bit. I enjoyed the fact that there was a strong emphasis on involving patients. This is important because researchers sometimes tend to forget the people for whom the interventions are intended when designing those interventions. From my experience in clinical trial research implementation I know it’s true that patients and/or participants play a critical role in the successful implementation of research.

Besides the research that was conducted, I appreciated the fact that there is a platform for an annual General Meeting where all Cochrane collaborators can discuss pertinent issues. While it was all great, the allocated time was not enough and, as a result, important sessions were parallel to one another. I felt it should have been extended to more days to ensure that important research presentations are heard by as many people as possible.

Overall my experience was great and I enjoyed the colloquium.
TECHNICAL SUMMARY

Treatment for HIV-associated cryptococcal meningitis

Background
Cryptococcal meningitis is a severe fungal infection that occurs primarily due to advanced immunodeficiency and is a major cause of HIV-related deaths worldwide. The best initial therapy to reduce mortality from HIV-associated cryptococcal meningitis is unclear, particularly in resource-limited settings where management of drug-related toxicities associated with more potent anti-fungal drugs is a challenge.

Objectives
To evaluate the best initial therapy to reduce mortality from HIV-associated cryptococcal meningitis and compare side-effect profiles of different therapies.

Search methods
The authors searched the Cochrane Infectious Diseases Group Specialised Register, CENTRAL, MEDLINE (PubMed), Embase (Ovid), LILACS (BIREME), African Index Medicus, and Index Medicus for the South-East Asia Region from 1 January 1980 to 9 July 2018. They also searched the World Health Organization International Clinical Trials Registry Platform, ClinicalTrials.gov, and the ISRCTN registry; and abstracts of select conferences published between 1 July 2014 and 9 July 2018.

Selection criteria
The authors included randomised-controlled trials that compared anti-fungal therapies used for the first episode of HIV-associated cryptococcal meningitis. Comparisons could include different individual or combination therapies, or the same anti-fungal therapies with differing durations of induction (less than two weeks or two or more weeks, the latter being the current standard of care). Data were included regardless of age, geographical region or drug dosage and no language restriction was specified.

Data collection and analysis
Two review authors independently screened titles and abstracts identified by the search strategy. Full texts of potentially eligible studies were obtained to assess eligibility and data were extracted using standardised forms. The main outcomes included mortality at two weeks, 10 weeks, and six months; mean rate of cerebrospinal fluid fungal clearance in the first two weeks of treatment; and Division of AIDS Grade 3 or 4 laboratory events. Using random-effects models pooled risk ratio (RR) and 95% confidence interval (CI) for dichotomous outcomes and mean differences (MD) and 95% CI for continuous outcomes were determined. For the direct comparison of 10-week mortality, the certainty of the evidence was assessed using GRADE.

A network meta-analysis was performed using multivariate meta-regression. The authors modelled treatment differences (RR and 95% CI) and determined treatment rankings for two and 10-week mortality outcomes using surface under the cumulative ranking curve (SUCRA). Transitivity was assessed by comparing distribution of effect modifiers between studies, local inconsistency through a node-splitting approach, and global inconsistency using design-by-treatment interaction modelling. For the network meta-analysis, a modified GRADE approach was applied for assessing the certainty of the evidence for 10-week mortality.

Results
Thirteen studies were included that enrolled 2426 participants and compared 21 interventions. All involved adults, and all but two studies were in resource-limited settings, including 11 of 12 studies with 10-week mortality data.

In the direct pairwise comparisons evaluating 10-week mortality, one study from four sub-Saharan African countries contributed data to several key comparisons. At 10 weeks these data showed that those on the regimen of one-week amphotericin B deoxycholate (AmBd) and fluconazole (5FC) followed by fluconazole (FLU) on days eight to 14 had lower mortality when compared to (i) two weeks of AmBd and 5FC (RR 0.62, 95% CI 0.39 to 0.93; 228 participants, one study); (ii) two weeks of AmBd and FLU (RR 0.58, 95% CI 0.39 to 0.86; 227 participants, one study); (iii) one week of AmBd with two weeks of FLU (RR 0.49, 95% CI 0.34 to 0.72; 224 participants, one study); and, (iv) two weeks of 5FC and FLU (RR 0.68, 95% CI 0.47 to 0.99; 338 participants, one study). The evidence for each of these comparisons was of moderate certainty.

For other outcomes, this shortened one-week AmBd and 5FC regimen had similar fungal clearance (MD 0.05 log10 CFU/mL/day, 95% CI -0.02 to 0.12; 186 participants, one study) as well as lower risk of Grade 3 or 4 anaemia (RR 0.31, 95% CI 0.16 to 0.60; 228 participants, one study) compared to the two-week regimen of AmBd and 5FC. For 10-week mortality, the comparison of two weeks of 5FC and FLU with two weeks of AmBd and 5FC (RR 0.92, 95% CI 0.69 to 1.23; 340 participants, one study) or two weeks of AmBd and FLU (RR 0.85, 95% CI 0.64 to 1.13; 339 participants, one study) did not show a difference in mortality, with moderate-certainty evidence for both comparisons.

When two weeks of combination AmBd and 5FC was compared with AmBd alone, pooled data showed lower mortality at 10 weeks (RR 0.66, 95% CI 0.46 to 0.95; 231 participants, two studies, moderate-certainty evidence). When two weeks of AmBd and FLU was compared to AmBd alone, there was no difference in 10-week mortality in pooled data (RR 0.94, 95% CI 0.55 to 1.62; 371 participants, three studies, low-certainty evidence). One week of AmBd and 5FC followed by FLU on days eight to 14 was the best initial therapy regimen after comparison with 11 other regimens for 10-week mortality in the network meta-analysis, with an overall SUCRA ranking of 88%.
Conclusions
In resource-limited settings, one-week AmBd- and 5FC-based therapy is probably superior to other regimes for treatment of HIV-associated cryptococcal meningitis. An all-oral regimen of two weeks 5FC and FLU may be an alternative in settings where AmBd is unavailable or intravenous therapy cannot be safely administered. The review found no mortality benefit of combination two weeks AmBd and FLU compared to AmBd alone. Given the absence of data from studies in children, and limited data from high-income countries, the findings provide limited guidance for treatment in these patients and settings.


The authors found there were not enough data on any one dietary intervention to be able to say whether it helped or not.
- Exercise programmes (including brisk walking, cycling, resistance circuit-type training, instruction on active lifestyle, home-based exercise programme, six-week or 10-week exercise programme, yoga, etc.)
- Taking insulin or other drugs to control diabetes (including insulin and oral glucose lowering drugs).
- Supplements (myo-inositol given as a water-soluble powder or capsule).
- Lifestyle interventions may also increase the number of births.
- Management strategies (including early birth, methods of blood-glucose monitoring).

They found little data for strategies which included planned induction of labour or planned birth by caesarean section, and there was no clear difference in outcomes among these care plans. Similarly, they found no clear difference among outcomes for different methods of blood-glucose monitoring.

What evidence was found?
The authors found 14 Cochrane systematic reviews and included 10 reviews covering 128 studies in the analysis, which included a total of 17,984 women, and their babies. The quality of the evidence ranged from very low to high.

They looked at:
- Dietary interventions (including change to low or moderate glycaemic index (GI) diet, calorie restrictions, low-carbohydrate diet, high complex carbohydrate diet, high saturated fat diet, high-fibre diet, soy-protein enriched diet, etc.)
African Cochrane Indaba, Cape Town, 25 – 26 March 2019

“Trusted evidence for better health decisions in Africa.”

The Cochrane Indaba, hosted by Cochrane SA, will aim to share knowledge, experiences and skills for evidence-informed policy making and knowledge translation in Africa.

Objectives include facilitating advocacy for evidence-informed policy making; creating opportunities for stakeholder engagement and information sharing; planning for patient and public engagement; and, celebrating Cochrane SA’s 21st anniversary.

Early registration, which closes on 19 February 2019, is ZAR 2000 and late or onsite registration is ZAR 2800.

Abstract submission

Abstracts should be submitted online by 10 January 2019. They will be reviewed by the Abstract Review Committee and authors will be notified regarding acceptance or rejection by 22 January 2019. Abstracts must be submitted in English, are limited to 300 words and must include the following sections: background, methods, results and conclusion. For assistance with abstract submission contact aci.cochrane@mrc.ac.za

Key dates

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Expanding horizons: Cochrane SA’s first awareness-raising workshop delivered in Portuguese

On 24 October 2018, Cochrane SA hosted a workshop on evidence-based healthcare (EBHC) and Cochrane at the National Health Institute (INS) in Maputo, Mozambique. INS is an institution of Mozambique’s Ministry of Health that works towards generating technical and scientific health information to improve the health and well-being of the country’s population (https://www.ins.gov.mz/).

The aim of the workshop was to raise awareness about EBHC and how to access and interpret evidence from Cochrane reviews. The programme was dynamic and included short didactic presentations, and interactive sessions and exercises covering topics on principles of EBHC, systematic reviews, how to develop search strategies to identify systematic reviews in the Cochrane Library, and how to interpret results from systematic reviews.

Eleven participants attended the workshop, including medical doctors, dentists, pharmacists, biologists and one anthropologist. Most were INS staff, except two; one from Centro de Investigação e Treino em Saúde da Polana Caniço and the other from the Beira Operational Research Centre.

This was the first time this workshop was delivered in Portuguese. Through work of Cochrane Africa, funded by Cochrane Central, existing standardised training materials, including Powerpoint presentations and the participant manual, had been translated into Portuguese. This was an opportunity to implement this material, and worked very well.

In a previous workshop Cochrane SA had delivered in Maputo, participants mentioned that the fact that the workshop was delivered in English was a barrier to understanding and full participation. Some aspects of the workshop were in English, such as developing search strategies for the Cochrane library, but this was not problematic as participants had some knowledge of the English language and were able to do this fairly easily.

Overall participant feedback was very positive, and they enjoyed the interactivity of the workshop. For many this was the first time they had heard about Cochrane and Cochrane reviews, and they showed great interest in becoming Cochrane contributors. Feedback included wanting more time for exercises and to go more in depth into systematic review methods.

We hope that this is the beginning of growing Cochrane activity in Mozambique. Some of the participants have already started engaging with Cochrane Africa work linked to translation of abstracts of Cochrane review abstracts into Portuguese. These are reviews that address priority topics identified through Cochrane Africa’s priority-setting exercises.

Solange Duraõ, Cochrane SA
Find, interpret and use systematic reviews: Evidence synthesis workshop in Kilifi, Kenya

The role of systematic reviews is increasingly recognised in sub-Saharan Africa, where there is a need for evidence-based policies and practices to address the huge burden of disease. In order to effectively use evidence, all healthcare workers, decision makers and researchers need to be able to find, critically appraise and interpret systematic reviews. As part of the Effective Health Care Research Consortium (EHCRC) www.evidence4health.org, staff members from the Centre for Evidence-based Health Care (CEBHC) at Stellenbosch University, Cochrane SA and the Liverpool School of Tropical Medicine (LSTM) developed a 3-4 day course, Primer in Systematic Reviews, which aims to equip participants with the knowledge and skills to find, understand, appraise and use systematic reviews of effects of interventions. The course makes use of interactive presentations, group work and relevant systematic reviews to enhance learning. The course was first offered in Tanzania in 2012, and has since been implemented in various African countries, tailored to the specific needs of participants.

From 24 to 27 July 2018, facilitators from the CEBHC and the Ministry of Health, in Kenya, as part of Cochrane Africa (https://africa.cochrane.org/), offered the four-day workshop to 29 junior and senior health researchers at the KEMRI Wellcome Trust Research Programme in Kilifi, Kenya. The learning objectives for the workshop were for participants, on completion of the course, to be able to outline the rationale for research synthesis; identify components of a high-quality Cochrane systematic review; access systematic reviews of effects after formulating clear questions using PICO (population, incidence, condition, outcome); critically appraise reviews of effects, including statistical interpretation of meta-analysis; to interpret a GRADE profile table; and, to outline key components of a systematic review of effects that need to be considered in applying to health policy and practice. On the first day, we divided participants into five small groups, and they remained in their groups for the duration of the course. Each group received a unique scenario, describing an area of uncertainty, and had to phrase a clear question using the PICO format, develop a search strategy and search for evidence to answer that question, critically appraise a randomised-controlled trial (RCT) related to the question, and critically appraise and interpret the results of a systematic review to answer the question (the RCTs and the SRs were provided to them in advance as part of reading materials).

The topics included oral iron supplementation in malaria-endemic areas, task-shifting for initiating and maintaining antiretroviral treatment, fixed-dose versus single formulation of drugs for tuberculosis, interventions to improve coverage of childhood immunisation, and pre-exposure prophylaxis to prevent HIV. Participants actively engaged with each other in their small groups and also contributed to lively discussions during feedback sessions. Their evaluation of the workshop was positive, with many commenting on the relevance and timeliness of the training. Participants also suggested expanding the training beyond systematic reviews of effectiveness.

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Acknowledgements
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Michael McCaul and Anke Rohwer, CEBHC Stellenbosch University

Excellence awards for students
Two students supported by the South African Medical Research Council to attend the International Society for Vaccines conference in Atlanta, USA received excellence awards at the conference for their presentations and their work. They are supervised by Cochrane SA Director Charles Wiysonge. Both Chukwudi Nnaji, MPH student at the University of Cape Town, and Dr Olatunji Adetokunboh, PhD student at Stellenbosch University received the 2018 Low-and Middle-Income Country Award.

Both expressed their thanks to their supervisors and their ongoing motivation to work in the field of vaccines in Africa.
Principles of evidence-based healthcare and systematic reviews – workshop with AfricaCheck

A workshop was held in October with AfricaCheck in their offices in Johannesburg. Part of the mission of Cochrane SA is the dissemination of information on Cochrane and evidence-based healthcare (EBHC) to health stakeholders and the South African public. An obvious channel for such dissemination is the media. AfricaCheck is a fact-checking news agency and, as such, an obvious audience for further information on EBHC principles and Cochrane. The workshop was used to introduce them to the concepts of EBHC, systematic reviews and Cochrane reviews, the Cochrane library and other useful resources for their work.

Topics covered:

1. Understanding the principles of EBHC.
2. Explaining different types of study designs to answer different questions.
3. Outlining aspects of a good systematic review.
4. Highlighting components of a meta-analysis (forest plots) and summary of findings table.
5. Understanding the role of Cochrane, Cochrane South Africa and the Cochrane Africa Network.
6. Navigating the Cochrane library to access and read reliable evidence for stories.
7. Finding and using Cochrane systematic reviews for developing different types of media.

Learning techniques used included presentations, videos, case scenarios and exercises; practical demonstrations; and, small group work. The students were introduced to a case scenario, which was used throughout the presentation including the demonstration on the use of the Cochrane library.

In the small group exercise they were given four case scenarios and asked to prepare as feedback for the group the steps they took to find a relevant Cochrane review including developing a PICO and identifying keywords, what the overall review findings showed – indicating their understanding of the Abstract or Plain Language Summary and Summary of Findings Table, their analysis of the evidence and their plan for how they would use this in their work.

Michelle Galloway and Ameer Hohlfeld, Cochrane SA

“Thank you again for a truly insightful workshop. I think I speak for all of us when I say, we walked away from the workshop with new and useful tools with which to do our work. I think we’ll be making good use of the systematic review database going forward, particularly as a way of orientating ourselves to the latest research.”
– Gopolang Makou

This workshop was funded by the Research, Evidence and Development Initiative (READ-It) project (project number 300342-104) which is funded by the UK government.

Integration between Gradepro and RevMan 5 announced

The new deep integration between GRADEpro and RevMan 5 has recently been announced.

Users are able to connect with their Cochrane account (Archie account) and with their GRADEpro account, to share and update review data between those tools in real time, without the need to download or swap files back and forth. With a Cochrane account connected you will be able to import any of your reviews to GRADEpro.

The new integration comes with multiple benefits:

• All your reviews on Archie are available directly in GRADEpro.
• GRADEpro ‘knows’ about your review changes in RevMan and automatically offers the option to update the data.
• Data can be upgraded with one click in the same project. There is no need to create a new GRADEpro project with every review update done in RevMan.
• Ready summary of findings tables can be exported from GRADEpro directly to your RevMan review, automatically populating the correct review document section.

Connect your Cochrane account today to try this new functionality.
Dr Chikwendu J. Ede has been announced as the 2018 winner of the prestigious Aubrey Sheiham Leadership Award. The award is managed by Cochrane SA and presented annually to an African researcher to support the conduct of a Cochrane Review focusing on a priority topic with impact on the health of people living in low- and middle-income countries.

Dr Ede is a specialist surgeon and a lecturer at University of the Witwatersrand. The award will be used to undertake a review already registered with the Cochrane Hepatobiliary group, titled: Nonselective shunts versus selective shunts for preventing and treating variceal rebleeding in people with portal hypertension.

"Variceal bleeding is a lethal complication of portal hypertension. A third of people living in Africa will bleed from oesophagogastric varices and mortality from this bleed is estimated at 30%," said Dr Ede. "It’s important to stop such bleeding to reduce morbidity and mortality. This new review will address a gap in knowledge identified by my previous review."

"As variceal bleeding is a significant health and economic burden in developing countries, there is need for an in-depth study of measures to prevent and treat this condition," he continued. “This review will provide evidence to show which type of shunt works best for preventing and treating oesophagogastric variceal rebleeding."

Dr Roseline Ede, a registrar at University of the Witwatersrand, has been included as an author in this review as a mentee.

The South African Medical Research Council (SAMRC) recently renewed the national Cochrane Library licence that will make evidence-based scientific reviews accessible to healthcare decision makers in South Africa.

This collaboration between Wiley, the SAMRC and Cochrane South Africa offers free access, through IP recognition, to the Cochrane Library throughout South Africa and enables all South Africans to access the gold-standard in evidence-based healthcare research.

The renewal of the licence means that healthcare practitioners, policy makers, researchers and the general public will have sustained ‘one-click’ access to reliable and unbiased Cochrane Reviews.

The national licence commenced in June 2017 and since then access to the library has increased substantially. Between June 2017 and June 2018 full-text accesses increased from 31 549 to 51 089 – an increase of over 60%.

The Cochrane Library can be found at https://www.cochranelibrary.com/

The Cochrane Nutrition field launched an online newsletter this year. Cochrane Nutrition was formally established in August 2016. The field represents the interests of evidence-based nutrition and is based in South Africa, jointly hosted by Cochrane SA at the South African Medical Research Council, and the Centre for Evidence-based Health Care at Stellenbosch University. The newsletter is available at: https://nutrition.cochrane.org/news/cochrane-nutrition-newsletter-2018-issue-1
New staff

Bey-Marrié Schmidt
Bey-Marrié Schmidt is based at Cochrane SA where she is leading and contributing to systematic reviews linked to the Collaboration for Evidence-Based Healthcare and Public Health in Africa (CEBHA+) and Research, Evidence and Development Initiative (READ-I) projects. She is also involved in the write-up of qualitative research findings for the South African Guidelines Excellence (SAGE) project. Bey has an academic background in medical anthropology and public health, which enables her to work on both qualitative and quantitative reviews and primary studies. She is particularly interested in evidence synthesis and knowledge-translation activities of public-health interventions that can improve clinical and health system outcomes. Bey is currently in the process of finalising her PhD dissertation through the School of Public Health and Family Medicine at the University of Cape Town.

Lodwick Modika
Lodwick joined Cochrane SA in September as a Senior Admin Officer. He holds a National Diploma in Management and is completing his B Tech Management at the Tshwane University of Technology. He also has a National Certificate in Banking Services Advice from MIlpark Business School. His previous employers include the City of Tshwane, the Tshwane Economic Development Agency and ABSA. Lodwick is fluent in five languages – Sepedi, English, Xitsonga, Tshivenda and IsiZulu.

Phetole Walter Mahasha
Phetole holds a BSc (majoring in Biochemistry and Microbiology) and a BSc Honours in Biochemistry from the University of Limpopo, an MSc in Medical Biochemistry from the University of Stellenbosch and a PhD in Medical Immunology from the University of Pretoria. He is currently completing a DPH in Public Health at Walden University. He has been a post-doctoral research fellow at the Universities of Virginia/Venda and the National Institute for Communicable Diseases, a research intern for the South African Medical Research Council and Senior Research Manager at EQUIP – Right to Care. Mahasha has over 10 years’ of experience in conducting scientific research in TB and HIV, malnutrition, and enteric diseases, including managing international projects. He is currently involved in systematic reviews on BCG revaccination and protection against tuberculosis; the immunogenicity and safety of human papillomavirus vaccines in people living with HIV; and, the effectiveness of the female condom in preventing HIV and sexually transmitted infections. He is also managing a project on contextualised strategies to increase childhood vaccination coverage in South Africa.

Edison Johannes Mavundza
Edison holds a PhD in Ethnobotany from the University of KwaZulu-Natal which he received in 2015. This was preceded by an MSc in Plant Science, a BSc (Hons) in Botany and a BSc (Majoring in Botany and Zoology) all from the University of Pretoria. His work experience includes being a postdoctoral researcher at the South African Medical Research Council and at the University of KwaZulu-Natal as well as working as a scientist at the South African Medical Research Council and as a medical technician for the National Health Laboratory Services. Among the projects Edison is currently involved in is a systematic review of the effects of human papillomavirus vaccines in people living with HIV.