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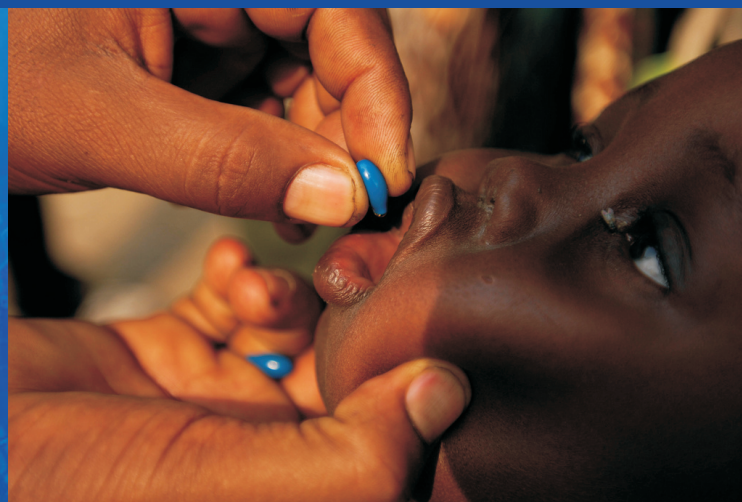
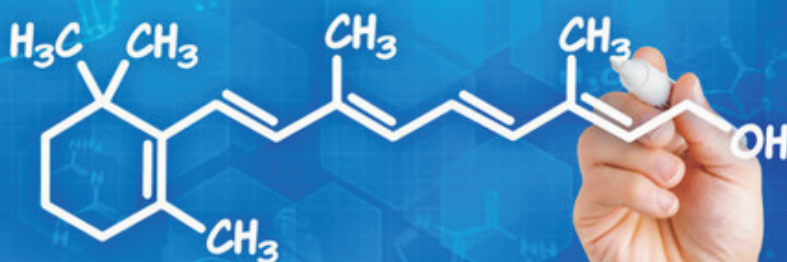
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infosheet

April 2017

Newsletter of Cochrane Nigeria, Calabar Institute of Tropical Diseases Research and Prevention, University of Calabar Teaching Hospital

VITAMIN A₁



VITAMIN A SUPPLEMENTATION FOR REDUCING CHILDHOOD MORBIDITY AND MORTALITY

There has been about 50% reduction in the global under-five mortality between 1990 and 2015.¹ However, this global trend is not reflective of all the regions of the world. Sub-Saharan Africa and Asia made the least progress in the reduction of childhood deaths over the period under review with an estimated 60 and 42 under-five mortality per 1,000 live births in sub-Saharan Africa and Asia respectively as against 6 under-five deaths per 1,000 live births in the developed countries.¹ The main causes of under-five morbidity and mortality globally are pneumonia, diarrheal disease, measles, malaria, malnutrition and perinatal problems. These are essentially preventable and treatable childhood conditions that are associated with infections, epithelial injury or secondary immunodeficiency state.

One of the cost-effective interventions, with the potential of reducing childhood morbidity and mortality, is Vitamin A supplementation (VAS). Vitamin A enhances repair of damaged epithelial cells especially those of the eyes, respiratory tract, gastrointestinal tract and the urinary tract. It also has immunomodulatory (immunity regulating) effects, anti-infective properties, and prevents iron deficiency

anaemia and growth deficit in children. The strategies developed by the World Health Organization for preventing vitamin A deficiency (VAD) include, dietary diversification, food fortification with vitamin A, and periodic administration of vitamin A supplements to children aged 6 – 59 months² Compared to food fortification, periodic administration of vitamin A supplements has been reported to have greater effect in preventing VAD³

A recently updated Cochrane systematic review by Imdad, Mayo-Wilson, Herzer and Bhutta⁴ provides reliable evidence that vitamin A supplementation reduces morbidity and mortality in children under five. The review included a total of 47 studies involving 1,223,856 children. Most of the studies were conducted in Asia (30%) and Africa (17%). In addition, about half of these studies were in rural settings. The review found that VAS led to a 12% reduction in overall risk of death, and death due to diarrhoea (*high certainty evidence*). It also reduces the risk of night blindness. Although VAS did not specifically reduce death due to measles, respiratory infections or meningitis, the review showed that it can reduce new occurrences of measles and diarrhoea (*moderate certainty evidence*).

Part of the targets under the health-related Sustainable Development Goals (Goal 3) is to end preventable deaths of children under-five years of age and reduce the under-five mortality to at least 25 deaths per 1,000 live births by 2030.¹ The current unacceptably high burden of childhood morbidity and mortality may be indicative of poor utilization of cost-effective interventions like Vitamin A in countries in Asia and sub-Saharan Africa with high death tolls. As the count down to the achievement of this goal begins, it is imperative for health care providers, policy-makers and other stakeholders in child health and nutrition in countries in these continents, including Nigeria, to

drive the process of ensuring optimum coverage of VAS at country level using more effective strategies for improving uptake of this life-saving intervention.

It may be necessary to review the current strategies for administration of VAS, identify possible barriers to effective administration and develop new strategies for improving awareness of the usefulness of the VAS among caregivers of under-fives, increasing the supply, distribution and uptake of VAS by the target population.

References

1. UN IGME: Report on levels and trends of child mortality 2015.
2. <http://www.who.int/nutrition/to>

[pics/vad/en/](http://www.who.int/wad/pics/vad/en/)

3. <http://www.who.int/wad/pics/vad/en/>

4. Imdad A, Mayo-Wilson E, Herzer K, Bhutta ZA. Vitamin A supplementation for preventing morbidity and mortality in children from six months to five years of age. Cochrane Database of Systematic Reviews 2017, Issue 3. Art. No.: CD008524. DOI: 10.1002/14651858.CD008524.pub3.

EVIDENCE AT YOUR FINGERTIPS (FROM THE COCHRANE LIBRARY) TECHNICAL SUMMARY

SUPPORT FOR HEALTHY BREASTFEEDING MOTHERS WITH HEALTHY TERM BABIES



Background

Breastfeeding has an important impact on the short-, medium- and long-term health of children and on women's health. It is estimated that each year, 823,000 deaths in children under five years, and 20,000 deaths from breast cancer could be averted by near universal breastfeeding. The World Health Organization (WHO) recommends that, wherever possible, infants should be fed exclusively on breast milk until six months of age and that

breastfeeding should be continued as an important aspect of the infant's diet until at least two years of age. In many high-income countries, however, breast feeding rates are low and exclusive breastfeeding to six months is rare. Even though breastfeeding initiation and duration are generally higher in middle- and low-income countries, the average rate of exclusive breastfeeding is only 37%.

Most of the major factors that influence infant feeding rates are

likely to be sociocultural and related to societal and subgroup norms, public policy, and availability of appropriate care and support, both professional and lay. Support is complex and includes several elements such as emotional and esteem-building support (including reassurance and praise), practical help, informational support (including the opportunity to discuss and respond to women's questions) and social support (including signposting women to support groups and networks). It is

important to examine the support that mothers receive when breastfeeding to determine what might be effective in helping women continue to breastfeed, regardless of the setting they live in.

Objective

To describe the forms of breastfeeding support evaluated in controlled studies and examine the effectiveness of different modes of support. Also to examine the effectiveness of different care providers and training and explore the interaction between background breastfeeding rates and effectiveness of support.

Main Results

- One hundred studies were included in the review involving a total of 83,246 mother-infant pairs however only 73 trials contributed data. Fifty-eight (58) of these were individually-randomised trials and 15 were cluster-randomised.
- Four studies were conducted in low-income countries, four in low-middle income countries, 15 in upper middle-income countries and 52 in high-income countries.
- Types of support received included provision of verbal or written information, education or advice on breastfeeding/infant and young child feeding. Support was provided via telephone calls, face to face sessions or both.
- Primary outcomes were recorded for stopping any or exclusive breastfeeding before four to six weeks and before six months postpartum.
- Participants were healthy pregnant women considering or intending to breastfeed or healthy women who were breastfeeding healthy babies.

- **Stopping any breastfeeding up to six months postpartum:**

Interventions to support breastfeeding appear to have a beneficial effect on the number of women who continue breastfeeding beyond six months, with fewer women in the groups that receive support stopping breastfeeding by this time (RR 0.91, 95% CI 0.88 to 0.95; *moderate-quality evidence, 51 trials*).

- **Stopping exclusive breastfeeding up to six months postpartum:**

Women in the intervention groups were less likely to have stopped exclusive breastfeeding before six months (average RR 0.88, 95% CI 0.85 to 0.92; *moderate-quality evidence, 46 trials*).

- **Stopping any breastfeeding before four to six weeks postpartum:**

Women receiving support interventions were less likely to stop breastfeeding before six weeks (average RR 0.87, 95% CI 0.80 to 0.95; *moderate-quality evidence, 33 trials*).

- **Stopping exclusive breastfeeding before four to six weeks postpartum:**

Women in the intervention groups were less likely to stop exclusive breastfeeding by six weeks compared with women in the control groups (average RR 0.79, 95% CI 0.71 to 0.89; *moderate quality evidence, 32 trials*);

- **Who delivered the support:**

For cessation of any breastfeeding by four to six weeks there is no evidence for a differential effect when professionals, lay or both deliver support (test for subgroup differences: $\text{Chi}^2 = 1.47$, $\text{df} = 2$ ($P = 0.48$), $I^2 = 0\%$) For other primary outcomes there were varying results, however due to



high within-group heterogeneity these result have to be interpreted with caution.

- **Type of support:** For cessation of exclusive breastfeeding at up to six months or at up to four to six weeks, face-to face interventions may have greater effects than other types of support; however, there was very high within-group heterogeneity in the analyses and so results should be interpreted with caution.

- **When the support was offered:** The treatment effect for support offered antenatally was similar for post natal support for all four primary outcomes.

- **Background breastfeeding initiation rates:** In countries where breastfeeding initiation rates were high, the interventions had a greater effect of preventing women from stopping exclusive breastfeeding at both time points. However there was no similar effect on any breastfeeding. These results should be interpreted with caution due to high within-group heterogeneity.

CONCLUSIONS

Implications for practice

Breastfeeding support increases

the duration and exclusivity of breastfeeding. To be effective, support should be offered as standard by trained personnel during antenatal or postnatal care, and include ongoing scheduled visits so that women can predict when support will be available. In addition, support should be tailored to the setting and the needs of the population and may be offered by professional or lay/peer supporters, or a combination of

both. Support is likely to be more effective in settings with high initiation rates and face-to-face support is more likely to be effective with women practising exclusive breastfeeding.

Implications for research

The key research question for the future is to identify how such support can best be provided consistently, for all women, in all countries.

Reference

McFadden A, Gavine A, Renfrew MJ, Wade A, Buchanan P, Taylor JL, Veitch E, Rennie AM, Crowther SA, Neiman S, MacGillivray S. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews* 2017, Issue 2. Art. No.: CD001141. DOI: 10.1002/14651858.CD001141.pub5.

PLAIN LANGUAGE SUMMARIES



Multiple-Micronutrient Supplementation For Women During Pregnancy

WHAT IS THE ISSUE?

In low- and middle-income countries, many women have poor diets and are deficient in nutrients and micronutrients which are required for good health. Micronutrients are vitamins and minerals that are needed by the body in very small quantities but are important for normal functioning, growth and

development. During pregnancy, these women often become more deficient, with the need to provide nutrition for the baby too, and this can impact on their health and that of their babies.

Why is this important?

Combining multiple micronutrients has been suggested as a cost-effective way to achieve multiple benefits for women during pregnancy. Micronutrient deficiencies are known to interact and a greater effect may be achieved by multiple supplementation rather

than single-nutrient supplementation, although interactions may also lead to poor absorption of some of the nutrients. High doses of some nutrients may also cause harm to the mother or her baby.

What evidence did we find?

We searched Cochrane Pregnancy and Childbirth's Trials Register (11 March 2015). This systematic review included 19 trials involving 138,538 women, but only 17 trials involving 137,791 women contributed data. The included trials compared pregnant women who supplemented their diets with multiple micronutrients with iron and folic acid with pregnant women who received a placebo or supplementation with iron, with or without folic acid. Overall, pregnant women who received multiple-micronutrient supplementation had fewer low birthweight babies and small-for-gestational-age babies than pregnant women who received only iron, with or without folic acid. The evidence for the main outcomes was found to be of high quality.

What does this mean?

These findings, consistently observed in several other systematic reviews of evidence, provide a strong basis to guide the replacement of iron and folic acid with multiple-micronutrient supplements for pregnant women in low- and middle-income countries where multiple-micronutrient deficiencies are prevalent among women.

Reference

Haider BA, Bhutta ZA. Multiple-micronutrient supplementation for women during pregnancy. *Cochrane Database of Systematic Reviews* 2017, Issue 4. Art. No.: CD004905. DOI: 10.1002/14651858.CD004905.pub5.

Does Group Therapy Improve Well-Being in People Living With HIV?

Cochrane researchers conducted a review of the effects of group therapy for people living with human immunodeficiency virus (HIV). After searching for relevant trials up to 14 March 2016, they included 16 trials reported in 19 articles that enrolled 2520 adults living with HIV. The included trials were conducted in the USA (12 trials), Canada (one trial), Switzerland (one trial), Uganda (one trial), and South Africa (one trial), and published between 1996 and 2016. Ten trials recruited men and women, four trials recruited homosexual men, and two trials recruited women only.

What is group therapy and how might it benefit people with HIV?

Group therapy aims to improve the well-being of individuals by delivering psychological therapy in a group format, which can encourage the development of peer support and social

networks. Group therapy often also incorporates training in relaxation techniques and coping skills, and education on the illness and its management.

Human immunodeficiency virus (HIV) causes a chronic, life threatening, and often stigmatising disease, which can impact on a person's well-being. Group therapy could help people living with HIV to adapt to knowing they have HIV, or recover from depression, anxiety, and stress.

What the research says

Group-based therapy based on cognitive behavioural therapy may have a small effect on measures of depression, and this effect may last for up to 15 months after participation in the group sessions (*low certainty evidence*). This effect was apparent in groups who did not appear to be depressed on clinical scoring systems before the therapy started. The research also showed there may be little or no effect on measures of anxiety, stress, and coping (*low certainty evidence*).

Group-based interventions based on mindfulness have been studied in two small trials, and have not demonstrated effects on measures of depression, anxiety or stress (*all very low certainty evidence*). No mindfulness based interventions included in the studies had any valid measurements of coping.

Overall, the review suggests that existing interventions have little to no effect in increasing psychological adjustment to living with HIV. More good quality studies are required to inform good practice and evidence.

Reference

van der Heijden I, Abrahams N, Sinclair D. *Psychosocial group interventions to improve*

psychological well-being in adults living with HIV. *Cochrane Database of Systematic Reviews* 2017, Issue 3. Art. No.: CD010806. DOI: 10.1002/14651858.CD010806.pub2.

Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases

Previous research on animal and physiological models suggests that antioxidant supplements have beneficial effects that may prolong life. Some observational studies also suggest that antioxidant supplements may prolong life, whereas other observational studies demonstrate neutral or harmful effects. Our Cochrane review from 2008 demonstrated that antioxidant supplements seem to increase mortality. This review is now updated.

The present systematic review included 78 randomised clinical trials. In total, 296,707 participants were randomised to antioxidant supplements (beta-carotene, vitamin A, vitamin C, vitamin E, and selenium) versus placebo or no intervention. Twenty-six trials included 215,900 healthy participants. Fifty-two trials included 80,807 participants with various diseases in a stable phase (including gastrointestinal, cardiovascular, neurological, ocular, dermatological, rheumatoid, renal, endocrinological, or unspecified diseases). A total of 21,484 of 183,749 participants (11.7%) randomised to antioxidant supplements and 11,479 of 112,958 participants (10.2%) randomised to placebo or no intervention died. The trials appeared to have enough statistical similarity that they could be combined. When all of the trials were combined,

antioxidants may or may not have increased mortality depending on which statistical combination method was employed; the analysis that is typically used when similarity is present demonstrated that antioxidant use did slightly increase mortality (that is, the patients consuming the antioxidants were 1.03 times as likely to die as were the controls). When analyses were done to identify factors that were associated with this finding, the two factors identified were better methodology to prevent bias from being a factor in the trial (trials with 'low risk of bias') and the use of vitamin A. In fact, when the trials with low risks of bias

were considered separately, the increased mortality was even more pronounced (1.04 times as likely to die as were the controls). The potential damage from vitamin A disappeared when only the low risks of bias trials were considered. The increased risk of mortality was associated with beta-carotene and possibly vitamin E and vitamin A, but was not associated with the use of vitamin C or selenium. The current evidence does not support the use of antioxidant supplements in the general population or in patients with various diseases.

Reference

Bjelakovic G, Nikolova D, Gluud LL, Simonetti RG, Gluud C. Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases. Cochrane Database of Systematic Reviews 2012, Issue 3. Art. No.: CD007176. DOI: 10.1002/14651858.CD007176.pub2.

RECENT EVENTS

COCHRANE MEDIA ROUNDTABLE ON STROKE

According to the World Health Organization, Stroke is one of the world's biggest killers. This is why Stroke was the focus a recent media roundtable programme held with members of the Nigerian Union of Journalists, Cross River State Chapter. The event, which held at the Institute of Tropical Diseases Research and Prevention Calabar on 14 March 2017 had 25 Media practitioners from newspaper, radio and television stations in attendance. Dr. Emmanuel Effa (Acting Head, Department of Internal Medicine, University of Calabar Teaching Hospital) gave an overview of Stroke and this elicited a number of questions from the participants. In particular, some of the participants were interested in knowing how stroke could be prevented. In addition, they asked about the challenges of rehabilitating stroke patients in Nigeria.

Evidence from two Cochrane reviews on physical fitness and self-management

programmes for people living with effect of stroke was shared with the participants. The reviews showed that cardiorespiratory fitness training, particularly involving walking, can improve exercise ability and walking after stroke and that self-management programmes improve the quality of life after stroke. The participants said they had learnt a lot from the media roundtable.



Dr. Emmanuel Effa making a presentation



Group Photo with participants



The following reviews published recently in the Cochrane Library were authored or co-authored by Nigerians.

New Reviews

- **Hepatitis B immunoglobulin during pregnancy for prevention of mother-to-child transmission of hepatitis B virus** by *Ahizechukwu C Eke, Gerorge U Eleje, Uzoamaka A Eke, Yun Xia and Jiao Liu*. Issue 2, 2017.

Other Recent Reviews

- **Short-acting erythropoiesis-stimulating agents for anaemia in predialysis patients** by *Deirdre Hahn , Christopher I Esezobor, Noha Elserafy, Angela C Webster and Elisabeth M Hodson*. Issue 1, 2017.
- **Antibiotics for treating septic abortion** by *Atim Udoh , Emmanuel E Effa , Olabisi Oduwole , Babasola O Okusanya and Obiamaka Okafo*. Issue 7, 2016.

Updated Reviews

- **Ethosuximide , sodium valproate or lamotrigine for absence seizures in children and adolescents** by *Francesco Brigo and Stanley C Igwe*, Issue 2, 2017

WHAT'S NEW

Cochrane recently launched two new platforms to help people get involved in Cochrane and to provide greater support for Cochrane Review authors.

- **Cochrane Crowd** is a platform that provides a means for anyone to participate in the work of Cochrane by helping with small tasks that contribute to the production of systematic reviews. To get involved in the Cochrane crowd and become a Cochrane Citizen Scientist, visit <http://crowd.cochrane.org>
- **TaskExchange**: TaskExchange is a platform recently launched by Cochrane that connects people who need help with their Cochrane reviews with people who have the time and expertise to help.

Three things you can do on task exchange:

- Build a profile** so you can be seen by those looking for help
- Post a task**: You can let people with appropriate skills know that you need help with a particular task and when you need it.
- Respond to a task**: You can offer to help a Cochrane review author with a task for which you possess the necessary skills or expertise.

To get started go to <http://taskexchange.cochrane.org/>

ANNOUNCEMENTS

- **How can we serve you better** - Please feel free to contact us and let us know how we can tailor the *Info Sheet* to better meet your needs. Send your emails to cochranenigeria@yahoo.co.uk

- **Global Evidence Summit 2017- Early Bird Registration/Stipends**: This year, **Cochrane**, along with four other leading organizations – the Guidelines International Network, The Campbell Collaboration, the International Society for Evidence-based Health Care, and the Joanna Briggs Institute will be hosting the first '**Global Evidence Summit**' (GES) in Cape Town, South Africa from 13-16 September 2017. Early Bird registration (with **11% off the standard ticket price**) is now on and will be open till 30 June. A number of stipends and bursaries are also available to help cover registration, travel and other costs. For more details please visit: <https://www.globalevidencesummit.org/stipends-and-bursaries>

Theme: Using Evidence. Improving Lives



- **Cochrane Priority Review List Updated**: The list of Cochrane Priority Reviews was updated in February 2017. To view the updated list and a list of titles that are open to new authors visit - <http://www.cochrane.org/news/cochrane-priority-reviews-list-update>

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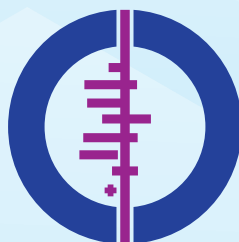
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