

RECENTLY PUBLISHED RESEARCH

- Adams KP, Okronipa H, Adu-Afarwuah S, **Arimond M**, Kumordzie S, Oaks BM, Ocansey ME, Young RR, Vosti SA, Dewey KG

Ghanaian parents' perceptions of pre and postnatal nutrient supplements and their effects. *Matern Child Nutr* 2018 Apr; epub ahead of print. [Journal Impact Factor: 3.233]

This study in Ghana examined perceptions of lipid-based nutrient supplements compared with capsules in a long-term follow-up of a maternal and infant supplementation trial. The authors found that parents perceived a range of benefits, and perceptions did not differ between capsules and lipid-based supplements. The results suggest that in similar contexts, supplementation may be highly acceptable and specific responses can help shape messaging to accompany supplements.

- **Badejo OA**, Menson WN, Sam-Agudu NA, Pharr J, Ereka S, Bruno T, Nwanne G, Ogunsola O, Ilozumba J, Busari O, Ezeanolue EE

Pediatric to adult healthcare transitioning for adolescents living with HIV in Nigeria: A national survey. *PLoS One* 2018 Jun; 13(6): e0198802. [Journal Impact Factor: 2.766]

The authors conducted a nationwide survey in Nigeria to characterize routine transition procedures to adult health care for 10- to 19-year-old adolescents living with HIV. The authors found that the facilities were more likely to have nonspecialized HIV treatment services and had loosely defined, abrupt transfer versus transition practices. Evidence-based standards of transitional care tailored to nonspecialized HIV treatment programs need to be established to optimize outcomes among these adolescents in Nigeria and in similar settings.

- Branson BM, Chavez PR, Hanscom B, **Greene E**, McKinstry L, Buchacz K, Beauchamp G, **Gamble T**, Zingman BS, Telzak E, Naab T, Fitzpatrick L, El-Sadr WM, HIV Prevention Trials Network (HPTN) 065 study team

Expanding hospital human immunodeficiency virus testing in the Bronx, New York and Washington, District of Columbia: Results from the HPTN 065 study. *Clin Infect Dis* 2018 May; 66(10): 1581-7. [Journal Impact Factor: 9.117]

Public health authorities in the United States recommend routine HIV screening in health care settings, including hospitals, to identify undiagnosed patients. The authors found that, in practice, implementing large-scale HIV screening programs in hospital-based settings is very difficult and often unsuccessful in reaching testing goals, but success is possible when adequate resources are available and testing is prioritized by hospital and public health leadership.

- **Burke HM**, Chen M, Buluzi M, **Fuchs R**, **Wevill S**, **Venkatasubramanian L**, **Dal Santo L**, Ngwira B

Women's satisfaction, use, storage, and disposal of subcutaneous depot medroxyprogesterone acetate (DMPA-SC) during a randomized trial. *Contraception* 2018 May; epub ahead of print. [Journal Impact Factor: 2.894]

The authors describe women's experiences with subcutaneous depot medroxyprogesterone acetate (DMPA-SC) during a 12-month randomized controlled trial in Malawi. The results show that women reported a high satisfaction with DMPA-SC and were successfully trained by public sector community health workers and clinic-based providers to self-inject and to appropriately store and dispose of DMPA-SC. The lessons learned will inform training and communication materials to optimize DMPA-SC delivery and scale-up.

- Figueroa DB, Madeen EP, Tillotson J, Richardson P, Cottle L, **McCauley M**, Landovitz RJ, Andrade A, Hendrix CW, Mayer KH, Wilkin T, Gulick RM, Bumpus NN

Genetic variation of the kinases that phosphorylate tenofovir and emtricitabine in peripheral blood mononuclear cells. *AIDS Res Hum Retroviruses* 2018 May; 34(5): 421-9. [Journal Impact Factor: 1.935]

The data from this study provide insight on the contribution of genetic variants of the kinases that activate both tenofovir (TFV) disoproxil fumarate and emtricitabine (FTC) for pre-exposure prophylaxis. Overall frequency of the genetic variants in the participants was low, and a future study using directly observed therapy could be conducted; any individual genetic variants identified could be then be tested directly for activity of the study drugs.

- **Hubacher D**, Spector H, Monteith C, **Chen PL**

Not seeking yet trying long-acting reversible contraception: A 24-month randomized trial on continuation, unintended pregnancy and satisfaction. *Contraception* 2018 Jun; 97(6): 524-32. [Journal Impact Factor: 2.894]

This unique study used better approaches to reduce bias and scientifically measure the impact of choosing to try long-acting reversible contraceptives. Participants assigned to long-acting methods had similar satisfaction levels, higher continuation rates and greater reductions in unintended pregnancy compared with those assigned to short-acting methods. These results validate the findings from decades of observational research.

- **Ibrahim M**, Lawal N, **Sylla FS**

Improving reading and numeracy outcomes in Nigeria through strategic trust building. *Child Educ* 2018 May-Jun; 94(3): 25-32. [Journal Impact Factor: n/a]

This article shares strategic trust-building experiences to improve reading and numeracy conducted in Hausa in northern Nigeria. The authors include background information on the social conditions necessitating the intervention, descriptions of the trust-building mechanisms put in place and consideration of the results and outcomes.

- **Jenkins D**, **Diallo C**, **Bethea E**, Kaale E, Layloff T

Method validation approaches for pharmaceutical assessments — highlights with high performance thin layer chromatographic (HPTLC) techniques. In: Stauffer, M., editor. *Calibration and validation of analytical methods: A sampling of current approaches.* IntechOpen; 2018. pp. 143-63. [Journal Impact Factor: n/a]

The high performance thin layer chromatographic (HPTLC) technique for analyzing pharmaceuticals can save resources, diminish testing time and reduce chemical waste, and its suitability for pharmaceutical testing is well documented. However, its implementation in developing countries has been slow. The authors provide information for the validation and thus application of HPTLC methods in resource-limited settings for pharmaceutical testing.

- **Koroma JB**, Sesay S, Conteh A, Koudou B, Paye J, Bah M, Sonnie M, Hodges MH, Zhang Y, Bockarie MJ

Impact of five annual rounds of mass drug administration with ivermectin on onchocerciasis in Sierra Leone. *Infect Dis Poverty* 2018 Apr; 7(1): 30. [Journal Impact Factor: 2.708]

Onchocerciasis control interventions re-established between 2003 and 2005 in 12 health districts in Sierra Leone were evaluated in 2010, following an 11-year break due to civil conflict. This paper discusses the progress made in controlling onchocerciasis despite challenges and suggests that the country's onchocerciasis elimination program is on course to achieve targets by the year 2025.

- **Koroma JB**, Sesay S, Conteh A, Paye J, Bah M, Sonnie M, Hodges MH, Zhang Y

Progress on elimination of lymphatic filariasis in Sierra Leone. *Parasit Vectors* 2018 Jun; 11:334. [Journal Impact Factor: 3.163]

Lymphatic filariasis and onchocerciasis are co-endemic in 12 districts in Sierra Leone. In 2008, albendazole was added to ivermectin treatments for integrated management of both diseases. This study showed that eight districts achieved criteria for conducting final lymphatic filariasis evaluations that would eliminate the need for treatment, while four districts need two more years of treatment before repeating the evaluation.

- **Maharaj Y**, Robinson A, McIntyre D

A needs-based approach to equitable allocation of district primary healthcare expenditure in North West Province, South Africa. *S Afr Med J* 2018; 108(3): 190-6. [Journal Impact Factor: 2.163]

This paper assessed current spending patterns on primary health care at the district level in North West Province, South Africa, and found inequities in resource allocation and expenditure in both the provincial and district levels. International literature suggests that using a needs-based approach to resource allocation could improve equity. The authors of this paper recommend four needs-based resource allocation formulae, updated when data becomes available.

- McFarland EJ, Karron RA, Muresan P, Cunningham CK, **Valentine ME**, **Perlowski C**, Thumar B, Gnanashanmugam D, Siberry GK, Schappell E, Barr E, Rexroad V, Yogev R, Spector SA, Aziz M, Patel N, Cielo M, Luongo C, Collins PL, Buchholz UJ, International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPACT) 2000 study team

Live-attenuated respiratory syncytial virus vaccine candidate with deletion of RNA synthesis regulatory protein M2-2 is highly immunogenic in children. *J Infect Dis* 2018 Apr; 217(9): 1347-55. [Journal Impact Factor: 5.186]

The respiratory syncytial virus causes substantial morbidity and mortality, and although the palivizumab prophylaxis treatment is effective for high-risk infants, there is a need to develop a vaccine for general use. In this trial, the authors evaluated the candidate vaccine LIDΔM2-2. The results showed an excellent infectivity and immunogenicity, supporting further study of similar candidate vaccines.

- **Moret WM**

Let's stop trying to quantify household vulnerability: The problem with simple scales for targeting and evaluating economic strengthening programs. *Glob Health Sci Pract* 2018 Mar; 6(1): 150-60. [Journal Impact Factor: n/a]

This article discusses efforts in Côte d'Ivoire, South Africa and Uganda to develop simple scales to quantify and classify economic vulnerability status. The findings suggest that broad constructs of economic vulnerability cannot be readily captured using simple scales to classify households and individuals in a way that accounts for a substantial amount of variance at locally defined vulnerability levels.

- **Nanda G**, **Dal Santo L**, Konde JN, **de Negri B**

Barriers to achieving the first 90%: Gender norms and HIV testing among men in the Democratic Republic of the Congo. *AIDS Care* 2018 Jun; epub ahead of print. [Journal Impact Factor: 1.994]

Gender inequality and gender norms are key social drivers of the HIV epidemic through their influences on sexual relationships, behavior and risk-taking. These findings indicate that levels of support for inequitable gender norms were significantly associated with never having been tested for HIV. To change prevailing gender norms, HIV prevention efforts should prioritize an increase in counseling and testing for men.

- Nguyen PH, Frongillo EA, **Sanghvi T**, Wable G, **Mahmud Z**, **Tran LM**, Aktar B, Afsana K, **Alayon S**, Ruel MT, Menon P

Engagement of husbands in a maternal nutrition program substantially contributed to greater intake of micronutrient supplements and dietary diversity during pregnancy: Results of a cluster-randomized program evaluation in Bangladesh. *J Nutr* 2018 Jun; epub ahead of print. [Journal Impact Factor: 4.398]

This study evaluated how much of the improvement in intake of micronutrient supplements and dietary diversity among pregnant women is explained by the participation of their husbands in a nutrition-focused maternal, neonatal and child health program. The results show that targeting husbands in addition to women in these programs and designing activities to engage men in maternal nutrition programs is important for maximizing impact.

- **Oladele EA**, **Badejo OA**, **Obanubi C**, Okechukwu EF, James E, Ow'honda G, Omeh OI, **Abass M**, **Negedu-Momoh OR**, Ojehomon N, Oqua D, Raj-Pandey S, **Khamofu H**, Torpey K

Bridging the HIV treatment gap in Nigeria: Examining community antiretroviral treatment models. *J Int AIDS Soc* 2018 Apr; 21(4): e25108. [Journal Impact Factor: 5.131]

This paper assessed the effectiveness of different large-scale, community-based models of identifying people in Nigeria who are living with HIV and linking them to treatment. The findings showed that going beyond health facilities is critical in expanding access to much-needed HIV services. The authors state that comprehensiveness of services, integration into other health services and deliberate attention to barriers to care are factors that contribute to effectiveness and are important to consider in model design.

- Parker W, **Pennas T**, Kommwa I

Community health priorities: Lessons for malaria prevention from Balaka district, Malawi. *Malawi Med J* 2018 Jun; 30(2): 99-102. [Journal Impact Factor: 1.123]

Communication about priority health challenges typically uses epidemiological research while referencing global and country strategies. This study explored the relationship between situational aspects of health and community insights into health priorities. The authors suggest that regular assessment of contextual challenges in high malaria incidence areas provides opportunities to understand gaps, refine intervention strategies and inform communication programming.

- **Schulz KF**, Chalmers I, Altman DG, Grimes DA, Moher D, Hayes RJ

'Allocation concealment': The evolution and adoption of a methodological term. *J R Soc Med* 2018 Jun; 111(6): 216-24. [Journal Impact Factor: 2.654]

The authors review the precursors of the term "allocation concealment" and its subsequent evolution and adoption. The research on empirical evidence of bias related to allocation concealment provided justification and impetus for the acceptance of the concept and the term. The authors state that heightened attention to the process of allocation concealment has improved the conduct and reporting of randomized trials in medical research.

- Sugarman J, Barnes M, **Rose S**, Dumchev K, Sarasvita R, Viet HT, Zeziulin O, Susami H, Go V, Hoffman I, Miller WC

Development and implementation of participant safety plans for international research with stigmatized populations. *Lancet HIV* 2018 Jun; epub ahead of print. [Journal Impact Factor: 11.355]

Stigma attached to drug use and HIV often raises safety concerns during research. To address these concerns, this study developed participant safety plans to supplement local ethics and community practices. The authors found that after refining and implementing these plans, only five participants reported a negative social impact due to study participation. Future research with stigmatized populations should consider using and assessing this approach to enhance participant safety and welfare.

- **Tolley EE**, Guthrie KM, **Zisette S**, Fava JL, Gill K, Louw CE, Kotze P, Reddy K, **MacQueen K**

Optimizing adherence in HIV prevention product trials: Development and psychometric evaluation of simple tools for screening and adherence counseling. *PLoS One* 2018 Apr; 13(4): e0195499. [Journal Impact Factor: 2.766]

Low adherence to treatment in recent HIV prevention clinical trials highlights the need to better understand, measure and support product use. This study aims to develop and psychometrically evaluate tools to screen and monitor participant adherence to HIV prevention products within the context of clinical trial research. This study lays the groundwork for the development of a more integrated biomedical-behavioral approach to achieving high levels of adherence within HIV prevention trials.