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#206 - Evaluating an Omega-3 Test-and-Treat Program, as Part of Routine Pregnancy Care, to Prevent Preterm Birth

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Objectives/aims

This project reports on the feasibility, adoption, scalability, and effectiveness of an Omega-3 Test-and-Treat Program in South Australia, which aims to reduce the incidence of early preterm birth. The program is underpinned by the evidence-based recommendation in the 2020 NHMRC Australian Pregnancy Care Guidelines that advises targeted omega-3 long-chain polyunsaturated fatty acid (LCPUFA) supplementation to reduce the risk of prematurity for pregnant women with low omega-3 status.

The program's primary objective is to drive large-scale change through effective implementation, scalability and evaluation of the Omega-3 Test-and-Treat Program in the community. The program takes a multifaceted approach, working with health systems, health professionals, and health consumers, aiming to encourage the uptake and sustainability of the program, ultimately leading to a reduction in the incidence of premature births.

Methods

Through working with health systems, the program sought to integrate the Omega-3 Test-and-Treat Program into standard practice. In partnership with the South Australian government pathology service, SA Pathology, the program has made it possible for health professionals to order, measure and report serum omega-3 status as part of the routine antenatal serum screening program. This approach makes omega-3 testing available to all women with singleton pregnancies.

To engage with health professionals, initial consultations with obstetricians, midwives and General Practitioners (GPs) were undertaken to ensure that program resources aimed at driving awareness of the program were tailored accordingly. This approach involved researchers closely working with health professionals to gather feedback and ensure reciprocal understanding and acceptance of the program's aims. Seminars and academic detailing sessions were also conducted to provide information about the availability and importance of omega-3 screening in early pregnancy. The program also distributed GP informational packs and visited GPs to further support health professionals in implementing the program.

Consumer engagement was also a key component of the program's implementation strategy. The program collaborated with health consumer reference groups to co-design information resources to enhance awareness of the importance of omega-3

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screening and the potential benefits of supplementation for women with low omega-3 levels. By working closely with health consumer reference groups, the program aimed to create tailored information resources that were relevant and accessible to pregnant women. Following these consultations, the program launched a state-wide mass media campaign to increase public awareness of the program and the benefits of omega-3 screening.

Main findings

As of June 2023, more than 10,000 omega-3 tests have been ordered and reported since the initiation of the program just over 2 years ago. The number of tests ordered has continued to increase steadily, with over 150 tests being reported each week, accounting for more than 40% of pregnancies in South Australia. Of these tests, about 70% were ordered and managed by GPs, highlighting strong uptake and engagement within the health system. Notably, approximately 17% of women reported low omega-3 status, congruent with findings from our ORIP clinical trial, upon which this research is based. Furthermore, the state-wide mass media campaign has since reached more than half a million South Australians across TV, Radio, Social and Print Media.

In conclusion, the results demonstrate that integrating the Omega-3 Test-and-Treat Program into routine pregnancy health services is both feasible and well-received within the community. The program has the potential to drive large-scale change and improve health outcomes for both mothers and babies by reducing the incidence of early preterm birth. This work highlights the importance of community involvement and the need for sustained utilisation of the Omega-3 Test-and-Treat Program to achieve long-term benefits. Evaluation of the program is ongoing to further validate the program's effectiveness in reducing prematurity rates within the community.