

CHECK2GETHER: ANTENATAL CARE FOR MOTHERS WHO NEED IT MOST



TNO innovation
for life

In some parts of the world, women have access to all the care they need to have a well-monitored and safe pregnancy, and to give birth to a healthy child. But in developing countries, especially in rural areas, access to effective antenatal care is far from ideal. Every year, hundreds of thousands of women and children die in childbirth from preventable conditions. TNO and partners have created simple, affordable and easy-to-use tools that help reduce those numbers. Our ultimate goal is to provide women with the care they need to help them achieve healthier pregnancies and safe motherhood.

GLOBAL GOALS, LOCAL IMPACT

In response to the UN's Sustainable Development Goals and other global initiatives, TNO is putting its extensive expertise and experience to work for mothers around the world. Using evidence-based interventions and proven business models, TNO has implemented a number of programmes aimed at improving children's health in the first 1,000 days of their lives, so that every child has chance to live a full and productive life.

As part of these efforts, TNO and its partners created Check2Gether (C2G). It combines a diagnostic kit and group care to give pregnant women in developing regions a better chance at long-term health and survival. Together, the programmes can significantly reduce maternal and infant morbidity and mortality from preventable conditions,

and reduce the barriers to effective antenatal care. With education, support and simple diagnostic tools, Check2Gether is ensuring healthier lives, fewer negative outcomes and increased well-being.

DIFFICULT CHALLENGES, EASY SOLUTIONS

The most common – and most preventable – conditions that can threaten mother and child during pregnancy include anaemia, preeclampsia, gestational diabetes and high blood pressure. But in remote, rural or poverty-stricken regions, testing for these conditions is often not available or affordable. Women either don't know about, or don't have access to, professionals who can help with these conditions. Community healthcare workers are often not equipped to deal with special cases like these. Until now.



C2G KIT: SIMPLICITY SAVES LIVES

The C2G Kit, created with partner Simavi, is an affordable backpack that contains non-invasive, FDA- and National Guideline-approved screening and diagnostic tools and a smartphone. With it, healthcare workers can measure a pregnant woman's blood pressure, glucose, protein and haemoglobin. Supported by an app, the worker is better equipped to decide whether a woman is at risk for common health conditions and get instructions. He/she can refer at-risk mothers to a professional for follow-up.

The tests are easy to use and require minimal medical training. Healthcare workers can learn to use them in one day. The C2G Kits cost very little, and yet are effective at early-stage identification of high-risk pregnancies.

PROVEN EFFICACY

In Indonesia and Ghana, the kits are already proving successful. Also in reducing unnecessary referrals. By correctly identifying low-risk pregnancies, the kits have reduced referrals from 40% to 15%, freeing up scarce resources for the mums that need them most. The kits empower primary-level healthcare workers, increase mothers' awareness of complications and improve compliance to advice.

C2G Group Care: strength in numbers
Only around 3% of pregnant women in developing countries receive the recommended four antenatal check-ups. This

is due to lack of knowledge about their importance, lack of availability or resources, or social blockades. C2G Group Care, in which TNO partners with Group Care Global, aims to reduce these challenges. It offers antenatal care in a welcoming and enjoyable environment.

Group Care is based on the positive impact of group dynamics and facilitative care. It involves groups of 10-12 women in similar stages of pregnancy. Together, the women become actively involved in their check-ups, participate in facilitated discussions and develop a support network. They learn to recognise signs of complications, discover effective preventions, and learn better infant care.

BETTER CARE FOR HEALTHIER BIRTHS

Group Care improves pregnancy outcomes and overall mother and child health, especially in underserved populations. The educative model reduces complications at birth and supports healthier parenting. Participants are more accepting of professional midwives, resulting in more, earlier and consistent antenatal care and healthier births. Group Care improves parent's participation in, and satisfaction with, their care. Care workers also show higher satisfaction in their work.

ACCESSIBLE CARE IN ACCEPTABLE FORMATS

Implementing wide-scale programmes in developing countries comes with unique challenges. In addition to finding the

necessary funding, it can also be difficult to convince local populations to adopt new behaviours. TNO recognises these challenges and developed Check2Gether in ways that reduce the hurdles.

First, TNO uses every resource to find the lowest cost, reliable materials for C2G Kits. Training ensures that workers are comfortable using the kits. The Group Care structure is adaptable to a region's social, geographic and cultural needs.

TOGETHER IS BETTER

Each programme is highly effective on its own. But the impact is significantly higher when they are used together. Every aspect of C2G is adaptable to local needs. With international and local partners, TNO aims to make Check2Gether available to every mother who needs it. That includes empowering mothers with at-home kits, and adding new functionalities. So that, someday soon, all mums and babies have an equal chance at the best possible start.

Interested in saving the lives of women and children in a developing country? We welcome your support. Contact us today to find out how you can help.

TNO.NL

FIRST 1,000 DAYS

First 1,000 Days aims to give children the best possible start in life, regardless of where they are born. Together with the WHO, Harvard University, the Bill & Melinda Gates Foundation and more, this TNO initiative offers innovative solutions.

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