Preconception health and choices: Tailored solutions for prospective parents

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The first 1,000 days of a child's life are crucial to their later health, wellbeing and opportunities. Their development in this early stage is influenced by a wide range of factors, such as nutrition, socioeconomic drivers, parental smoking, alcohol consumption, mental health, working conditions, stress, air pollution and the cultural contexts of motherhood, fatherhood and parenthood. Although this is well known, it is still hard to transform this knowledge into a comprehensive approach to inform parents-to-be, their network and the wider community on the immense importance of this period. The same is true for professionals, policymakers and governments in different domains who might not be aware of the importance of the role they could play in this early stage of life. The national Dutch 'Solid Start' programme aims to make a significant change by promoting the idea that 'everybody can do something' to improve the early development of children and to overcome barriers. Preconception health is a principal focus within this programme.
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Becoming and being a parent is an important life goal for many people. By improving preconception health and well-being, couples have an important opportunity to maximize the likelihood of realizing their dream of having a safe pregnancy and a healthy child. Whereas the initial focus to reach this dream was on women's health and well-being, the important role of men's health in birth outcomes is now being embraced. Another important development is the introduction of the life course theory by Lu and Halfon (2003) which acknowledges the dynamic interactions across time and space of people and their environments. Each stage of life lays the building blocks for the next stage. The life course theory identifies sensitive periods of development. During these periods, attention to protective factors and reduction of risks can significantly impact future, and even inter-generational, life trajectories. One of these periods is preconception health (Shawe et al., 2020).

The life course approach demonstrates the way disparities in health outcomes and life trajectories happen and are transmitted to future generations, even before they are conceived or born. For example, unequal access to quality health care, exposure to interpersonal violence, poverty and/or institutionalised racism and sexism can perpetuate inequities into the next generation. Even within a high-income country, such as The Netherlands, inequities continue to be perpetuated.

Women in socially deprived neighbourhoods are at considerably greater risk for perinatal mortality, children being born preterm, or small for gestational age. Stress because of poverty, income or housing insecurity, low educational level, psychosocial problems, domestic violence or risk factors in lifestyle, nutrition and the social environment are examples of non-medical risk factors that underlie health inequities, even before pregnancy and birth.

These inequities have long term implications, both individually and at the population level. Because the root causes are beyond the scope of (perinatal) health care systems, a holistic and cross-sectional approach is needed that combines the expertise of general practitioners, community midwives/nurses and obstetricians with the expertise of professionals in public health, social services, education and youth work. We have labelled this integration of the medical and social domains of care as 'social obstetrics' (Steegers, 2019).

SOCIAL OBSTETRICS

Based on the core ideas of social obstetrics, cooperation between partners in the medical and social domains started in The Netherlands in Rotterdam with the introduction of the 'Ready for a Baby' program in 2008 (Denktas et al., 2012). This local initiative was followed by 'Healthy Pregnancy 4 All' (HP4All), which builds on the insights of 'Ready for a Baby'.

Essential components of these programmes are the use of city maps showing the unequal

distribution of perinatal health outcomes among neighbourhoods, and offering innovative approaches to improve this situation. These include preconception and interconception care, risk assessment at pregnancy booking (including assessment of non-medical risks and care pathways tailored to the individual) and early involvement of maternity and preventive youth health care in the case of vulnerable families (Barsties et al., 2021; Waelput et al., 2017; Denktas et al., 2014).

Building on the know-how acquired through 'Ready for a Baby', HP4All and other initiatives, The Netherlands Ministry of Health, Welfare, and Sport launched a nationwide action programme entitled 'Solid Start' in 2018 (Ministry of Health, Welfare and Sports 2020). 'Solid Start' supports municipalities in addressing health inequities before, during, and after pregnancy. In this article, we share our experience of preconception health as one of the three themes within the nationwide 'Solid Start' initiative.

A NATIONWIDE PROGRAMME: 'SOLID START'

The programme aims to get more children off to a solid start through three different courses of action (Box 1).

BOX 1: AIMS OF 'SOLID START'

Before pregnancy:

1. More vulnerable parents-to-be are well prepared when they start their pregnancy.
2. Fewer unplanned and unintended pregnancies occur.

During pregnancy:

3. Problems and serious risks (including non-medical ones) are identified in vulnerable (or potentially vulnerable) families.
4. More vulnerable prospective parents get the help they need sooner.

After birth:

5. More vulnerable parents are better equipped for parenthood and raising children.
6. Fewer babies and young children need to be placed out-of-home or under supervision.

Currently, 272 out of the 352 municipalities in The Netherlands have joined 'Solid Start'. They are encouraged and facilitated to engage in a cross-sectoral approach. This includes: building local coalitions around the 'first 1,000 days' with representatives of local organisations, health insurers, preventive youth healthcare services and professionals in the medical and social domains (e.g., neighbourhood/social teams, social welfare teams, debt assistance service, general practitioners, midwives, community nurses, maternity-care workers, gynaecologists etc.). Involvement of local informal networks and the voice of parents and parents-to-be, both mothers and fathers, is growing. To strengthen the local coalitions and advocate for the importance of the first 1,000 days, diverse individuals and influential opinion leaders were invited to join a national coalition. The local and national coalitions are supported by a programme team and managed by a steering committee

Since 2018, a wide range of interventions and tool-boxes for local coalitions has been developed (Box 2).

BOX 2: INTERVENTIONS AND TOOLBOXES FOR LOCAL COALITIONS

- Factsheets on how to build a local coalition and how to involve stakeholders
- Perinatal atlas with key local, regional and national data on health outcomes at birth (perinatal mortality, preterm and/or small for gestational age, late entry into prenatal care) to facilitate the local approach to the first 1000 days (Visit www.waarstaatjegemeente.nl - in Dutch)
- Self-assessment tool for local coalitions to discover whether their approach fits the key issues in their communities with which they regularly deal
- Self-assessment tools for professionals to gain insight into the skills that are important for reaching out to and supporting (future) families experiencing increased vulnerability
- Screening for non-medical risk factors in order to facilitate the timely identification of prospective and expectant parents at risk of vulnerability and/or adverse outcomes
- Improvement in, and wider introduction of, tailored care pathways to ensure timely referral of soon-to-be mothers and fathers to social welfare teams, addiction treatment, housing authorities and other needed sources of assistance
- An overview ('menu') of interventions available to support them throughout the first 1,000 days. The range of interventions is wide and includes those to strengthen parenthood through prenatal home visits, reduce domestic violence, employ informal or peer-to-peer support, improve physical health and wellbeing, promote better nutrition and other efforts to better prepare for pregnancy and then parenthood.

WELL PREPARED BEFORE PREGNANCY

More than a decade ago, Michele Stranger Hunter at the Oregon Foundation for Reproductive Health started the One Key Question® programme (Bellanca & Stranger Hunter, 2017). This initiative aims to improve both preconception care and contraceptive counselling by asking the question, 'Do you plan to become pregnant in the next year?' Instead of having to choose between yes and no, women have more meaningful choices, including, 'I'm unsure' or 'I'm okay either way' (Allen et al., 2017). If the answer is 'no', advice is provided on contraceptive methods to postpone or prevent pregnancies. Otherwise, prospective parents can be provided with the best available care to prepare for a healthy start to pregnancy.

This very same question is key to the thinking and options provided by the 'Solid Start' programme. To enable parents to be well prepared before pregnancy, 'Solid Start' offers: 1) support to prospective parents, especially those

who are vulnerable, to prepare for pregnancy in a healthy way, and 2) an invitation for potential parents in vulnerable situations to discuss - via the 'Not Pregnant Now' initiative - whether this is the best time for them to conceive a child in view of their personal situation.

'NOT PREGNANT NOW'

'Not Pregnant Now' started as a pilot in Tilburg, a city in the southern part of The Netherlands with approximately 222,000 inhabitants and a less favourable socio-economic profile. A nurse practitioner at the Municipal Health Services was meeting women who were pregnant and had serious psychosocial, psychiatric or financial problems, intellectual disabilities, and/or addiction to alcohol or drugs. Most of the women already had children and were in regular contact with various organizations and professionals such as mental-health institutions, youth institutions, abortion clinics, institutions for the homeless, healthcare professionals and other care providers who work with vulnerable people. Their problems were discussed and (if possible) dealt with as quickly and fully as possible. However, it became apparent that no one had previously asked them about family planning and effective contraception, which left these women vulnerable to repeated unintended, unwanted, risky pregnancies, abortion, or loss of custody over their children.

In the pilot, the nurse supported potential parents in vulnerable and complex situations to discuss their reproductive goals/desires - that is, their short and long-term wish for children. If they did not desire children, the nurse discussed their choices for effective contraception, in order to help them gain control over their own futures. Women and men not seeking a pregnancy have been helped to postpone pregnancy until they have built a more stable and favourable environment to raise a family. Professionals from both the medical and social domains have worked together to provide counselling and family planning services, even if the women or couples are not able to pay for them.

By using a patient-centred outreach presence approach, the nurse has gained their confidence and thereby been able to ensure tailored care for them. Visiting them at home, or in the community, for as long as needed has resulted in gains for the women (and men) in terms of avoiding unwanted pregnancies, and financially for the community (Rijlaarsdam, 2015). Evaluation of the programme has shown that most participating parents did not want a pregnancy in their current situation and appreciated the support they received in starting reliable contraception (Jeeninga & Cloïn, 2021).

Since 2018, 'Not Pregnant Now' is embedded in 'Solid Start'. Currently, more than 180 municipalities offer this service to women and men in vulnerable circumstances. Organisations and professionals from different backgrounds have been brought together, regional infrastructures set up, and coordinators assigned to reach out to all parties. Dedicated professionals are selected to provide the service. Training and supervision have been developed to enable professionals to integrate reproductive health conversations into their regular day-to-day activities with women and men about having children and the use of contraception.

IMPLEMENTING PRECONCEPTION COUNSELLING AND CARE

In The Netherlands, preconception health and care have been on the agenda for three decades. Nevertheless, most health care professionals still lack knowledge about general and specialist preconception care. For health care providers, preventive health care does not seem to be of great interest. By far the most time is spent on curative care, even in professional educational curricula (Schonewille-Rosman et al., 2018). Various strategies, including guidelines and reimbursement for the provision of preconception care, have been implemented to raise awareness of the importance of preconception health and to encourage the provision of care.

- ZwangerWijzer (Preparing for Pregnancy) is an interactive questionnaire for parents for assessing risk factors in combination with tailored information and advice on how to reduce or mediate them (Vink-van Os et al., 2015). In 2017, the accessibility of the website was tested amongst women with low health literacy. This resulted in modifying the language used in the questionnaire and simplifying the questions to make it more user-friendly.

- Smarter Pregnancy is an online, evidence-based, six months coaching program tailored to the individual aiming to improve healthy behaviour (Oostingh et al., 2020).

Women are still facing barriers to preparing for and achieving a healthy pregnancy, especially those of lower socio-economic status and/or with lower health literacy (Murugusu et al., 2019). One major barrier is the lack of widespread awareness and understanding of preconception health and the availability of preconception counselling and care. A social marketing strategy directed towards prospective parent(s) to explain the importance of preconception health may be useful in raising awareness and expectations (Van Voorst et al., 2017; Poels et al., 2016). The 'Wake Smart (future) Mama! Let's make your baby strong' programme uses social networks to encourage women to motivate each other towards healthy behaviours (Maas et al., 2020).

AGENDA FOR THE FUTURE

It is hard to find effective ways to communicate the importance and feasibility of preconception health care to the general population, to

specific communities, to policy makers and to professionals. In order to shine a light on early life preventive care, 'Solid Start' has proposed a preconception agenda for the future (Box 3).

BOX 3: PRECONCEPTION HEALTH: AGENDA FOR THE FUTURE

- Raise awareness amongst the public and health professionals about the need to think about preconception health and to prepare actively for pregnancy and parenthood.
- Tackle perceived barriers to implementing preconception health and care through a multi-agency approach including general and specialized medical professionals, preventive youth health services, health insurance companies and all professionals who work with and care for women and men who might become parents.
- Encourage professionals to use the One Key Question approach at every available opportunity in a culturally sensitive manner that fits the context of The Netherlands. For example, this includes during visits to the family doctor, the pharmacist or the occupational health physician; at post-pregnancy check-ups with a midwife, obstetrician or paediatrician; during visits to the child health care centre (Sijpkens et al., 2019; Sijpkens et al., 2016); during check-ups with a medical specialist in relation to chronic disorders, and within the social domain.
- Enable professionals to provide effective preconception (before pregnancy) and inter-conception (in between pregnancies) care through competency building and enriching existing guidelines.
- Ensure that all women and men, including asylum seekers, new immigrants and those with special needs or low health literacy, can benefit from the preconception agenda by providing culturally sensitive and tailored care.
- Invite young people to think actively about their health and wellbeing, intended/unintended pregnancy and the benefits of a well-prepared parenthood.

'WHILE NOBODY CAN DO EVERYTHING, EVERYBODY CAN DO SOMETHING'

This quote from Sher (2017) heralds the way forward. Improving preconception and interconception health is becoming part of a broader movement across The Netherlands in which professionals, managers and national/local policy makers are involved. Every one of them can ask the key question 'Do you plan to become pregnant in the next year?' Everyone can contribute to proper access to informed counselling and reproductive options around preparing for pregnancy or postponing it. Local and national advocates can draw attention to the need for facilities, staff and/or time, competency building and funding. Together, they can create awareness amongst the public, professionals and policy makers of the immense importance of the first 1,000 days. Such awareness raising must start with good quality contraception services and preconception health education and care for both women and men.

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