Article

Social Obstetrics as Niche-Development in Addressing Health Inequities

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Abstract: We apply a transition research perspective to the Dutch obstetric care system to analyze historic, current, and future shifts and find ways to overcome persistent health inequities. We present social obstetrics as an emerging niche that addresses perinatal health inequities by acknowledging their multifaceted origins and fostering collaborations across the medical, social, and public health sectors. We conducted desk research, in-depth semi-structured expert interviews, and interactive group sessions with change-inclined professionals that are relevant for the implementation of social obstetrics in six Dutch municipalities. The outcomes are synthesized in a historical narrative and perspectives on current obstacles and future systemic shifts. We argue that social obstetrics can be considered a sustainable addition to what is already present, instead of a disruptive transformation of the current system. Social obstetrics is innovative as it connects various societal systems and offers a framework for cross-sectoral collaboration. These collaborations, in turn, can be the starting point for the transformation of the obstetric care system as well as other relevant societal systems.

Keywords: health inequities; perinatal health; obstetric care system; social obstetrics; transition research

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1. Introduction

Addressing health inequities within and across countries proves to be a challenging task. Notwithstanding the growing body of research on the origins of and solutions to inequities in health across the lifespan, differences in health outcomes between, for instance, socioeconomic groups in modern welfare states are not decreasing [1]. In this paper, we apply a transition research perspective to the Dutch obstetric care system to analyze its historic, current, and future shifts. By doing so, we aim to identify current obstacles in addressing health inequities as well as possible ways to address them.

1.1. Health Inequities as a Persistent Problem

While global health outcomes, such as life expectancy and child mortality, have shown a positive development in the past decades, health inequities within and across countries have mostly remained the same or have even widened. According to Mackenbach [1], the persistence of socioeconomic inequities in health, also in the affluent welfare states of Western Europe, is one of the great disappointments of public health [1]. In the Netherlands, health inequities present a societal challenge as people with a high socioeconomic status (SES) live approximately seven years longer, and even 18 years longer in perceived good health, than people with a low SES [2].

In this paper, we use the term 'health inequities' as opposed to 'health inequalities'. While the latter describes the existence of differences in health between groups (i.e., between age groups), the term 'health inequity' denotes unjust, preventable, and unnecessary differences in health outcomes [3]. Income, education, gender, ethnicity, immigration status, and living conditions are important predictors of varying health outcomes between

population groups. A central finding from decades of work on the social determinants of health, i.e., "the conditions in which people are born, grow, live, work and age" [4] (p. 101), is the inverse relationship between one's socioeconomic position and health [5]. Adverse socioeconomic conditions could even be considered the "fundamental cause of disease", reproducing health inequities through time and space [6].

In recent decades, there have been numerous calls to reduce health inequities through action on the social determinants of health. Even though efforts have been made to address health inequities, these efforts did not have the desired effect and only a few countries are systematically tackling the social determinants of health [4]. Addressing health inequities is necessary because it can be argued that they are unfair and avoidable, affect everyone, and lead to severe health care costs [7]. Moreover, health inequities are likely to increase due to current societal developments, such as the COVID-19 pandemic [8].

In this paper, we focus on health inequities in the perinatal period, i.e., the time shortly before and after birth, and ways to address them. This broadens the focus from decreasing health inequities among current generations, to also addressing health inequities for future generations. Substantial inequities in perinatal health outcomes exist between and within cities across high-income countries [9–11]. Across Dutch municipalities, for instance, perinatal morbidity and mortality range from 17.3 to 23.6% and from 10.1 to 15.4 ‰, respectively [10]. Additionally, perinatal health inequities are apparent on the neighborhood level. In the city of Rotterdam, for instance, perinatal mortality rates range from 2 to 34 per 1000 births and deprived neighborhoods show the highest rates [9]. Perinatal health inequities have long-term health consequences and therefore major implications for the entire health care system [12]. Adverse perinatal health outcomes, like being born small for gestational age or preterm birth, are associated with increased rates of coronary heart disease and related disorders like stroke, hypertension, and type 2 diabetes in adult life [13]. Medical risk factors as well as accumulation of non-medical risk factors, such as a low parental educational level, poor living conditions, and lack of social support, underlie inequities in perinatal health [9,14]. Next to these individual-level determinants, macro-level characteristics, such as neighborhood deprivation, can have a negative impact on health at birth [9,14–16]. Differences in perinatal health between neighborhoods of various levels of deprivation have not decreased between 2003 and 2017 [17]. This illustrates that perinatal health inequities in the Netherlands are hard to address.

We take a transition research perspective to unpack the persistent nature of perinatal health inequities in the Netherlands and address the following questions: How can we understand historic, current, and future shifts in addressing perinatal health inequities? What are current obstacles in addressing health inequities at birth? And how can these obstacles be overcome? By answering these questions, we hope to address several research gaps. First, transition literature rarely focusses on inequities and health systems let alone a combination of both. Its primary focus still lays on sociotechnical transitions in other systems, like the energy or mobility sector. Second, within medical literature one rarely reads about fundamental systemic changes and how to conceptualize and manage them. By applying a transition perspective on the Dutch obstetric care system, we aim to offer new perspectives and combine insights from both academic worlds.

1.2. A Transitions Perspective on (Perinatal) Health Inequities

Persistent problems of modern health care systems, such as rising public costs, increasing demand for long-term health care, newly emerging or re-emerging diseases, and increasingly complex management processes have been discussed by transition scholars [18]. They, however, have barely addressed (perinatal) health inequities. Yet, the persistent nature of health inequities, the growing awareness of the need to address them, and the emergence of alternative ways to do so are factors indicative of an ongoing transition [19]. Transitions are fundamental shifts from one equilibrium of a societal (sub)system to another, occurring in the timeframe of several decades [20]. They represent a non-linear change process in a (sub)system's dominant culture, structure, and practices (i.e., its regime) [21].

Regimes are path dependent as its actors, policies, and innovations are directed towards improvement, efficiency, and optimization of the current status quo. To react to transformative pressures and adapt to changing societal demands, possibilities, technologies, and lifestyles, structural and often disruptive changes in the dominant regime are necessary. Transition scholars study the process of regime destabilization as well as emerging social, technological, institutional, and economic innovations, i.e., niches [21]. Within transition studies, explorative research methods are applied to assess a more sustainable future for a specific societal (sub)system.

One of the emerging niches addressing perinatal health inequities is 'social obstetrics' [22]. Social obstetrics builds on collaborations across the medical, social, and public health sector and acknowledges the multifaceted, medical, social, and environmental origins of perinatal health inequities. Cross-sectoral collaborations are necessary, as medical professionals alone cannot address factors like poverty, stress, or discrimination. In designing and executing social obstetrics, national and local governments can play a crucial role. They can formulate (public) health policies, which aim to facilitate access to health care for all people and link them to other relevant fields, such as the social welfare or education sector [23]. Yet, cross-sectoral collaborations within the Dutch obstetric care system are still not part of the status quo. There have been several research programs focusing on the implementation of social obstetrics. The Ready for a Baby program (2008–2012), for instance, aimed to address perinatal health inequities in Rotterdam by stimulating collaborations between obstetric care professionals and stakeholders from other sectors (i.e., the public health and social sector) [24,25]. Since 2011, researchers of the nationwide Healthy Pregnancy 4 All program study how to implement customized preconception care, antenatal and postnatal risk assessment, as well as patient-tailored multidisciplinary care pathways [26,27].

Not only in the Netherlands there is a growing sense of awareness of the contribution of social and environmental risk factors to perinatal health outcomes and therefore the need to collaborate across sectors when offering care to (future) parents. In the United States, for instance, the Federal Government initiated the nationwide programme 'Healthy Start' in 1991 to decrease perinatal health inequities [28]. The programme's focus is on improving outreach, case management, health education, perinatal depression screening, and interconception care. To enable these care elements, interdisciplinary collaborations are considered necessary. The Danish Health Authorities highlight the importance of care for pregnant women who are living in precarious conditions. Therefore, several projects were initiated in Denmark in 2014 to improve antenatal care and improve perinatal health outcomes among vulnerable families [29]. To meet the specific needs of this population, the Danish Health Authorities recommend involving different professionals from in- and outside the health sector in their care. The German 'Early Childhood Intervention' (ECI) programme offers support to all pregnant women and families with young children, as well as extra psychosocial support services to families living in precarious conditions. The ECI programme builds on systematic cooperation between the health sector and the child and youth welfare sector [30]. These examples highlight that perinatal health inequities are considered a persistent problem on an international scale. They also show that there is an increasing sense of urgency and awareness of the need to collaborate across sectors to be able to offer adequate care to all (future) parents.

The trend of cross-sectoral care to improve health outcomes and address health inequities is also apparent in other contexts. In Rotterdam, for instance, collaborations between youth-care organizations and community sports clubs are seen as a way to improve the physical, mental, and emotional health of vulnerable youths [31].

Addressing inequities (in health) should be an inherent ingredient of sustainability transitions [32], as it can positively influence the quality of life of current and future generations. Also, focusing on perinatal health inequities and implementing social obstetrics can be considered sustainable because: (1) preventive measures at the very start of life can improve long-term health of individuals and their offspring. This can relieve the health care

system and decrease health care costs, which can be beneficial for all members of society; (2) it acknowledges the need to interconnect the health care system with other societal systems. It shows that making today's health care system more sustainable requires other systems to transform as well because health outcomes are shaped by social, environmental, and lifestyle factors; and (3) focusing on inequities in health – and not solely on health –, can help to create a more just society, in which children can have a healthy and thereby promising start in life, regardless of the socioeconomic stratum their parents belong to.

1.3. A Nested Systems Demarcation of Obstetric Care

The Dutch obstetric care system is our main unit of analysis as it is the system that is most concerned with perinatal health. It includes preconception, antenatal, and postpartum care and is divided into three levels, or 'tiers'. Women with a low-risk pregnancy receive care by community midwives (first tier). Women with one or more risk factors receive care from gynecologists in the second tier. In case of sever maternal or fetal morbidity and (possible) prematurity, women and their offspring receive care within the third tier from gynecologists and other specialists in academic hospitals [33,34]. The obstetric care system can be considered a subsystem of the overarching health care system, which is again embedded in the public health system. The latter is primarily concerned with addressing health inequities by promoting health capacities and preventing diseases through population-based interventions [35]. Because health and wellbeing depend on a variety of factors, the public health system is linked to a diverse set of (sub)systems such as the welfare, housing, education, and energy systems. Due to the interconnectedness of all these systems, we speak of an interplay, a so-called 'patchwork', of interdependent (sub)systems and therewith of multiple relevant regimes [36]. We use a 'nested' systems demarcation (Figure 1) that highlights the systems' embeddedness and fluid boundaries.

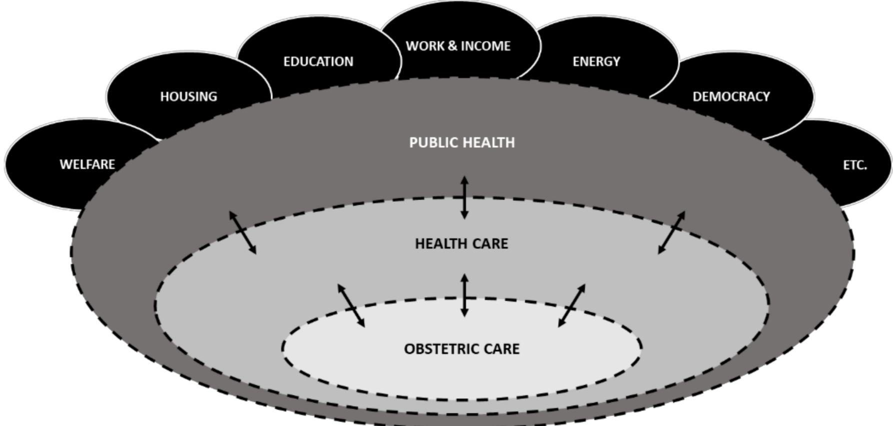

Figure 1. Nested systems demarcation of the obstetric care system.

Each of these systems has a different scalar dimension, ranging from the municipal to the national level. Also, different actors from the medical, social, and public health sector are involved in every system. The nested systems demarcation highlights the multi-actor, -scalar, and -domain characteristics that are needed to tackle perinatal health inequities. Collaborating across the obstetric, health care, and public health systems is highly complex as they comprise different financial structures, types of regulation, practices, etc. Professionals from the Dutch obstetric care system increasingly collaborate with other health care, public health, and welfare professionals. These collaborations are often instigated by short term pilots and/or the intrinsic motivation of individuals or small groups of professionals. Yet, addressing the root causes of perinatal health inequities needs more stable, institutional, and broad collaborations. For instance, the body of research on the association between perinatal health outcomes and environmental factors (i.e., physical living conditions, air pollution, poor isolation, etc.) is growing [37–39]. Therefore, it might

be one of the logical and necessary next steps to build collaborations between obstetric care professionals and actors from, for instance, the housing sector.

2. Materials and Methods

Transition research combines analytical and action-oriented methodologies. It offers a conceptual lens to structure historical analyses and frame existing societal systems, their dominant regimes, and transformative change dynamics. The action-oriented methods are used to validate and refine these analyses in a participatory context, involving stakeholders from practice. Furthermore, action research is used to facilitate discussions and co-creation to explore future transitions and ways to enable them. For this paper, we draw on both methodologies. The outcomes are synthesized in a historical narrative and perspectives on current obstacles and future systemic shifts.

The Healthy Pregnancy 4 All-3 study (HP4All-3) (2018–2021) [40] has been conducted by researchers of the Erasmus MC and the Dutch Research Institute for Transitions (DRIFT), as well as professionals from the Dutch Centre of Expertise on Health Disparities (Pharos). The aim of the HP4All-3 study was to identify barriers and facilitators for transformative change in institutional structures, cultures, and practices towards addressing perinatal health inequities at the municipal level [40]. The role of municipal governments in implementing a cross-sectoral approach to perinatal health inequities is at the center of interest of the HP4All-3 study, as they are primarily responsible for the organization of public health care in the Netherlands. HP4All-3 took place in six Dutch municipalities (i.e., Eemsdelta, Enschede, The Hague, Vlissingen, Landgraaf, and Heerlen). These municipalities all struggle with a high incidence of adverse perinatal health outcomes (i.e., preterm birth and small for gestational age) but vary considerably with regards to the implementation of perinatal health into their approaches and policies concerning health inequities. The location and size of the participating municipalities vary as well (i.e., North, Centre, South; either more or less than 70,000 inhabitants).

The target population of the HP4All-3 study were professionals that are relevant for the implementation of social obstetrics: professionals from the medical sector (i.e., midwives, obstetricians, general practitioners, maternity care assistants, etc.), social sector (i.e., professionals working for a multidisciplinary neighborhood team or another welfare organization), and public health sector (i.e., employees of a Preventive Child Health Care organization), as well as from municipal governments (i.e., aldermen and civil servants from the field of youth, public health, work and income, or societal support). As we focused on *institutional* barriers and facilitators for transformative change, we did not include (future) parents.

After conducting extensive desk research on the municipalities' approaches to (perinatal) health inequities, we held eight to ten in-depth semi-structured expert interviews per municipality (53 interviews with in total 70 respondents). Furthermore, two interactive group sessions with approximately 10 to 20 participants (interviewees as well as other interested and change-inclined professionals) were organized in each municipality (12 sessions with in total 96 participants). The aim of the interviews was to gather information on participants' views on (perinatal) health inequities, their ideas on how to address them, and their insights on what is currently being done in their municipality within and across different sectors to decrease inequities in (perinatal) health. Two researchers of the HP4All-3 team screened the interviews and summarized insights on the perceived urgency, existing activities to address perinatal health inequities, and the local network involved in these activities. This was translated into a first problem analysis, which was presented and validated during the first group session in each municipality.

The goal of the group sessions was threefold: (1) to validate our problem analysis of the local obstetric care system, (2) to discuss the urgency of perinatal health inequities, and (3) to jointly develop a local action agenda on how to address them. Additionally, participants of the first interactive group session discussed future systemic shifts that are needed to overcome local perinatal health inequities. The systemic shifts were expressed in

'from-to' sentences, summarizing what is needed to move from the current unsustainable situation to a desired future situation. After the first group session, we synthesized a set of approximately five systemic shifts for each of the six municipalities (31 in total). As to validate these shifts, we discussed them with the participants of the second group session and revised them based on this discussion. Subsequently, the participants identified tangible short- and long-term actions to realize the desired future shifts, which we summarized in the local action agenda. After the group sessions, we synthesized the validated 31 systemic shifts into six overarching guiding principles, which can be used as recommendations for future action.

For our historical analysis, we conducted an explorative, non-systematic literature review. The aim of this review was to draw a rough picture—i.e., a historical narrative—of the main shifts, which the Dutch obstetric care system has gone through during the last 150 years. It helps to place the current obstetric care system—as well as the trend of social obstetrics – in a long-term transitions perspective (see paragraph 3.1). For more information on the background of the HP4All-3 study and the methods that were applied, we refer to the study's research protocol [40].

3. Results

This section contains the results from both our analytical and action-oriented research. The first part presents various development stages of the Dutch obstetric care system drawing on the historical analysis. In the second part, we reflect on the current obstacles and future shifts of the obstetric care system, by drawing on the interviews, interactive group sessions, and our synthesizing work as action researchers.

3.1. Historical Narrative of the Obstetric Care System

We explored the systemic shifts that the Dutch obstetric care system has undergone since the early 1900's. Giving a detailed description of these shifts is beyond the merit of this paper. However, we want to explore some of the developments that are relevant for the system's current role in addressing health inequities, drawing on the 'Urban Water Transitions Framework' [41,42]. This framework is used as a heuristic tool to describe different stages of urban water systems, comparing their sustainability across different cities. It enables the assessment of historical, current, and future system constellations from a transitions perspective and maps development stages of urban water transitions along two dimensions: cumulative socio-political drivers and service delivery functions. Cumulative socio-political drivers are society's demands and expectations influenced by its environmental awareness, attitude toward water management, and amenity expectations. Service delivery functions are the functions needed to address the socio-political divers and to realize more sustainability. The framework is specifically interesting in relation to the topic of (perinatal) health inequities due to this two-dimensional analysis and its explicit focus on 'cumulative socio-political drivers' of system shifts. This conceptual and empirical angle relates to earlier criticisms on transition studies for not paying sufficient attention to the politics and political dimensions of sustainability transitions [43].

Based on a review of several historical overviews of the Dutch obstetric care system since the early 1900s [44–48], we discerned six development stages of the Dutch obstetric care system in relation to addressing health inequities (see Figure 2). These stages show a development from a narrow view on obstetric care to a social and cross-sectoral approach to care for (future) parents and (unborn) children. The boundaries of these stages are not clear cut but are fluid and overlapping.

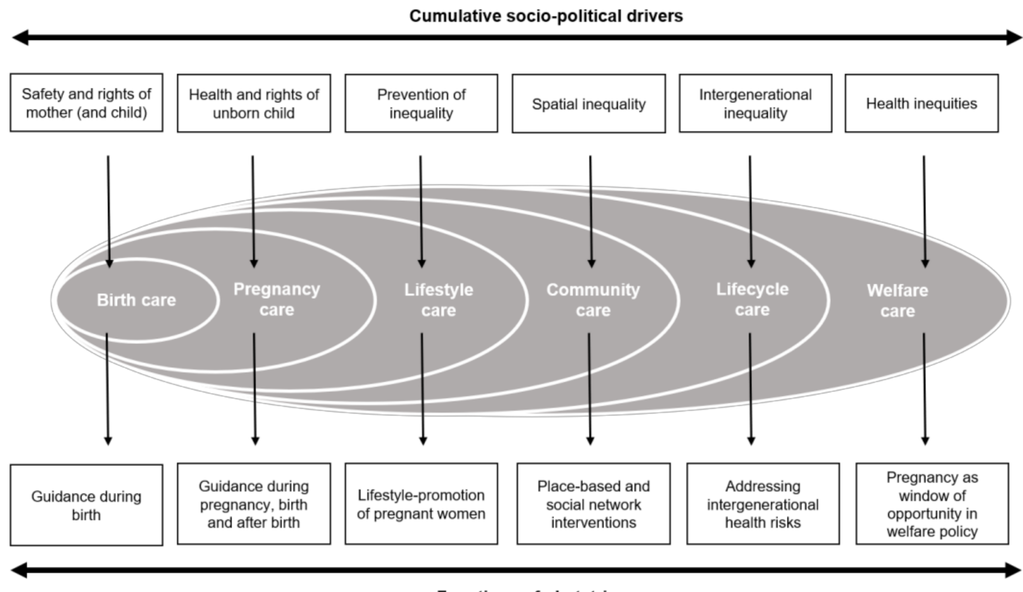

Figure 2. Stages of the Dutch obstetric care system (inspired by the Urban Water Transitions Framework by Brown and colleagues) [41,42].

Inspired by the 'Urban Water Transitions Framework', we as well apply a two-dimensional approach. On the one hand, we consider cumulative socio-political drivers underlying the development of the Dutch obstetric care system (see upper part of Figure 2). These are the demands and expectations society has towards the obstetric care system. The lower part of Figure 2 denotes the functions of the obstetric care system that are necessary to fulfill these demands and expectations. The Dutch obstetric care system is not necessarily developing linearly nor chronologically. Rather, different ways of thinking, doing, and organizing can exist simultaneously. The core stage represents elementary birth care, in which the health and safety of pregnant women are promoted. This stage is the foundation of all other development stages. The far outer stage is extended welfare care, where pregnancy and the beginning of new life are considered a window of opportunity to address health inequities. With each development stage, new functions are added to the core.

The factors that are believed to shape the health of unborn children change across the development stages. During the early 1900's, for instance, there were no screenings of risk factors during pregnancy at all. Nowadays, medical professionals involved in the care for pregnant women not only offer medical support, but they are also increasingly expected to screen women and families for social risk factors (e.g., poverty, loneliness, lifestyle, etc.) and, if possible, address them [49]. This is related to more insights into the association between social risk factors and perinatal health outcomes [15] and has led to a richer understanding of perinatal health inequities and their social, spatial, and intergenerational origins.

The functional scope of the Dutch obstetric care system has expanded significantly. While a century ago, obstetric care was centered around birth [48], nowadays, (future) parents can receive medical and social care prior to becoming pregnant, during the entire pregnancy, and the first days of their child's life. This extension of care also entails more attention for the unborn child. While birth care focuses exclusively on the health of the (future) mother, pregnancy care and all other development stages entail actions to improve the health of the child as well [48]. Lifecycle care additionally covers the preconceptional period.. This type of care plays into the growing awareness of the importance of preconceptional parental health for the health and wellbeing of future children [50]. The focus on the period before conception enables preventive actions to be taken as early as possible. This development enables a life course approach to health [51], connecting health outcomes at birth, during childhood, and adulthood with each other.

Another aspect that changes across the development stages is the number of professionals involved in the care for pregnant women and their (unborn) children. While birth care involves medical professionals alone, welfare care needs to be delivered by a wide spectrum of professionals. Approximately 150 years ago, midwives offered care to birthing women and only severe complications led to the intervention of doctors. Yet, already at the beginning of the 20th century, one third of all childbirth was accompanied by general practitioners [52]. During the first days after birth, midwives and maternity care assistants supported parents in the care for their newborn child [53]. Nowadays, midwives, general practitioners, maternity care assistants, and gynecologists can be involved in the care for pregnant women, young mothers, and newborn babies. Welfare care entails that next to professionals from the medical sector, professionals from the social and public health sector as well as from municipal/national governments endeavor in the care for (future) parents and their newborn children.

This brief exploration of the Dutch obstetric care system shows its ever-developing state in terms of corresponding structures, cultures, and practices. The historical shifts have led to more complexity in terms of involved professionals, domains, as well as norms and values. Also, over the years, the Dutch obstetric care system became increasingly medicalized. While in the middle of the 20th century almost 80% of women living in the Netherlands gave birth at home, currently most Dutch women chose to give birth in a hospital [48]. Also, screenings of mother and child during the entire pregnancy, starting as early as possible [54], are normal and considered necessary. At the same time, fertility treatments like in vitro fertilization and intracytoplasmic sperm injection enable more people to become parents. These developments show the growing possibilities of the obstetric care system and the central role it can play in addressing (perinatal) health inequities.

3.2. Current Obstacles and Future Shifts of the Obstetric Care System

To illustrate current obstacles in addressing perinatal health inequities and to explore possible ways to overcome them, we present a set of transformative shifts from a current, undesired state of the system to a future, desired state of the system. These shifts are the result of the interactive group sessions, which were organized in the participating municipalities. In the following, we present the synthesis of all systemic shifts (31 in total), summarized in six guiding principles.

1. Equal opportunities for all (newborn) children

Currently, a healthy and therewith promising start in life for all children born in the Netherlands is not safeguarded. The first systemic shift therefore addresses the need to move from health inequities to equal and fair opportunities for every child and family. Most professionals, who attended the interactive group sessions, were aware of the existence of perinatal health inequities. Yet, to reach equal and fair opportunities for all children, more awareness of the *origins* of perinatal health inequities is needed. Many professionals still do not know the social risk factors underlying differences in perinatal health outcomes. Especially professionals working for the municipal government mostly thought of medical or lifestyle risk factors (i.e., parental obesity or smoking), when asked about factors causing inequities in perinatal health. Professionals working in the medical sector do not always know how to *address* social risk factors. Some of them predominantly screen for medical risk factors, as they are uncomfortable talking about topics like poverty or loneliness with (future) parents. Structured risk screening tools, focusing on medical and social risk factors alike, can facilitate guided conversations between (health) care professionals and parents (to be).

> "Previously, there was no attention for health inequities at birth. Therefore, we said that we need to look at socioeconomic patterns in perinatal health outcomes. And that we should call them like that: socioeconomic health inequities. And that perinatal mortality is caused by socioeconomic inequities in health". Professional working at a municipal health service organization

2. Empowerment of (pregnant) women and (future) parents

(Health) care professionals struggle to integrate (future) parents' needs and wishes in the care they offer. They rather provide support that they themselves believe to be necessary and adequate. Yet, to assure that all (future) parents and their children receive the best possible care, obstetric care needs to shift from directive and normative services to care that enables autonomy and safeguards the rights of women and (future) parents. To empower (future) parents, who are struggling with financial or social problems, more time is needed for consultations during – and if possible, even before – pregnancy. This would enable (health) care professionals to listen to their clients' needs and wishes and get to know their capabilities and network.

> "Parents always accept advice from grandparents, neighbors, best friends, uncles, aunts, etc. better than from professionals. I therefore want to strengthen their network and pick someone from it, who can guide the (future) mother. [. . .] But often we do not even know their network."
>
> Professional working at a youth care organization

3. Open and easy access to obstetric care for all

Many professionals attending the interactive group sessions discussed that future parents living in precarious conditions (due to, for instance, poverty, marginalization, or social isolation) often do not want or know how to get in touch with (health) care professionals. According to the participants of the sessions this is due to two reasons: (1) a clear overview of (health) care professionals and the services they offer is lacking; (2) future parents fear that (health) care professionals will not understand them, stigmatize them, or offer care that does not fit the situation they are living in. To be able to provide adequate support to all future parents, (health) care professionals want to move from high threshold and standardized care to low-threshold and flexible care. Obstetric care should be made more accessible. This can be done by developing easy to understand overviews of local (health) care providers and their services, eliminating waiting lists and unclear registration forms, and creating awareness for the need to offer care that is sensitive to (future) parents' social, economic, and cultural origin and context.

> "We have to enable future parents in finding financial support and requesting financial compensations. I think that this is quite a challenge [for them]. [. . .] There should be a better overview."
>
> Gynecologist

4. (Future) parents central in obstetric care

Related to the third shift, professionals indicated that current care for (future) parents is too much guided by professionals' own ideas about their clients' needs. Often, there is not enough time to listen to their wishes and ideas. (Health) care professionals should shift from one-size-fits-all care to tailor made services, putting the needs of families central. This can help to build a trusting relationship, which is especially relevant when talking about social risk factors like poverty or marginalization. To reach client-centered care, professionals should develop care in co-creation with (future) parents that are living in precarious conditions.

> "I talk to them [future mothers] and ask them about their ideas concerning their pregnancy and whether they need anything. Often, they think that there is nothing they need. I ask them whether they were abused when they were young, for instance, and whether they ever received help for that. And whether they feel safe now."
>
> Midwife

5. Cross-sectoral collaboration

For the implementation of social obstetrics, cross-sectoral collaborations are necessary. Yet, thus far, actions to address perinatal health inequities are mainly instigated within

the obstetric care system. This can be explained by the fact that professionals from other systems are not always aware of the manifestation and long-term consequences of perinatal health inequities. Subsequently, such professionals do not feel responsible for delivering care or offering support during the perinatal period. All participants of the group sessions indicated that working across sectors can be challenging. Conflicting interests, market competition, privacy regulations, different work procedures and protocols, as well as overall unfamiliarity among professionals are factors that can hinder smooth collaborations across sectors. There is a need to shift from fragmentation, unfamiliarity, and isolated initiatives to getting to know each other's strengths and possibilities, as to ultimately reach direction, cohesion, and a joint vision and agenda. Group sessions with professionals that are relevant for the implementation of social obstetrics, like the ones that were organized in the framework of the HP4All-3 study, were mentioned to be a helpful approach.

> "They [i.e., midwives] often do not know where to refer vulnerable pregnant women to. They know about multidisciplinary neighborhood teams, but do not know how to get in touch with us. [. . .] That is why we thought we have to find a way to collaborate more."
>
> Neighborhood coach working for a multidisciplinary neighborhood team

6. Structural policies aimed at prevention, impact, and continuity

So far, municipal governments are hardly involved in tackling perinatal health inequities. Yet, to successfully implement social obstetrics, new practices, ideas, and collaborations should be developed and institutionalized as part of long-term solutions. Practices that proved to be effective should be continued to increase their impact. Practices and activities are often stopped due to temporary funding and budget cuts. Participants expressed the need to shift from discontinuation of effective initiatives and pilots to institutionalizing social obstetrics.

> "Previously we had a network which met every eight weeks. Everybody could talk about what they have been doing. But that network collapsed some years ago, as the municipality stopped financially supporting it. Something else was initiated. They keep initiating new stuff and then shut it down."
>
> General practitioner

Participants of the second group session decided collectively which tangible short-term and long-term actions are needed to realize these systemic shifts. Following the sessions, we summarized all guiding principles and shifts, as well as the accompanying actions in six action agendas. These agendas can be used as a tool to guide future steps to address local perinatal health inequities.

4. Discussion

In this paper, we applied a transition perspective to sustainability in health care. We used the analytical and action-oriented methodologies of transition research to assess the (un)sustainability of the Dutch obstetric care system and to identify ways to address perinatal health inequities. Recently, several studies have been published that are focusing on transitions in the health care system. These studies discuss and explain phenomena like persistent problems [55], transition governance [36], and transition experiments [56] in relation to health outcomes and the health care system. Yet, so far there is no research that applies a transition perspective to the Dutch obstetric care system and ways to address (perinatal) health inequities. By discussing current obstacles and future systemic shifts, identified by professionals working in different sectors in six Dutch municipalities, we discerned unsustainable characteristics of the obstetric care system, which can reproduce and even widen health inequities in the Netherlands. We argue that addressing health inequities should be an inherent ingredient of sustainability transitions as such inequities hamper the overall wellbeing of current and future generations.

Analyzing the persistency of (perinatal) health inequities using a transition perspective proved to be a fruitful exercise. Not only did it yield a systemic perception of obstetric care

in the Netherlands and its interdependency with other systems, but it also helped to create a dynamic impression of its different development stages. This enables an assessment of the transformative potential of social obstetrics as a niche trend. Applying a nested systems demarcation highlighted the fact that social obstetrics can be considered a sustainable addition to what is already present, instead of a disruptive transformation and complete refiguration of the current system. Therefore, social obstetrics can be considered as an alternative way of thinking, doing, and organizing that challenges the incumbent regime. It is a niche-development that might potentially address persistent problems and help to guide a transition of the public health system.

To further accelerate this transition, several aspects should be kept in mind. Social obstetrics offers tools for (health) care professionals to identify risk factors and break the taboo of addressing them. This is a necessary first step in offering adequate care to parents (to be), who are living in precarious conditions. Being able and taking the time to talk to (future) parents can be a way for (health) care professionals to empower them. Together they can discuss how to offer their child(ren) a healthy start. Yet, to enable these conversations, care for (future) parents needs to be easily accessible. Therefore, (health) care structures should be designed in such a way that everybody can find adequate resources and professional care. As to create trusting and thereby lasting relationships between (health) care professionals and their clients, the latter should be put central in the development of all health care innovations. Client-centered care is intrinsically sustainable as it integrates (future) parents' wishes, needs, strengths, and weaknesses. Moreover, social obstetrics is innovative as it can connect various societal systems with each other. It can offer the structure and framework to collaborate across sectors. Cross-sectoral collaborations, in turn, can be the starting point for the transformation of the obstetric care system as well as other relevant societal systems. Joining forces to address (perinatal) health inequities under the umbrella of a niche-development like social obstetrics can help to increase awareness of the interconnectedness of health, wellbeing, and welfare. Combining medical with social care, tackling issues like poverty or marginalization, can positively influence the health and wellbeing of (future) parents and their offspring – far beyond the timespan of a pregnancy. Finally, to prevent discontinuation of social obstetrics and to enable upscaling of local activities, promising practices should be institutionally embedded into municipal and national policies concerning health inequities.

Since the Netherlands is not the only country in which there is growing awareness for perinatal health inequities and the need to tackle them by collaborating across sectors, future research should make efforts to synthesize insights and experiences from several countries. Connecting programs from different countries and contexts might be a fruitful endeavor as to create a common language and terminology as well as more effective practices to tackle (perinatal) health inequities.

By analyzing the topic of (perinatal) health inequities from a transitions perspective, we hope to have shown that transition research offers useful tools to identify shortcomings and opportunities within the current obstetric care system. Applying elements of transition studies offers unique possibilities for future research on health inequities. One of them being the ethical and political dimension of health inequities and intervening with such a delicate topics like perinatal health and birth of new life in general. In addition, the notion of justice as an orienting principle for transitions [57,58] is a promising and necessary avenue for future research with regards to health inequities. Furthermore, studying health inequities can also be linked to equity in food, mobility, and energy systems and can yield academic and practical cross-fertilization. Lastly, follow-up research should dive deeper into possible ways to institutionalize the niche trend of social obstetrics. This is important as to prevent it from remaining a marginal and fragmented innovation in the search for addressing (perinatal) health inequities.

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