



# Home-visiting programs during the first 1000 days

*A review about the impact of home-visiting interventions on socioeconomic disparities in  
healthcare access.*

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This thesis has been written as a study assignment under the supervision of an Utrecht University teacher. Ethical permission has been granted for this thesis project by the ethics board of the Faculty of Social and Behavioral Sciences, Utrecht University, and the thesis has been assessed by two university teachers. However, the thesis has not undergone a thorough peer-review process so conclusions and findings should be read as such.

## Abstract

**Background:** The first 1000 days of a child's life are crucial for healthy development and lifelong well-being. However, equal access to healthcare during this period remains a challenge, even in Western countries. Home-visiting programs are frequently implemented to support vulnerable individuals during this critical period, yet there is insufficient attention to the accessibility of these interventions.

**Objective:** This rapid review synthesized existing knowledge, providing an overview of evidence regarding the accessibility of home-visiting interventions during the first 1000 days for individuals facing socioeconomic disparities.

**Methods:** A rapid review was conducted, searching the PubMed and Scopus databases. Eligibility criteria were based on the PICOST Framework, including Western children and their parents in the first 1000 days of life (population), home-visiting interventions (intervention), studies with a control group (comparator), outcomes related to accessibility and effectiveness (outcomes), randomized and non-randomized controlled trials (study design), and English, peer-reviewed studies published between 2014 and 2024. Data were analyzed and coded using three theoretical lenses: accessibility framework, socioecological levels, and intersectionality, utilizing a data-extraction sheet and Atlas-TI.

**Results:** 44 studies were included. Findings indicated that home-visiting interventions primarily address supply-side factors and challenges at the interpersonal and intrapersonal levels. However, there is a notable lack of attention to intersectionality and to institutional and structural challenges that influence the accessibility of healthcare during the first 1000 days.

**Discussion and conclusion:** Home-visiting programs predominantly address challenges related to personal development and social interactions, focusing on supply-side factors of the intervention. Consequently, there is less focus on institutional and structural challenges, which often serve as notable barriers to healthcare access for individuals experiencing socioeconomic disadvantages. This review underscores the impact of home-visiting interventions on healthcare access disparities and questions whether the current design of these interventions adequately addresses the underlying institutional and structural challenges contributing to these disparities.

## Introduction

### **Problem statement**

The pursuit of equality in child healthcare access is a fundamental objective across numerous countries, exemplified within the member states of the European Union, where equality in healthcare access is entrenched as a pillar of social rights (Baeten et al., 2018). Nonetheless, the pervasive global emphasis on child healthcare access suggests that the challenge of unequal access persists as a contemporary societal concern, transcending geographical boundaries and persisting within both developing and Western countries alike (Baptista et al., 2023; OECD, 2019).

Consequently, the enduring nature of this issue highlights the need for ongoing research and targeted interventions to address and reduce these disparities in healthcare access, especially during the first 1000 days of life.

Despite generally well-organized child healthcare systems in many Western countries, disparities persist (Gerlach & McFadden, 2022). In having access to child healthcare, the first 1000 days of a child's life are of great importance. This period, spanning from conception to the second birthday, is recognized as a crucial period for establishing lifelong health and well-being (Bellieni, 2016).

However, certain individuals in vulnerable positions encounter substantial obstacles in accessing child healthcare during this period due to factors such as income disparities, educational inequalities, language barriers, ethnic disparities, and age differentials (Adams, 2020; Haggerty et al., 2020).

Therefore, the overarching term: socioeconomic inequality in healthcare access, is used. In addressing this multilayered inequality, the concept of intersectionality emerges as pertinent, illuminating the compounding effects of intersecting forms of inequality that exacerbate barriers to healthcare access (Gerlach & McFadden, 2022). Thus, both socioeconomic inequality and intersectionality emerge as crucial constructs shaping child healthcare access, offering valuable insights when acknowledged.

Across Western countries, governmental initiatives are implemented to address the multifaceted socioeconomic inequality in child healthcare access (Saunders et al., 2017). Notably, home-visiting programs are a prevalent intervention during this critical period (Doyle, 2020). These programs entail professionals conducting home visits to provide support to vulnerable new families during the prenatal and/or postnatal phases (Duffee et al., 2017). Consequently, home-visiting programs serve as strategic and preventative interventions to mitigate disparities in accessing healthcare during the first 1000 days of life.

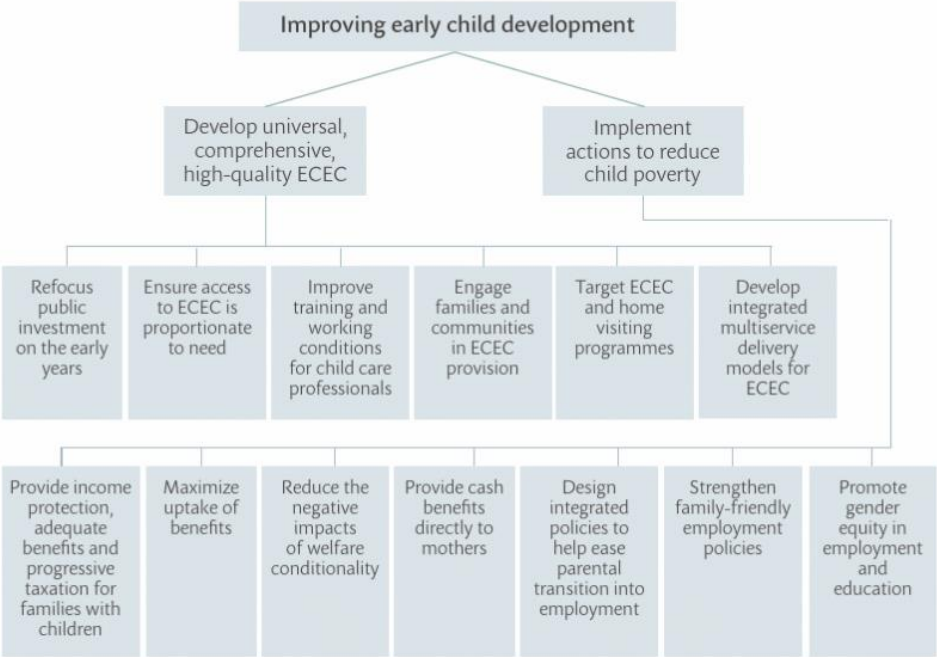
However, a comprehensive overview of the impact of home-visiting programs across Western contexts is presently lacking and attention to the accessibility of these interventions is comparatively scarce (Hirve et al., 2023; Yuan et al., 2014). Conducting this rapid review of Western home-visiting programs aims to synthesize existing knowledge to create this overview, thereby offering a focused analysis of the accessibility of interventions during the first 1000 days within Western settings. Moreover, by adopting an analytical framework informed by an accessibility framework, intersectionality, and the socioecological model, this review provides a unique scientific relevance. Intersectionality exposes groups in double-burdened positions, while the socioecological model facilitates an understanding of the challenges that are addressed across various policy levels. In conclusion, integrating Western intervention analyses with a nuanced focus on accessibility, intersectionality, and the socioecological model can be seen as a scientific complement to existing research.

Additionally, the relevance of this rapid review extends beyond academia, holding societal importance. Addressing the impact of home-visiting programs is essential for optimizing child healthcare outcomes (Saunders et al., 2017). Therefore, conducting this rapid review will hold relevance in informing and advising policymakers to improve the accessibility of home-visiting interventions for individuals experiencing socioeconomic disadvantages.

### **Overview of existing literature**

Existing literature underscores that the first 1000 days of a child's life are important for establishing the foundations of optimal health, growth, and development. During this period, the fetus and infant are highly adaptable and vulnerable (Indrio et al., 2022). The social environment and the mother's physical and mental health during this time have long-term implications (Moore et al., 2017). Therefore, health status is not exclusively based on our genetic and biological disposition, but is also influenced by social, economic, and environmental conditions, collectively termed the social determinants of health (Commission on the Social Determinants of Health, 2008). Given the adaptability and vulnerability during this period, addressing the social determinants of health during the first 1000 days is a widely recognized focal point within public health and policy research. While creating equal access to healthcare stands as a crucial component in enhancing child development (Saunders et al., 2017) (see Figure 1), attention to this aspect remains limited in existing evaluations of interventions (Khanassov et al., 2016). In this rapid review, the importance of healthcare access during the first 1000 days is recognized and will be explored in depth.

From an economic standpoint, policy investment in the first 1000 days yields high returns. Scientific research emphasizes that early childhood interventions for disadvantaged children are more effective than interventions implemented at later ages. This is due to the increased adaptability and dynamic skill formation processes during early childhood (Heckman & Masterov, 2007). Additionally, investing in healthcare access during the first 1000 days has long-term benefits. Studies indicate that socioeconomic disparities in healthcare access impact not only the child's life but also extend to future generations, leading to intergenerational transmission of adverse health risks (Coneus & Spieß, 2012). By investing in the first 1000 days, these risks can be mitigated. The significance of these social and economic factors underscores the importance of ensuring access to child healthcare during this period.



**Figure 1:** Policy options for improving early child development (Saunders et al., 2017, p.7).

From a public health perspective, investing in healthcare access during the first 1000 days is of great importance. Consequently, various policies have been developed to enhance health equality during this period (Saunders et al., 2017). Home-visiting programs are a prominent intervention frequently implemented in Western countries (Doyle, 2020; Saunders et al., 2017). These programs are defined as evidence-based strategies where professionals provide services in the community or private home settings, targeting vulnerable parents and children to address inequalities in healthcare (Duffee et al., 2017). Home visiting is considered a promising interdisciplinary approach for addressing multiple needs, particularly for children and new families who are experiencing adversity (Avellar & Supplee, 2013). Overall, home-visiting interventions are viewed as an effective means of improving healthcare during the first 1000 days in Western countries.

Previous research underscores the widespread implementation of home-visiting programs across Western countries, including the United States (Duffee et al., 2017), Germany (Kliem & Sandner, 2021), The Netherlands (Mejdoubi et al., 2015), Scandinavian countries (Danielsdottir & Ingudottir, 2020), and Australia (Kemp et al., 2019). Notable examples of these programs include the Nurse-Family-Partnership program (NFP) and the interdisciplinary program: Minding the Baby (Slade et al., 2005). Differences among these programs are visible in the type of healthcare provision, content, and target groups. For instance, the NFP involves care from nurse practitioners, while Minding the Baby also includes support of social workers (Slade et al., 2005). Variations also exist in the amount of care and themes covered during home visits. For instance, the Australian Maternal & Early Childhood Sustained Home Visiting Program (MECSH) emphasizes child development and improving the social environment, while the NFP focuses more on maternal health (Molloy et al., 2020). Thus, while home-visiting interventions are implemented variably across Western countries, they are unified by the overarching objective of enhancing child healthcare provision. The enhancement of child healthcare is closely tied to the accessibility of healthcare services. However, this important aspect of improving child healthcare provision remains underexplored in the existing literature.

### **Research question**

Despite the popularity of home-visiting programs across Western countries, there are contextual differences among countries and variations within the same type of intervention. These discrepancies may potentially impact the accessibility of the interventions. Synthesizing existing knowledge of current home-visiting programs across Western countries, with specific attention to the accessibility of the programs, would provide valuable insights and clarity in this field. Accordingly, the research question of this rapid review is:

“What is the impact of home-visiting interventions on socioeconomic disparities in healthcare access during the first 1000 days of life in Western countries?”

## Theoretical Framework

Despite the presence of health facilities in Western countries, future and newborn families in vulnerable positions can experience difficulties in accessing appropriate care during the first 1000 days (Gerlach & McFadden, 2022). In this section, the theoretical framework is developed by using three theoretical lenses. The Access to Healthcare Framework (Levesque et al., 2013) initially provides insights into the accessibility of home-visiting interventions. However, to fully grasp this phenomenon in the context of socioeconomic disparities, two additional lenses are integrated: the Socioecological Model (McLeroy et al., 1988) and intersectionality (Crenshaw, 1989). This combination creates an interdisciplinary understanding of the accessibility of home-visiting interventions concerning the socioeconomic disparities of individuals. A visual representation of the coherence among these elements is visible in Figure 3.

### **Access to Healthcare Framework**

Levesque and colleagues (2013) have proposed an interdisciplinary framework for understanding access to healthcare. Aspects originated in public health, health economics, sociology, and psychology collectively offer a structured approach to analyzing and addressing barriers to healthcare access.

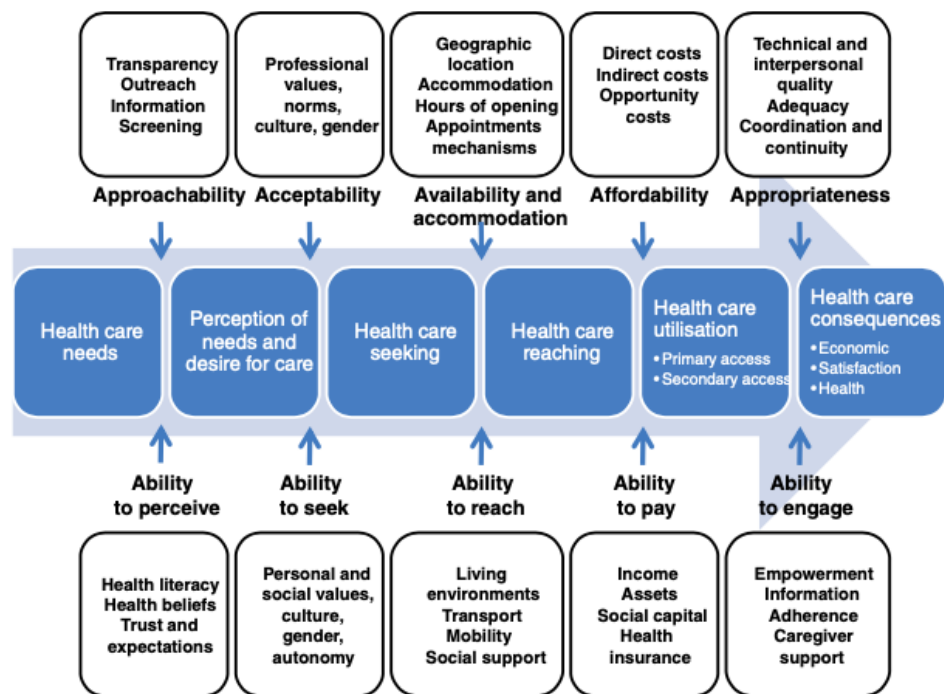
#### *Definition of healthcare access*

Healthcare access is defined as the opportunity and ability to acquire and use suitable healthcare services when individuals perceive the need for care (Levesque et al., 2013). Additionally, Levesque and colleagues (2013) state: "Access is seen as resulting from the interface between the characteristics of persons, households, social and physical environments and the characteristics of the health systems, organizations, and providers." (p.4). Therefore, access to healthcare is the result of interactions between supply-side and demand-side factors. Supply-side factors relate to the characteristics of the healthcare system or intervention and are typically under the control of policymakers. In contrast, demand-side factors encompass the characteristics and behaviors of individuals and their (social) environment. These elements collectively shape access to healthcare (Levesque et al., 2013).

#### *Explanation of the framework*

This framework offers a valuable lens to gain insights into the accessibility of home-visiting programs. As outlined by Levesque and colleagues (2013) (see Figure 2), the framework contains five supply-side dimensions crucial to access: approachability (1), acceptability (2), availability and

accommodation (3), affordability (4), and appropriateness (5). These dimensions serve as essential considerations for policymakers to ensure accessible healthcare in interventions. For instance, approachability underscores the intervention characteristics that ensure that individuals can identify and acknowledge the availability of home-visiting programs. Acceptability pertains to the organizational structure of the intervention. Some home-visiting programs could potentially exhibit arrangements that render them unsuitable for individuals or specific communities. Availability and accommodation encompass the essential aspects of the physical and timely presence of the intervention. Affordability addresses the financial regulations and costs of the interventions, which may influence access. Lastly, appropriateness underscores the significance of aligning the services of the interventions with the unique needs of the individual.



**Figure 2:** Conceptual Framework of Access to Healthcare (Levesque et al., 2013, p.5)

Since the Access to Healthcare Framework is about the interplay between the supply and demand sides, five related abilities of individuals interact with the supply-side dimensions to generate access to healthcare (see Figure 2). These dimensions are the ability to perceive (1), ability to seek (2), ability to reach (3), ability to pay (4), and ability to engage (5) (Levesque et al., 2013). Firstly, the ability to perceive the need for care is complementary to approachability of interventions. This is determined by factors such as health literacy, knowledge, and beliefs. The ability to seek aligns with acceptability, which is about cultural and social factors influencing access to healthcare. Thirdly, the ability to reach healthcare interventions may be influenced by the demand side. This is for instance about personal mobility, availability of transportation, and occupational flexibility. Also, the



interaction between the costs of the interventions (supply-side) and the ability to pay for the intervention (demand-side) affects access to healthcare. Lastly, the ability to engage in home-visiting programs is about the involvement of individuals in decision-making. This is influenced by self-efficacy and self-management.

#### *Application of the framework on home-visiting programs*

In analyzing Western home-visiting programs during the first 1000 days, the Access to Healthcare Framework (Levesque et al., 2013) offers a valuable supplementary tool. Although interventions aimed at the first 1000 days may show effectiveness in addressing outcomes such as early childhood obesity, well-being, and long-term health, accessibility is often overlooked (Khanassov et al., 2016). Consequently, while effectiveness analyses offer insights into the impact on individuals with access to the intervention, there is limited attention to the accessibility of the intervention to vulnerable individuals. Therefore, the application of the Access to Healthcare Framework on home-visiting interventions adds a new dimension to the evaluation process in the present study, shedding light on the accessibility of the intervention for people in need.

#### **Socioecological Model**

Within home-visiting interventions, programs may address a range of challenges and determinants at various levels of an individual's life and within society (Molloy et al., 2020; Slade et al., 2005). To analyze and determine these challenges, Bronfenbrenner's Socioecological Model (1979), adapted by McLeroy and colleagues (1988), serves as a pertinent tool. This model provides a structured approach, acknowledging that health is influenced by multiple levels and that interventions may target these challenges in different ways (McLeroy et al., 1988; Pereira et al., 2019).

The Socioecological Model (McLeroy et al., 1988) distinguishes five levels: the intrapersonal level (1), encompassing individual factors such as knowledge, attitudes, beliefs, and personal behavior; the interpersonal level (2), wherein relations with family, peers, the environment, and social networks exert influence; the institutional level (3), focused on formal and informal organizational structures and regulations; the community level (4), encompassing societal, religious, and cultural norms, and the policy level (5), representing the impact of policy dynamics on health and healthcare access (Pereira et al., 2019). Home-visiting programs may target specific levels within this model. For example, the interpersonal level can be addressed by fostering mother-child attachment (Slade et al., 2019) and improving social network influences (Molloy et al., 2020). Additionally, the intrapersonal level may focus on individual characteristics of mothers or children (Duffee et al., 2017), while the

community level could address cultural practices affecting parenting (De Sousa et al., 2021). Evaluating the levels addressed in home-visiting programs is valuable for identifying patterns and key features of effective home-visiting interventions.

### **Intersectionality**

Inequalities in healthcare access are influenced by multiple factors, including income disparities, variations in educational attainment, language barriers, ethnic discrepancies, age, and gender (McMaughan et al., 2020). Policymakers developing health policies often seek to identify the root causes of societal issues to effectively address them. However, the complexity of these issues often involves multiple causative factors, as is the case in access to child healthcare (Gerlach & McFadden, 2022). This complicates policy development, as policymakers must navigate and consider numerous intersecting factors. Integrating intersectionality into policy analysis offers a novel perspective for addressing this challenge in access to child healthcare.

#### *Definition of Intersectionality*

Intersectionality serves as a conceptual framework for understanding social injustices. Originating from the interdisciplinary field of Black feminist scholars (Crenshaw, 1989), it emphasizes the interconnected nature of social identities and how they intersect in shaping inequality. It elucidates how various forms of inequality intersect and reinforce one another, exacerbating social injustices (Collins & Bilge, 2016). For instance, poor access to child healthcare during the first 1000 days can be influenced by factors such as income, education, ethnicity, age, and language proficiency. These intersecting inequalities exacerbate barriers to healthcare access (Gerlach & McFadden, 2022).

In analyzing home-visiting programs, intersectionality may serve as an analytical lens. The convergence of multiple disadvantaged identities, such as young age, low educational attainment, and migration background can intensify disparities in healthcare access during the first 1000 days of a child's life and beyond (Große et al., 2012). By employing the concept of intersectionality, it can be evaluated whether these programs recognize and address the interplay of various forms of inequality, and how they endeavor to tackle this problem in relation to accessibility. Thus, this analytical focus helps to determine the extent to which home-visiting programs address the intersecting and multilayered issues underlying healthcare access disparities.

## **Sub-questions**

In addressing the research question: “What is the impact of home-visiting interventions on socioeconomic disparities in healthcare access during the first 1000 days of life in Western countries?”, three sub-questions have been formulated to create a comprehensive answer. Firstly, particular emphasis is placed on the accessibility of the home-visiting programs by using the Access to Healthcare Framework (Levesque et al., 2013). In addition, the various levels addressed by the intervention will be elucidated using the Socioecological Model (McLeroy et al., 1988). Finally, the concept of intersectionality (Crenshaw, 1989) will be utilized to assess the extent to which home-visiting programs acknowledge and address the intersecting disadvantaged identities within their target group. These components are visually presented in Figure 3 and articulated through the following sub-questions:

1. “How do Western home-visiting interventions incorporate the supply-side and demand-side factors of access to healthcare, as outlined in the Access to Healthcare Framework, in their programs?”
2. “How do Western home-visiting interventions relate to the different levels of the Socioecological Model?”
3. “How do Western home-visiting interventions consider the intersecting identities of socioeconomically vulnerable groups?”

## **Expectations**

### *1. Access to Healthcare Framework*

Existing literature underscores a tendency to overlook the importance of accessibility in health equality interventions (Khanassov et al., 2016). When accessibility is considered, it predominantly reflects a policymaker’s viewpoint, emphasizing healthcare resource characteristics rather than individual characteristics influencing access (Haggerty et al., 2020; Levesque et al., 2013). This leads to the expectation that home-visiting interventions may not fully incorporate both the supply-side and demand-side factors in their programs. It is therefore expected that mainly the supply-side factors are taken into consideration in home-visiting interventions during the first 1000 days.

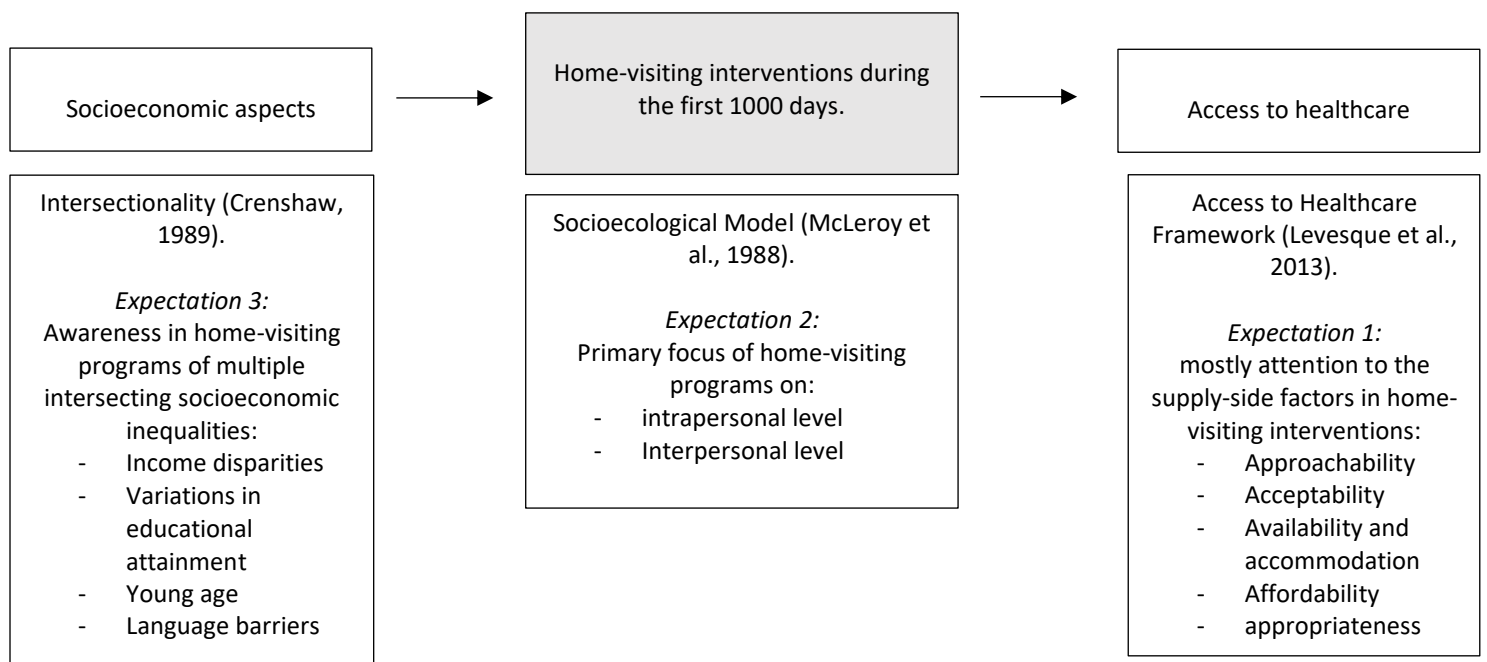
### *2. Socioecological Model*

Home-visiting programs encompass diverse forms of care targeting various challenges. Drawing from existing literature, it is expected that Western home-visiting interventions primarily focus on the intrapersonal level (addressing individual characteristics of mothers and children (Duffee et al.,

2017)) and the interpersonal level (emphasizing social networks and parent-child attachment (Molloy et al., 2020; Slade et al., 2019)).

### 3. Intersectionality

In the existing literature, it is addressed that home-visiting programs aim to serve the most vulnerable individuals encountering challenges in accessing child healthcare within the first 1000 days (Avellar & Supplee, 2013). Previous studies have extensively addressed the different socioeconomic aspects that contributed to this vulnerability of expectant and new families (Avellar & Supplee, 2013; Duffee et al., 2017; Molloy et al., 2020). Consequently, this leads to the expectation that Western home-visiting programs are aware of the multi-layered inequality and are integrating considerations of intersecting disadvantaged identities among socioeconomically marginalized groups within their programs.



**Figure 3:** Visual representation of the conceptual framework.

## Methods

### **Study design**

This study utilized a rapid review as a study design to synthesize existing knowledge, aiming to provide an overview of evidence regarding the accessibility of home-visiting interventions during the first 1000 days for individuals facing socioeconomic disparities. Rapid reviews accelerate the systematic literature review process and are often used to inform health-related policy and program decision-making, particularly when time is limited (Dobbins, 2017; Khangura et al., 2012; Toumi et al., 2023). Given the limited time frame of five months (February until June 2024) and the policy-informing purpose of this research, a rapid review methodology aligns well with the objective of the study.

To ensure the rapidity of the review, several adjustments were made from the conventional systematic literature review approach. These adaptations included limiting the number of databases utilized to two, restricting the review period to five months, and involving only one reviewer in the research process.

### **Eligibility criteria**

The eligibility criteria for study inclusion were established using the PICOST Framework, defining population, intervention, comparator, outcomes, study design, and timeframe.

#### *Population*

The review included the population of children and their parents in the first 1000 days of life, with a specific focus on populations in Western countries. Exclusion criteria encompassed children beyond two years of age and populations in low- or middle-income countries.

#### *Intervention*

Home-visiting programs within Western countries, targeting the first 1000 days of life and aimed at improving health were eligible for inclusion. In addition, an intervention was eligible if a professional conducted multiple home visits focusing on aspects such as child development, maternal wellbeing, parent-child interactions, or environmental adaptations. Home-visiting programs aimed at children older than two years old were excluded.

### *Comparator*

Studies with a control group were eligible for inclusion. By restricting the selection to studies with a control group, a higher quality among the included studies was assured. This contributes to greater reliability and validity of the review. Studies without a representative control group were excluded from the research. The Maryland Scale (Saunders, Robbins, et al., 2017) served as a tool to identify suitable studies, with those categorized as level 3 or higher deemed eligible for inclusion.

### *Outcomes*

Outcomes related to the accessibility of the home-visiting programs, whether as primary or secondary outcomes, were considered as an important inclusion criterion. Additionally, outcomes examining the effectiveness of home-visiting interventions were also deemed eligible, as these studies provided insights into the extent to which accessibility was addressed in relation to the intervention's effectiveness.

### *Study design*

Evaluation studies of home-visiting interventions, such as randomized controlled trials (RCT) and non-randomized controlled trials, were eligible for inclusion. The Maryland Scale (Saunders, Robbins, et al, 2017) was utilized as a tool to evaluate eligible studies, with those classified as level 3 (non-randomized controlled trials) or higher (randomized controlled trials) included. Studies employing a qualitative research design were excluded based on the criteria outlined by the Maryland Scale.

### *Timeframe and other limits*

Studies published between 2014 and 2024, written in English, and peer-reviewed were eligible for inclusion.

### **Search strategy**

For this rapid review, electronic database searches were conducted on two databases: PubMed and Scopus. To identify suitable studies for this review, a variety of search terms were included to match the predefined eligibility criteria (see Table 1). These search terms were based on the population, intervention, and study design, as described in the PICOST framework.

**Table 1:** Search strategy

<b>SEARCH STRATEGY:</b>	
#1 AND # 2 AND #3	
<b>1. POPULATION</b>	"first 1,000 days" OR "1,000 days" OR "early childhood" OR "strong start" OR "solid start" OR "prenatal care" OR "perinatal care" OR "postnatal care" OR "2 years old"
<b>2. INTERVENTION</b>	"home visiting" OR "home visiting program" OR "home visiting intervention" OR "house calls" OR NFP
<b>3. STUDY DESIGN</b>	"randomized control trial" OR "non-randomized control trial" OR "effectiveness"

### **Selection and quality appraisal**

The selection process contained multiple steps, using Zotero as a reference manager. The first step involved screening the title and abstract on the eligibility criteria. Literature that met these criteria was then read in full. Articles whose complete content matched the eligibility criteria were included in the review. The selection process is visible in the flow diagram in Figure 4. Quality assessment was performed utilizing the Maryland Scale (Saunders, Robbins, et al., 2017). The studies were rated by the quality standards, ranging from level 1 to 5. Studies that met levels 3, 4, or 5 are considered studies of adequate to good quality and were, if the content also met the eligibility criteria, included in the review.

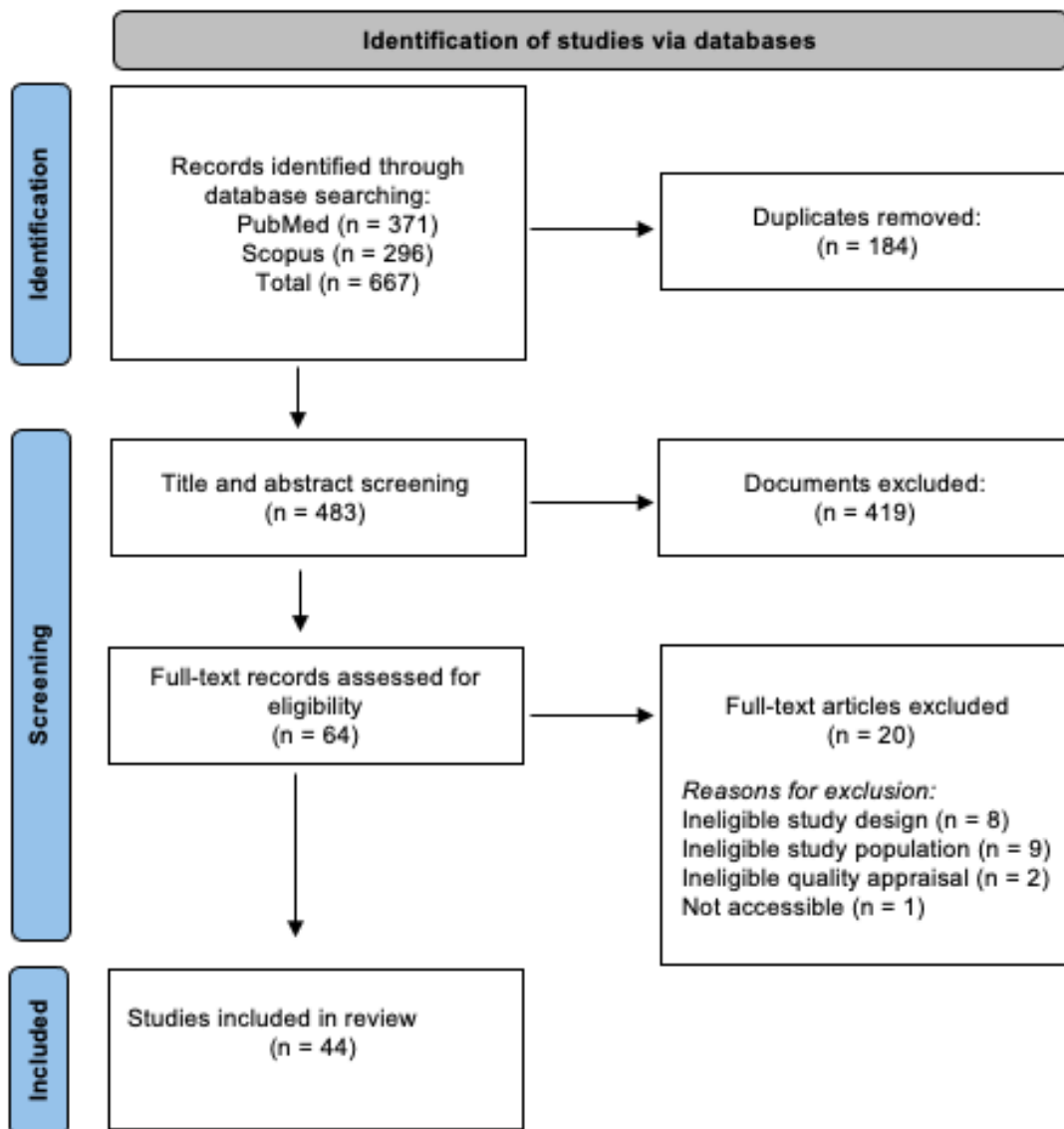
### **Data analysis**

The selected studies consist of evaluations of home-visiting programs across Western countries. The content of the selected studies was further analyzed and coded on the sub-themes: accessibility, socioecological levels, and intersectionality. The analysis was done by using a data extraction sheet and the program Atlas-TI. The sub-themes were deductively coded based on the theoretical framework. The characteristics of the interventions were first analyzed and coded on the five supply and demand-side factors of the Access to Healthcare Framework (Levesque et al., 2013) and on the socioecological levels addressed by the intervention. Additionally, the description of the participants of the intervention was coded based on the attention paid to intersecting disadvantaged identities. As a final step of the analysis, the outcomes were categorized based on these sub-themes.

## Results

### Overview

A total of 667 records were initially retrieved through database searching. After applying the eligibility criteria, 44 studies were deemed eligible for inclusion. The process of selecting these studies is visually presented in Figure 4.



**Figure 4:** Flow diagram of the selection process

Among the included publications, 44 evaluations of home-visiting programs were conducted across Western countries, covering 28 distinct interventions. The Nurse-Family Partnership (NFP), Parents as Teachers (PaT), and Right@Home were most frequently evaluated, with seven, four, and four assessments respectively. Further details regarding the characteristics of the included home-visiting programs can be found in Table 1 of the supplementary file.



The selected records encompass a combination of program adaptations and original interventions that underwent evaluation. A shared criterion among all selected interventions was their implementation within the first 1000 days of life. Consequently, disparities are evident among the interventions concerning the specific time frames, target population, program aims, and theoretical underpinning, given that the first 1000 days encompass both the prenatal and postnatal period.

In terms of methodological quality, the records were assessed using the Maryland Scale (Saunders, Robbins, et al., 2017). Level 3 studies (n = 3) featured both an intervention and control group but lacked control for multiple variables. Level 4 studies (n = 4) were non-randomized controlled trials, while level 5 studies (n = 37) comprised of randomized controlled trials with control for multiple variables. The results of the quality assessment are presented in Table 1 of the supplementary file.

### Thematic synthesis of the findings

Three thematic categories were identified on which the included publications were analyzed: accessibility of the intervention (1), the addressed socioecological levels (2), and the attention to intersecting disadvantaged identities (3). The results of this analysis are visible in Table 2 and narratively presented below.

**Table 2:** Analysis thematic categories

THEMATIC CATEGORIES	STUDIES:
<b>ACCESS TO HEALTHCARE FRAMEWORK</b>	
<i>SUPPLY-SIDE FACTORS:</i>	
<ul style="list-style-type: none"> <li>APPROACHABILITY</li> </ul>	<b>5 studies:</b> Dew & Breakey, 2014; Olds, Kitzman, et al. 2014; Samankasikorn et al, 2016; Sandner et al., 2018; Thomson et al., 2017.
<ul style="list-style-type: none"> <li>ACCEPTABILITY</li> </ul>	<b>5 studies:</b> Berlin et al., 2018; Hans et al., 2018; McConnell et al., 2023; Samankasikorn et al., 2016; Tandon et al., 2018.
<ul style="list-style-type: none"> <li>AVAILABILITY AND ACCOMMODATION</li> </ul>	<b>1 study:</b> Van Horne et al., 2021.
<ul style="list-style-type: none"> <li>AFFORDABILITY</li> </ul>	<b>3 studies:</b> Haire-Joshu et al., 2019; Hans et al., 2018; Van Horne et al., 2021.
<ul style="list-style-type: none"> <li>APPROPRIATENESS</li> </ul>	<b>12 studies:</b> Berlin et al., 2018; Brekke et al., 2023; Dew & Breakey, 2014; Goodman et al., 2019; Green et al., 2018; Haire-Joshu et al., 2019; Kanda et al., 2022; McConnell et al., 2023; Mersky et al., 2022; Sandner et al., 2018; Tereno et al., 2022; Thomson et al., 2017.
<i>DEMAND-SIDE FACTORS:</i>	
<ul style="list-style-type: none"> <li>ABILITY TO PERCEIVE</li> </ul>	<b>2 studies:</b> Corapci et al., 2023; Gourevitch et al., 2023
<ul style="list-style-type: none"> <li>ABILITY TO SEEK</li> </ul>	<b>4 studies:</b> Corapci et al., 2023; Goldfeld et al., 2019; Kanda et al., 2022; Tereno et al., 2022.

<ul style="list-style-type: none"> <li>• ABILITY TO REACH</li> </ul>	<b>4 studies:</b> Guterman et al., 2023; Haire-Joshu et al., 2019; Tóbon et al., 2022; Van Horne et al., 2021.
<ul style="list-style-type: none"> <li>• ABILITY TO PAY</li> </ul>	None
<ul style="list-style-type: none"> <li>• ABILITY TO ENGAGE</li> </ul>	None
<b>SOCIOECOLOGICAL LEVELS</b>	
INTRAPERSONAL LEVEL (1)	<b>5 studies:</b> Doyle et al., 2014; Ichikawa et al., 2015; Sabo et al., 2021; Samankasikorn et al., 2016; Sharps et al., 2016.
INTRAPERSONAL LEVEL (1) + INTERPERSONAL LEVEL (2)	<b>32 studies:</b> Anzman-Frasca et al. 2018; Berlin et al., 2018; Brekke et al., 2023; Catherine et al., 2020; Catherine et al., 2023; Cooper et al., 2014; Çorapçı et al., 2023; Goldfeld et al., 2021; Goldfeld et al., 2019; Gourevitch et al. 2023; Green et al., 2018; Guterman et al., 2023; Haire-Joshu et al., 2019; Hans et al., 2018; Ingalls et al. 2019; Kanda et al., 2022; Kliem & Sandner, 2021; Leung et al. 2020; McConnell et al., 2023; Olds, Holmberg, et al., 2014; Olds et al., 2019; Olds, Kitzman, et al., 2014; Pan et al., 2020; Rosenstock et al., 2020; Sandner, 2019; Sandner et al., 2018; Tandon et al., 2018; Tereno et al., 2022; Thomson et al., 2014; Thomson et al., 2017; Tobón et al., 2020; Van Horne et al., 2021.
INTRAPERSONAL LEVEL (1) + INTERPERSONAL LEVEL (2) + INSTITUTIONAL LEVEL (3) AND/OR COMMUNITY LEVEL (4)	<b>7 studies:</b> Baziyants et al., 2023; Dew & Breakey, 2014; Dodge et al., 2014; Goodman et al., 2019; Mersky et al., 2022; Ordway et al., 2018; Sawyer et al., 2014.
<b>INTERSECTIONALITY</b>	
NO ATTENTION TO DISADVANTAGED IDENTITIES	<b>6 studies:</b> Anzman-Frasca et al., 2018; Baziyants et al., 2023; Brekke et al., 2023; Goodman et al., 2019; Guterman et al., 2023; Mersky et al., 2022.
FOCUS ON (MULTIPLE) DISADVANTAGED IDENTITIES	<b>38 studies:</b> Berlin et al., 2018; Catherine et al., 2020; Catherine et al., 2023; Cooper et al., 2014; Çorapçı et al., 2023; Dew & Breakey, 2014; Dodge et al., 2014; Doyle et al., 2014; Goldfeld et al., 2021; Goldfeld et al., 2019; Gourevitch et al. 2023; Green et al., 2018; Haire-Joshu et al., 2019; Hans et al., 2018; Ichikawa et al., 2015; Ingalls et al. 2019; Kanda et al., 2022; Kliem & Sandner, 2021; Leung et al. 2020; McConnell et al., 2023; Olds, Holmberg, et al., 2014; Olds et al., 2019; Olds, Kitzman, et al., 2014; Ordway et al., 2018; Pan et al., 2020; Rosenstock et al., 2020; Sabo et al., 2021; Samankasikorn et al., 2016; Sandner, 2019; Sandner et al., 2018; Sawyer et al., 2014; Sharps et al., 2016; Tandon et al., 2018; Tereno et al., 2022; Thomson et al., 2017; Thomson et al., 2014; Tobón et al., 2020; Van Horne et al., 2021.
EXPLICIT ATTENTION TO INTERSECTION OF MULTIPLE DISADVANTAGED IDENTITIES	<b>4 studies:</b> Gourevitch et al., 2023; McConnell et al., 2023; Sabo et al., 2021; Tereno et al., 2023.

## **Accessibility**

In 22 of the 44 studies analyzed, particular emphasis is placed on the accessibility of the interventions. A range of factors affecting the accessibility of the program are delineated and classified into supply and demand aspects.

### *Approachability and ability to perceive*

In addressing the approachability of home-visiting programs, attention is directed toward recruitment strategies and inclusion criteria. Five studies highlight methods such as individual sign-up, passive recruitment through flyers, and active referrals by health specialists as means to enhance program accessibility (Dew & Breakey, 2014; Olds, Kitzman, et al. 2014; Samankasikorn et al., 2016; Sandner et al., 2018; Thomson et al., 2017). Additionally, to be allowed to make use of certain home-visiting interventions, 39 programs (except Anzman-Frasca et al., 2018; Baziyants et al., 2023; Brekke et al., 2023; Goodman et al., 2019; Mersky et al., 2022) have detailed and extensive criteria. Inclusion criteria like age, duration of pregnancy, income, or presence of multiple risk factors, impact the approachability of interventions. This consequently affects the accessibility of the intervention from the supply side.

However, accessibility is also influenced by the demand side, particularly through the ability to perceive. Challenges in the ability to perceive, such as trust issues and lack of interest in additional healthcare, are in two publications identified as challenges to the approachability of the home-visiting program from the demand side (Corapci et al., 2023; Gourevitch et al., 2023).

### *Acceptability and ability to seek*

Regarding acceptability from the supply side, five studies consider the social and cultural backgrounds of individuals within the intervention to enhance accessibility (Berlin et al., 2018; Hans et al., 2018; McConnell et al., 2023; Samankasikorn et al., 2016; Tandon et al., 2018). This includes providing the programs in multiple languages to cater to the diverse population. However, challenges related to the ability to seek home-visiting interventions are mentioned in four different studies (Corapci et al., 2023; Goldfeld et al., 2019; Kanda et al., 2022; Tereno et al., 2022). "Language difficulties have also been shown to be associated with service avoidance" (Kanda et al., 2022, p.7), and inaccessibility of programs because of language requirements was also present in part of the programs (Goldfeld et al., 2019; Sandner et al., 2018; Tereno et al., 2022). This leads to challenges in the acceptability, and thus in accessibility, of the interventions.

### *Availability and accommodation and ability to reach*

Availability and accommodation indirectly contribute to the accessibility of all interventions, since bringing healthcare services into the home environment ensures access for individuals who otherwise might not be able to use this care. However, this point in the accessibility of home-visiting interventions is not directly mentioned in the studies. Flexibility and high availability in appointment scheduling are mentioned as an additional positive element in influencing the intervention's accessibility from the supply side (Van Horne et al., 2021). Nonetheless, challenges such as residence requirements, like living in certain neighborhoods or within a certain distance of health facilities, impact individuals' ability to reach the interventions. This challenge is noted in four studies (Guterman et al., 2023; Haire-Joshu et al., 2019; Tóbon et al., 2022; Van Horne et al., 2021).

### *Affordability and ability to pay*

In only three studies affordability is mentioned as an influential factor from the supply side (Haire-Joshu et al., 2019; Hans et al., 2018; Van Horne et al., 2021). For example: "The home visitation program was not considered a billable service, and participants received these services for free through grant funds." (Van Horne et al., 2021, p. 2206), indicates that a conscious decision was made to make the intervention available free of charge. In addition, none of the studies mention the ability to pay for the program as a challenge. It can therefore be argued that both affordability and the ability to pay receive little attention in evaluations of home-visiting interventions.

### *Appropriateness and ability to engage*

In 12 studies the appropriateness of the intervention received specific attention (Berlin et al., 2018; Brekke et al., 2023; Dew & Breakey, 2014; Goodman et al., 2019; Green et al., 2018; Haire-Joshu et al., 2019; Kanda et al., 2022; Mersky et al., 2022; McConnell et al., 2023; Sandner et al., 2018; Tereno et al., 2022; Thomson et al., 2017). This indicates that program content is adjusted to individual needs and preferences. This responsiveness to diverse needs positively impacts intervention accessibility from the supply side. The parts: "The intervention was manualized but adjusted to each family's needs." (Tereno et al., 2022, p.5) and: "The intensity of services is based on the family's needs." (Dew & Breakey, 2014, p.895) show that the appropriateness of the intervention was taken into consideration. None of the studies paid specific attention to the ability of individuals to engage with the intervention.

## **Socioecological levels**

The socioecological levels addressed by the evaluated interventions are largely uniform. The home-visiting programs predominantly address the initial two levels of McLeroy's' adaptation of the Socioecological Model (1988), namely the intrapersonal and interpersonal levels (see Table 2).

In five of the evaluated home-visiting programs exclusive emphasis is placed on the intrapersonal level (Doyle et al., 2014; Ichikawa et al., 2015; Sabo et al., 2021; Samankasikorn et al., 2016; Sharps et al., 2016). This signifies a focus on enhancing individual factors such as knowledge, beliefs, and personal behavior. This is visible in the programs: Healthy Start, DOVE, Resource Mother Program, Preparing for Life, and Population-based home-visit program. For instance, The Healthy Start program consists of behavior change activities that promote personal agency and self-efficacy of the mother (Sabo et al., 2021).

A majority of the studies (32 in total) exhibit a dual focus of the programs on both intrapersonal and interpersonal levels (see Table 2). This contains 19 programs since there are multiple studies included about NFP, Right@home, Pro Kind, and Parents as Teachers. By focusing on the intrapersonal and interpersonal level, the programs address both individual development and interpersonal relations with family and the social environment. For example, the Parents as Teachers program aims to increase parental knowledge, refine parenting skills, and provide early detection of developmental delays (Thomson et al., 2017). Similarly, the Mothers and Babies 1-on-1 program directs attention to the first two levels of the model by addressing maternal mood and stress, and the mother-infant attachment (Tandon et al., 2018).

The other seven studies (comprising five different programs) exhibit a broader scope, encompassing the institutional and/or community levels (Baziyants et al., 2023; Dew & Breakey, 2014; Dodge et al., 2014; Goodman et al., 2019; Mersky et al., 2022; Ordway et al., 2018; Sawyer et al., 2014). Notably, Ordway and colleagues (2018) underscore the multilevel focus of the Minding the Baby program directly, which encompasses child development, primary relationships, cultural influences, and community dynamics. Similarly, the Family Connects Program emphasizes engagement with the entire community in addition to personal and relational development (Baziyants et al., 2023; Goodman et al., 2019; Mersky et al., 2022).

### **Intersecting disadvantaged identities**

Only six of the 44 analyzed studies target future/newborn families in general, without specifically considering disadvantaged socioeconomic or sociodemographic identities (Anzman-Frasca et al., 2018; Baziyants et al., 2023; Brekke et al., 2023; Goodman et al., 2019; Guterman et al., 2023; Mersky et al., 2022). Conversely, 38 studies do have the primary focus on families with one or multiple disadvantaged identities (see Table 2). The definition of “disadvantaged” varied across home-visiting programs, with common factors including low income, limited education, young maternal age, and unstable mental conditions of the mother. Several studies concretely mention the use of a vulnerability/risk factor to determine eligibility for program enrollment (Catherine et al., 2020; Dew & Breakey, 2014; Hans et al., 2018; Ichikawa et al., 2015; Kliem & Sandner, 2021; Pan et al., 2020; Sandner, 2019; Sandner et al., 2018). For instance, Sandner (2019) stipulates that one social risk factor must be present for enrollment, such as having a low education level (1), teenage pregnancy (2), isolation (3), health problems (4), or have been a victim of violence (5). However, these studies focus on the presence of one risk factor and do not imply an examination of the interrelationships between factors. Consequently, the concept of intersectionality remains unaddressed.

Recognition of “High contextual adversity” (the presence of multiple economic and social stressors) (Tereno et al., 2022, p.11) in home-visiting programs is evident in several studies where multiple disadvantaged identities are acknowledged. For example, some programs require two or more sociodemographic risk factors for enrollment (Catherine et al., 2023; Dodge et al., 2014; Goldfeld et al., 2021; Goldfeld et al., 2019; Gourevitch et al., 2023; Green et al., 2018; Kanda et al., 2022; McConnell et al., 2023; Olds et al., 2019; Olds, Kitzman, et al., 2014; Sabo et al., 2021; Tereno et al., 2022). Kanda and colleagues (2022) identify ten risk factors, of which a minimum of two must be present for enrollment: young pregnancy (younger than 23); not living with another adult; no support in pregnancy; smoking; poor/fair health; long-term illness; anxious mood; not completed secondary level education; no income; and never worked. However, most of these studies do not give explicit attention to the intersection and the mutual reinforcement of these risk factors (Catherine et al., 2023; Dodge et al., 2014; Goldfeld et al., 2021; Goldfeld et al., 2019; Green et al., 2018; Kanda et al., 2022; Olds et al., 2019; Olds, Kitzman, et al., 2014).

While acknowledging the presence of multiple factors contributing to a disadvantaged position is important, it does not fully address the concept of intersectionality. Intersectionality refers to the mutual intersection and reinforcement of these factors, that together exacerbate social injustice in access to healthcare. Explicit attention to intersecting disadvantaged identities is mentioned in four

of the studies (Gourevitch et al., 2023; McConnell et al., 2023; Sabo et al., 2021; Tereno et al., 2022). Sabo and colleagues (2021) discuss the reinforcing effects of disadvantaged identities on each other. They mention that negative birth outcomes (like preterm birth or low birth weight) and limited access to healthcare are associated with multiple interlocking socioecological risk factors. Reinforcing factors such as poverty and racism are linked to each other, and therefore an example of the use of intersectionality in this study. Also, McConnell and colleagues (2023) explicitly consider the intersecting identities of participants of NFP, by highlighting that interrelated structural factors such as poverty, racism, environmental exposure, and neighborhood characteristics collectively influence healthcare access. However, despite the focus on intersecting disadvantaged identities in the program, there was no significant effect of the intervention. Additionally, they note that “Home-visiting programs may not be adequate to address these long-standing structural challenges.” (McConnell et al., 2023, p.35). In this study, intersectionality is compared and linked to long-standing structural challenges. A comparable conclusion is articulated by Gourevitch and colleagues (2023), who state that the provision of home visits (NFP program) did not lead to increased healthcare utilization among disadvantaged families. The finding underscores the enduring presence of complex structural, institutional, and social challenges in getting access to care that home-visiting programs might not be able to affect.

## Discussion

This review presents an analysis of home-visiting interventions across Western countries during the first 1000 days of life. The aim of this review is to synthesize existing knowledge to provide an overview of the evidence regarding the accessibility of these home-visiting interventions to individuals experiencing socioeconomic disparities.

Overall, home-visiting programs predominantly impact and address challenges related to personal development and social interactions, primarily focusing on supply-side factors of the intervention. Consequently, the programs tend to overlook institutional and structural challenges, including the complex intersection of disadvantaged identities. These overlooked factors frequently serve as notable barriers to healthcare access for individuals experiencing socioeconomic disparities. As a result, the structural, underlying causes of socioeconomic disparities in healthcare access are not always addressed and impacted by Western home-visiting programs.

The three theoretical lenses collectively substantiate this answer. Firstly, although accessibility is often not explicitly mentioned (Hirve et al., 2023; Yuan et al., 2014), the findings indicate that

elements of the Access to Healthcare Framework (Levesque et al., 2013) are considered in several programs. The focus is on the supply-side factors of the interventions, pertaining mainly to appropriateness of the intervention, ensuring that the provided services align with the needs of the individuals. A notable finding is that affordability and the ability to pay are only mentioned in very few studies. Thus, these factors are regularly overlooked as influential factors in the accessibility of home-visiting interventions. As noted by Levesque and Colleagues (2013), it is also important to recognize the interplay between supply-side and demand-side factors of interventions. Demand-side factors influencing accessibility are less frequently addressed. This suggests that the supply side, reflecting the policymaker's perspective, predominantly guides efforts to improve the accessibility of home-visiting interventions. However, this raises the question of whether this approach in home-visiting programs is sufficient to address the needs of individuals and thereby improve accessibility to those experiencing socioeconomic disadvantages. These results align with the expectations based on earlier research. Similar to previous studies (Levesque et al., 2013; Haggerty et al., 2020), home-visiting programs predominantly incorporate supply-side factors. Policymaker's viewpoints are most considered, by emphasizing healthcare resource characteristics (such as the appropriateness of the intervention) rather than the personal characteristics of the individuals in need.

Secondly, the findings concerning the Socioecological Model (McLeroy et al., 1988) shed light on the types of challenges targeted by the interventions. This is essential for understanding which levels of socioeconomic disparities in healthcare access are addressed. The findings indicate a predominant focus on the intrapersonal and interpersonal levels of the Socioecological Model. In contrast, the structural and long-standing challenges that occur at a broader scope, namely at the institutional and community level, are often not addressed in home-visiting programs. These findings align with expectations based on previous research. The intrapersonal level forms the foundation of all studies, with a focus on individual development and knowledge acquisition (Duffree et al., 2017).

Furthermore, fostering parent-child attachment (Slade et al., 2019) and improving the interaction with the social environment and network (Molloy et al., 2020) are the most common elements addressed at the interpersonal level.

Finally, the incorporation of intersectionality enriches the analysis by highlighting the deeper challenges, complexities, and intersecting identities addressed (or overlooked) by the home-visiting programs. Findings indicate that most studies acknowledge disadvantaged identities that influence accessibility. However, acknowledging multiple disadvantaged identities does not necessarily entail addressing the reinforcing effects. Only a minority of studies explicitly consider the intersection of disadvantaged identities. Consistent with findings on the Socioecological Model, the structural and



longstanding challenges, including the intersection of complex disadvantaged identities, remain insufficiently addressed in most home-visiting interventions. These results partially align with the expectations based on earlier research (Avellar & Supplee, 2013; Duffee et al., 2017; Molloy et al., 2020). While Western home-visiting interventions do address various socioeconomic disparities contributing to vulnerability and healthcare access, attention to the intersection and mutual reinforcement of disadvantaged identities receive less attention in most interventions, this is in contrast with the expectations.

Utilizing the Access to Healthcare Framework (Levesque et al., 2013), the Socioecological Model (McLeroy et al., 1988), and the concept of intersectionality (Crenshaw, 1989), provides a comprehensive interdisciplinary perspective on the impact of Western home-visiting interventions on socioeconomic disparities in healthcare access. Interventions show promising aspects by addressing and adjusting supply-side factors (such as appropriateness and acceptability) to meet the (anticipated) needs of disadvantaged individuals. However, the limited focus on demand-side factors within these interventions (such as the ability to pay and ability to perceive) restricts their overall accessibility. In the context of socioeconomic disparities, this review shows that home-visiting interventions are not fully addressing the structural and longstanding challenges, such as the intersection of disadvantaged identities, that may influence healthcare accessibility.

### **Limitations and strengths**

This review has several limitations. Firstly, the generalizability of this study is limited due to the contextual variability among Western countries. For instance, differences in healthcare systems between the United States and most European countries may influence the implementation and accessibility of home-visiting programs. These elements are not considered in this study.

Additionally, this review only includes randomized and non-randomized controlled trials. These quantitative research designs predominantly reflect the policy perspectives, overlooking the nuanced experiences and perspectives of individuals involved in the home-visiting programs. This could lead to an incomplete understanding of their impact. Furthermore, the wide variation in content and target groups within the interventions poses challenges in drawing generalized conclusions about the overall impact. However, the entire span of the first 1000 days is crucial for lifelong well-being. Narrowing the focus of this study to a single target group, subject, or phase would therefore undermine the critical coherence between the prenatal and postnatal phases, which are both crucial for the child's development and lifelong well-being.

A strength of this study is its interdisciplinary approach. As specified in the theoretical framework, interdisciplinary theories and concepts are integrated to create a comprehensive analysis. For

instance, the Access to Healthcare Framework (Levesque et al., 2013) is an interdisciplinary framework, encompassing aspects of public health, health economics, sociology, and psychology. Similarly, the Socioecological Model proposed by McLeroy and colleagues (1988) demonstrates interdisciplinary integration, as it incorporates both psychological and sociological dimensions. Furthermore, the concept of intersectionality, rooted in gender studies, also reflects an interdisciplinary character. The first 1000 days of a child's life are recognized as a critical phase for development across social, psychological, and physical domains. Therefore, using an interdisciplinary framework is essential to understand the complexity of this phase.

### **Implications for research and practice**

The findings of this study hold implications for both future research and practice. In terms of policy implications, explicitly addressing various supply and demand-side factors within home-visiting programs has proven effective in enhancing their accessibility. Incorporating these elements into current policies and policy evaluations could positively impact the accessibility and effectiveness of these programs. However, the limited focus of programs on structural and longstanding challenges indicates a need for policy improvement. The inaccessibility of healthcare for individuals experiencing socioeconomic disadvantages is rooted in broader structural and societal issues, rather than caused by the individuals themselves. To address these complex challenges, policymakers should extend the focus of these programs beyond intrapersonal and interpersonal dynamics. This could be done by explicitly addressing the social determinants of health within home-visiting interventions, since this theoretical perspective acknowledges that health is influenced by a complex interplay of societal factors, not just individual, genetic, and biological disposition (Molloy et al, 2020; Slade et al., 2005). By incorporating a strategy that tackles structural and societal issues, policies can create a more holistic framework for improving healthcare accessibility for vulnerable individuals.

This study also has several implications for future research. As noted in the strengths and limitations section, the contextual differences across Western countries make it challenging to generalize results. To improve the external validity, future research should explore the mediating role of healthcare systems in the impact of home-visiting interventions on accessibility for individuals experiencing socioeconomic disparities. Additionally, incorporating qualitative methodologies in future research could provide a deeper understanding of the users' perspective, thereby enriching the overall findings.

## **Conclusion**

This rapid review provides an overview of the impact of Western home-visiting interventions on socioeconomic disparities in healthcare access during the first 1000 days of life. Home-visiting programs mostly address challenges related to personal development and social interactions, focusing primarily on supply-side factors of interventions. Consequently, there is less emphasis on institutional and structural challenges, which are often the barriers to healthcare access. In conclusion, while home-visiting interventions could offer important benefits, the current implementation of the programs tends to overlook the broader structural barriers to healthcare access. It can be questioned whether the current design of home-visiting interventions is the most adequate to address the challenges contributing to these socioeconomic disparities in healthcare access. Further research is required to explore this issue more comprehensively, incorporating the perspectives of parents and considering contextual differences to assess the accessibility of home-visiting programs in Western countries.

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