FACULTY OF MEDICINE AND HEALTH SCIENCES

EU ASYLUM AND BORDER POLICIES AS A DETERMINANT OF MATERNAL AND PERINATAL HEALTH IN APPLICANTS FOR INTERNATIONAL PROTECTION

BRIDGING THE GAP BETWEEN MIGRATION MANAGEMENT AND HEALTH AS A HUMAN RIGHT

Word count: 24232

BAVO HENDRIKS
Student number: 01205443

Promotor: Prof. Dr. Kristien Roelens
Co-promotors: Prof. Dr. Ellen Desmet, Prof. Dr. Ines Keygnaert, Prof. Dr. Arie Franx

A dissertation submitted to Ghent University in partial fulfilment of the requirements for the degree of Master of Medicine in Specialist Medicine – Main Subject Gynaecology-Obstetrics.

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Date 24/07/2023

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Positionality and acknowledgements

It was in the first two years of my training in obstetrics and gynaecology that I first noticed the complexity in existing maternal and perinatal health inequities in applicants for international protection, and anyone really who is forced to flee from home, wherever that home might be. Being a male gynaecologist in training, I would never be able to fully grasp the intersectional experience of pregnancy and forced displacement. Yet, I did have the opportunity to listen to every shared story. Trails of institutional injustice motivated me to apply for the course 'Selected Issues: European and International Migration Law and Policy' at the Ghent University Faculty of Law and Criminology, hosted by Prof. Dr. Ellen Desmet (co-promotor of this thesis), aiming for a better understanding of the interaction of law, policy, and healthcare in this context. Applying the concepts learned to clinical practice introduced me to the field of 'social obstetrics', and eventually to writing this thesis.

This thesis is a result of two hectic academic years, where reading was followed by writing, nightshifts, and rewriting. However, and more importantly, it is the result of an inspiring process of learning from people I got to meet along the way, and from people that have always been there.

Special thanks go to my promotor and co-promotors for sharing their expertise, each from a different perspective, and to my partner, my parents, my siblings, my grandmother, and my dear friends for their love and support.

Contents

Abbreviations

A
ABP – Arterial blood pressure
ACOG – American College of Obstetricians and Gynecologists
AGREE – Appraisal of guidelines for research and evaluation
AIP – Applicants for international protection
ANC – Antenatal care
ASC – Asylum seeker centres

B
BMI – Body mass index

C
CAT – Convention against Torture
CEAS – Common European Asylum System
CEDAW – Convention on the Elimination of all forms of Discrimination Against Women
CETI – Centre for the temporary stay for immigrants
CIS – Critical interpretative synthesis
CJEU – Court of Justice of the European Union
CMV - Cytomegalovirus
CPZ – College Perinatale Zorg
CSDH – Commission on Social Determinants of Health

E
ECHR – European Convention of Human Rights
ECtHR – European Court of Human Rights
EPDS – Edinburgh Postnatal Depression Scale
ETM – Emergency Transit Mechanism
EU – European Union

F
FGD – Focus group discussion
FHR – Foetal heart rate

G
GAD – General anxiety disorder
GDG – Guideline Development Group

H
HELLP – Hemolysis, Elevated Liver proteins, Low Platelets
HIV – Human Immunodeficiency Virus

I
ICU – Intensive Care Unit
ICCPR – International Covenant on Civil and Political Rights
IOM – International Organisation for Migration
IPV – Intimate partner violence

K
KCE – Federaal Kenniscentrum voor de Gezondheidszorg, Centre Fédéral d'Expertise des Soins de Santé

L
LGBTIQ+ – Lesbian, gay, bisexual, transgender, intersexual, queer, and other

M
MAR – Migrants, asylum seekers, and refugees
MLCC – Midwifery-led continuity of care

N
NGO – Non-governmental organisations
NICE – National Institute for Health and Care Excellence
NVOG – Nederlandse Vereniging voor Obstetrie en Gynaecologie

O
OGTT – Oral glucose tolerance test
ORAMMA – Operational Refugee and Migrant Maternal Approach

P
PHAC – Public Health Agency Canada
PICO – Population, intervention, control, outcome
PTSS – Post-Traumatic Stress Syndrome

S

SAR – Search and rescue
SDG – Sustainable Development Goals
SFH – Symphysis-fundal height
SGBV – Sexual and gender-based violence
SOGC – Society of Obstetricians and Gynaecologists of Canada
STP – Stranieri Temporaneamente Presenti

T

TFEU – Treaty on the Functioning of the European Union

U

UK – United Kingdom
UNHCR – United Nations High Commissioner for Refugees
USA – United States of America

V

VIL – Verloskundige indicatielijst
VSV – Verloskundig Samenwerkingsverband

W

WHA – World Health Assembly
WHO – World Health Organisation

Glossary

Internally displaced persons: persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognised state border. (1)

Applicant for international protection: any person who has made an application for international protection in respect of which a final decision has not yet been taken (2).

International protection: refugee status and subsidiary protection status, i.e. the recognition of a Member State of a third-country national as a refugee or a person eligible for subsidiary protection (2).

Person eligible for subsidiary protection: a third-country national or a stateless person who does not qualify as a refugee but in respect of whom substantial grounds have been shown for believing that the person concerned, if returned to his or her country of origin, or in the case of a stateless person, to his or her country of former habitual residence, would face a real risk of suffering serious harm as defined in Article 15[1], and to whom Article 17(1) and (2)[2] does not apply, and is unable, or owing to such risk, unwilling to avail himself or herself of the protection of that country (2).

Refugee: a third-country national who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, political opinion or membership of a particular social group, is outside the country of nationality and is unable or, owing to such fear, is unwilling to avail himself or herself of the protection of that country, or a stateless person, who, being outside of the country of former habitual residence for the same reasons as mentioned above, is unable or, owing to such fear, unwilling to return to it, and to whom Article 12[3] does not apply (2,3).

Undocumented or 'irregular' migrant: in the global context, a person who owing to irregular entry, breach of a condition of entry or the expiry of their legal basis for entering and residing, lacks legal status in a transit or host country. In the EU context, a person present on the territory of a Schengen State who does not fulfil, or no longer fulfils, the conditions of entry as set out in the Regulation (EU) 2016/399 (Schengen Borders Code) or other conditions for entry (4,5).

Common European Asylum System (CEAS): a framework of agreed rules which establish common procedures for international protection and a uniform status for those who are granted refugee status or subsidiary protection based on the full and inclusive application of the Geneva Refugee Convention and Protocol and which aims to ensure fair and humane treatment of applicants for

[1]Serious harm consists of death penalty or execution; or torture or inhuman or degrading treatment or punishment of an applicant in the country of origin; or serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict (2).
[2]Article 17: Exclusion; on reasons why a third-country national or a stateless person is excluded from being eligible for subsidiary protection (2).
[3]Article 12: Exclusion; on reasons why a third-country national or a stateless person is excluded from being a refugee (2).

international protection, to harmonise asylum systems in the EU and reduce the differences between Member States on the basis of binding legislation, as well as to strengthen practical cooperation between national asylum administrations and the external dimension of asylum (6).

Externalisation of migration controls or border externalisation policies: extraterritorial state actions to prevent migrants, including applicants for international protection, from entering the legal jurisdictions or territories of destination countries or regions or making them legally inadmissible without individually considering the merits of their protection claims. These actions include unilateral, bilateral, and multilateral state engagement, as well as the enlistment of private actors. These can include direct interdiction or preventive policies, as well as more indirect actions, such as the provision or assistance to security or migration management practices in and by third countries (7).

Safe third country: A third country that treats a person seeking international protection in accordance with the following principles:

(a) Life and liberty are not threatened on account of race, religion, nationality, membership of a particular social group or political opinion;
(b) There is no risk of serious harm as defined in Directive 2011/95/EU (Recast Qualification Directive) (2);
(c) The principle of non-refoulement in accordance with the Geneva Refugee Convention and Protocol is respected;
(d) The prohibition of removal, in violation of the right to freedom from torture and cruel, inhuman, or degrading treatment as laid down in international law, is respected; and
(e) The possibility exists to request refugee status and, if found to be a refugee, to receive protection in accordance with the Geneva Refugee Convention and Protocol (3,8).

Principle of non-refoulement: a core principle of international human rights and refugee law that prohibits States from returning individuals to a country where there is a real risk of being subjected to persecution, torture, inhuman or degrading treatment or any other human rights violation, without any exception. The principle is explicitly included in Article 7 of the 1966 International Covenant on Civil and Political Rights (ICCPR) (9), Article 3 of the 1984 Convention against Torture (CAT) (10), Article 3 of the 1950 European Convention of Human Rights (11) and in Article 19(2) of the 2000 EU Charter of Fundamental Rights (12).
The principle of non-refoulement has also been formally yet more narrowly embodied in Article 33 of the 1951 Refugee Convention and the 1967 Protocol, stating that 'no Contracting State shall expel or return ("refouler") a refugee in any manner whatsoever to countries or territories in which their lives or freedom may be threatened on account of their race, religion, nationality, membership of a particular social group or political opinion' (3). The Refugee Convention and Protocol however make a negative exception for refugees who constitute 'a danger to the security of the country in which he is, or who, having been convicted by a final judgement of a particularly serious crime, constitutes a danger to the community of that country' (3).

Maternal health: health of women during pregnancy, childbirth, and the post-partum period (13).

Maternal mortality: death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or

aggravated by the pregnancy or its management but not from unintentional or incidental causes (14).

Perinatal health: health from 22 completed weeks of gestation until 7 completed days after birth (13).

Perinatal mortality: death of a foetus or newborn in the perinatal period, commencing at 22 completed weeks of gestation and ending at 7 completed days after birth (15).

Abstract

Aims: The Common European Asylum System (CEAS) provides that applicants for international protection (AIP) are entitled to 'necessary care'. Yet, maternal and perinatal health inequities persist among AIP compared to their European host populations. As restrictive migration policies have repeatedly been linked to adverse migrant health outcomes, this interdisciplinary exercise aims to explore how current EU asylum and border policies affect maternal and perinatal health in AIP and where healthcare professionals can take their responsibility in defining and providing 'necessary antenatal care (ANC)'.

Methods: Following the critical interpretive synthesis (CIS) approach, a broad search strategy preceded a more structured literature search in both medical (PubMed, Embase/MEDLINE) and law databases (HeinOnline, KluwerLawOnline, EURLEX). Extracted quantitative and qualitative data were grouped under recurring themes, which were then integrated in the WHO Conceptual Framework for action on the Social Determinants of Health (CSDH) as 'structural' and 'intermediary determinants' of maternal and perinatal health in AIP.
Existing clinical guidelines on routine ANC were subsequently reviewed using the AGREE II tool. Matching the resulting concepts with the recommendations made in available 'migrant-sensitive' guidelines allowed for a risk-appropriate and rights-based exploration of what 'necessary ANC' for AIP should look like.

Results: The applied CSDH framework consists of three structural (externalisation, Dublin, reception) and four intermediary (sexual and gender-based violence, migration stress, access to care, continuity of care) determinants of maternal and perinatal health in AIP. An intensified focus on border securitisation and externalisation policies, the unequal responsibility distribution under the Dublin III Regulation and substandard reception conditions contribute to migration related stress in AIP, increase their risk of experiencing sexual and gender-based violence and interfere with their access to continuous ANC.
The developed concept of 'necessary ANC' requires healthcare professionals to support pregnant AIP in navigating existing ANC programs and to work towards more regionalised and integrated health services.

Conclusions: Current EU asylum and border policies create and maintain maternal and perinatal health inequities in AIP. Healthcare professionals' adherence to a patient-centred approach in defining and providing 'necessary ANC' for AIP can prove to be of transformative potential in bridging the implementation gap between migration management and health as a human right.

Background

Trends in forced displacement

The global number of forcibly displaced people has doubled over the past decade to an unprecedented number of 108.4 million displaced people at the end of 2022 (16). The UNHCR estimates these numbers to only increase due to recent emergencies like Ukraine, while other ongoing conflicts around the world reignite or remain unresolved (16). Internally displaced people continue to constitute the majority of forcibly displaced people around the world, accounting for some 58% at the end of 2022 (16). The remaining global number of applicants for international protection and refugees in 2022 also increased to a total of 5.4 and 35.2 million people respectively, half of whom are women and girls[4] (16).
The number of first-time EU applications for international protection registered in the past decade did not follow this ongoing global rise of forced displacement, showing a contrasting drop from 1.3 million applications in 2015 to 0.5 million applications in 2021. Since 2021, the annual number of first applications increased again to 'almost 1 million applicants (962 160)' at the end of 2022, with Germany, France, Spain, Austria and Italy registering almost three quarters of all first-time applications (17). Syrian, Afghan, Venezuelan and Turkish nationals together accounted for 40% of all 2022 EU first applications (17).

Maternal and perinatal health in applicants for international protection

Throughout the process of leaving their home country to their application for international protection and the following asylum procedure, pregnant applicants find themselves on a unique and vulnerable intersection of individual, interpersonal, and structural factors shaping their pregnancy experience and outcome (18). On these intersections, research on maternal and perinatal health disparities continues to demonstrate generally adverse health outcomes in migrants compared to their host populations (19). Inconsistent findings however do reflect the evident heterogeneity of 'migrants' as a study group (19,20). With the commonly used 'migrants, asylum seekers and refugees (MAR)' as study population, systematic reviews on migrant maternal and perinatal health outcomes often fail to detect the implications of the covariant translation of legal entitlement to care into practice for each legal status (i.e. undocumented migrant, applicant for international protection, subsidiary protection, temporary protection, refugee status) (19,20).

Data that are stratified per legal status demonstrate the exact same trend towards adverse health outcomes and self-perceived health among applicants for international protection (20,21). Although maternal mortality has become a rare event in higher income countries, available data has shown a mortality ratio that was 10 times higher among applicants compared to their host population. Severe acute maternal morbidity (i.e. ICU admission, uterine rupture,

[4]Following the global trend of forced displacement, the number of LGBTIQ+ applicants for international protection has risen accordingly. As transgender men and gender diverse individuals might also have the capacity for pregnancy, general usage of 'women' or 'women and girls' will further be avoided in acknowledgment of the intersectional experience of gender diversity, pregnancy, and forced displacement. Where the substantive experience of sex and gender is relevant, gender-sensitive terms will continue to be specified.
The gendered term 'maternal health' was chosen in the current absence of a more inclusive alternative that could as much relate to existing scientific literature and global health agendas.

eclampsia/HELLP syndrome, major obstetric haemorrhage or miscellaneous) was 4.5 times more likely to occur (21).

Additional morbidities like gestational diabetes are diagnosed more frequently among migrant populations, yet again stratified data for applicants for international protection is lacking (22). Elevated antenatal HIV infection rates have been found specifically among applicants compared to their host population, with most involved applicants originating from Sub-Saharan Africa (23,24).

After correction for confounding variables like parity, gestational age at birth and birth weight, Dutch research has further shown a 7.2 times increased risk for applicants to experience perinatal mortality than Dutch nationals (25,26). Preterm birth rates also tend to be higher among 'migrants' compared to EU host populations (20). Evidence even suggests an underlying correlation between psychosocial stress and risk of preterm birth in migrant populations (20,22,27). Yet, studies reporting on preterm birth rates in applicants for international protection specifically are again lacking.

Eventual mode of delivery generally does not seem to differ significantly between applicants and their host populations (20). Although (non-EU) studies have shown a protective effect for emergency caesarean sections for applicants and refugees compared with other migrant groups, most studies report mixed results for caesarean delivery, varying by country of origin and of reception (20,28,29).

Perinatal mental health disorders are further common in the general population and have been associated with a wide range of adverse outcomes for both parent and child (30). Heterogeneity between study methods and included migrant groups have prevented any consistent evidence to be generated so far on perinatal depression rates among 'migrants' compared to 'non-migrants'. Antenatal and postnatal depression should therefore be considered at least as common (30). Available data on other mental disorders however did show an increased risk of anxiety symptoms among 'migrants' and increased prevalence rates of PTSS symptoms among applicants for international protection (30,31).

Pervasive power dynamics throughout the migratory and following asylum procedure put applicants further at risk for experiencing sexual and gender-based violence (i.e. rape, transactional sex, sexual exploitation) (32–34). The direct and indirect physical and mental health consequences of gender-based violence, as well as the risk of unwanted pregnancy and elevated (unsafe) abortion-to-live birth rates furthermore contribute to a gendered and detrimental cycle of ill-health (34–36).

Legal framework on the right to maternal and perinatal health

International law

Contrasting with the reality of adverse maternal and perinatal health outcomes among different migrant groups, the right to health has been well established under international human rights law while health equity has been repeatedly expressed as a key feature in global health agendas (19,37,38).

First, the general principle of non-discrimination has repeatedly been affirmed by international human rights law, whereas Article 12 of the 1979 UN Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) specifically provides for eliminating discrimination of women in the field of healthcare, 'in order to ensure, on a basis of equality of men and women, access to healthcare services, including those related to family planning' (39). Ever since the 1994 International Conference on Population and Development, sexual and reproductive health have furthermore been at the forefront of the universal health coverage and human rights agenda (37,38).
General Comment 14 on Article 12.1 of the 2000 International Covenant on Economic, Social and Cultural Rights further states that 'governments have *legal obligations* to ensure that health facilities, goods and services are *accessible to all*, especially the most vulnerable of marginalised sections of the population, in law and in fact, *without discrimination* on any of the prohibited grounds' and specifies that states should refrain from 'denying or limiting equal access for all persons, including prisoners or detainees, minorities, *asylum-seekers and illegal immigrants*, to *preventive*, *curative* and *palliative* health services (38,40).

With the 2011 Rio Political Declaration on Social Determinants of Health, all WHO member states express 'a global political commitment for the implementation of a social determinants of health approach to reduce health inequities'(41). These commitments have been reincorporated in the 2030 UN Agenda for Sustainable Development in 2015 wherein three Sustainable Development Goals (SDG) cover maternal and perinatal health in migrant women (SDG 3, good health and well-being; SDG 5, gender equality; SDG 10, reduced inequalities) (38,42). The following 2016 Strategy and Action Plan for Refugee and Migrant Health adopted by the WHO Regional Office for Europe highlighted the need for 'universal health coverage, person-centred health systems and intersectoral coherence in policies affecting refugees and their access to care' (43). As COVID-19 has further exposed and magnified existing health inequities, the 2021 World Health Assembly (WHA) commissioned a World Report on Social Determinants of Health Equity 'to set the agenda for the next ten years for action on the social determinants of health'(44).

EU law

When it comes to setting out global health agendas, all EU member states clearly seem to commit to ensuring equal access to preventive and thus non-emergency care (i.e. antenatal care, ANC) for all migrant statuses. Yet, even where EU law does provide for equal and universal entitlement to care, the care package applicants for international protection are eventually entitled to remains patchy throughout the EU (19,37).

EU anti-discrimination law may function as a legal opening in entitlement to care for pregnant applicants for international protection, as the 2000 EU Charter of Fundamental Rights prohibits any discrimination 'based on any ground such as sex, ethnic or social origin (…)' or '(…) *birth'* (12). The 2000 Race Equality Directive further prohibits 'direct or indirect discrimination based on racial or ethnic origin' in relation to, among others, 'social protection, including social security and healthcare' (45). However, Article 3(2) of that same directive adds that this framework 'does not cover difference of treatment based on nationality and is without prejudice to provisions and conditions relating to the entry into and residence of third-country nationals and stateless persons on the territory of Member States (…)' (45).

Applicants for international protection can nonetheless rely on both primary and secondary, and thus legally binding EU law that provides for universal entitlement to care (46,47). Article 35 of the EU Charter of Fundamental Rights on the right to health states that 'everyone has the right to access preventive healthcare and the right to benefit from medical treatment *under the conditions established by national laws and practices*' (12). The existing order in primary EU law establishes EU competences regarding 'common safety concerns in public health matters', but then limits EU competences to a mere supportive, coordinating, or supplementary role in respect of the member states' responsibilities (48). The 2013/33 Reception Conditions Directive, laying down minimum standards of reception of applicants for all EU member states, in its turn remains rather a-specific on the care package applicants are actually entitled to, stating that 'member states shall ensure that applicants receive the *necessary* healthcare which shall include, *at least, emergency care* and *essential treatment* of illnesses and of serious mental disorders' with attention for further 'special reception needs, including *appropriate* mental healthcare where needed' (47).
Without providing any specifications or conditions on what is meant with 'necessary', 'essential', or 'appropriate' care and whether this includes ANC, these legal provisions allow for national modifications to the care package applicants are eventually entitled to in each member state (37).

Bridging the gap between legal entitlement to care and persistent health inequities

Keygnaert et al. (2014) already described and denounced the 'discrepancy between a proclaimed rights-based approach to health and actual obstacles to migrant's attainment of good sexual and reproductive health', and urged EU policymakers to 'encourage its member states to ensure equal access to healthcare for migrants as for EU citizens' (37). As health inequities among pregnant applicants for international protection persist ten years later, the challenge remains to uncover the underlying mechanisms that determine this discrepancy.

The conditional and sometimes a-specific character of existing EU law on applicants' right to health allows for fragmentation of the care package applicants will eventually be entitled to in each member state (i.e. non-emergency versus emergency care only). On the other hand, one could also argue that the 2013/33 Reception Conditions Directive does provide an adequate legal base for the care package applicants are entitled to and that the definition of 'necessary', 'essential', or 'appropriate' care remains a responsibility of both national policymakers and healthcare professionals, rather than EU legislators. Commonly used study populations like 'migrants' or 'MAR' however reduce available 'migrant-sensitive' clinical guidelines' sensitivity to the translation of legal entitlement to care into practice that varies for each legal status (i.e. conditions of access, content of care packages). This lack of 'status-sensitive', normative content in current clinical guidance limits healthcare professionals in successfully turning 'necessary' care into practice (19,38,49,50).
Meanwhile, reports on delayed initiation of ANC, higher rates of obstetric presentations to the emergency room and hospital admissions as well as significantly longer postnatal hospital stays for 'migrant' than for 'non-migrant' populations suggest a general tendency towards suboptimal care delivery to pregnant applicants (51–53).

By framing health 'as a topic of social justice', the WHO Commission on Social Determinants of Health (CSDH) conceptual framework for action on the social determinants of health points towards 'the adoption of human rights frameworks as vehicles for enabling the realisation of

health equity, wherein the state is the primary responsible duty bearer' (54). Most studies and reports on determinants of migrant maternal and perinatal health focus on individual and interpersonal determinants such as chronic stress, language barriers, socio-economic status, or suboptimal antenatal care delivery. Although restrictive non-health related migration policies have repeatedly been linked to adverse migrant health outcomes, these individual and interpersonal determinants are rarely put into their legal and political context (55). When studies do report on intermediary or structural determinants of migrant maternal and perinatal health, it is hard to uncover this 'primary responsible duty bearer', as each individual migratory process is shaped by a complex and variable policy context where local, national, and international responsibilities collide. More targeted, interdisciplinary exercises are therefore needed to examine how each policy level may function as a determinant of maternal and perinatal health for each legal status (55).

Aims and scope

Part one of this thesis first aims to explore how current EU asylum and border policies determine maternal and perinatal health in applicants for international protection. For this interdisciplinary exercise to remain legally consistent, applicants for international protection were chosen as study population as their entitlement to care conditions are mainly defined by EU law. The results from this exercise may not only clarify the mechanisms through which EU asylum and border policies determine applicants' maternal and perinatal health. They may also uncover existing implementation gaps between migration management and health as a human right, illuminating new entry points for targeted policy interventions.

Part two will explore 'necessary ANC' for pregnant third-country nationals who apply for international protection in the EU as a clinical concept. As the 2013/33 Receptions Conditions Directive centres essential medical, psychological, and emergency care in its provision on 'necessary care', existing guidelines on routine ANC for low-risk pregnancies were first reviewed. The results from this review will then be matched with emerging themes and recommendations from the available migrant-sensitive guidelines, aiming to extrapolate which additional 'necessary medical or other assistance' should be provided to pregnant applicants for international protection (47). This two-step approach not only targets the perceived tension between the initial guideline assessment of routine care for low-risk pregnancies and the higher risk profile of pregnant applicants' pregnancies. It would also allow for a more complete, risk-appropriate, and rights-based exploration of what 'necessary ANC' for applicants for international protection should look like. Furthermore, the post-natal period plays a unique and pivotal role in defining maternal health and well-being, only guidelines on ANC were included in this exercise. As separate guidelines often exist on the antenatal and post-partum period, one period was chosen for the guideline assessment to remain clinically consistent.

It is hoped that this thesis can serve as an innovative blueprint for future research and advocacy, encouraging similar interdisciplinary exercises on different migrant statuses, involved policy levels, and different periods in the maternal and perinatal health spectrum. The covariant translation of entitlement to care into practice per legal status requires pragmatism and focus in each exercise. The results will nonetheless provide specific tools for both policymakers and healthcare professionals to address the implementation gap between migration management and health as a human right, each from their individual responsibilities and capacities.

1. EU asylum and border policies as a determinant of maternal and perinatal health: a critical interpretative synthesis

1.1. Methods

1.1.1. Research questions and approach

The first part of this thesis aims to explore how EU asylum and border policies affect maternal and perinatal health outcomes in applicants for international protection from a rights-based perspective.

The study population in this exercise was restricted to pregnant applicants for international protection, defined as 'all third-country nationals that are pregnant while filing a formal application for international protection in an EU member state, or who become pregnant throughout their following asylum procedure, in respect of which a final decision has not yet been taken'.

As each individual journey is pivotal in shaping applicants' individual pregnancy experience and outcome, targeted policies were deliberately defined more generally as 'EU asylum and border policies', allowing to identify all EU policies that affect applicants' trajectories of entering EU territory, applying for international protection, and seeking care throughout their asylum procedure. Choosing the EU as target policy level or 'responsible duty bearer' (54) further allowed to deconstruct the previously described implementation gaps between current asylum and border policies and the EU's proclaimed rights-based approach to health.

Target outcomes were all studied outcomes situated under maternal and perinatal health. The WHO refers to 'maternal health' as 'health during pregnancy, childbirth, and the post-partum period', whereas 'perinatal health' is defined as 'health from 22 completed weeks of gestation until seven completed days after birth'(13). As mentioned in the background section of this thesis, target outcomes are restricted to pregnancy and childbirth only. Post-partum and neonatal outcomes were excluded to remain clinically consistent with part two of this thesis.

The broad scope of the research question required a flexible yet systematic review approach, preferably integrating both quantitative and qualitative data. Four review types were eligible for this exercise: integrative review, realist review, narrative synthesis, and critical interpretative synthesis. The critical interpretative synthesis (CIS) method was considered to allow for the most dynamic and iterative process of analysis of the available, interdisciplinary body of evidence. The goal of the relatively new CIS is to detect and connect recurrent themes from the evidence to further develop an existing or generate a new theoretical framework. However, the CIS method is both recommended and critiqued for its degree of flexibility, as concerns about transparency and systematicity may hamper the implementation of developed theory. For this exercise to serve as a reproducible blueprint for future research and advocacy, reporting on used methods and results is therefore based on the CIS evaluation criteria provided by Depraetere et al (2021) (56).

1.1.2. Literature search and selection

A broad search strategy preceded a more structured literature search in both medical and legal databases. The broad search strategy was based on insights derived from clinical practice and the course 'Selected Issues: European and International Migration Law and Policy', hosted by Prof. Dr. Ellen Desmet at the Ghent University Faculty of Law and Criminology (co-promotor), as well as from further website searches, reference chaining and (co-)promotor consultancy. After identifying the study population, policy level and health outcomes, a more systematic search was then conducted.

Annexes 1 and 2 provide a detailed 2020 PRISMA statement on the search strategies used for both medical and law databases respectively, including applied record exclusion criteria. A total of 69 records (health databases, n = 39; law databases, n = 30) was eventually included in the CIS.

1.1.3. Quality appraisal

As methodologically weak records can still provide 'relevant insights in the emerging theoretical framework', a systematic quality appraisal of the retrieved records was not performed prior to inclusion (56). All selected records were however peer-reviewed papers and reports commissioned by international and academic organisations. Included records were further assessed on 'content, likely relevance and theoretical contribution' to the CIS.
Conflicts of interest were assessed for each included record. However, records were not excluded when conflicts of interest were present as used language and approach in these records could also provide valuable information.

1.1.4. Analysis

Aiming to understand how current EU asylum and border policies affect maternal and perinatal health in applicants for international protection, the 2008 Commission on Social Determinants of Health (CSDH) conceptual framework was chosen as an appropriate framework for analysis (54).

First, by centring the role of power in generating health inequities, this framework allows for a focused analysis of the responsibility of 'the state' while engaging 'the agency of disadvantaged communities' (i.e. pregnant applicants for international protection) (54). The existing order in primary EU law limits EU competences to a mere supportive, coordinating, or supplementary role in respect of the member states' responsibilities to implement EU legislation. The analysis of the EU as 'the state', or a single political actor responsible for affecting applicants' maternal and perinatal health thus remains quite a stretch. This thesis will therefore focus on how the legal and political interaction between the EU and its member states may generate maternal and perinatal health inequities in applicants for international protection.

Second, the CSDH clearly distinguishes between 'the social determinants of health and the social processes that shape these determinants' unequal distribution among more and less advantaged groups' (54). This approach enhances the reproducibility of this exercise for other legal statuses than applicants for international protection as it allows for a stratified analysis of different migrant groups per legal status and their covariant entitlement to care conditions.

Finally, the CSDH framework has already proven its relevance as a commonly used tool for academic research as well as for national and international public and global health commitments

(41,44). Applying this framework to the context of EU asylum and border policies and pregnant applicants for international protection (i.e. further theory development rather than theory generation) will only increase this exercise's consistency with the existing global health agenda.

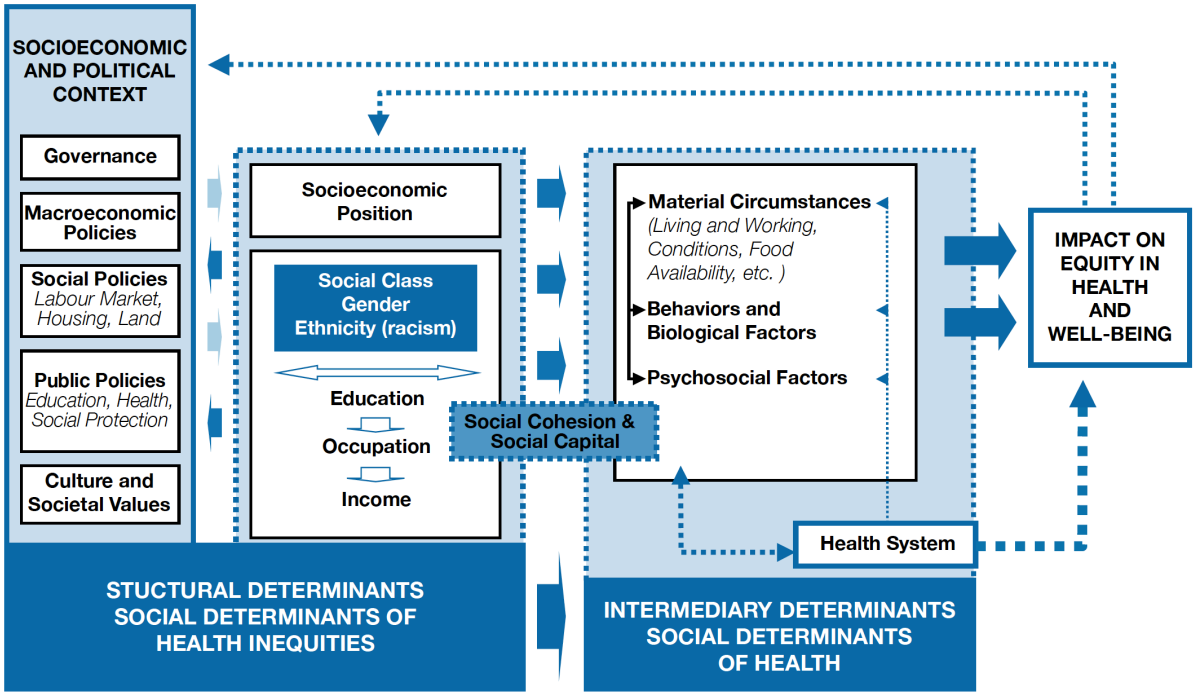

Figure 1 CSDH conceptual framework on social determinants of health

Figure 1 (54) summarises the CSDH framework, showing how 'structural determinants' generate social stratification in populations based on 'social class, gender, ethnicity, education, occupation and income' (54). These 'stratifiers' are configured by the socio-economic and political context of a particular setting. 'Intermediary determinants' of health include individual and interpersonal factors that directly affect health outcomes, such as 'material circumstances, behaviours and biological factors, psychosocial factors' as well as (access to) 'the health system' (54). 'Rooted in key institutions and the processes of the socio-economic and political context', structural determinants then define the distribution of these intermediary determinants among more and less advantaged groups (54). It is through the unequal distribution of these intermediary determinants that the structural determinants shape health outcomes and inequities (54).

After a thorough reading of the selected records, quantitative and qualitative data were extracted under recurrent subthemes and then grouped in recurring main themes. All main themes were then integrated in the CSDH framework and organised under 'structural' and 'intermediary determinants'. 'Stratifiers' like social class, gender and race were included when relevant data was available. This applied version of the CSDH framework then allowed for inductive synthesis and argument formation.

1.2. Results

1.2.1. Structural determinants

1.2.1.1. Externalisation

Helbling et al. (2018) demonstrated that the conditions and criteria for entering and staying in OECD countries have generally become more liberal between 1980 and 2010, while at the same time more restrictive migration control mechanisms have been put in place (57). The increase in these control mechanisms have been observed to be much stronger in EU than in non-EU OECD countries (57). Instead of focusing on 'denying access, tightening borders, and non-entry', Spijkerboer therefore argues for a wider, more stratified take on global mobility and migration that centres access to the 'global mobility infrastructure' (58). Although the expansion of human global mobility has been considered as highly desirable throughout the past decades, countries in the global North have sought to simultaneously regulate access to the global mobility infrastructure to stay in control of the population present on their territories (57,58).

Travel authorisation systems such as visa requirements are main control mechanisms to regulate legal entry in the EU (58). Third-country nationals that do not need visa for EU entry are mostly citizens of non-EU European, North, and most Latin American countries, as well as Australia and New Zealand. Citizens of African, Caribbean, and Asian countries often do need visa when travelling to the EU (58). Article 21(5) of the Visa Code further requires verification of the applicant's possession of 'sufficient means of subsistence', while the EU Visa Handbook refers to the applicant's 'employment situation, regularity and level of income, social status, as well as the possession of a house or real estate' as relevant factors in considering a visa application (59,60). When comparing the country-of-origin list of all applications for international protection in the EU to the global Passport Index, these selective migration control mechanisms disproportionally disadvantage forcibly displaced people who intend to apply for international protection in the EU (58). However, the intention to apply for international protection is not accepted as a purpose to apply for a short-term Schengen or even for a humanitarian visa, leaving them with little or no alternatives than to opt for irregular and often more dangerous entry routes (58,59). As socio-economic position further determines visa access and given the globally weaker position of women and e.g. Sub-Saharan nationals, access to legal entry in the EU inherently becomes gendered and racialised (58).

Restrictive EU migration control mechanisms not only include selective visa regimes, but also more targeted (border) externalisation policies (7,57,58). Although the discordance in registered applications for international protection in the EU with the global trends of forced displacement should be interpreted as multifactorial in origin, scholars mark a 'notable intensification of European migration and asylum policies in third countries' since the Syrian refugee crisis in 2015 (60).

The 2014/656 EU regulation establishes a set of rules 'for the surveillance of the external sea borders in the context of operational cooperation coordinated by the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union' (61). Given the multinational character of the policy aim to prevent 'unauthorised border crossings, countering cross-border criminality and apprehending or taking other measures against those persons who have crossed the border in an irregular manner', this regulation provides a coordination framework for operational cooperation between EU member states and third countries (61). When this cooperation takes place on the territory or in the territorial waters of a third country, 'Member States should comply with norms and standards at least equivalent to those set by Union Law' (61). In accordance with international, maritime and fundamental rights law, Article 4 of this regulation further states that participating member states

shall assess whether or not 'disembarking, forcing to enter, conducting or handing over intercepted or rescued persons' to a third country implies a risk of 'death penalty, torture, persecution or other inhuman or degrading treatment or punishment, or where his or her life or freedom would be threatened on account of his or her race, religion, nationality, sexual orientation, membership of a particular social group or political opinion, or from which there is a risk of an expulsion, removal or extradition to another country in contravention of the principle of non-refoulement' (61). The regulation further states that 'throughout a sea operation, the participating units shall address the special needs of children, including unaccompanied minors, victims of trafficking in human beings, persons in need of urgent medical assistance, disabled persons, persons in need of international protection and other persons in a particularly vulnerable situation' (61).

The 2017 Italy-Libya Memorandum of Understanding serves as an extension of previous cooperation agreements that have been concluded between the two countries since 2000, 'committed to assisting each other in the effort to curb irregular migration and exchanging information' (62). Whereas the 2007 Protocol and Additional Protocol specified that Libyan authorities should intercept migrant boats prior to reaching Italian territorial waters and return them to Libya, the 2017 Memorandum remains rather a-specific on the intended time of interception. Article 1 of the Memorandum however states that Libyan authorities will be provided with Italian vessels and border control systems 'in order to stem the illegal migrant fluxes' (62). Italy further committed to 'finance existing "hosting centres" for migrants and to supply them with medical equipment' (62). The existing Libyan legal framework on immigration however 'does not distinguish between people seeking international protection and all other migrants' and penalises every person who enters the country irregularly through a fine, forced labour, imprisonment, or a combination of penalties (62). In this context, the previously mentioned "hosting centres" are contested to operate as detention centres. The Memorandum further does not distinguish either between people seeking international protection or other migrant groups. Although the memorandum remains a bilateral agreement between an EU member state and a third country, the EU is vaguely mentioned to be involved in funding of the 'various projects' outlined in the document (62).

The 2023 ASILE 'Asylum for Containment' report further provides a rich, case-based inventory of the intensified EU cooperation with third countries since 2015 (60). Examined policies include but are not limited to EU external sea border surveillance policies, with Serbia, Turkey, Niger, and Tunisia included as examined third countries. In exchange for financial and/or operational assistance to existing security, policing and asylum infrastructure, or other (geo)political interests (e.g. EU accession, visa access), involved third countries agree to cooperate on containment of potential applicants for international protection. Extraterritorial containment is then legitimated through European efforts in strengthening asylum infrastructure in these cooperating third countries, designating them as 'safe third countries'. The authors argue that involved third countries are more willing to cooperate when it comes to policing and security than to strengthening their own asylum infrastructure 'out of concern of becoming an extraterritorial European hotspot' (60). The following paragraphs provide an overview of the content and impact of the cooperation agreements between the EU and the four examined third countries, discussed in chronological order.

Third-country nationals who transited through Serbia to reach the central or eastern EU member states can be returned to Serbia based on the 2007 EU-Serbia Readmission Agreement. Within this agreement, the EU supports Serbia in developing an asylum system in line with EU standards through funding of Serbian reception capacities and offering legislative support. Serbian authorities' response to readmission requests, third-country nationals' access to the Serbian asylum procedure as well as reception conditions however all remain substandard (60).

One of the most cited examples in the report is the 2016 EU-Turkey statement. In exchange for EU visa liberalisation for Turkish nationals and further openings in EU accession talks, members of the European Council and Turkish officials agreed that Turkey would accept the 'rapid return' of 'all irregular migrants intercepted in Turkish waters', while migrants on Greek territory 'who are not applying for asylum or whose application has been found unfounded or inadmissible in accordance with the EU Asylum Procedures Directive will also be returned to Turkey' (60,63). In exchange for every returned Syrian migrant, a Syrian national residing in Turkey with the intention to apply for international protection in the EU will be resettled from Turkey to a member state of the EU (63). Furthermore, the 2016 EU-Turkey statement explicitly endorses closing the Turkish border with Syria and the containment of Syrian migrants in 'certain areas near the Turkish border which would allow for the local population and refugees to live in safer areas' (60). The impact of this agreement remains disputed. Moreover, the EU-Turkey statement is increasingly considered to be incompatible with international law as Turkey does not qualify as a 'safe third country', the statement further limits case-by-case consideration for transfers to Turkey while EU resettlement efforts remain 'homeopathic' (60,64).

The EU-funded 2017 Emergency Transit Mechanism (ETM) is a cooperation framework between Niger, the International Organisation for Migration (IOM), UNHCR and several EU member states, where vulnerable refugees in Libyan detention centres are identified by UNHCR staff and transferred to Niger with a perspective on admission to European countries and Canada. With the EU simultaneously funding the Libyan Coast Guard and facilitating pullbacks from the Mediterranean sea to Libya and most refugees transferred to Niger being resettled to third countries or remaining in Niger, scholars consider the ETM as another example of reducing access to international protection on EU territory and a violation of the principle of non-refoulement and the European Convention of Human Rights (ECHR), facilitated by European actors (60).

Similar strategies are further applied in Tunisia, where the EU has increased the Tunisian government's border management and search and rescue (SAR) capacities to prevent third-country nationals from leaving Tunisia and returning them to Tunisia when intercepted at sea (60).

1.2.1.2. Dublin

The aim of the 604/2013 Dublin III regulation is to reduce secondary movement of applicants within the EU following their first entry (64). As the regulation has its origins in a separate non-EU treaty, non-EU countries like Norway, Iceland and Switzerland are also included in this common aim (65). In 2003, the initial Dublin system was integrated in EU law as the Dublin II Regulation. Through a set hierarchy of criteria, it provided for a framework on 'responsibility allocation' between member states that enables to determine which state is responsible for examining the lodged application for international protection (65). As the Dublin II regulation

'contained profound deficiencies in protecting fundamental rights' of applicants for international protection, all signatory states except for the United Kingdom and Ireland acceded to the Dublin III regulation that came into force in January 2014 (65).

The criteria for determining the responsible member state are ordered in a hierarchy that prioritises determining whether the applicant is an unaccompanied minor, has a family member that is an applicant for or beneficiary of international protection in another member state, or whether the applicant has a valid residence document or visa issued by another member state (64,66). Pregnant applicants can further be considered as 'dependent persons' under Dublin III. This clause requires member states to keep or bring pregnant applicants 'dependent on the assistance of (…) her child, sibling, or parent legally resident in one of the Member States' together with that family member, provided that 'family ties existed in the country of origin'. Responsibility is then allocated to the member state where this family member is legally residing.
If none of these criteria apply, the responsibility is allocated by default to the member state of first entry. If a member state considers another member state to be responsible for examining the application for international protection, a 'take charge request' or 'take back request' can be sent that then needs to be examined by the requested member state (66). Prior to sending a 'take charge' or 'take back' request, Article 3(2) requires member states to assess whether there are 'substantial grounds for believing there are systemic flaws in the asylum procedure or reception conditions for applicants' in the intended receiving country, 'resulting in a risk of inhuman or degrading treatment within the meaning of Article 4 of the Charter of Fundamental Rights of the European Union' (12,64,66).

While most cases are determined based on the default first-entry criterium, effective, physical transfer rates of applicants have remained comparably low since the Dublin III regulation has come into effect (64). The economically weaker external border states thus remain responsible for the highest numbers of applications. No data could however be found on Dublin transfers for pregnant applicants. The unequal, internal responsibility distribution further ignores existing migration patterns, leaving little or no incentive for the more 'desirable' northern states to share responsibility with the eastern and southern border states in accordance with the principle of solidarity, set out in Article 80 of the Treaty on the Functioning of the European Union (TFEU) (64,67). As Article 3(2) does not specify on which 'substantial grounds' a state's asylum system could be considered as 'systemically flawed', the external border states remain reluctant to improve reception facilities for applicants, facilitate access to international protection or even register applicants within their territory (64).

Despite lawful detention during a Dublin procedure being restricted to applicants that impose 'a significant risk for absconding' or 'danger to national security' only, states continue to resort to arbitrary detention as an extra migration management 'tool'. These forms of arbitrary detention have been legitimated by the lack of a legal definition of 'absconding' or through national bypass laws, e.g. the systematic provision of third-country nationals and stateless persons who irregularly entered Greece through one of the Greek hotspots with a 'status of restriction of liberty' in 'Reception and Identification Centres' (64).

1.2.1.3. Reception

The 2013/33 Reception Conditions Directive lays down the 'standards for the reception of applicants for international protection in Member States' (47). These standards should be provided by the responsible member state from the moment the application is officially registered and apply as long as the applicant is 'allowed to remain on the territory' of that member state (47).

The 2013/33 Reception Conditions Directive provides that all applicants should be informed within 15 days after lodging their application concerning the available reception conditions, including healthcare (47). Although applicants should from then on be allowed to 'move freely within the territory of the host Member State or within an area assigned to them by that Member State', detention is only lawful when the applicant's identity or nationality or their right to enter the territory requires 'additional verification', when there is a 'risk of absconding', or 'when protection of national security or public order so requires' (47). Furthermore, the Directive adds that 'the grounds for detention shall be laid down in national law', again allowing for fragmentation among member states (47).

Member states are further specifically required to provide access to schooling and education for minors, access to the labour market and vocational training, material reception conditions that ensure an 'adequate standard of living, which (…) protects their physical and mental health' (47). As previously mentioned in the background section of this thesis, Article 19 also requires member states to

> 'ensure that applicants receive the *necessary health care* which shall include, *at least, emergency care* and essential treatment of illnesses and of serious mental disorders' and to 'provide *necessary medical or other assistance to applicants who have special reception needs*, including *appropriate mental health care where needed*' (47).

The 2013/33 Reception Conditions Directive clearly seems to have adopted a gender-sensitive approach when it comes to defining these 'special reception needs', in accordance with the obligations of the 2011 Istanbul Convention on preventing and combating violence against women and domestic violence (47,68–70). Not only are 'pregnant women, victims of human trafficking, persons who have been subjected to (…) rape or other forms of serious (…) sexual violence, such as victims of female genital mutilation' acknowledged as applicants with special reception needs, member states are required to assess the applicant's needs as soon as possible to ensure access to appropriate medical, legal, and psychosocial care (47,68). Member states are also responsible for preventing 'assault and gender-based violence, including sexual assault and harassment' when providing accommodation or in case of detention (47,68).

Six records were retrieved that, sometimes briefly, discussed reception conditions in different EU member states. Although set in different time frames, these records make pregnant applicants' experiences of variable reception conditions per member state more concrete. The examples are discussed in both a chronological and geographical order following existing migration patterns from the southern, external border states to the northern, more 'desirable' member states.

In 2012, Gerard and Pickering considered 'the layers of exile and vulnerability' through conducting qualitative interviews with (mostly Somali) women after their irregular arrival, as well as with 'key state and non-governmental organisation (NGO) stakeholders' in Malta (71). Respondents reported on a comprehensive policy of 'mandatory detention' after irregular arrival

in Malta, often in 'deplorable conditions'. Upon their release from detention, applicants were provided accommodation in several 'Open Centres', concentrated in and around the remote and former military area Hal-Far. This two-step reception approach was contended by NGO and law enforcement respondents to incentivise 'forced pregnancies', or where pregnancy becomes a strategic gateway to being categorised as having 'special reception needs' in order to 'gain release from the detention centres and be relocated to Open Centres' (71). Reports of overcrowding, poor sanitary conditions and limited access to facilities and transport in these centres, as well as employers' 'gendered and social rejection' of female applicants looking for regular employment (e.g. tourism industry) however illustrate the generally substandard reception conditions in 2012 Malta (71).

The Italian asylum system has been described to be divided in two administrative stages (65). First, applicants are required to file a request for applying for international protection, either at a border police office or to the provincial office of the *Questura*, the national police force. Second, applicants are invited to a *verbalizzazione* or personal interview where the application for international protection is officially registered. The *Questura* then forwards the application to the 'Territorial Commission for the Recognition of International Protection' which will then decide on the application after a second personal interview with the applicant (65).
Despite the 2013/33 Receptions Conditions Directive being incorporated into national law, the bureaucratic barriers Italy has erected for applicants limit their access to these conditions (65). Between the time of arrival and the official registration of their application after the *verbalizzazione*, applicants are not officially considered as 'applicants for international protection' under Italian law. As the scheduling and sometimes rescheduling of the *verbalizzazione* falls under complete control of the *Questura* and may occur weeks or months after arrival, full access to the reception conditions required by the 2013/33 Receptions Conditions Directive is artificially delayed. After their identification and fingerprinting at the border police or provincial *Questura* offices, applicants are nonetheless granted an intermediary status of 'temporary residence permission', which does grant them free access to basic healthcare coverage including perinatal and abortion care, as well as free movement within Italy in this period (i.e. '*Stranieri Temporaneamente Presenti – STP'* or 'temporarily present foreigners') (36,65). After their official registration as applicant for international protection, the reception conditions applicants are then granted access to are characterised by an overlapping, disorganised system of shelters where stays of six months or longer were routine in 2015 due to lack of capacity in the accommodation centres that were next in the transfer order. These shelters were often located in 'isolated or rural settings'. The 'temporary centres' that were established in response to this lack of capacity in turn lacked social services needed to assist applicants with special reception needs (65).

Gordon et al. (2019) conducted a qualitative, consultative study with 500 applicants for international protection living in a 'short-term holding centre' on Samos, one of the five Greek island 'hotspots' (72). High number of applicants arriving on the Greek islands combined with restricted movement into mainland Greece has resulted in applicants having to await their procedure in informal settlements outside the official camp, 'living in makeshift shelters and tents provided by NGOs'. Respondents reported a median of five months residence in the camp, with some staying for up to 39 months. Substandard nutrition and food access, poor hygiene and sanitary conditions and limited security were further reported, with conditions often being significantly worse in the informal settlements compared to the official camp (72).

A 2014 record on pregnant applicants' experiences of childbirth in Ireland provides a brief illustration of the Irish reception conditions in the background section (73). Applicants are housed in government funded accommodation centres under the 'direct provision system'. Conditions were also characterised by overcrowding, inadequate facilities, limited access to cooking facilities, insufficient weekly allowances 'with no opportunity for paid employment'. Accommodation centres were further situated in isolated and rural settings (73).

Gewalt et al. (2018,2019) provide an insight in reception conditions in Southern Germany through two qualitative studies of pregnant applicants' experiences of state-provided accommodation (74,75). After lodging their application for international protection, applicants are allocated to state-provided reception centres under a policy of 'compulsory dispersion', with policies in addressing special needs of pregnant applicants being known to vary between regions. A personal interview is realised within two days after the formal application, and applicants will eventually be transferred at any time after their personal interview to an accommodation centre, 'shared flats with kitchens for self-catering and communal sanitary facilities'. The application process can take up six months or longer, whereas study participants reported to have been 'transferred up to four times between state-provided reception centres'. When asked about their housing and neighbourhood quality, respondents made reports of high background noise, poor hygiene and sanitary conditions, shared sanitary facilities, limited privacy and security, insufficient monthly allowances and lack of autonomy (74,75).

Tankink et al. published a five-year cross-sectional study on potential risk factors for adverse perinatal outcomes among applicants for international protection in the Netherlands in 2021 (76). One of the main findings regarding reception conditions in the Netherlands was that 69.5% of all pregnant applicants 'were relocated between asylum seeker centres (ASC) at least once during pregnancy'. As applicants depend on a contracted organisation that has health centres in most ASC to access primary healthcare and perinatal care, frequent relocations may lead to 'discontinuity of care, repeated interventions and missed treatment leading to potentially dangerous medical situations' (76).

In the context of variable reception conditions among member states, the 2016 Reception Conditions Directive recast proposal entails further harmonisation of reception conditions among EU member states, 'reducing incentives for secondary movements and increasing applicants' self-reliance and possible integration prospects' (68,69). Full harmonisation has however never been considered feasible or desirable, as 'significant differences in member states' economic capacities' will continue to cause divergencies in reception conditions (69).

1.2.2. Stratifiers

Migration patterns change continuously. As Spijkerboer et al. (2018) already theorised, it is the access to existing migration routes that will shape the individual experience of each applicant (58). In accordance with the CSDH framework, socio-economic position plays a central role in stratifying the pre-departure possibilities applicants end up having when choosing between regular or irregular routes to the EU and will continue to affect further migratory choices and vulnerabilities along the way (54,58). Spijkerboer argues that selection of access to the global mobility infrastructure is therefore indirectly related to both gender and race, given the 'lower socio-economic status of women globally, and the weak socio-economic position of, for example,

black people in South Africa and the Maghreb' (58). As EU asylum and border policies set a framework that (pregnant) applicants need to navigate in seeking access to international protection in the EU, retrieved records provided empirical data on how the intersection of gender and race impacted their individual trajectories.

In the absence of legal and safe alternatives, three main, international routes lead to the southern border states: the Western Mediterranean, the Central Mediterranean and the Eastern Mediterranean route (18).

The Central Mediterranean route 'connects West and East Africa to Niger and Libya before entering Italy', through the island of Lampedusa. Again, socio-economic position will stratify for the time needed to reach Lampedusa. As irregular border passages in transit countries are often transactional, migrant women without sufficient resources resort to domestic work or the service industry, 'although employment conditions tend to merge labour with sexual requests and favours in trafficking spirals' early in their journey (18). Reports on opportunistic and systematic sexual violence by human smugglers or police officials after arrival in Libya, or the separation of pregnant women from their partners as they get arrested or forced into labour for human traffickers, further contribute to a gendered experience of the already dangerous route into Libya (18).
The risk of arrestation and detention after irregular entry in Libya diverts migrants to accommodation alternatives away from public space (18,77). Yet, in these alternative accommodations, women also have to negotiate their freedom on a daily basis, again putting them at risk of sexual violence, trauma, and distress (77). Conditions in the Libyan "hosting" or detention centres then are not only reported to be extremely violent and have poor hygienic and sanitary standards. Scholars furthermore argue that EU and Italian border policies have turned the Libyan detention centres susceptible for a corrupt, local cycle of arrest, detention, transactional release, 'and arrest once more' (77).

In their gendered, ethnographic study of routes into southern Europe, Grotti et al. (2018) describe the Central Mediterranean route as the most dangerous of all (18). The Western and Eastern Mediterranean route, respectively leading to passage into the Spanish enclaves Ceuta and Melilla and the Greek islands, produce similar, but 'perhaps subtler' forms of gendered vulnerability (18). Socio-economic position largely determines access to primary or antenatal care, as private care is often the only alternative for pregnant migrants in transit. Syrian nationals constitute the largest group of pregnant migrants along the EU side of the Western Mediterranean route, i.e. Melilla Centre for the Temporary Stay of Immigrants (CETI) (18). Following the European Court of Human Rights (ECtHR) ruling on *N.D. and N.T. vs. Spain,* the other side of the Spanish-Moroccan land border in Melilla has been contested to be 'a lawless zone of automatic expulsions' targeting sub-Saharan migrants attempting to cross the border (78). The European Centre for Constitutional and Human Rights (ECCHR) argues this form of institutionalised racism to be another example of Eurocentric cooperation agreements focusing on migration management without the EU 'ensuring that partner countries put appropriate mechanisms in place' (78).

1.2.3. Intermediary determinants

1.2.3.1. Migration-related stress

Experienced migratory distress factors have been associated with a high risk of developing mental health problems in forcibly displaced people by a large body of quantitative and qualitative data. A systematic review of systematic reviews on 'perinatal health outcomes among asylum seekers and refugees' by Heslehurst et al. (2018) further reported mental health, 'including postnatal depression, antenatal depression, anxiety and post-traumatic stress disorder' to be the most frequently reported outcome (20), with migration-related stress being the 'most frequently and consistently reported risk factor for the development of mental health disorders amongst migrant women' (20).

As in the general population, studies have shown how adverse mental health can in turn have a negative impact on maternal and perinatal health outcomes in applicants for international protection (31). Of the 120 pregnant applicants that consulted a psycho-social walk-in clinic 'addressing pregnant refugees' and new mothers' maternity mental health care needs' for example, 87.4% experienced obstetric complications (31).

Non-EU studies have accordingly put 'asylum-seeking status' forward as a risk factor for poor mental health, with increased prevalence rates of PTSS symptoms reported among applicants for international protection (30).

Gerard and Pickering (2012) explored how the Dublin system (at that time Dublin II regulation) contributed to feelings of depression and isolation by forcing returnees to remain in Malta, their country of first arrival. As onward migration becomes 'unpredictable and uncertain', women remain suspended in a state of 'perpetual arrival' disrupting family reunification or their desire to apply for international protection in member states with 'more gender-sensitive refugee determination procedures'.

Gewalt et al. (2018,2019) further conceptualised how stressful material circumstances in Germany's reception sector exert a 'perceived negative impact on the health and wellbeing' of pregnant applicants (74,75). Participants reported that having to share a room resulted in a negative impact on their feeling of security and privacy and poor sleep quality (75). Restrictive regulations on their consumption potential and catering were experienced to negatively affect their nutrition and wellbeing. Participants further related the housing, sanitary and hygiene conditions directly to both their physical and mental health and expressed a fear of these conditions interfering with the healthy course of their pregnancy (75). Substandard reception conditions on the Greek island of Samos were also associated with an increased risk of having a 'psychological disorder' (72).

Frank et al. (2021) further conducted a qualitative, meta-ethnographic synthesis of the existing literature on maternity experiences of pregnant applicants in EU countries (79). Recurrent stress-related subthemes were: language or communication barriers, isolation and loneliness, status uncertainty and ongoing dislocation, but also how positive interactions with healthcare professionals resulted in feelings of safety (79).

1.2.3.2. Gender-based violence

Community-based participatory research by Keygnaert et al. (2012) showed that most participating refugees, applicants for international protection and undocumented migrants had

experienced personal (39%) or peer (35%) victimisation of sexual violence after their arrival in the EU (32). The majority of victims were either applicants for international protection or refugees (32). Further research conducted in eight different EU member states has shown that living in a reception centre as such is a risk factor for experiencing sexual violence for female residents (33). Although intimate partners or people known to the victim are frequently mentioned as perpetrator, comparable to the general population, more than one fifth of perpetrators '(…) were either persons in authority – including those assigned to their protection – or were unknown to the victim' (32,33). Moreover, most cases consisted of multiple types of violence, including physical, psychological and socio-economic violence, as well as harmful cultural practices (i.e. forced marriage, child marriage, honour-related violence) (32).

A more recent, Italian study by Bronsino et al. (2020) further warned for the underestimation of the magnitude of sexual and gender-based violence (SGBV) among applicants for international protection out of 'women's fear of retaliation (…)' or of a possible negative impact on their application procedure (34). Applicants who experienced SGBV in their sample were 'sicker than their counterparts', with increased rates of neurological and genital pathology, sexually transmitted infections and mental health problems like post-traumatic stress syndrome or symptoms of depression or anxiety (34).

1.2.3.3. Access to care

Barriers in accessing care experienced by pregnant applicants have been situated on the structural, interpersonal (e.g. interaction with healthcare professionals) and personal level (e.g. language or cultural barriers). The scope of this thesis required a focus on recurrent subthemes that could be retrieved in records reporting on structural barriers.

The first recurrent subtheme was 'navigating the system'. Bureaucracy, inadequate information on available support services, or when provided, verbal or written information not being in a language understandable to the applicant can lead to confusion and misconceptions about their entitlement to care (20,80–83). A Finnish study applying the 'three delays model framework' to maternity care for 'humanitarian migrants', derived that the first connection with the healthcare system is often made by 'whoever holds the language' and rarely by the applicants themselves (80).

Detention of pregnant applicants often results in further isolation from sources of help in finding their way into the system, enhancing their dependency on detention centre staff who sometimes refuse or delay their access to care (83). Subsequent 'mistrust towards authorities' among applicants in accessing care has also been recorded in this context (81).

A second subtheme that could be retrieved was applicant's 'socio-economic status', related to insufficient financial resources, transport issues, and other material or housing circumstances (e.g. set meal times) (20,84). Limited or no access to childcare was also noted as a barrier in accessing ANC (84).

1.2.3.4. Continuity of care

The most important recurring subtheme that could be retrieved in records undermining continuity of care for pregnant applicants was the common practice of 'relocation', both between and within member states.

Gerard and Pickering (2012) reported that seven of the 26 interviewed migrant women had been sent back to Malta from another EU member state based on the default first-entry criterium under the Dublin II regulation. Two of whom had been sent back twice. More recent data on the number of transfers of pregnant applicants under the Dublin III regulation could however not be found.

As previously mentioned, Gewalt et al. (2018, 2019) mention transfer rates of pregnant applicants within Germany of up to four times during their pregnancy (74,75). Tankink et al. (2021) made similar observations in the Netherlands, with estimated repeated transfer rates (i.e. two times or more during pregnancy) rising up to 28.2% of all pregnant applicants (76).

Despite existing guidelines on the timing of relocation (76), British data on pregnant applicants for international protection has shown relocation rates of 40% of applicants who were transferred within two weeks of delivery, either from outside or within the United Kingdom (52).

Reports on relocation of pregnant applicants in the United Kingdom prior to Brexit further showed increased feelings of social exclusion and isolation. Separation from their partners or other family members could lead to 'practical and emotional difficulties for women during labour (…) having no one to look after their older children and/or having to experience labour on their own with no birth partner' (84).

Grotti et al. (2018) mention isolated private care contacts along the West Mediterranean Route, yet the conducted search strategy could not retrieve any data on the impact of intra-EU migration patterns on continuity of maternity care among applicants for international protection.

1.3. Discussion

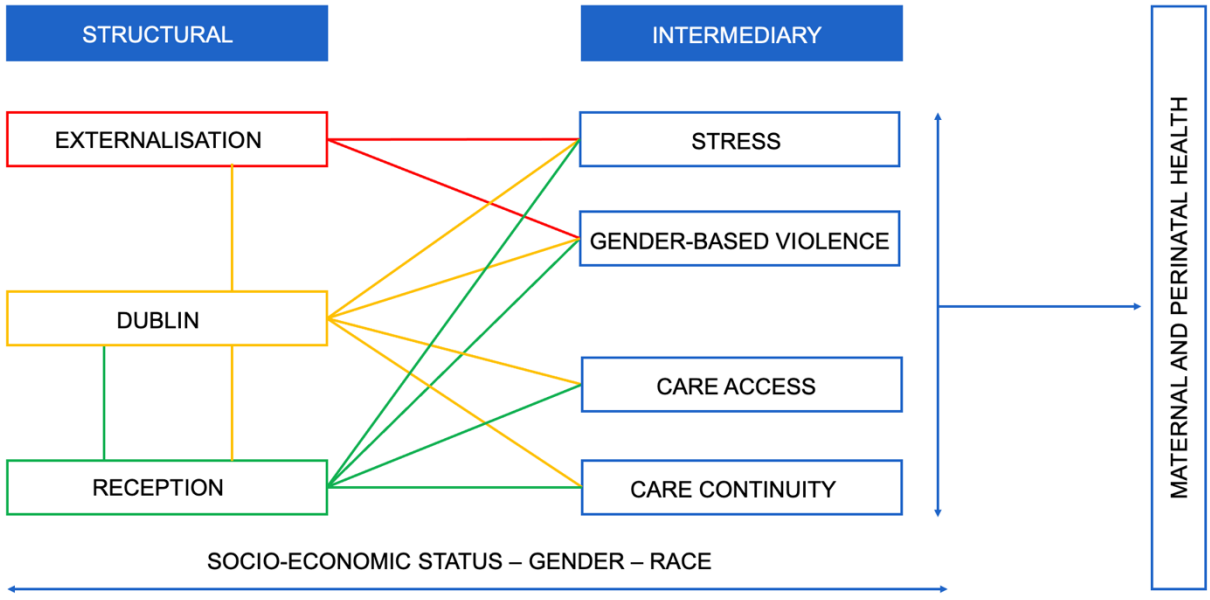

Figure 2 Applied CSDH framework

Integrating the emerging subthemes in both structural and intermediary determinants resulted in the development of an applied version of the CSDH framework (Figure 2). This framework identifies the different mechanisms through which EU asylum and border policies directly and indirectly determine maternal and perinatal health outcomes in applicants for international protection.

In their gendered ethnography of migratory routes into southern Europe, Grotti et al. (2018) conceptualised how each individual applicant's trajectory is decisive for their pregnancy experience and outcome. The results of this thesis show how the three structural determinants of the applied framework each shape their trajectory of entry, relocation, and reception within the EU. The connecting lines between the structural determinants refer to how each structural determinant interacts with at least one other structural determinant. It is exactly this interaction that illustrates how EU migration and asylum policies can generate a myriad of possible trajectories that will define applicants' pregnancy experience and outcome along the route, mediated by the four intermediary determinants of maternal and perinatal health.

The EU's externalisation policies are the first structural determinant that directs their trajectory of entry. Unequal access to the EU mobility infrastructure, directly stratified by socio-economic position and indirectly by gender and race, is argued to leave women seeking international protection with little alternatives to the irregular and inherently more dangerous entry routes into the EU. The intensified EU cooperation agreements with third countries in the past decade has provided a myriad of examples of implementation gaps between the intended goal of migration management and securitisation and the protection of fundamental rights (61). Scholars argue that the persistent Eurocentric approach in these agreements, too often tainted by a lack of democracy and transparency, leads to different contexts of non-cooperation in the involved third countries, further increasing the risk of human rights violations along the targeted migration routes (60).

The second structural determinant of applicants' individual trajectories mainly refers to the Dublin III regulation. Although originally aimed to combat irregular secondary movement within the EU, its focus on 'responsibility allocation' instead of responsibility sharing is contested to refrain external border member states from investing in their own reception sector and further incentivises the externalisation of responsibilities to third, non-EU countries. Moreover, the resulting 'race to the bottom' effect among both northern and southern member states maintains or may even induce new secondary movement patterns along changing, often irregular routes from 'less' to 'more desirable' member states. Divergence in member states' economic capacities therefore does not seem to be the only explanation of why full harmonisation of reception conditions is currently not politically feasible or 'desirable'. Lengthy procedures and inefficient implementation of Dublin transfers further prevent these secondary movements to be addressed accordingly.
Where solidarity between member states fails, external border states resort to extra migration management 'tools', such as arbitrary detention or bilateral cooperation agreements with third countries.

The secondary 'race to the bottom' effect in reception conditions among member states shows how the second and third structural determinant interact in creating secondary and often irregular and more dangerous movements (64). The Dublin system and reception system in

member states are furthermore closely related as applicants are supposed to remain having access to the reception system of the member state that requested their transfer until a transfer decision is made (66).
Reception conditions *in se* are furthermore the most direct determinant of the applicant's experience of pregnancy and maternity care after arrival in the member state where the application is lodged. Bureaucracy, lengthy application procedures and substandard material conditions are described to constitute to a new phase of migration-related stress (65,72–75). Limited privacy in reception centres does not allow for the processing of traumatic events experienced prior to arrival, while a gendered risk of re-traumatisation through sexual violence and discrimination has further been observed in numerous studies among different EU member states (32–34,74,75).

The stratifiers 'socio-economic status', 'gender' and 'race' are essential in connecting the structural with the intermediary determinants. Despite existing EU anti-discrimination law and the 2011 Istanbul Convention (70) having served as an important opportunity for integrating a gender-sensitive approach in both existing EU asylum and border policy and recast proposals, Sub-Saharan African women with limited resources often face the most dangerous routes in their search for international protection (18,78). By looking at the applied framework in phases of entry, transit and reception, EU asylum and border policies that target these secondary movements drive applicants in a continuous negotiation on their stratified access to the next phase. Although negotiation does hold the opportunity for agency and self-determination, pervasive power dynamics present in each negotiation increase (pregnant) applicants' risk of SGBV, discriminatory access to international protection in the EU and adverse maternal and perinatal health.

The structural determinants defined in the applied framework create a stratified reality for pregnant applicants to navigate their search for international protection in the EU. As these realities are often characterised by different migratory distress factors and potential violations of fundamental rights, applicants face a high risk of developing mental health problems during their trajectory of entry, transit, and reception. As adverse mental health problems in pregnancy can be related to obstetric complications, 'migration-related stress' is the first and main intermediary determinant of perinatal and maternal health outcomes in the applied framework (19,20,85,86). The second intermediary determinant of 'SGBV' closely interacts with migration-related stress, causing trauma and adverse mental health and other migratory-related stress factors increasing the risk of (re)victimisation (32,33). Furthermore, the inherent risk of unwanted pregnancy, unsafe abortion, as well as sexually transmitted infections are known to be direct determinants of adverse maternal and perinatal health (34).

Allowing for transfers between member states and practices of arbitrary detention, the current Dublin system arguably adds to the reality of unequal 'access' to and 'continuity' of care for pregnant applicants for international protection, the two final intermediary determinants of maternal and perinatal health in the applied CSDH framework. The 2013/33 Reception Conditions Directive however does provide a binding commitment to ensuring access to *necessary*, *essential*, and *appropriate* care and acknowledges pregnant applicants to have special reception needs (47). Yet, divergence in national implementation of these requirements and further relocation practices within member states further hampers accessible and continuous care. The emerging subtheme of applicants' 'distrust in authorities' developed along the route and through EU restrictions on

secondary movement can be considered as another bridging element between the structural determinants of externalisation, transit and reception and the intermediary determinants of access to and continuity of care (80).

Of course, the existing legal order limit EU competences to a mere 'supportive, coordinating, or supplementary role' in respect of member states' responsibility to, in this case, ensure access to necessary care (48). In the increasing implementation gap between migration management and the protection of fundamental rights, scholars argue that the European courts therefore are the only main actors left in protecting health as a human right for applicants for international protection. The CJEU case of *C.K. et al. v. Supreme Court of Republic of Slovenia* provides an important example of the translation of the right to health care for pregnant applicants through public litigation, combining different elements of the applied CSDH framework (48,87)

On the 16th of August 2015, a Syrian national named C.K. and. an Egyptian national H.F., entered the EU through a visa validly issued by the Republic of Croatia (87). After a short stay in Croatia, they both crossed the Slovenian border to arrive in a reception centre in the capital of Ljubljana where they lodged an application for international protection. C.K was pregnant at the time of the Slovenian border crossing. On the 28th of August 2015 then, Slovenian authorities requested the Republic of Croatia to take charge of the examination of their application for international protection under Article 12.2. of the Dublin III regulation or the visa criterium. Although Croatia accepted the request on the 14th of September 2015, The Republic of Slovenia did not proceed with the procedure until after the 20th of November 2015, the date on which C.K. gave birth to her child A.S. An application for international protection for A.S. was subsequently lodged in Slovenia on the 27th of November 2015, and all three applications were examined together.
After the Slovenian Ministry of Interior refused to examine their application twice and ordered their transfer to the Republic of Croatia, the case was referred to the Court of Justice of the European Union (CJEU) as C.K. et al claimed that the requested transfer would amount to inhuman and degrading treatment under Article 4 of the EU Charter of Fundamental Rights. C.K. claimed that the transfer 'would have negative consequences for the state of health of C.K.' and 'likely to affect the well-being of her new-born child'. Given the advanced stage of her stated high-risk pregnancy at the time of the transfer request, and the fact that C.K. started suffering from post-natal depression and suicidal ideations, C.K. et al argued that Croatia did not have adequate reception facilities that would address her special needs. A specialist psychiatrist further stated that her psychological state was mainly caused 'by uncertainty regarding her status and the resulting stress' and that her illness required her and her new-born child to stay in the reception centre in Ljubljana (87).
In its final judgement, the CJEU reasoned that a transfer could only take place if there is no risk of the violation of the transferee's fundamental rights, in this case the 'prohibition of inhuman and degrading treatments, taking particular account of her health condition' (48,87). The CJEU further affirmed the responsibility of member states to provide necessary care' and 'essential treatment of serious mental disorders' under Article 19 of the 2013/33 Reception Conditions Directive (47,48). The CJEU concluded that 'it cannot be ruled out that the transfer of an asylum seeker whose state of health is particularly serious may, in itself, result, for the person concerned, in a real risk of inhuman or degrading treatment within the meaning of Article 4 of the Charter, irrespective of the quality of the reception and the care available in the Member State responsible for examining his application', confirming that 'circumstances in which the transfer of an asylum seeker with a particularly serious mental or physical illness would result in a real and proven risk

of a significant and permanent deterioration in his state of health, that transfer would constitute inhuman and degrading treatment, within the meaning of that article'(48,87). However, as the assessment of these 'circumstances' falls under the responsibility of the transferring member state, it remains difficult to, first, identify systemic deficiencies in the reception and health system of the receiving member state, and second, provide solid evidence that these deficiencies will result in a risk of 'significant and permanent deterioration (…) of health' (48).

This case shows how the CJEU still has an important role in defending applicants' fundamental rights throughout their individual trajectories. Its judgement however remained limited to the mere acknowledgement of applicants' right to health care rather than effectively protecting it. Within the current CEAS framework, it remains hard to prove that your fundamental right to health is threatened by decisions made by EU member states regarding your application for international protection (48). Scholars argue that providing more normative content of the care package per medical condition could contribute to a more solid legal basis for the effective protection of applicants' right to health care (48). This leaves an important opportunity for healthcare professionals to engage in protecting applicants' fundamental right to health through strategic litigation and the rule of law.

2. Defining necessary antenatal care: review of international guidelines

2.1. Methods

2.1.1. Research questions and approach

The second part of this thesis aims to explore the available normative content on *necessary* ANC for pregnant applicants for international protection by performing a systematic review of existing clinical guidelines. The applied CSDH framework in part one of this thesis illustrates how pregnant applicants in the EU can face several risks and complications throughout their pregnancy that are directly and indirectly mediated by current EU asylum and border policies. The available evidence on adverse maternal and perinatal health outcomes among applicants for international protection further adds to a higher risk profile of their pregnancies compared to those of their host population counterparts. Available clinical guidelines on maternal and perinatal healthcare however required some pragmatic choices for this exercise to remain both legally and clinically consistent.

First, by using 'MAR' or 'migrant women' as their study populations, available migrant-sensitive guidelines become less sensitive to the specific entitlement to care conditions per legal status. The recommendations made in these guidelines therefore tend to remain rather general. The case of *C.K. et al. v. Supreme Court of Republic of Slovenia* shows how more applicable and detailed normative content on the care package pregnant applicants should be entitled to is needed to verify whether member states adhere to the reception condition of providing *necessary care* or if decisions made during asylum procedures (e.g. Dublin transfers) infringes applicants' right to health care.

Second, although the post-natal period plays a unique and pivotal role in defining maternal health and well-being, separate guidelines often exist on the antenatal and post-partum period. Since the antenatal period shapes the course of the postnatal period and allow for planning of postnatal care, guidelines on the antenatal period were chosen for this exercise to remain clinically consistent.

The provision of Article 19 of the 2013/33 Reception Conditions Directive on 'necessary care' consists of two requirements.

First, it requires member states to ensure that necessary health care 'at least' includes 'emergency care and further essential treatment of illnesses and of serious mental disorders', these two considerations led to the decision to start with a systematic review of existing clinical guidelines on routine ANC for low-risk pregnancies (47). The generated normative content would then be used to conceptualise the minimum care package all applicants should be entitled to in each member state.

The results from this review will then be matched with emerging themes and recommendations from the available migrant-sensitive guidelines, aiming to extrapolate which additional 'necessary medical or other assistance' should be provided to pregnant applicants for international protection, in line with the second requirement of the 2013/33 Reception Conditions Directive provision on providing 'necessary care' (47).

The study population in this exercise is identical to the one in part one of this thesis, i.e. 'all third-country nationals that are pregnant while filing a formal application for international protection

in an EU member state, or who become pregnant throughout their following asylum procedure, in respect of which a final decision has not yet been taken'.

The following research questions were covered:

1. What is the recommended timing of inclusion in ANC programs (gestational age, in weeks) for a timely detection of pregnancy-related complications and prevention of concurrent diseases in low-risk pregnancies?
2. What is the minimum number of ANC contacts recommended for a timely detection of pregnancy-related complications and prevention of concurrent diseases in low-risk pregnancies?
3. What is the minimum content of these ANC contacts recommended for a timely detection of pregnancy-related complications and prevention of concurrent diseases in low-risk pregnancies?
4. Which health system interventions are recommended for optimising accessibility, quality, and coordination of care?

Neonatal outcomes (i.e. morbidity, mortality) were considered to be outside the scope of this report, again to maintain legal focus on the right to health for the pregnant applicant.

2.1.2. Literature search and selection

A systematic search for evidence-based guidelines was then conducted. Used databases for the initial search were PubMed and Embase/MEDLINE. Annex 3 contains a PRISMA 2020 flow diagram providing a complete overview of the screening procedure.

Among all retrieved records, the Australian Government Department of Health (AGDH) clinical practice guideline on perinatal care was the only clinical guideline that was found to be eligible for review. A secondary search in the following organisation-specific databases and websites was therefore performed, using the search terms 'pregnancy', 'antenatal care', and 'prenatal care':

- Belgian Health Care Knowledge Centre [Federaal Kenniscentrum voor de Gezondheidszorg, Centre Fédéral d'Expertise des Soins de Santé, KCE, in Dutch and French]; Available from: https://kce.fgov.be
- Perinatal Care College [College Perinatale Zorg, CPZ, in Dutch]; Available from: https://www.kennisnetgeboortezorg.nl
- Dutch Society of Obstetrics and Gynecology [Nederlandse Vereniging voor Obstetrie en Gynaecologie, NVOG, in Dutch]; Available from: https://www.nvog.nl
- The Society of Obstetricians and Gynaecologists of Canada (SOGC); Available from: https://sogc.org
- Publich Health Agency Canada (PHAC); Available from: https://www.canada.ca/en/public-health.html
- American College of Obstetricians and Gynecologists (ACOG); Available from: https://www.acog.org
- National Institute for Health and Care Excellence (NICE); Available from: https://www.nice.org.uk
- WHO publications repository (WHO); Available from: https://www.who.int/publications

Table 1 provides an overview of the eight guidelines that were eventually selected for review:

National guidelines	Publication year	Organisation	Title and reference
EU member states			
Belgium	2015	KCE	Which examinations are recommended during pregnancy? [Welke onderzoeken zijn aanbevolen bij een zwangersschap?, in Dutch] (88)
Netherlands	2015	NVOG	Basic Prenatal Care [Basis Prenatale Zorg, in Dutch] (89)
	2020	CPZ	Care standard Integrated Birth Care [Zorgstandaard Integrale Geboortezorg, in Dutch] (90)
Third countries			
United States of America (USA)	2017	ACOG	Guidelines for Perinatal Care (91)
Canada	2020	PHAC	Family-Centred maternity and newborn care: National guidelines, Chapter 3: Care during pregnancy (92)
Australia	2020	AGDH	Clinical Practice Guidelines: Pregnancy Care (93)
United Kingdom (UK)	2021	NICE	Antenatal Care (94)

International guidelines	Publication year	Title
WHO	2016	WHO recommendations on antenatal care for a positive pregnancy experience (95)

Table 1 Guideline selection overview

Available migrant-sensitive guidelines were retrieved through purposive sampling, also with 'publication type other than guideline', 'publication date before 2012', 'language other than Dutch, English, French, German, and Italian' and 'full-text unavailability' as used exclusion criteria. The following guidelines were included for content review:

- ORAMMA. Approach to Integrated Perinatal Healthcare for Migrant and Refugee Women (D4.2.). 2017. (50)
- Operational Refugee and Migrant Maternal Approach (ORAMMA). Practice Guide for Perinatal Health Care of Migrant, Asylum-seeking & Refugee Women (D4.1.). 2017. (96)
- Bo Brancheorganisatie Geboortezorg, GezondheidsZorg Asielzoekers, Centraal Orgaan opvang Asielzoekers (COA), Royal Dutch Organisation of Midwives [Koninklijke Nederlandse Organisatie van Verloskundigen], Menzis-COA-Administratie, Dutch Society for Obstetrics and Gynecology [NVOG], et al. Chain guideline Birth care Asylum seekers [Ketenrichtlijn Geboortezorg Asielzoeksters, in Dutch]. 2018. (97)

- WHO Regional Office for Europe. Improving the health care of pregnant refugee and migrant women and newborn children – Technical guidance on refugee and migrant health. Copenhagen; 2018. (49)

2.1.3. Quality appraisal and analysis

The guidelines were first assessed for methodological quality using the validated Appraisal of Guidelines for Research and Evaluation (AGREE) II instrument.
Each guideline was rated on 23 items organised into six quality domains: 'scope and purpose', 'stakeholder involvement', 'rigour of development', 'clarity of presentation', 'applicability', and 'editorial independence'. The AGREE II tool finishes its methodological quality assessment with whether or not the assessed guideline should be recommended for use (i.e. yes; yes, with modifications; no), in this case further content review. To come to an overall assessment of each guideline relevant to the scope of this thesis, the quality domains 'scope and purpose' (i.e. overall and specific objectives), 'stakeholder involvement' (i.e. patient and professional representation), 'rigour of development', and 'applicability' (i.e. healthcare setting, practical or theoretical focus and resource implications) were chosen as defining variables.

Aiming to generate applicable and detailed normative content on the minimum care package all applicants should be entitled to, a content review of the assessed guidelines on routine ANC was then performed, guided by the four research questions mentioned under paragraph 6.1.1. The results from this content review were then matched with emerging themes and recommendations from the included migrant-sensitive guidelines to further concretise which additional 'necessary medical or other assistance' should be provided to pregnant applicants for international protection.

2.2. Results

2.2.1. AGREE II: guideline methodological quality assessment

2.2.1.1. Scope and purpose

All guidelines share the overall scope of improving pregnancy outcomes through optimising the accessibility, quality, and coordination of routine ANC for low-risk pregnancies. Specific health questions are often summarised and structurally formulated using validated question frameworks such as the Population-Intervention-Control-Outcome (PICO) framework for intervention reviews. The 2015 KCE, 2020 CPZ, 2017 ACOG and the 2020 PHAC guidelines however did not provide an open access summary of covered health questions or targeted outcomes.

2.2.1.2. Stakeholder involvement

The views and preferences of the study population have generally been sought, but often remain literature based. The 2020 CPZ, 2020 AGDH and the 2016 WHO guidelines did involve direct patient representation in their guideline development process. The 2020 AGDH guideline opened its external review process for a public consultation prior to publication, while the 2020 CPZ suggested patient reported outcome measures (PROM) as quality indicators in monitoring and

improving delivered care. The 2015 KCE guideline integrated patients' perspectives in the formulation of their recommendations, through their general approach of shared decision making and the systematic consideration of the potential impact of investigated screening and diagnostic test results on the individual patient's experience. The authors however stated that a literature review on patient-centred care was outside the scope of the guideline.

The 2016 WHO guideline further excelled in professional representation by including 20 external experts and stakeholders in public health and nutritional sciences, obstetric and neonatal medicine, global health, and relevant international organisations, further ensuring gender and geographical balance. Other guidelines mostly included medical experts involved in perinatal care, such as obstetricians and gynaecologists and midwives.

2.2.1.3. Rigour of development

The 2020 CPZ, 2017 ACOG and the 2020 PHAC guidelines do not provide an open access overview of used methods, specific health questions, or resulting evidence reviews and recommendations. All other guidelines transparently demonstrate to rely on systematic methods to search for evidence and how these have resulted in rigorous evidence reviews. Health benefits and risks are adequately considered for each recommendation made, often with a clear link to the supporting evidence. The 2015 KCE, 2020 PHAC, 2020 AGDH, 2021 NICE and the 2016 WHO guidelines further state to have been reviewed by external experts prior to publication.

2.2.1.4. Clarity of presentation

All guidelines provide specific and unambiguous recommendations, followed by authors' considerations on the rationale behind and impact of each recommendation. Due to the chronological integration of recommendations in the main text of the 2020 CPZ, 2017 ACOG and 2020 PHAC guidelines, key recommendations are harder to identify in comparison to the other guidelines.

2.2.1.5. Applicability

Whereas the 2020 CPZ, 2017 ACOG and the 2020 PHAC guidelines maintains a more general, evidence-based focus in formulating recommendations, all other guidelines systematically integrate application facilitators and barriers in each recommendation. This increases their applicability to comparable, often higher income healthcare settings. The considered facilitators and barriers in the 2016 WHO guideline reflect its primary focus on lower and middle-income settings, although its resulting 2016 WHO ANC model provides a general ANC blueprint that can be applied to any setting. Resource implications are consistently considered by the 2020 AGDH, 2021 NICE and the 2016 WHO guidelines.

2.2.1.6. Editorial independence

Funding sources and potential conflict of interests have been stated rather inconsistently. The 2015 KCE, 2020 AGDH, and the 2016 WHO guideline specify that its funding sources had no influence on the guideline's content and further adequately recorded potential competing interests of guideline development group (GDG) members. The procedure to address competing

interests was only recorded in the 2020 AGDH and the 2016 WHO guidelines. No similar statements were provided nor accessible online for the 2020 CPZ, 2017 ACOG, 2020 PHAC and the 2021 NICE guidelines.

2.2.1.7. Guideline variable framework

Table 2 represents the AGREE II defining variable framework that was developed for further guideline content review.

Guidelines	*Scope and purpose*		*Stakeholder involvement*		*Rigour of development*	*Applicability*		
	Overall objectives	Specific objectives	Patients	Professionals		Healthcare setting	Focus	Resource implications
2015 KCE *Belgium*	Define best clinical basic care for low-risk pregnancies Prevent suboptimal care, inefficient use of resources and health inequity	Timing and indication of routine ANC examinations 34 review questions No target outcomes specified	Shared decision-making No GDG representation No public consultation No supporting evidence review	Multidisciplinary GDG of mostly medical experts	Systematic search methods Systematic health benefits and risks consideration External review AGREE II criteria largely integrated	Higher income setting; Belgium	Theoretical Practical: ANC algorithm	Inconsistently mentioned No new economic analyses or primary economic modelling
2015 NVOG *The Netherlands*	Uniform, minimum care Optimise quality, safety, and efficacy of care Increasing patients' trust and satisfaction	Minimum number and content of ANC contacts Detection and treatment of most prevalent obstetric complications	No GDG representation Retrospective focus group discussions (FGD)	Monodisciplinary GDG Obstetricians and gynaecologists only	Systematic search methods Systematic health benefits and risks consideration No mention of external review	Higher income setting; the Netherlands	Theoretical No practical guidance or implementation considerations	Inconsistently mentioned Expert opinion-based cost evaluations No new economic analyses or primary economic modelling

	Improving pregnancy outcomes	Six review questions Specified target outcomes			AGREE II criteria largely integrated			
2020 CPZ *The Netherlands*	Care standard Prevent perinatal morbidity and mortality Improve stakeholder collaboration Individualised, accessible, and cost-effective care	Patient-centred care Coordination and integration of care No summary of covered review questions No target outcomes specified	GDG representation No public consultation PROM as quality indicators Supporting evidence review	Multidisciplinary GDG of mostly medical experts, organisations for parents' and children's health and wellbeing	Search methods not specified No systematic health benefits and risks consideration No mention of external review	Higher income setting; Netherlands	Theoretical Inconsistent practical guidance and implementation considerations No clinical practice guideline	Inconsistently mentioned No new economic analyses or primary economic modelling

2017 ACOG *USA*	Improving pregnancy outcomes Reducing maternal and perinatal mortality and morbidity Covering the full perinatal care spectrum Perinatal care coordination	Patient- and family-centred care No summary of covered review questions No target outcomes specified	Not specified Supporting evidence review, attention for specific patient groups	Not specified	Search methods not specified No systematic health benefits and risks consideration No mention of external review	Higher income setting; United States	Theoretical Inconsistent practical guidance and implementation considerations	Inconsistently mentioned No new economic analyses or primary economic modelling
2020 PHAC *Canada*	Assist implementation and evaluation of maternal and newborn health care policies/practices Protect, promote, and restore physical and mental well-being	Family-centred Maternity and Newborn Care No target outcomes specified	No GDG representation No public consultation Supporting evidence review, attention for specific patient groups	Multidisciplinary GDG of mostly medical experts	Search methods not specified No systematic health benefits and risks consideration No mention of external review	Higher income setting; Canada	Theoretical Inconsistent practical guidance and implementation considerations No clinical practice guideline	Inconsistently mentioned No new economic analyses or primary economic modelling

	Improve ANC accessibility							
2020 AGDH *Australia*	Improve health and ANC experience of pregnant women and their babies Promote consistency of care	Woman-centred care 10 topics; 62 subtopics and sets of systematic reviews Inconsistently specified target outcomes	GDG representation Public consultation Supporting evidence review, attention for specific patient groups	Multidisciplinary GDG of mostly medical experts, methodology expert	Systematic search methods Systematic health benefits and risks consideration AGREE II criteria fully integrated External review	Higher income setting; Australia	Practical Practice summary per recommendation Systematic implementation considerations	Systematically mentioned when evidence available New economic analyses performed for 5 subtopics
2021 NICE *UK*	Organisation and delivery of ANC Improve ANC accessibility	Routine ANC Interventions for common problems during pregnancy 23 review questions	No GDG representation Literature based equality impact assessment Patient-reported review	Obstetricians and gynaecologists, midwives	Systematic search methods Systematic health benefits and risks consideration AGREE II criteria largely integrated	Higher income setting; United Kingdom, NHS	Practical ANC algorithm	Systematically mentioned New economic analyses or primary economic modelling when relevant to the review question

		Specified target outcomes	question outcomes		External review			
2016 WHO	Enabling health and well-being of patients throughout pregnancy and childbirth	'Positive pregnancy experience' Detection of pregnancy-related complications Prevention of concurrent diseases at routine ANC visits Human rights-based approach 49 review questions Specified target outcomes	GDG representation Literature based scoping review on patients' views and preferences	Multidisciplinary GDG Geographical and gender representation	Systematic search methods Systematic consideration of health benefits and risks External review AGREE II criteria largely integrated	Lower and middle-income settings Applicable to all healthcare settings	Practical 2016 WHO ANC model	Systematically mentioned Evidence- and expert-opinion based cost evaluations No new economic analyses or primary economic modelling

Table 2 AGREE II defining variable framework

2.2.1.8. Overall assessment

Although their recommendations cannot always rely on high-quality supporting evidence, most cited guidelines share a high level of methodological rigour. The 2020 CPZ, 2017 ACOG and the 2020 PHAC guidelines could not always be assessed accordingly since they did not provide an open access overview of used methods. All guidelines share a comparable scope and purpose, with the 2020 AGDH, 2021 NICE and the 2016 WHO guidelines being more practically applicable, while the 2015 KCE, 2020 CPZ, 2017 ACOG and the 2020 PHAC guidelines adhere to a more theoretical policy focus. Resource implications are systematically considered by the 2016 WHO and 2021 NICE guidelines. Patients' views and preferences are inconsistently represented and often integrated through supporting evidence reviews. The 2020 CPZ, 2020 AGDH and the 2016 WHO guidelines ensured direct patient representation in their guideline development process. The 2016 WHO guideline is the only guideline to explicitly prioritise its applicability to lower and middle-income healthcare settings.

Table 3 provides an overview of the author's conclusions on whether the assessed guidelines should be included for further content review for this report. The recommended modifications are applicable for general use or future guideline updates. The decision to exclude the 2020 PHAC guideline from further content review was motivated by its methods and data saturation being reached, with no transparent reporting on used methods and the reader often being referred to external guidelines that were already included in this review (i.e. ACOG, NICE).

Guidelines	No	Yes	Yes, with modifications	Modifications
2015 KCE *Belgium*			X	- Increase patient representation - Systematic consideration of resource implications - Provide implementation tools
2015 NVOG *The Netherlands*			X	- Increase patient and professional representation - Increase transparency on used methods - Provide implementation tools
2020 CPZ *The Netherlands*			X	- Provide clarity on responsibility distribution and practice recommendations - Systematic consideration of resource implications - Increase transparency on used methods
2017 ACOG *USA*			X	- Increase patient representation - Systematic consideration of resource implications - Increase transparency on used methods

2020 PHAC *Canada*	X			No
2020 AGDH *Australia*		X		No
2021 NICE *UK*		X		No
2016 WHO		X		No

Table 3 Guideline inclusion assessment

2.2.2. Content review: routine ANC guidelines

2.2.2.1. Timing of inclusion and minimum number of ANC contacts

The 2015 KCE guideline recommends a first ANC contact in the first trimester before 14 weeks of gestation. The authors then propose an ANC algorithm of 10 contacts for nulliparous and seven for parous patients with a low-risk pregnancy. These contacts can be planned with the obstetrician, midwife, or general practitioner. However, no specifications are provided on when these extra contacts for nulliparous patients should be planned.

The 2015 NVOG guideline does not specify a recommended timing of inclusion in ANC. The authors do consider a minimum of six to nine contacts to be sufficient to screen for hypertensive disorders of pregnancy and gestational diabetes. There was no difference in the relative risk of foetal growth restriction for the reduced number compared to the standard number of ANC contacts. The risk of preterm birth (defined as delivery before 37 weeks of gestation) would be elevated when compared to the standard number of ANC contacts (i.e. 13-14 contacts). The moderate power of the supporting evidence however could not convince the authors when taking the limited available options for effective preventive measures, associated costs, and patients' preferences into consideration. The guideline underlines the importance of individual risk assessment and adequate patient education at each contact. The retrospective focus group discussions valued quality over quantity in ANC contacts considering self-reported maternal satisfaction.

The 2020 CPZ guideline recommends the intake to take place before nine weeks of gestation. With no literature-based consensus on the recommended minimum number of following contacts, the authors recommend developing an organisation-specific, basic ANC program for uncomplicated pregnancies, equally distributed throughout a patient's pregnancy. This blueprint program should then be discussed with the patient before 16 weeks of gestation and individualised into a personal *birth care plan*.

The 2017 ACOG guideline underlines the need for individualisation in determining the required frequency of ANC contacts for each patient. The first contact 'typically occurs' in the first trimester, without further specifications on the ideal timing of inclusion (91). The recommended frequency is differentiated by the patient's parity. A patient with an uncomplicated, first pregnancy should be offered one contact every four weeks in the first 28 weeks of gestation, once per two weeks until 36 weeks of gestation, and then weekly until delivery (i.e. 13 ANC contacts for an at-term pregnancy). Parous patients with subsequent uncomplicated pregnancies can be offered less frequent contacts if additional contacts are available when needed.

The 2020 AGDH guideline recommends the first ANC contact to occur within 10 weeks of gestation due to high information needs and arrangements to be made for early pregnancy tests. The following ANC program should again be determined based on the individual patient's needs. The authors also differentiate by the patient's parity and suggest a minimum of 10 visits for nulliparous patients and seven contacts for subsequent uncomplicated pregnancies.

The 2021 NICE guideline recommends a first antenatal booking appointment to take place by ten weeks of gestation. The recommended following number of ANC contacts are differentiated by the patient's parity (i.e. total of 11 ANC contacts for nulliparous patients, eight for parous patients). When patients are referred to maternity services after nine weeks of gestation, a booking appointment should be provided within two weeks. The authors also underline the importance of the continuity of carer (e.g. one midwife who is part of a community-based midwifery team). Studied outcomes in the review questions behind these recommendations were severe maternal morbidity up to 42 days postpartum (i.e. admission to inpatient psychiatric services, intensive care units), maternal and neonatal mortality.

The 2016 WHO ANC model recommends 'a minimum of eight ANC contacts, with the first contact scheduled to take place in the first trimester (up to 12 weeks of gestation)' in aiming to reduce perinatal mortality rate and improve patients' experiences of care. With 'contacts' the authors imply 'an active connection between a pregnant woman and a healthcare provider that is not implicit in the word 'visit'', enhancing the 2016 WHO ANC model's flexibility and adaptability to local contexts (95).

2.2.2.2. Minimum content of ANC contacts

Table 4 represents a comparative overview of minimum content per ANC contact as recommended by each guideline.

GA (weeks)	2015 KCE	2015 NVOG	2020 CPZ	2017 ACOG	2020 AGDH	2021 NICE	2016 WHO
1st trimester (up to 12 weeks)	*< 14 weeks:* Medical and psychosocial risk assessment BMI, arterial blood pressure (ABP) Full blood count, ABO blood type, rhesus D typing, irregular antibody screen, HIV, hepatitis B, syphilis, rubella, and varicella zoster (if unknown immunity status) Proteinuria *> 12 weeks:*	Medical and psychosocial risk assessment BMI, ABP Full blood count, glucose, ABO blood type, rhesus D and c typing, irregular antibody screen, HIV, hepatitis B and syphilis Ultrasonography (FHR, determine gestational age) Patient education: lifestyle and nutrition, immunisations,	*< 9 weeks:* Medical and psychosocial risk assessment Height, weight, ABP Haemoglobin, ABO blood type, rhesus D and rhesus c typing, irregular antibody screen, glucose, HIV, hepatitis B, syphilis Ultrasonography (gestational age) Proteinuria on indication	Medical and psychosocial risk assessment ABP, weight, symphysis-fundal height (SFH) for progressive growth and term consistency Full blood count, iron-deficiency anaemia screening, ABO blood type, rhesus D typing, irregular antibody screen, HIV, hepatitis B, syphilis Asymptomatic bacteriuria and	*< 10 weeks:* Medical and psychosocial risk assessment (i.e. EPDS for all patients) BMI, ABP Full blood count, ferritin on indication, ABO blood type, rhesus D typing, irregular antibody screen, HIV, hepatitis B, hepatitis C, syphilis Asymptomatic bacteriuria and proteinuria screening	*< 10 weeks:* Medical and psychosocial risk assessment (i.e. depression identification questions and GAD-2 for all patients; EPDS and GAD-7 on indication) BMI, ABP, proteinuria Full blood count, ABO blood type, rhesus D typing, irregular antibody screen Patient education: lifestyle and	*< 12 weeks:* Medical and psychosocial risk assessment ABP, proteinuria Intimate partner violence (IPV) enquiry on indication and when capacity for supportive response is available Full blood count, glucose, HIV, and syphilis Asymptomatic bacteriuria screening

	Doppler, foetal heart rate (FHR) Patient education: lifestyle and nutrition, CMV and toxoplasmosis prevention, prenatal screening/genetic testing	prenatal screening/genetic testing	Patient education: lifestyle and nutrition, occupational advice, informed consent *9 - 14 weeks:* Prenatal screening/genetic testing if opted for, personal birth care plan	proteinuria screening Chlamydia screening *< 14 weeks:* Ultrasonography (on indication) Patient education: pregnancy symptoms, lifestyle and nutrition, dental care, teratogens, air travel, immunisations, prenatal screening/genetic testing Supplements: folic acid, iron, vitamin D	*> 12 weeks:* Ultrasonography (FHR, gestational age) Patient education: pregnancy symptoms, lifestyle and nutrition, dental care, immunisations, prenatal screening/genetic testing Supplements: folic acid (pre-pregnancy throughout first 12 weeks), omega-3 on indication	nutrition, infectious diseases screening (HIV, hepatitis B and syphilis), inherited blood disorders screening (thalassaemia screening for all patients; sickle cell screening on indication), immunisations, prenatal screening/genetic testing	*12 weeks:* ultrasonography (FHR, gestational age, anatomical survey) Patient education: lifestyle and nutrition Tetanus toxoid vaccination Supplements: folic acid, iron
14	*11 - 13+6 weeks:* Ultrasonography (gestational age, detect multiple pregnancies, anatomical survey if opted for)					*14 weeks:* ABP, proteinuria *11+2 - 14+1 weeks:* Ultrasonography (gestational age, detect multiple pregnancies, anatomical survey if opted for)	

16	*15 - 16 weeks:* Asymptomatic bacteriuria screening			*16 weeks:* ABP, weight, SFH	*16 - 19 weeks:* ABP, foetal growth	*16 weeks:* ABP, proteinuria	
20	*20 weeks:* ABP, weight *> 20 weeks:* Systematic proteinuria screening *18 - 22 weeks:* Ultrasonography (FHR, biometry, anatomical survey, placenta location)	*20 weeks:* ABP *18 - 20 weeks:* Ultrasonography (FHR, biometry, and anatomical survey)	*20 weeks:* Ultrasonography (FHR, biometry, and anatomical survey) *> 22 weeks:* Immunisation against tetanus toxoid, diphtheria, pertussis *22 - 28 weeks:* Patient education: symptoms of hypertensive disorders	*20 weeks:* ABP, weight, SFH *18 - 22 weeks:* Ultrasonography (FHR, biometry, anatomical survey, placental position)	*18 - 20 weeks:* Ultrasonography (FHR, biometry, and anatomical survey) *20 - 27 weeks:* ABP, foetal growth, proteinuria on indication Patient education: foetal movements	*20 weeks:* ABP, proteinuria *18 - 20+6 weeks:* Ultrasonography (biometry, anatomical survey, placenta location)	*20 weeks:* ABP, proteinuria Ultrasonography (FHR, biometry, and anatomical survey)
24	*24 weeks:* ABP, weight, proteinuria, SFH, doppler FHR *24 - 28 weeks:*	*24 weeks:* OGTT (on indication) *> 24 weeks* Patient education: foetal	*24 - 28 weeks:* OGTT (on indication) Patient education: foetal movements	*24 weeks:* ABP, weight, SFH Second-trimester patient education, birth plan	*24 - 28 weeks:* Hyperglycaemia test (on indication) *> 24 weeks:*	*24 - 28 weeks:* OGTT (on indication) *24 weeks (nulliparous*	/

26	OGTT (on indication)	movements, symptoms of hypertensive disorders and preterm birth	*26 weeks:* Individual foetal growth curve determination (length, weight, ethnicity, parity)		SFH at each ANC contact	*patients):* ABP, proteinuria *> 24 weeks:* Foetal movement assessment at every presentation Patient education: foetal movements	*26 weeks:* ABP, proteinuria Anaemia screening Asymptomatic bacteriuria screening
27		*27 weeks:* Rhesus D and/or c-negative patients: irregular antibody screen, foetal rhesus D and/or c-typing	*27 weeks:* Rhesus D-negative patients: irregular antibody screen, foetal rhesus D-typing	*27-36 weeks:* Immunisation against tetanus toxoid, diphtheria, pertussis			
28		*28 weeks*: ABP, FHR, foetal movement assessment	*28 weeks:* Patient education: preparing for labour, birth, and parenthood	*28 weeks:* ABP, weight, SFH	*28 weeks:* ABP, SFH, foetal growth, anaemia screening, ABO blood type, irregular antibody screen Repeat EPDS Anti-D prophylaxis in rhesus D-negative, non-immunised patients	*28 weeks:* ABP, SFH, proteinuria Full blood count, ABO blood type, irregular antibody screen Anti-D prophylaxis in rhesus D-negative patients *> 28 weeks:*	

					Iron suppletion based on anaemia screening	Patient education: preparing for labour and birth, birth plan, recognising active labour	
29	*> 29 weeks:* Ultrasonography (foetal position, biometry, placenta location)				*29 - 34 weeks:* ABP, SFH, foetal growth, proteinuria on indication Patient education: preparing for labour and birth, birth plan, recognising active labour, breastfeeding		
30	*30 weeks:* ABP, weight, proteinuria, SFH, doppler FHR, anaemia screening	*30 weeks:* ABP, FHR, foetal movement assessment Anaemia screening Anti-D prophylaxis in rhesus D-negative patients and rhesus D-positive foetus	*30 weeks:* Anti-D prophylaxis in rhesus D-negative patients and rhesus D-positive foetus *< 32 weeks:* Intake maternity care	*30 weeks:* ABP, weight, SFH Third-trimester patient education, birth plan			*30 weeks:* ABP, proteinuria Monitor maternal and foetal well-being
32				*32 weeks:* ABP, weight, SFH		*32 weeks (nulliparous patients):* ABP, SFH, proteinuria	
33		*33 weeks:* ABP, FHR, foetal movement assessment					
34			*34 weeks:* Home visit maternity care	*34 weeks:* ABP, weight, SFH	*34 weeks:* Repeat anti-D prophylaxis in	*34 weeks:* ABP, SFH, proteinuria	*34 weeks:* ABP, proteinuria

					rhesus D-negative, non-immunised patients		Monitor maternal and foetal well-being Asymptomatic bacteriuria screening
36	*36 weeks:* ABP, weight, proteinuria, SFH, foetal position Doppler FHR *35-37 weeks:* GBS screening	*36 weeks:* ABP, FHR, foetal movement assessment and engagement Patient education: birth plan, analgesia during labour	*36 weeks:* External cephalic version for breech position Patient education: labour, birth, prolonged pregnancy, parenthood, and newborn care	*36 weeks:* ABP, weight, SFH *35-37 weeks:* GBS screening *36 - 38 weeks:* External cephalic version for breech position	*35-37 weeks:* ABP, SFH, foetal growth, GBS screening conform organisational policy External cephalic version for breech position Patient education: newborn care, psychosocial support in postnatal period	*36 weeks:* ABP, SFH, proteinuria *> 36 weeks:* Abdominal palpation to identify possible breech presentation	*36 weeks:* ABP, proteinuria Monitor maternal and foetal well-being Anaemia screening
37	/		/	*37 weeks:* ABP, weight, SFH			
38		*38 weeks:* ABP, FHR, foetal movement assessment and engagement		*38 weeks:* ABP, weight, SFH	*38 - 40 weeks:* ABP, SFH, foetal growth, proteinuria on indication	*38 weeks:* ABP, SFH, proteinuria	*38 weeks:* ABP, proteinuria
39				*39 weeks:* ABP, weight, SFH			

						Patient education: options for prolonged pregnancy	Monitor maternal and foetal well-being
40		*40 weeks:* ABP, FHR, foetal movement assessment and engagement		*40 weeks:* ABP, weight, SFH		*40 weeks (nulliparous patients):* ABP, proteinuria	*40 weeks:* ABP, proteinuria Monitor maternal and foetal well-being
41		*41 weeks:* ABP, FHR, foetal movement assessment and engagement		*41 weeks:* ABP, weight, SFH	*41 weeks:* ABP, SFH, proteinuria on indication, options for prolonged pregnancy	*41 weeks: pregnant* ABP, SFH, proteinuria	

Table 4 Guideline recommendations on minimum content per ANC contact

2.2.2.3. Health system interventions

Other organisational advice on how to improve accessibility, quality, and coordination of care than recommendations on the minimum number of ANC contacts was outside the scope of the 2015 KCE and NVOG guidelines.

The 2020 CPZ guideline proposes an integrated perinatal care model where existing, regionalised, obstetric collaboration networks [Verloskundig Samenwerkingsverband, VSV, in Dutch] are encouraged to connect individual patient's needs to evidence-based practice. The guideline recommends every network to agree on an interprofessional, team-based approach to this standard of individualised care, including collaboration with local institutions and patient representatives. Each network should decide on regional responsibility distribution, transparency in registration and data exchange. Professional, organisational, and financial conflicts of interests should hereby always be subordinate to patients' preferences and needs.
Informed consent, shared decision-making and continuity of care are key principles in developing and following a personalised birth care plan [geboortezorgplan, in Dutch]. In this process, every patient should be supported by a coordinating care provider, who is already a member of the individual interprofessional birth care team. The midwife effectuating the intake and first risk assessment is often assigned as coordinating care provider. This role can also be transferred to other care providers in the birth care team (i.e. general practitioner, physician assistant or gynaecologist), at every perinatal stage and depending on the patient's corresponding healthcare needs. The reader is referred to the external obstetric indication list [Verloskundige Indicatielijst, VIL, in Dutch] for primary input on proposed transfer indications. The obstetric collaboration networks are further responsible to monitor and report on the implementation of this integrated care standard, based on minimal quality indicators provided by the guideline.

The 2017 ACOG guideline also proposes a regionalised and integrated perinatal care model, where capabilities and expertise of all healthcare professionals are clearly defined into 'basic', 'specialty' and 'subspecialty' levels to ensure risk-appropriate care (91). Perinatal care for low-risk, singleton pregnancies should be covered by 'birth centres' and 'basic or first level care' (91). Birth centres provide peripartum, midwifery-led care that is integrated in a comprehensive referral network to higher levels facilities and hospitals. Basic or first level health facilities provide antepartum, intrapartum, and postpartum care, 'with the ability to detect, stabilise and initiate management of unanticipated maternal-foetal or neonatal problems', again with formal partnerships with higher-level receiving facilities (91). Inpatient perinatal care should be organised within individual regions or service areas where the care for the highest-risk patients is concentrated in high-volume, designated regional centres, allowing for maintenance of expertise, and achieving optimal outcomes. Regional perinatal healthcare, education, community outreach, as well as regional data analysis and evaluation should further be coordinated by these high-level, regional centres. Perinatal care should also prioritise the provision of culturally and linguistically appropriate care through community-based outreaches, language assistance (i.e. trained interpreters, translation of patient education materials) and increased diversity among healthcare professionals.

The 2020 AGDH guideline refers to the 1998 WHO principles of perinatal care, stating that 'care should be local, multidisciplinary, holistic, evidence-based and woman-centred' and further highlight the need for (midwifery-led) continuity of care and collaborative practice (93). The

guideline provides specific recommendations on antenatal care for psychosocially vulnerable patient groups based on successful examples of local antenatal care models. Language assistance (i.e. accredited healthcare interpreter services, available and free of charge) as well as diversity among healthcare professionals further facilitate 'culturally safe' ANC (93).

Specific recommendations on the organisation and delivery of antenatal care provided by the 2021 NICE guideline mainly focus on the initiation of ANC, continuity of care and provision of patient-centred care. Health systems should provide multiple, straightforward ways of referral in initiating ANC, including self-referral. The guideline further underlines continuity of carer within the involved healthcare team and effective information transfer between team individuals. The availability of reliable interpreting services whenever needed is recommended for health systems that aim to provide patient-centred care.

In accordance with a human rights-based approach, the 2016 WHO guideline recognises that patients 'are entitled to participate in decisions that affect their sexual and reproductive health', yet 'may need to be empowered to do so' (95). Community-based interventions are therefore specifically recommended in settings with low access to health services. Healthcare settings with well-functioning midwifery programs are further recommended to implement midwifery-led continuity of care models (MLCC) to facilitate coordinated referral to other care providers when necessary. Policymakers should consider health system-specific interventions to recruit, educate and retain qualified health workers in support of a MLCC model, again particularly in 'low-access' settings (95).

2.2.3. Content review: migrant-senstive guidelines

ORAMMA is an 'integrated, woman centred, culturally sensitive and evidence-based approach' to perinatal health care for MAR women, resulting from an international, EU co-funded, research project consisting of systematic reviews of evidence, interdisciplinary team consultations and consensus-building (50). The 2017 D4.1. ORAMMA practice guide provides both specific recommendations on perinatal health care of MAR women (i.e. antenatal, intrapartum and postpartum period), as well as overarching standards of care.
Besides recommendations on risk-, culturally and language-appropriate care, most specific recommendations follow those made in the WHO and NICE guidelines and will therefore not be discussed into detail because of data saturation. Interestingly, the guide does provide specific recommendations on both mental health and SGBV, two intermediary determinants of the applied CSDH framework in part one of this thesis. At first contact, healthcare professionals are strongly recommended to inquire about the patient's mental health status, including past or present severe mental illnesses, and further be 'aware of the possible impact of previous trauma on the perinatal period' (96). After identifying a possible mental illness, the guide recommends referring the patient to the general practitioner or a specialist mental health service if a severe mental illness is suspected. Peer support groups could further empower pregnant MAR women who lack social support and 'help in reducing the risk of isolation and mental health disorders' (96). Culturally and language appropriate preventive measures should be taken to help patients cease psychoactive substances. With regards to SGBV, the guide recommends the establishment of both 'routine screening for abuse in maternity services settings' and 'tested, culturally sensitive referral systems' (96). Training of healthcare professionals in recognising signs and symptoms of sexual and domestic violence, managing 'pregnancies complicated by sexual violence issues' and

'supporting women who experience domestic abuse in their use of ANC services' is essential in this context (96).

The 2017 D4.1. ORAMMA overarching standards further all share a focus on improving accessibility, quality, and coordination of care. Potential barriers in accessing care should be discussed and addressed with each patient (i.e. language, transport and financial barriers, distrust in authorities), whereas patients' information needs should be identified throughout the care process. Professional interpreters and access to multiple methods of communication are essential in overcoming language and communication barriers. The guide also specifically recommends making maternity care available in detention centres.
Inquiring about potential psychosocial and economic challenges in a sensitive way further constitutes to qualitative care. Continuity of care (i.e. either personal or in 'philosophy of care') with extra time allocated to each contact is crucial when inquiring about these issues (96).
Cultural competence training for healthcare providers when interacting with patients from different backgrounds is further recommended. Trainings should however focus on 'developing an understanding of diversity, recognition of the multiplicity of issues that contribute to our understanding of culture and responsiveness to cultural needs', rather than being restricted to 'knowledge of facts about other cultures that can result in further objectifications and stigmatisation' (96).

Flexible, community-based maternity services where hospitals and communities work closely together in ensuring continuity of care and individualised outreach programs are furthermore essential in providing high quality perinatal care for MAR women. The 2017 D4.2. ORAMMA approach document elaborates on how this type of integrated perinatal care can be achieved. Timely detection of pregnancy at reception centres, followed by a risk and needs assessment should be coordinated by a general practitioner or midwife operating in the community (e.g. associated with a reception centre). Care during pregnancy should then be coordinated by a midwife 'with support from a multidisciplinary team as required'. This team 'ideally consists of general practitioners, social care providers, cultural mediators and other allied health professionals' (50).

The 2018 WHO technical guidance on refugee and migrant health identified areas for intervention using the Reproductive Outcomes and Migration (ROAM) International Research Collaboration framework for equity in health (49). This framework describes 'equitable health care as a product of four main factors: individual health status, quality of care, accessibility, and health care policy and financing systems' (49).
An important recommendation on individual health status is viewing 'country of birth' as a risk marker '(…) rather than considering migration in itself as a risk factor' (49). A systematic approach to risk-appropriate care therefore includes increasing awareness among healthcare professionals on the 'higher burden of some diseases in specific migrant groups and how some diseases can affect pregnancy outcomes' (49). Inclusive screening processes and risk-appropriate referral pathways should further be put in place (i.e. quality of care).
Reducing barriers of costs and transportation through community-based health services and providing and guaranteeing professional translation services are the guidance's main recommendations on improving accessibility of care. Again, awareness among healthcare professionals on the variable entitlement to care conditions and rights per legal status is again essential for putting these recommendations into practice.

The guidance underlines that integrating 'migrants' into current health systems that are responsive to their diversity and individual needs is fundamental in achieving equity in health. Sharing responsibility between stakeholders in promoting health literacy, peer-support initiatives, and patient representation in the design of health programs will support 'migrant women' in a more active management of their own health status and further optimal use of existing health services (49).

The 2018 Dutch chain guideline on birth care for asylum seekers (i.e. Ketenrichtlijn Geboortezorg Asielzoeksters, in Dutch) is a more practical example of how to integrate birth care for applicants for international protection in the current Dutch perinatal health care system. The result is a document that mainly focuses on responsibility allocation, establishing which professional is responsible for which step in the pregnant applicant's process of accessing ANC, birth, and postpartum care. The directive prescribes that all pregnant applicants should have their first contact with a primary care midwife, unless in case of emergencies where the general practitioner should refer the patient to a gynaecologist immediately.

2.3. Discussion

In line with the two-step approach to conceptualising 'necessary ANC' for applicants for international protection, routine ANC guidelines were first assessed for existing consensus on the recommended timing of inclusion in ANC programs, minimum number and content of ANC contacts and necessary health system interventions. However, contrasting with a shared general consistency in methodological rigour, content review of the included guidelines did not always provide for a clear consensus on how 'necessary ANC' for applicants for international protection should look like.
There is little consensus on the ideal timing of inclusion in ANC programs nor on the recommended frequency of ANC contacts, besides the more general recommendations for the first contact to occur in the first trimester of pregnancy and the need for individualisation in determining the frequency of following ANC contacts. Content review on the recommended minimum ANC content also showed fragmented recommendations among different guidelines, hampering further consensus building on 'necessary ANC' as a concrete, clinical concept.

Although a broader consensus on the recommended timing of inclusion, minimum number, or minimum content of ANC contacts would allow for a more sensitive detection of when suboptimal ANC is provided, member states should not and cannot restrict 'necessary ANC' to providing 'minimum ANC' (48). From a rights-based perspective, this would legitimise the already existing two-tier health care reality for applicants, violating the non-discrimination principle in their right to health as established by international and EU human rights law. 'Minimum ANC' as a clinical concept would in turn increase the risk of inappropriate care delivery due to the higher risk profile of applicants' pregnancies. Moreover, significant differences in member states' health systems and economic capacities further raise questions on whether developing a broader, European consensus on a minimum care package applicants should be entitled to can be considered feasible or desirable. As applicants can arrive in any EU member state at any stage of their pregnancies, a timely inclusion in the existing health system of each member state, with equitable access to the ANC programs their host population counterparts are entitled to should therefore always be the primary focus in providing 'necessary ANC' to applicants for international protection.

Matching the normative content generated from the routine ANC guideline assessment with emerging themes and recommendations from the included migrant-sensitive guidelines however shows how supporting pregnant applicants in accessing and navigating these systems is fundamental in this context. Language assistance, access to social care services, peer-support interventions, and training of healthcare professionals in cultural competence and trauma-centred care should therefore be considered as 'necessary medical or other assistance' that member states are required to provide according to Article 19(2) of the 2013/33 Reception Conditions Directive (47).

Moreover, supporting pregnant applicants in accessing and navigating available ANC programs requires member states to also rethink their current obstetric care systems, as both the migrant-sensitive guidelines and routine ANC guidelines show clear parallels in recommended health system interventions. Health care providers in each member state have the opportunity here to work towards more regionalised and integrated health services that allow for community-based care where possible and risk-appropriate referral where necessary. A clear allocation of responsibilities in each regional care network is therefore crucial in providing coordinated, continuous care.

This two-step guideline assessment exercise shows how healthcare professionals can take their responsibility in protecting individual, pregnant applicants' fundamental right to health through expanding the concept of 'necessary ANC' from 'minimum' to 'patient-centred ANC'. Consistent monitoring of regional and community-based health system interventions will subsequently generate transferable, good clinical practice concepts. Additional research on maternal and perinatal health inequities in applicants for international protection in the EU could then help to further extend this bottom-up focus shift from 'minimum' to 'patient-centred ANC' in both advocacy and strategic litigation.

A major limitation of this clinical guidance review is that both the AGREE II quality appraisal and two-step content review have been performed by a single reviewer. Results should therefore be considered as interpretative by the author only.
Furthermore, patients' views and preferences were often only represented through literature-based data in most guidelines. Active patient participation in designing future research, advocacy and strategic litigation will hold the key to achieving maternal and perinatal health equity for applicants for international health.

Conclusions

Throughout the process of leaving their home country to their application for international protection and the following asylum procedure in the EU, pregnant applicants find themselves on a unique and vulnerable intersection of individual, interpersonal, and structural factors that shape their pregnancy experience and outcome.

The applied CSDH framework described in part one of this thesis aims to clarify the mechanisms through which EU asylum and border policies determine applicants' maternal and perinatal health outcomes and illuminate new entry points for more targeted policy interventions. An intensified focus on border securitisation and externalisation policies, the unequal responsibility distribution under the Dublin III Regulation and substandard reception conditions put applicants at a stratified risk for experiencing both migration-related stress and sexual and gender-based violence and interfere with their access to continuous ANC, despite applicants' legal entitlement to 'necessary care'. This growing discrepancy between the EU's current migration management agenda and pregnant applicants' fundamental right to health requires bottom-up action.

Healthcare professionals' adherence to a patient-centred approach in defining and providing *necessary* ANC interventions in the different contexts of each member state not only holds important implications for future research, advocacy, and strategic litigation. Their awareness on how migration policies determine maternal and perinatal health among applicants for international protection will direct local and regional system interventions that will prove to be of transformative potential for a more effective protection of their individual right to health.

Similar interdisciplinary, yet more participative exercises are urgently needed to fully understand the covariant translation of legal entitlement to care into practice for different migrant statuses in the EU. The results will provide more concrete tools for both policymakers and healthcare professionals to address the implementation gap between migration management and health as a human right, each from their individual responsibilities and capacities.

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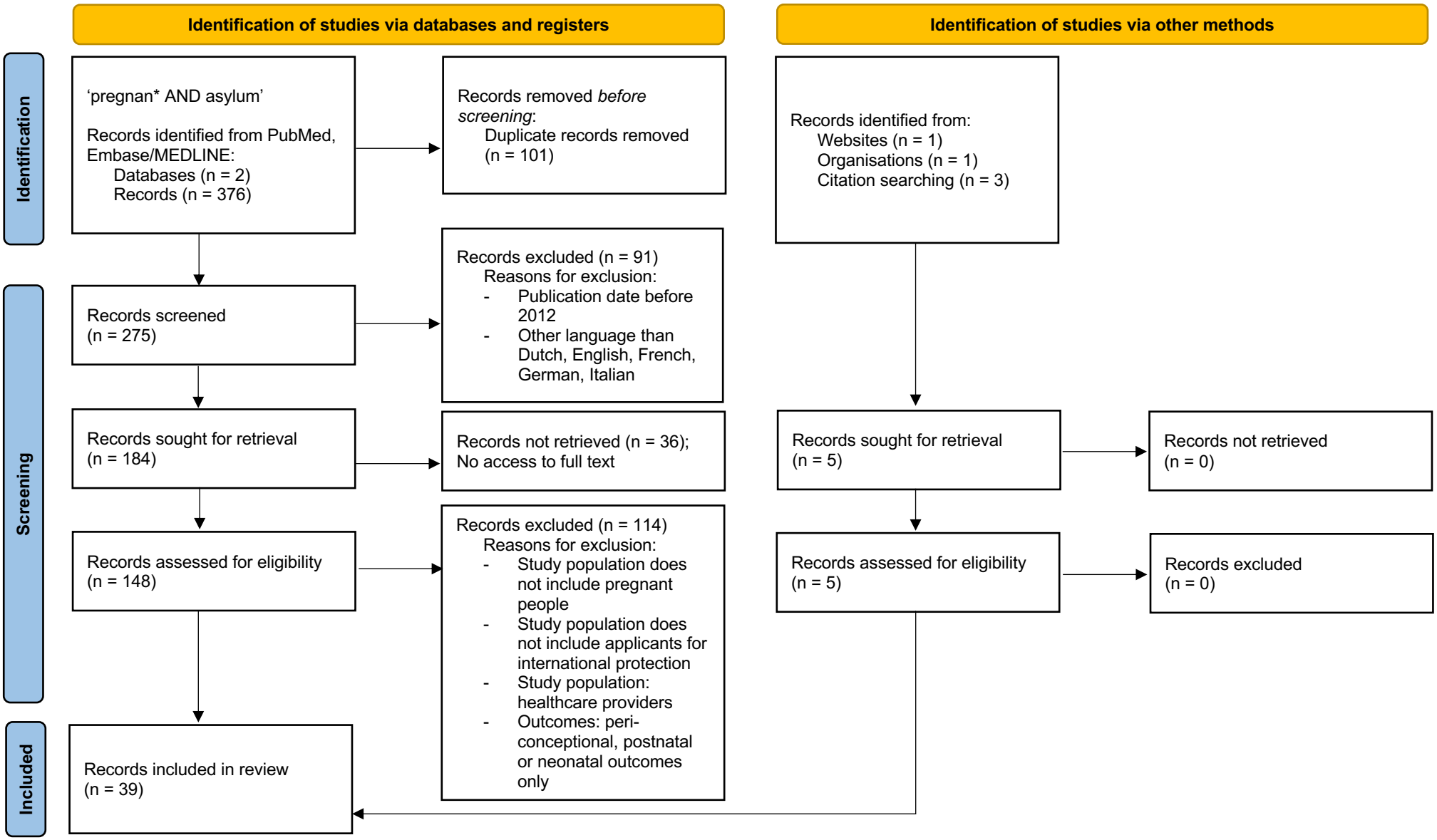
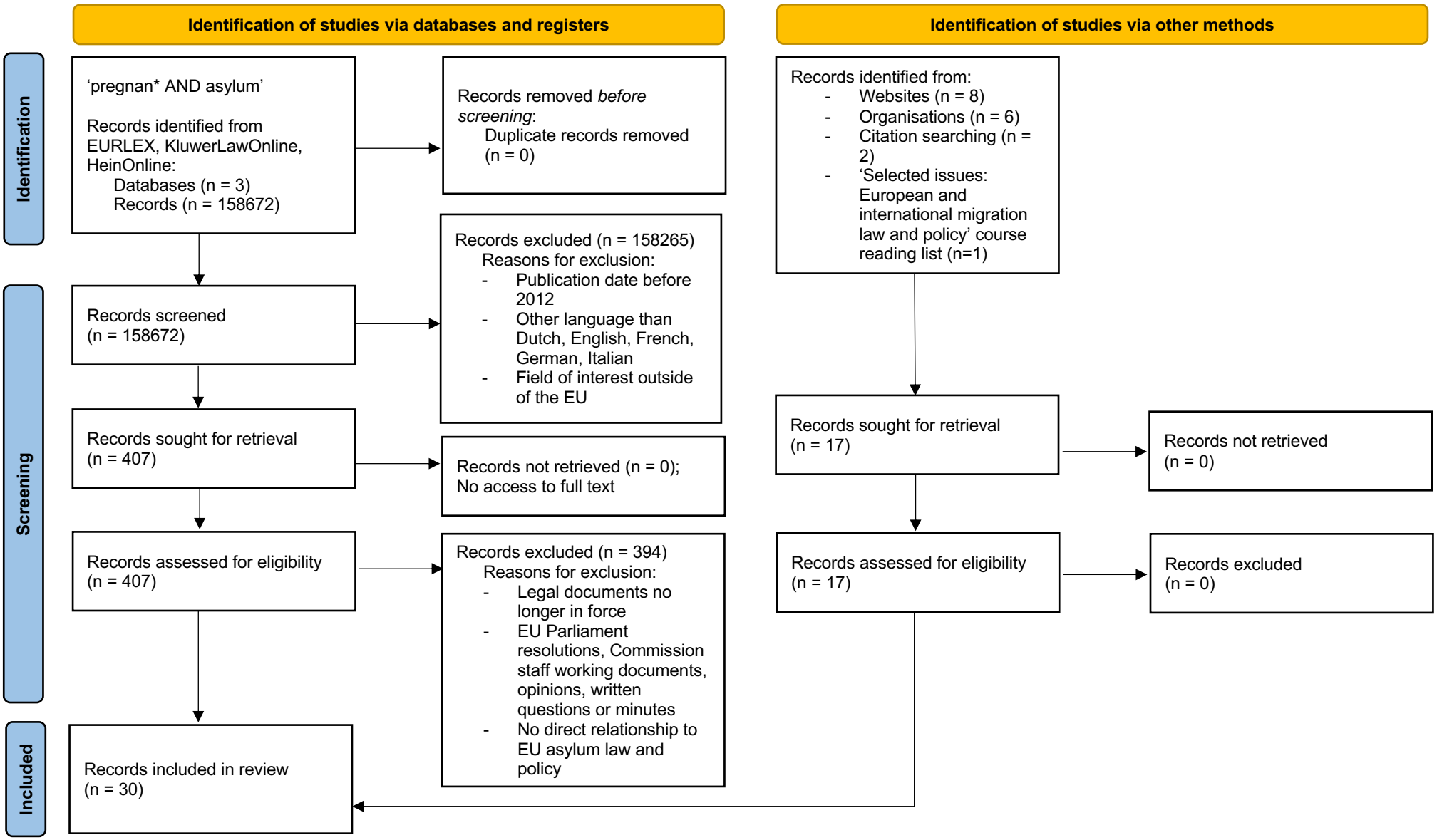
ANNEX 1: PRISMA 2020 flow diagram for searches of medical databases, registers, and other sources



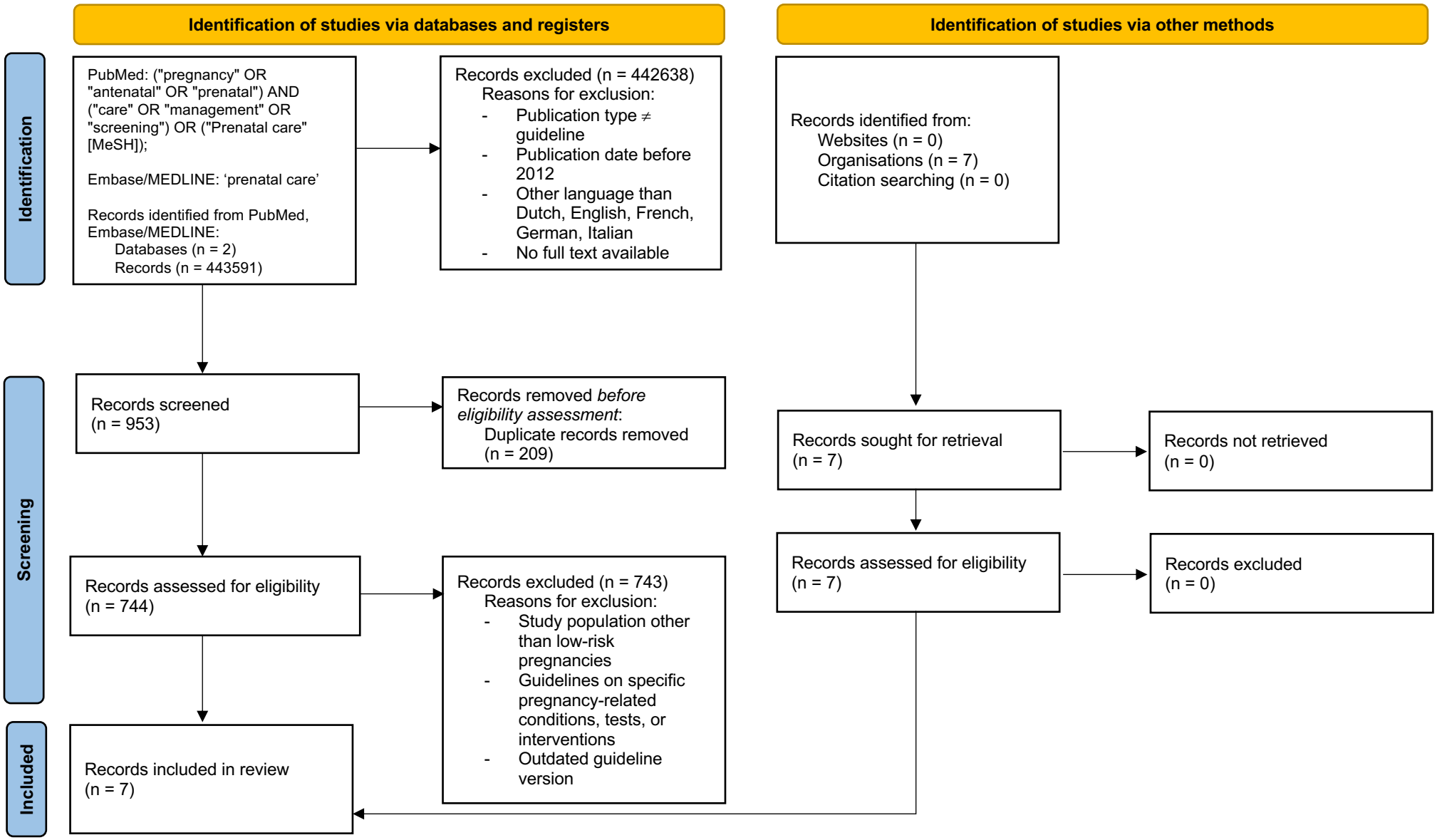
From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

ANNEX 2: PRISMA 2020 flow diagram for searches of law databases, registers, and other sources



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

ANNEX 3: PRISMA 2020 flow diagram for searches of routine ANC guidelines in databases, registers, and other sources



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/