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# General discussion



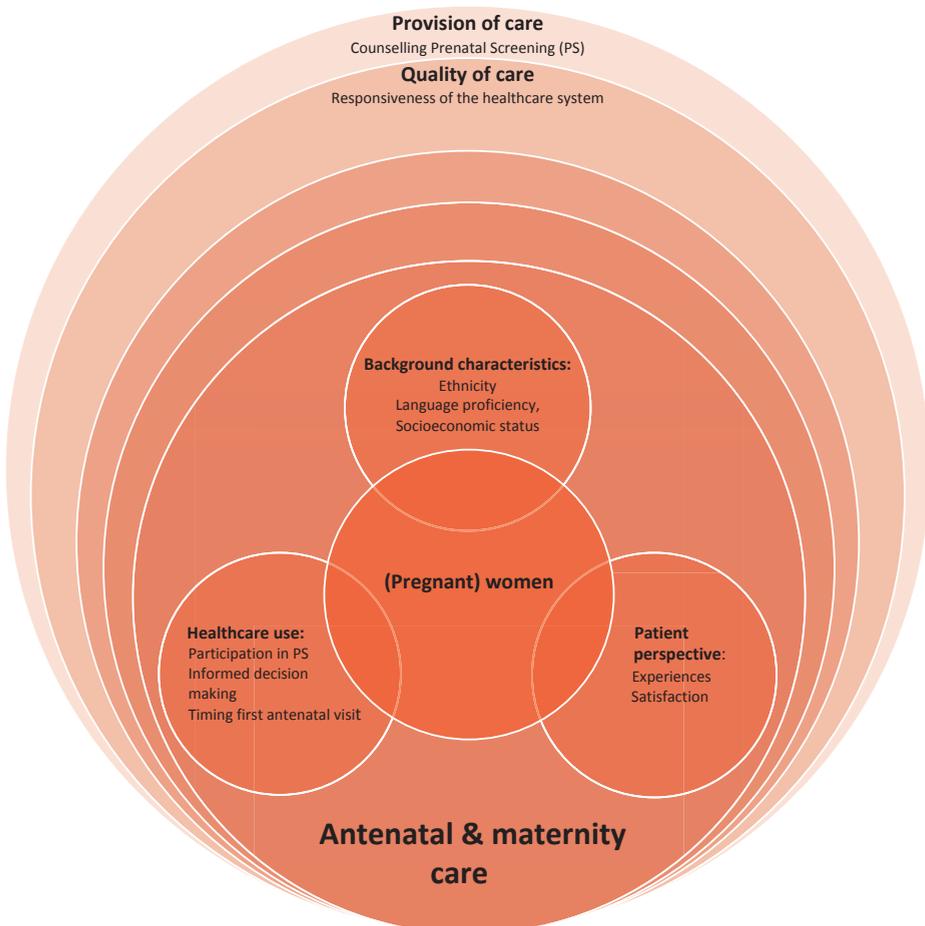


## GENERAL DISCUSSION

### Reflection on the principal findings

*Part I - Satisfaction with care, inequalities in use and provision of antenatal and maternity care in a multi-ethnic population.*

The studies of **Part I** explored satisfaction with the provided antenatal, obstetric and maternity care using, among others things, the concept of a healthcare system's responsiveness with regard to measuring quality of care – as illustrated in figure 10.1. These studies also explored the reasons for delay in the first antenatal visit, the provision of antenatal screening in the Netherlands, intentional participation in screening



**Figure 10.1**, Exploring satisfaction and inequalities related to antenatal, birthing en maternity healthcare in a multi-ethnic women's population

and inequalities in the actual uptake of antenatal screening. Furthermore, the possible interaction between healthcare system factors was studied as well as the influence of individual characteristics of (pregnant) women and new mothers in a multi-ethnic population on the perceived satisfaction with care, inequalities in use and provision of antenatal, obstetric and maternity care.

In **chapter 2** it is shown that the 'respect for persons' responsiveness domain category was the most influential on the satisfaction with antenatal, birthing and maternity care in the studied low-educated native Dutch and non-western minority women. The study population was mostly positive about the provided care during the antenatal phase. They were less positive about the other two phases of care. Moreover, the obstetric healthcare systems' responsiveness in all phases of care (antenatal, birthing and maternity) did not meet these women's needs. The 'respect for persons' domains 'autonomy', 'communication' and 'dignity' and the 'client orientation' domain 'prompt attention' were judged most negatively.

The study described in **chapter 3** study shows that women in a disadvantaged position, those with a non-native Dutch background and/or with an insufficient language proficiency level, were underserved in the Dutch prenatal screening program. They were less likely to receive an information offer about the Combined Test (CT) and Fetal Anomaly Scan (FAS) and to be counselled about prenatal screening. In addition, the rate of intention to participate in CT and FAS among these women was considerably lower than the rate among women with a native Dutch background. These findings seem to indicate that the fundamental principle of the Dutch Population Screening Act – equal access to prenatal screening for all pregnant women – has not yet been realized.

In this line, our study on the presence of inequalities in the actual uptake of both the CT and the FAS in the four largest cities in the Netherlands as related to socioeconomic status and ethnicity (**chapter 4**) indicated that non-Western women in low socioeconomic areas had the lowest uptake. The pattern of observed effects suggests cumulative disadvantages for women with multiple risk factors.

Based on these findings we can conclude that pregnant women and new mothers with a non-Western immigrant and low socioeconomic status background, and not well proficient in the Dutch language, have a higher chance of being underserved with care in the Netherlands. There seems to be a mismatch between the provided antenatal, birthing and maternity care and the actual Dutch population mix. The existing inequalities call for further improvement efforts, in particular as they reflect the perinatal outcome gap in the Netherlands (see policy recommendations).

This thesis and the literature underline that the provision of antenatal and maternity care is subject to the women's individual characteristics, like age, educational

attainment, ethnicity, level of knowledge (health literacy), as well as the care providers' and immigrant women's attitudes towards subjects concerning health and healthcare.<sup>1-6</sup> More specifically, language barriers threaten the effective provision and actual use of health services,<sup>3, 7-9</sup> and immigrant women's underutilization of obstetric care services and level of health literacy are linked to the delay in the first booking visit.<sup>10, 11</sup> Intervention strategies focussing on individual factors such as insufficient language proficiency and health literacy among both non-Western and low socioeconomic status groups are needed (see policy recommendations).

Furthermore, the Dutch obstetric healthcare for pregnant women and new mothers seem not sufficiently take into account the growth in the number of patients born abroad with a variety of social, cultural and religious affiliations, migration histories and status. It is known that this ethnic and cultural variety of the patient population influences health care provision and reception.<sup>3, 12-15</sup> In light of the situation in the Netherlands, where we see an increasing diversity in the population, the outcomes of this thesis provide recommendations for cross-cultural communication and cultural competence improvements of the antenatal, birthing and maternity healthcare system (see policy recommendations). By taking up these recommendations, the obstetric healthcare system can sustainably meet the changed needs of the Dutch patient population and provide equal access to care for everyone.

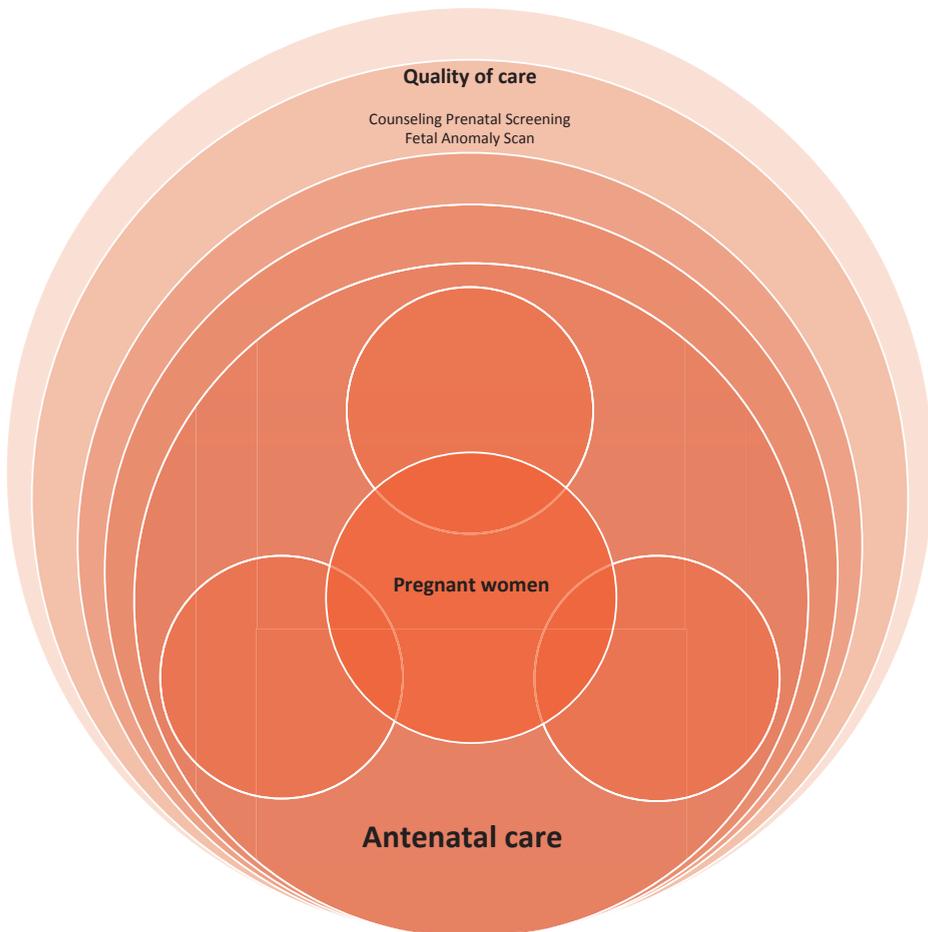
Another key finding of **part I** concerned the main reason for delay of the first antenatal visit (after week 12+0 of gestation). This was found to be an unplanned or unwanted pregnancy (**chapter 5**) was. The association was significant, in line with previous research.<sup>16</sup> The delay was most common in adolescents, older women ( $\geq 40$  years of age), high order multiparous women ( $P \geq 3$ ), women with a previous miscarriage and women who were not well proficient in the Dutch language. Plausible reasons for the delay are, therefore, misunderstanding of the Dutch healthcare system (health illiteracy), a language barrier, a more expectant attitude towards a new pregnancy (in the case of a previous miscarriage) and women in non-Western ethnicity groups not always being wont to timely plan their first antenatal visit.<sup>17</sup>

In the Netherlands, autonomy and individual responsibility to health and healthcare use are considered important. Individuals should be free to decide what is best for their own health. Still, not everyone is able to make a well-considered decision regarding timing of their first antenatal visit. The above-mentioned self-reported delaying factors for the first antenatal visit may guide caregivers and policymakers in developing intervention strategies to provide timely prenatal care to all patients. Interventions should focus on education about (1) the Dutch healthcare system and (2) the necessity of timely antenatal care (see policy recommendations).

*Part II – Performance assessment of prenatal counselling and Fetal Anomaly Scan*

The two studies in **part II** evaluate methods for standardized quality assessment of the counselling about prenatal screening and the second-trimester Fetal Anomaly Scan provided in the context of the Dutch prenatal screening program – as illustrated in figure 10.2. Furthermore, these studies evaluate how these quality assessment methods can contribute to a standardized, easy-to-reproduce and reliable quality assessment of the counselling.

A novel method for the assessment quality of prenatal screening counselling is described in **chapter 6**. This method involves two newly-developed assessment tools for the CT and the FAS, respectively, applied by three different assessors. The intraclass correlation coefficients of the three assessments was significantly above 0.80 ( $p < 0.001$ ), which



**Figure 10.2,** Exploring, performance of prenatal counselling and ultrasound prenatal screening

indicates excellent agreement between the assessment outcomes of the assessors. This method proved to be a reproducible and feasible assessment method and is useful in a broader health care perspective. Despite these promising results the method includes two restrictive elements for possible implementation in the Dutch prenatal screening program. First, the assessment spectrum is small because the focus is on the health educational element of counselling about prenatal screening. Second, the required transcription of the audio-recorded counselling session by the assessed counsellor is too time-consuming in the opinion of an advisory board of antenatal healthcare professionals (Foundation Prenatal Screening Southwest Netherlands, SPSZN) and an expert team of the National Institute for Public Health and the Environment (RIVM). New insights have revealed, however, that the method should not be used on its own but is particularly suitable when combined with a method that assesses the counselling competence. Examples of such methods are the one developed by Martin et al. (2015) and a brand-new method developed by TrainTool and expert groups of RIVM that uses digital roleplays.<sup>18, 39</sup>

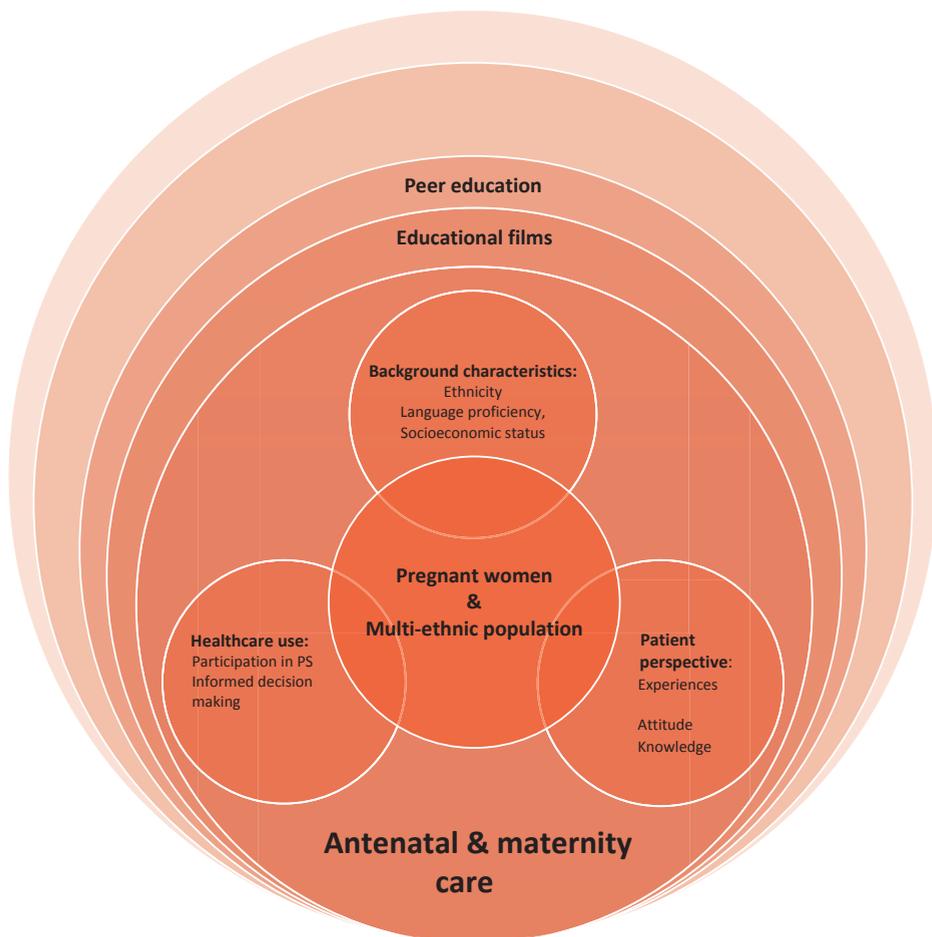
The study in **chapter 7** addresses the implementation in the Southwest region of the Netherlands of a standardized image-scoring method developed in 2012. We found that most of the sonographers met the expectations of the audit process; and those whose performance was subpar met the expectations after retraining. The Dutch population-based screening programs generally have a well-described system to achieve quality assurance, but a uniform system to monitor the actual performance of the FAS was lacking. When repeating the assessment cycle in a specific region every two years, this method enabled not only to measure the scanning performance of the FAS but also to investigate the interaction with organizational level factors (e.g., size of organization, patient population) and professional level factors (e.g. years of working as sonographer, educational background). Exploring these outcomes can be useful for quality assessment, but can also benefit scientific research in the field of sonography antenatal screening. The method is still in use in the Southwest region of the Netherlands and elements of the method are being implemented in other screening regions in the Netherlands. This shows that this method is useful and is supported within the prenatal screening program, under the condition that the FAS scanning performance assessment is standardized.

*Part III - Improving informed decision making (IDM), healthcare knowledge and healthy behaviour*

As illustrated in figure 10.3, the studies of **part III** investigate the effects of interventions that could help improve women's knowledge about antenatal and maternity care provision, healthy behaviour and informed decision making about prenatal screening

participation. In particular, the effects of two health educational interventions within an overall multi-ethnic and low socioeconomic status population were explored.

In **chapter 8** we demonstrate that ‘Active’ interpersonal recruitment methods were the most successful methods to recruit participants with a non-Western immigrant background (90% of the participants) for Reproductive Health Peer Education (RHPE). Non-Western immigrant women are considered difficult to reach, especially the first generation. Nevertheless, we found that 65% percent of the participants in RHPE have a first generation immigrant background, which is an encouraging result. Not only the use of the active interpersonal recruitment method ‘verbal advertising by organizations’ and involving the ‘social network’ were determining in the recruitment process, but bicultural peer educators as recruiters particularly played an important



**Figure 10.3,** Exploring, improving informed decision making, healthcare knowledge and healthy behaviour

role. The success of 'active' recruitment is in line with other studies<sup>19-21</sup>, but the involvement of the bicultural peer educators was innovative and recommendable to recruit participants with an immigrant background for (Peer) Health Education. Almost a decade ago participants and healthcare professionals were enthusiastic about the performance of Peer Health Educators (In Dutch: 'Voorlichters Eigen Taal en Cultuur') but the government meanwhile has ended subsidizing these educators.<sup>22, 23</sup> In **chapter 8**, too, a positive effect is shown of peer health education on the knowledge increase within a non-Western immigrant participant population. All measurements of reproductive behaviour and antenatal and maternity care system knowledge had improved after the intervention. In the already knowledgeable participant group the knowledge had increased on average by 24% and in the not knowledgeable group by 46%. Despite the proven effectiveness of RHPE, also this peer health educational initiative is not embedded in the Dutch public health system and is not financed in a structured way. Peer health education focussing on general health, healthy behaviour and the Dutch healthcare system for in particular first-generation immigrants and asylum seekers deserves to be integrated in the Dutch public health system (see policy recommendations). If, in addition, efforts should be made to stimulate learning the Dutch language, the inequalities in satisfaction, provision and utilization of Dutch antenatal care as described in **part I** of this thesis could be further bridged.

In **chapter 9** we demonstrate promising effects of cultural competent educational films (CCEFs) about prenatal screening in the Dutch, Turkish, Moroccan-Arabic and Moroccan-Berber languages. Ethnic minority women and 'medium' and 'highly' educated women showed significantly increased knowledge about the FAS after having watched a movie. An increase of 11% in informed decision making and a decrease of 12% in uninformed decision making were measured among women who had the intention to participate in the FAS. The CCEFs are a valuable complement to the provision of counselling and flyers, which on their own do not fully contribute to the informed decision making of women with a non-Western and low socioeconomic background.<sup>6, 24</sup> After our effectiveness study, antenatal healthcare professionals in the Southwest region of the Netherlands working in the primary, secondary and tertiary obstetric care sectors started to use the CCEFs as well during their consultations in the first trimester. In the year 2017 the films were updated to the current context of the Dutch prenatal screening (including the Non-Invasive Prenatal Test; NIPT). The RIVM provided funding for the update but due to cost reductions the updated films are only available in Dutch spoken word and with Dutch subtitles. The lack of updated films in the Turkish, Moroccan-Arabic and Moroccan-Berber languages was troublesome from the perspective of the antenatal health care professionals who used the different language versions of the films. The films are accessible through a health educational website about prenatal screening targeting Dutch pregnant women ([www.onderzoekvanmijnongeborenkind.nl](http://www.onderzoekvanmijnongeborenkind.nl)). Based

on a qualitative research of all health educational materials within the Dutch prenatal screening program commissioned by RIVM in 2018, the CCEFs were judged as suitable health education instruments. The respondents found the films useful to communicate elementary information about prenatal screening, especially for pregnant women and their partners with a language barrier.<sup>25</sup> Our study findings, the positive opinions of antenatal healthcare professionals and the suitability of the CCEFs as health educational instrument about prenatal screening from the patient perspective underline that it is well worth to implement watching these films in the Dutch screening program.

## METHODOLOGICAL ISSUES

### Study population

The study populations described in **chapter 2** and **chapter 8** shows an oversampling of respondents with a non-Western and low socioeconomic status background – which is a logical consequence of the inclusion criteria that especially targeted those respondents. We succeeded to include these vulnerable groups to explore the satisfaction with obstetric care in all phases (antenatal, birthing and postpartum) as well as the effect of Reproductive Health Peer Education Reproductive Health. These study samples did not reflect, however, the distribution of ethnicity groups within the population of the city of Rotterdam.<sup>26</sup> Due to the inclusion criteria, the same phenomenon held true with regard to the population of the southwest region of the Netherlands studied in **chapter 9**.

The presence of a (very) limited language proficiency level (LPL) of parts of the overall non-Western immigrant study populations included particularly in the studies in **chapters 2, 3, 8** and **9** may have resulted in a possible bias in the study results. Despite translations by other respondents, community workers and peer educators in the focus groups (**chapter 2**) for respondents with a (very) limited LPL, some respondents may not have understood all the questions asked. However, the outcomes for these respondents were rather similar to those of others respondents with similar background characteristics, which indicates a minimal bias. For the same reason, the outcomes of the study in **chapter 3** on the information provision procedure of the Dutch prenatal screening may have been biased through, for example, not fully understanding the questions from the counsellor concerning their wish for counselling or intentional participation in prenatal screening. The data-registration was web-based and primarily intended for quality control of the contracted counsellors in the context of the Dutch Population Screening Act, which gave minimal opportunities to prevent such a bias. Therefore, we possibly judged the Dutch prenatal counselling provision procedure too negatively. The Dutch LPL and native language of respondents of the population of the studies described in **chapter 8** and **chapter 9** can also have affected the responses to

the questions posed on reproductive health after participation in reproductive health peer education and on informed decision making in prenatal screening after watching or not watching a cultural competent educational film. The registration forms used in the study of **chapter 8** were only available in the Dutch language, which was not an ideal match with the study population. The questionnaires used in the study in **chapter 9** were provided in the Dutch language and as well in the Turkish and standard-Arabic languages, but this provision cannot rule out difficulties to read the questions inherent to low literacy. The respondents had been encouraged (verbally and written) to ask for assistance if filling in the questionnaire was problematic, but may have been hesitant to ask for help. Reading problems may have led to a small number of missed questions concerning knowledge and attitude about reproductive health and prenatal screening, but there is no indication that this has affected the study results.

The **chapters 4, 8** and **9** of this thesis show a few limitations concerning the data registration. In **chapter 4** the number of missing values may have reduced the generalizability of our findings to the rest of the population. The proportions of women with a non-Western ethnicity or a low socioeconomic status are comparable, however, to the proportions in other national databases, suggesting the populations may be comparable.<sup>27</sup> The number of missing values in Peridos (the national Dutch prenatal screening database) is partly caused by the newness of the system during the study period. In the study described in **chapter 8**, only a small part (4%) of the questionnaires were incomplete (missing of gender variable and missing of more than five respondent characteristics) and these were excluded from the analysis. We cannot fully oversee any consequences of this exclusion on the results of this study. However, given the small number of exclusions we do not expect a bias.

Other limitations regarding the data collection in **chapter 4** are the following. First, only women who wanted counselling about prenatal screening and gave permission to use their data were included in the database. The numbers and characteristics of the women who did not wish to receive information on prenatal screening or of those who denied the use of their data are not known. Second, most of the respondents' personal postal codes were missing. Instead, the postal code of the visited practice or hospital was assigned. It is reasonable to assume that women seek obstetric care in their immediate environment. Especially for women with limited financial budget, the traveling distance to a practice of choice would entail an additional financial burden.

### Used methodology

Some overall methodological considerations concerning the studies in this thesis deserve mention. In the focus group study described in **chapter 2** it was possible to obtain a more personal contextual and differentiated analysis on background characteristics in relation to determining factors for satisfaction with care. The focus group interview

methodology enabled us to find more in-depth explanations, like the influence of culture and migration history, compared to previous quantitative research in the field of responsiveness of prenatal and maternity care. The prospective register-based studies described in **chapter 3** and **chapter 4** and the cross-sectional study described in **chapter 9** investigated on a large scale and in a structured and quantitative manner the influence of ethnicity and language proficiency on the participants' intention to participate in prenatal screening and their attitudes towards screening. It was not possible, however, to uncover any first-generation immigrant respondents' experiences in the country of birth that may have influenced the study outcomes.

In **chapter 7** we underline that it took 2.5 years to complete the whole audit cycle. This may have been a limitation, as the sonographers who were evaluated at the end of the audit cycle could have been better informed about the audit method, although the audit score was not significantly dependent on the audit period. In contrast, the study described **chapter 9** had a shorter inclusion period than predetermined. We had to take into account the upcoming availability of the NIPT and the threshold change for the Combined Test (CT) in the Netherlands (since 2015 all women must pay for the CT). The predetermined longer inclusion period could perhaps have resulted in more positive significant outcomes of the effect of the educational films on informed decision making and attitudes concerning prenatal screening.

The studies presented in **chapter 3** and **chapter 5** were both prospective, register-based studies in the South-west region of the Netherlands and made use of different subsets of the same prospective dataset. Both studies share several similar methodological limitations. One, the respondents' language proficiency level was classified by the antenatal healthcare provider. Differences in interpretation may well exist between the approximately 200 prenatal healthcare providers included in our dataset. Due to this human subjective factor, it is realistic to take into account possible limitations resulting from non-standardization of the data input. Second, as a result of the strict definition of a second-generation immigrant, data from pregnant women with this background were underrepresented.<sup>28</sup> Third, the data concern intention to participate in prenatal screening rather than actual participation. The hypothetical and actual uptakes within the study population may well differ, but rates of intention to take up the CT and Fetal Anomaly Scan (FAS) in this study show similarities with actual CT and FAS uptake rates in the Netherlands, which is promising for the representativeness of the study results.<sup>29, 30</sup>

When it comes to methodological considerations on data analysis, in **chapters 4, 5** and **9** ethnicity was dichotomized into Western and non-Western for a part of the analysis, because the ethnic categories were not mutually exclusive to conduct in-depth regression analysis. This may have led to the grouping of women from distinctively different ethnic

and cultural backgrounds. Different backgrounds may in turn account for differences in uptake of prenatal screening<sup>31</sup>, may have masked the actual associations between different non-native Dutch ethnicities and the timing of the first antenatal visit<sup>32, 33</sup> and ethnic differences in informed decision making about prenatal screening after seeing a cultural competent educational film. Nevertheless, overall substantial differences between Western and non-Western women were found, justifying the dichotomization. Concerning the methodology used in the studies described in **chapters 6** and **7** to assess the quality of counselling about prenatal screening and the FAS, we propose specific limitations. It appeared that the sub-items in the novel assessment tools of the quality assessment method counselling were not explicit enough and led to poor interrater reliability (**chapter 6**). We made these sub-items more explicit, after which it was possible to obtain also reliable assessment outcomes on these themes. The standardized image-scoring method as described in **chapter 7** did not provide for annotations. Annotations are common practice in radiologic imaging as a means to improve the interpretation of scans and increase the reliability of the image storage. This is why it was an important missing variable.

## RECOMMENDATIONS

### Future research

Based on the outcomes of the study described in **chapter 2** it would be interesting to repeat the focus group study with exclusive inclusion of multi-ethnic low-educated pregnant women and women who recently gave birth. This would enable to explore more recent experiences with the responsiveness of the antenatal healthcare system. Such a prospective study design would reduce the risk of recall bias.<sup>34</sup> Also it is recommendable to conduct a new focus group study focussing on the extra care and interventions needed by vulnerable subgroups such as low-educated non-Western women. In this way the prerequisites of adequate obstetric care provision to these groups can be determined.

Qualitative study designs create opportunities to explore aspects of context-based medicine. Most of the healthcare provided in the Netherlands is based on protocols and guidelines grounded in an evidence-based medicine approach. In this approach, 'good healthcare' is that which has been proven adequate in mainly randomised experimental scientific research. As underlined by the Dutch Council for Health and Society, this kind of evidence is not related to the healthcare professionals and patients as persons and does not take into account the differences between patients' personal values and the dynamic settings of healthcare provision.<sup>35</sup> For each individual patient, good healthcare provision is different within a specific situation.<sup>36</sup> In addition, views on

the definition of good healthcare are influenced by ongoing changes in society and in patients' needs. Furthermore, recently a Dutch professor of 'Health Care Governance' stated that a digital dataset for registration of the healthcare performance is over trusted and does not automatically provide clues for innovation and improvements in care.<sup>37</sup> In the light of this statement, it is recommendable to explore adequate context-based medicine methods for establishing the responsiveness of the Dutch obstetric healthcare system.

The study findings described in **chapter 3** show the desirability of additional qualitative research among antenatal caregivers (counsellors) exploring why non-Native Dutch women and women with a limited language proficiency level are less likely to be offered counselling on the combined test and Fetal Anomaly Scan.

The study outcomes described in **chapter 4** underline that future research in this field should focus on potential inequalities in the uptake of prenatal screening in the new cell-free DNA test (NIPT) which was recently introduced in the Netherlands. Because counselling will become more complex, equity in healthcare offer and usage will become more important and inequalities in informed decision making and uptake may become more profound. Additional research on the influences of socioeconomic status and ethnic background on the intention to participate in prenatal screening and the actual uptake at a more detailed level (four digit postal code area, subgroup analyses of women with different ethnic backgrounds) may help to gain new insights.

Last, the studies in **chapter 3** and **chapter 4** show that the precise roles of healthcare organisations and caregivers in inequalities in uptake of prenatal screening need to be elucidated. Future research should investigate possible healthcare system factors and antenatal caregivers' factors that influence the uptake of prenatal screening. A more context-based medicine approach is recommended for exploring the healthcare system factors, because this gives a more realistic view on the underlying organisational mechanisms. Self-observation, self-recording, and self-evaluation can give insight in the antenatal caregivers' professional behavior and attitude and in addition point at areas for improvement. This approach enhances self-esteem, develops self-awareness and it may help to identify the transferable skills.<sup>38</sup>

The findings from the study in **chapter 5**, about the association between several maternal determinants and the reasons for delay of the first antenatal visit, provide directions for future research. It is recommendable to investigate maternal factors related to the most determining delaying factor for planning the first antenatal visit; i.e., an 'unplanned pregnancy'. A mixed methods strategy of both qualitative scientific research and a more context-based medicine approach would be most suitable to this aim. Intervention meet-

ings of antenatal caregivers should be planned to discuss what healthcare and patient factors may be related to a delayed antenatal visit (see healthcare recommendations).

The ‘Novel assessment method for counselling about prenatal screening’ described in **chapter 6** was complementary to the previously developed observation method with which a counsellor’s communication skills.<sup>18</sup> It would be interesting to combine both methods in one new quality assessment method along the lines of the digital RolePlay method as developed by TrainTool and to study the reproducibility and reliability of this method (see also healthcare recommendations).<sup>39</sup>

From the findings in **chapter 7** we conclude that it would be interesting to repeat the evaluation of the sonographers’ scanning performance based on the images-scoring method of the second trimester FAS. This may provide more insight in the sustained effect of the assessment method and the scanning performance monitoring. It is even more interesting to perform an evaluation on a national instead of regional level. Currently, however, a uniform FAS assessment method is not yet in use in the Netherlands.

The pilot study focussing on ‘Reproductive Health Peer Education’ (**chapter 8**) showed that it is possible to reach first- and second-generation non-Western ethnic minority groups through health peer education. This finding can be a starting point for a network study of how peer educators use their social networks to recruit participants. Such a study could be embedded in the nationwide perinatal health programme “Healthy Pregnancy 4 ALL-phase 3”.

Based on the findings in **chapter 9** we conclude it would be useful to use a randomized controlled trial study design to further build on evidence for the effect of culturally competent educational films on pregnant women’s informed decision making. Furthermore, to gain real insight in the effectiveness of using these films in the context of healthcare provision, obstetric healthcare organizations themselves would do well to evaluate this educational instrument.

## Policy recommendations

This thesis brought to light inequalities in the provision and utilization of obstetric care and inequities in healthcare between groups of women. Furthermore, the perceived satisfaction with antenatal, birthing and maternity care hints at disparities. Especially non-Western first and second generation immigrants and women with a low socioeconomic status tend to find the provided obstetric care as inadequate.

Since 1980, the Dutch government’s political agenda and national policy concerning ‘health inequalities’ was mainly aimed at avoiding and decreasing health inequalities in the Dutch society. Policy was mainly targeted on what had been labelled high-risk groups, such as youth, citizens living in deprived areas and immigrants. Despite good examples of Dutch governmental policies<sup>35, 40, 41</sup> and research efforts, the outcomes

of this thesis and other research findings show that obstetric healthcare and health disparities still exist in the Netherlands.<sup>13, 18</sup> Especially non-Western immigrant and low educated pregnant women and new mothers are disadvantaged by the Dutch obstetric healthcare system in which self-reliance plays an important role.

Therefore we recommend the Dutch government health policy makers to provide strong incentives for obstetric health educational institutes and obstetric care organizations to focus on bridging the health inequality gaps between pregnant women and new mothers with and without immigrant background and a low socioeconomic status.

This thesis concludes that the obstetric training programmes and the obstetric healthcare system in the Netherlands, which is based on self-reliance, do not equip healthcare professionals with the necessary skills to provide sufficient care for vulnerable pregnant women and new mothers. Therefore, the Dutch government should encourage and embed in policy (1) initiatives for restructuring care which contributes to patient-centred obstetric care; (2) the implementation of cultural competence as part of the curricula of health educational institutes and training for obstetric and midwifery healthcare professionals, and (3) the use of preventive and care intervention strategies to decrease disparities in the provision and utilization of obstetric healthcare.

In the Netherlands, several strategies are available to influence policy making in the field of obstetric healthcare. The most direct way is approaching high-positioned civil servants in the Ministry of Health, Welfare and Sport. Interest groups like the Dutch university medical centres and professional associations (KNOV and NVOG) have proved to be successful in influencing obstetric policy making concerning the 'perinatal mortality' topic in 2008-2010.<sup>42</sup> Also on a local level it is possible for interest groups to influence policy making. Convincing the responsible alderman, local governmental civil servants and the local public health service that it is essential to tackle a specific obstetric health topic can contribute to the desired policy programs. A successful example of such policy making supported by an interest group, in this case the Erasmus University Medical Centre, was the program Ready for a Baby.<sup>43</sup> In both more direct ways of influencing policy making, perinatal mortality rates triggered a policy process to change perinatal care.

For national and more structural long-term policy making, political agenda setting is the first step to accomplish the above-mentioned desired policy making goals. To this aim, it is important to involve interest groups like patients, migrants, welfare and obstetric health organizations. But seeing that more vulnerable interest groups, such as patients and migrants, may be less capable of influencing policy making, interest groups are recommended to join forces. For example, while obstetric healthcare organisations take the lead, other less well organized and capable interest groups may assume a supportive position in the lobbying coalition. It is essential that consensus should have

been reached between the most important actors about the topics for influencing the political and eventually the policy agenda.

As shown in a Dutch research paper that analysed policy towards improvement of perinatal mortality, policy makers and interest groups are most successful in influencing first the political and second the policy agenda setting if social developments around the lobbying topic are receiving persistent media attention.<sup>42</sup>

Influencing the political and policy agendas is possible by provision of petitions, positioning as an important actor and collocator and publishing reports that summarize the existing inequalities in obstetric care in terms of costs and effects on a societal and individual level, but also best practices to fix these disparities. It is recommendable for interest groups to get informed about relevant elements of the research- and advice reports of the Dutch Council for Health and Society and the Health Council of the Netherlands. Lobbying is best targeted at political parties that have a focus on improvement of healthcare in their election programmes, but also to the Minister of Health, Welfare and Sport and the civil servants of this Ministry.<sup>44</sup>

A decentral strategy, as recommended by a former Minister of Health Welfare and Sport, is to focus on the local government when it comes to policy making that can solve problems in the healthcare provision to immigrants.<sup>45</sup> Interest groups can seek liaison with Dutch local governments that conduct 'best practice' with regard to decreasing health disparities within the reproductive women's population. Through national political parties that participate in the coalition of these local governments it is possible to influence the national political and policy agenda. Also a bottom-up lobbying strategy is possible through the Dutch multi-level governance (local, provincial and national) if a local government has the opportunity to present the success of their implemented policy.<sup>44</sup>

## Healthcare recommendations

The outcomes of this thesis urge for improvements in the obstetric healthcare system in order to decrease the inequalities and inequities in the provision and utilization of the care for all Dutch pregnant women and new mothers.

In this thesis we propose two intervention strategies that can contribute to enhancing the provision and utilization of care within a multi-ethnic population, which ultimately reduces health inequalities. In line with the results of the pilot study 'Reproductive health peer education for multicultural target groups' (**chapter 8**) we recommend local governments and obstetric healthcare organizations to invest in training of educators for peer education about reproductive health. Especially educators with a Central African and Eastern European background are highly needed in the Netherlands, as well as native Dutch peer educators. The empowerment of reproductive health peer educators

can help increase non-Western immigrant and low socioeconomic status groups' knowledge about the health care system. This is particularly important for groups with a 'late' or 'very late' first antenatal visit and groups with healthcare utilization problems. Additionally it is recommendable for obstetric healthcare organisations to make use of reproductive peer educators. These can function as cultural sensitive healthcare experts and advisors on the provision of obstetric care in a multi-ethnic population. **Chapter 9** shows that adding culturally competent educational film to counselling about prenatal screening has a significant effect on the increase of knowledge within medium- and high- educated groups and non-Western immigrant groups. Therefore, we recommend the Dutch government to add the educational films to the existing national information materials about prenatal screening. Ideally, this should be combined with an evaluation by the obstetric healthcare organisations of the pros and cons of using the films in the context of healthcare provision for pregnant women with a low educated and non-Western background (context-based medicine).

From a broader context than only that of the intervention strategies as elaborated in this thesis, we make some recommendations that can contribute to reduce health disparities and improve the provision and utilization of obstetric healthcare.

*First*, the quality of healthcare systems should be measured by the organisations concerned (context-based medicine), using the classic World Health Organization concept of the responsiveness of healthcare. This provides opportunities for increasing awareness about the level of responsiveness of provided care, which contributes to reducing inequalities in the perceived responsiveness of obstetric care within the Dutch population.<sup>46</sup>

*Second*, all healthcare professionals working in the setting of antenatal, birthing and maternity care – like midwives, gynaecologists, sonographers, obstetric and maternity nurses – should know how to provide cultural competent care. To achieve this goal, the educational institutions should provide curricula for all basic supplementary training programs that offer a solid theoretical and practical basis related to ethnic-cultural diversity in the provision and utilization of obstetric healthcare. The involvement of trainers with an immigrant background is recommendable. The trainers of 'Stichting Voorlichters Gezondheid' in Rotterdam, for example, proved useful for making healthcare professionals more knowledgeable about diversity and the provision of obstetric care.<sup>47, 48</sup>

*Third*, based on the findings in this thesis a two-way strategy is recommended for improving medical communication, with implications for both obstetric caregiver and pregnant women behavior. Training of the (candidate) obstetric caregivers in cultural competence and cross-cultural communication is a direction for a possible solution. We recommend obstetric professional associations like the NVOG and KNOV to list

training about cross-cultural communication as a periodical required and accredited professionalization. The training should focus on increasing the obstetric caregivers' awareness that (1) culture affects the way in which pregnancy, childbirth and the postpartum period is framed and affects the experiences of pregnant women and new mothers; (2) cross-cultural communication starts with self-awareness and respect for the pregnant women's and new mothers' beliefs and values; and (3) communication with the woman about her culture and a cultural sensitive attitude of the caregiver is preferable.<sup>49</sup>

*Fourth*, our study findings show the need for self-assessment (as described in the 'future research' section) of obstetric caregivers and intervision between obstetric caregivers about providing obstetric care to low educated and non-Western pregnant women. **Chapters 2, 3, 4 and 5** show that obstetric caregivers provide obstetric care to vulnerable pregnant women in different ways. This is partly caused by the healthcare system, but it is also related to caregivers' beliefs, attitudes and behaviours. The deeper understanding of their own beliefs, attitudes and behaviour obtained through self-assessment will enable them to investigate areas for improvement with regard to the responsiveness of obstetric care. Intervision meetings provide the opportunity to discuss: (1) how they counsel non-native Dutch women and women with a limited language proficiency level; (2) the precise role of the counsellors in the inequalities in uptake of prenatal screening; and (3) patient, caregiver and healthcare organizations factors that are related to a late antenatal visit.

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