Health Policy 123 (2019) 87–95

Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol

Barriers to accessing adequate maternal care in Latvia: A mixed-method study among women, providers and decision-makers

Elina Miteniece[a,*], Milena Pavlova[a], Bernd Rechel[c], Dace Rezeberga[d], Liubovė Murauskienė[e], Wim Groot[a,b]

[a] Department of Health Services Research, CAPHRI, Maastricht University, Medical Center, Faculty of Health, Medicine and Life Sciences, Duboisdomein 30, P.O. Box 616, Maastricht, 6200 MD, the Netherlands
[b] Top Institute Evidence-Based Education Research (TIER), Maastricht University, Kapoenstraat 2, 6211 KH, Maastricht, the Netherlands
[c] European Observatory on Health Systems and Policies, London School of Hygiene & Tropical Medicine, Keppel Street, London, WC1E 7HT, United Kingdom
[d] Department of Obsterics and Gynecology, Riga Stradins University, Miera st 45, Riga, LV-1013, Latvia
[e] Department of Public Health, Institute of Health Sciences, Faculty of Medicine, Vilnius University, M.K. Čiurlionio g. 21, 03101, Vilnius, Lithuania

ARTICLE INFO

Article history:
Received 27 June 2018
Received in revised form 11 October 2018
Accepted 17 October 2018

Keywords:
Latvia
Central and Eastern Europe
Maternal care
Access
Pregnancy
Quality

ABSTRACT

Introduction: Latvia has a high maternal mortality ratio compared to other European countries, as well as major inequities in accessing adequate maternal care. Adequacy refers to the extent to which services are safe, effective, timely, efficient, equitable and people-centred. This study aims to explore stakeholder views on access to adequate maternal care in Latvia and the extent to which there was consensus.
Methods: This mixed-method study is based on an online survey among women who recently gave birth, as well as interviews with healthcare providers and decision-makers. The data were analysed using the method of directed qualitative content analysis. The extent of stakeholder consensus was determined by studying five access-related aspects of maternal care: availability, adequacy, affordability, approachability and acceptability.
Findings: Our study identified barriers to accessing adequate maternal care related to availability (i.e. shortage of human resources, geographical distance) and appropriateness (i.e. inequalities in provider knowledge, care provision and use of clinical guidelines). Other challenges were related to providers' approaches towards women (i.e. communication) and, to a lesser extent, maternal care acceptance by women (i.e. health literacy).
Conclusions: The barriers identified in our study highlight areas that should be addressed in future reforms of maternal care. These barriers also indicate the need for micro-level indicators that can facilitate a comprehensive evaluation of maternal care in Latvia and elsewhere.

1. Introduction

In Latvia, poor maternal health outcomes co-exist with inequities in accessing adequate maternal care [1–4]. Maternal care entails health services provided by a physician (e.g. obstetrician or GP) or midwife in an outpatient practice, hospital or maternity institution, to a woman during her pregnancy (antenatal care), childbirth and up to 42 days after childbirth (postnatal care) [5]. By adequate maternal care, we mean the extent to which services are safe, effective, timely, efficient, equitable and people-centred [6].

Estimates of the maternal mortality ratio (MMR) in Latvia differ between sources, ranging from 18 per 100,000 live births (in 2015) to 31.3 per 100,000 live births (in 2013–2015) [7–10]. However, all estimates are higher than the average of the WHO European region (17 per 100,000 in 2015) and far above the European Union (EU) average (8 per 100,000 in 2015) [7]. In 2013–2015, 35% of maternal death cases in Latvia were women without antenatal care, while another 15% had limited access to maternal care. Problems related to disability, socio-economic and lifestyle factors were identified in 75% of maternal death cases [9].

Maternal health has been declared a national priority in Latvia, and all pregnant women are entitled to publicly provided and publicly funded maternal care [11]. Evidence indicates that outpatient maternal care services are better remunerated than other healthcare services, which increased the interest of private providers to contract with the national health service (NHS) for antenatal care provision, especially since the introduction of the "money follows

* Corresponding author.
E-mail addresses: e.miteniece@maastrichtuniversity.nl (E. Miteniece), m.pavlova@maastrichtuniversity.nl (M. Pavlova), Bernd.Rechel@lshtm.ac.uk (B. Rechel), dace.rezeberga@rsu.lv (D. Rezeberga), murauskiene@mtvc.lt (L. Murauskienė), w.groot@maastrichtuniversity.nl (W. Groot).

https://doi.org/10.1016/j.healthpol.2018.10.012
0168-8510/

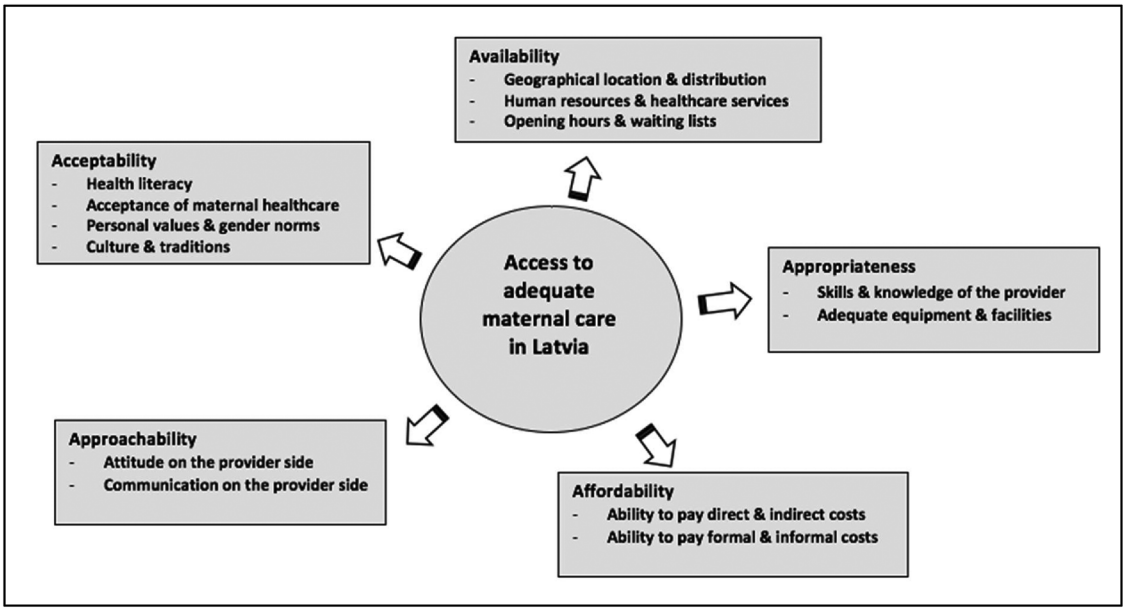

Fig. 1. Conceptual framework on access to adequate maternal care in Latvia; based on Levesque et al. [25].

pregnant women" initiative in 2012 [12,13]. Maternal care services are mainly provided by gynaecologists/obstetricians. In institutions with state funding they are free of charge to users. Women have the right to choose their provider, but if they choose a maternal care provider in the private sector who has no contract with the public sector or require care which at that time is only available in the private sector (e.g by endocrinologist), all services have to be paid for by the women themselves. In public care sector, they also have to cover the cost for extra services or services of increased comfort (e.g. additional ultrasounds, private room at hospital, contract with providers). Medication requires 75% out-of-pocket co-payment and the average stay in an inpatient facility is 3–4 days after a vaginal birth and 5–7 days after a caesarean birth. In case of a planned caesarean section women are admitted to the inpatient facility a day prior to the procedure [14]. Irrespective of whether the provider of maternal care is public or private, minimum standards of care apply, as determined by the Cabinet of Ministers Regulation No. 611. These minimum standards address requirements for healthcare providers and the routine care provision during each antenatal check-up, childbirth and post-natal check-ups. According to these rules, women are entitled to a minimum of seven antenatal check-ups and all necessary tests during this period, institutional birth with a free-of-charge stay in a shared room, regular check-ups at a facility and a minimum of one postnatal visit [13,15]. Breastfeeding is encouraged and facilitated at the inpatient facility after birth and through online reading materials (e.g. e-books, documents, regulations) along with other useful information on the maternal period available on various government websites. In addition, maternal courses – that are available for a small fee - and maternal care providers are an important source of information to women in their maternal period [13–15].

Yet, the maternal care sector shares many of the shortcomings of the wider health system. There is an overall lack of financial resources, with current health expenditure (including out-of-pocket payments) reaching only 5.8% of GDP in 2015 [16,17]. The substantial out-of-pocket payments in healthcare (41.6% of current health expenditure in 2015, mainly for pharmaceuticals and necessary care outside the public sector) are major barriers to access [1,18]. There are also long waiting lists for healthcare services, in addition to geographical inequalities due to a declining population and an urbanisation in care provision. A lack of healthcare providers exists as well, especially in rural areas. Another challenge is the inadequate quality of care (especially for inpatient care), as a result of low public investments and an insufficient use of evidence-based medicine and medical guidelines [1,12,18].

Regarding maternal care, in 2016, there were 21,442 live births, of which 0.7% were without and 6.7% with incomplete antenatal care. Importantly, 18% of pregnant women aged 15–24 reported having smoked during their pregnancy, while 0.1% consumed alcohol and 0.8% used illicit drugs [19]. The high incidence of infectious diseases (in particular HIV/AIDS and hepatitis C) that can be especially harmful during pregnancy is another challenge for maternal care [1,18].

Despite the maternal care problems in Latvia, no study so far has provided a comprehensive investigation of this topic. Our study starts addressing this shortcoming. It aimed to explore access to adequate maternal care by studying stakeholders' views and the extent of consensus on this topic.

2. Methods

This explorative mixed-methods study describes and interprets the experiences and views of study participants in order to gain insights into access to adequate maternal care in Latvia [20–22]. The design combines multiple perspectives to better capture the depth and complexity of the topic [23,24]. It involved women who gave childbirth in the previous four years, as well as healthcare providers and decision-makers. Fig. 1 describes the conceptual framework employed for our data collection and our directed qualitative content analysis (also known as thematic analysis) [25]. The framework was developed based on Levesque et al., where availability, appropriateness, affordability, approachability and acceptability are the five key aspects of access to adequate maternal care [26].

Prior to the study, ethical clearance was obtained from "Riga Stradins University ethical committee" (No 49/29.06.2017). Data collection was conducted in June-August 2017 and consisted of two phases:

Table 1
Main characteristics of respondent groups.

IDI participants' characteristics		(N)
Healthcare professionals	Midwife (public sector)	1
	Gynaecologist/Obstetrician (public sector)	2
	Gynaecologist/Obstetrician (private sector)	1
	Gynaecologist/Obstetrician (public & private sector)	1
	Neonatologist/Reanimatologist (public sector)	1
	General Practitioner	1
Decision-makers	Ministry of Health	1
	World Health Organization country office Latvia	1
	World Health Organization Regional Office Europe	1
	Management of Maternity Hospital	1
	Management of Gynaecology/Obstetrics clinic	1
	NGO for Reproductive Health	1
Women-participants' characteristics		**(N)**
Age	21- 41years	50
Education level	Lower than high school	1
	High school	10
	Professional degree	16
	Bachelor's degree	19
	Master's degree & higher	4
Children	1 -2	44
	3 or more	6
Civil status	Living with partner/spouse	48
	Living alone	2
Household income	Up to €500	7
	€501 - €1500	34
	Above €1500	9
Last childbirth (when)	1 year ago, or less	34
	2-3 years ago	16
	4 years ago	0
Last childbirth (where)	(Maternity) Hospital	49
	Homebirth	1
Last childbirth (how)	Vaginal birth	36
	Caesarean section	14
Health problems in maternal period	Yes	18
	No	32
Antenatal visits	Less than 4 visits	4
	4-7 visits	9
	8-10 visits	29
	More than 10 visits	8
Postnatal visits	No visits	7
	1-2 visits	37
	More than 2 visits	6
Maternal care sector utilised	Public	29
	Private	7
	Public and private	14

- an online survey among women who had their last childbirth in the past four years (2014–2017), with responses to open and close-ended questions from 50 women included in the analysis;
- semi-structured face-to-face in-depth interviews (IDIs) with seven healthcare professionals and six decision-makers.

The framework presented in Fig. 1, was operationalised in both research instruments (interviews and online questionnaires). In both instruments, questions were formulated around each concept and the wording was adjusted for the different participant groups (see Appendixes 1 and 2).

The respondents in the online survey were identified through Facebook "mommy" discussion groups and were recruited through a self-selection procedure. An invitation message with a survey link was posted in 48 Facebook "mommy" discussion groups that covered all five geographic regions of Latvia. This online survey approach was chosen due to being a time- and cost-efficient tool that generates easier access to a larger number of prospective participants, provides a higher level of anonymity and also allows participating through self-selection. The survey was designed for qualitative data analysis. The survey questionnaire included several open-ended and closed questions. Both, the IDI guide and the online questionnaires had similar questions and were developed based on research tools used in a similar study in Georgia [27]. Both research instruments were developed in English and then translated into Latvian by the main researcher who is bi-lingual in both languages. Furthermore, during the face-validity phase both instruments were tested and discussed with several persons in Latvia from the target groups. As a result, some minor textual adjustments were made in the Latvian translation.

The questionnaire was designed and disseminated using the Qualtrics® platform. At the beginning of the questionnaire, women were asked to provide informed consent for their participation in the survey. The survey questions were structured around the five key aspects of access to adequate maternal care (see Fig. 1) and participants were asked to share their experience and views from their last childbirth. Questions on socio-demographic characteristics were also included. The questionnaire concluded with a question on any additional experiences related to the topic. For ease of understanding, the questionnaire included lay definitions of the five aspects of access (see Appendix 1).

The IDIs were conducted with decision-makers and healthcare professionals who were selected through purposive and convenience sampling, based on their position and relevance in the field of maternal care in Latvia. In addition to questions related to the five aspects of access to adequate care, questions on maternal death registration and maternal care guidelines were added to help further explore the adequacy of maternal care (see Appendix 2). All interviews except one (conducted in English) were carried out in Latvian, recorded, transcribed and translated back into English. All IDI participants provided informed consent.

The data collected were in Latvian and were analysed in their original (Latvian) form by the main researcher. The final results were then translated into English. The data were used to identify similarities and differences in opinions across the three stakeholder groups, applying directed qualitative content analysis (thematic analysis) [25]. The interview transcripts and survey results were first read to identify information related to any of the five aspects of access presented in Fig. 1, which were the study themes. The categorised information across the stakeholder groups was then synthesised. Results are presented narratively and illustrated in tables with participants' quotes.

3. Results

The results are based on 13 IDIs with professionals and decision-makers and 50 online questionnaires by women who were part of Facebook "mommy" groups in Latvia and gave birth in 2014–2017. In total 622 respondents completed the survey, however, the first ten respondents of each of the five geographic regions of Latvia (Riga, Zemgale, Kurzeme, Vidzeme, Latgale) were selected for an equal geographical distribution and included in the study. We observed a sufficient level of saturation in the first 10 responses per region. The main characteristics of respondents included in the study are presented in Table 1. In addition, socio-demographic characteristics comparison between the women included and excluded from the study are presented in Appendix 3 along with the statistical tests that compare the differences between both samples.

Table 2
Participant quotes about availability of maternal care.

Decision makers
1. "There might be a barrier for women in rural areas where there are transportation restrictions, if she has no car, has limited income (as it is typical for those areas), if there are five children at home, a farm, and there are no maternal care providers in the surroundings (rural areas might face a significant lack of human resources)." (Management of Maternity House, public sector)
2. "There are such long waiting lists (up to 6 months) in publicly funded care, which is related to pregnancy and necessary to receive." (Management Gynaecology/Obstetrics clinic, private sector)
3. "Health professionals emigrate or simply do not want to work in hospitals, but in the private outpatient sector, so most of gynaecologists (maybe about 70-85%) work in the private sector." (WHO Latvia)
4. "Mother and child care is our national priority, no matter what happens we need to find resources to ensure the care. Two years ago, we had only about 70 general practitioners offering antenatal care services – we need time to get used to such thinking." (Ministry of Health)
Healthcare providers
5. "There is a problem with transportation, but not in bigger cities. If there is a negative genetics test result and you need an expert, there is no place to refer her in Latvia. . .I know that there work only two doctors who are overloaded – if you get an appointment you are lucky, but it is not normal to rely on luck." (Gynaecologist/Obstetrician, private sector)
6. "Antenatal, postnatal care in Riga and other bigger cities, concentration of maternal care providers is certainly larger than in rural regions." (Midwife, Public sector)
7. "I work in Rezekne, Jekabpils, Daugavpils un Preili – in the private and public sector, in outpatient and inpatient care." (Gynaecologist/Obstetrician, private & public sector)
8. "Latvia is a unique country where per 2 million inhabitants are 70 hospitals, simply not possible to afford things" (Anaesthesiologist & Reanimatologist, public sector)
Women
9. "To receive good quality ultrasound, needed to travel quite a distance and also needed to wait at least 2 months. Despite that, you need to face a long delay upon arrival."
10. "Gynaecologist has long waiting list and long delay"; "Good specialists always have a long waiting list"
"For USG check-ups needed to go to Riga, because in Ogre there are only private services. Person without a private transport can face some problems"
11. "In my municipality, there are no obstetricians/midwives who could provide services to a high-risk pregnancy"
12. "With respect to delivery, was bad luck with main doctor and due to the low interest and poor attendance it resulted in caesarean section. Complete ignorance even though I was the only woman in labour."

3.1. Availability

Healthcare professionals and decision-makers claimed that in some rural areas there are no obstetricians or other maternal care services to manage complications. As explained by these respondent groups, women travelling to the capital city face long distances and public transport restrictions. The distance barriers combined with other factors (e.g. limited income, household and childcare responsibilities, and lack of awareness of the need for maternal care) sometimes limit the utilisation of care (see Table 2, quotation 2, 5–6). However, most women-respondents noted that they had no problems in accessing maternal care due to distance, transport infrastructure or time limits. A few women mentioned that they needed to travel to another city for ultrasound services in the public sector, or for a gynaecologist who treats high-risk pregnancies or is able to identify potential pathologies. In such cases, women faced difficulties accessing adequate and affordable maternal care due to long distances and a lack of time or transportation (see Table 2, quotation 9–11).

All three respondent groups did not see waiting lists as a major problem in accessing adequate maternal care but agreed that they become a problem for necessary care during the maternal period outside obstetrics (e.g. for endocrinology). Healthcare professionals suggested that the waiting lists might be shorter at private providers and that in urgent specialised care (e.g. child genetics) there are only few professionals and timely access depended on luck. Some women identified delays in the schedule of maternal care providers of one to two hours (see Table 2, quotation 2–3, 5, 9–10).

Shortage of healthcare staff is, according to healthcare professionals and decision-makers, an important problem in Latvia, especially in rural areas and public inpatient care. A few women agreed that skilled maternal care providers in inpatient care were lacking, especially during night hours. Decision-makers noted that the human resource problem is increasing due to the emigration of highly trained or qualified professionals. They also explained that maternal care providers are switching from the public to the private sector, as well as from rural to urban areas and from inpatient to outpatient care. The healthcare professionals pointed out that Latvia has too many hospitals (about 70 hospitals for fewer than 2 million inhabitants), but only 18 have childbirth departments. At the same time they argued for the need to concentrate the provision of maternal care to increase the availability of (human) resources and to maintain childbirth case volume standards of at least 700 per year. Two gynaecologists from East Latvia (which has plenty of rural areas) said that they work in multiple towns to increase the availability of their services in that region. Healthcare professionals and decision-makers agreed that the involvement of general practitioners would improve the availability of human resources (see Table 2, quotation 4, 7–8, 11–12).

3.2. Appropriateness

None of the healthcare professionals and decision-makers identified problems related to conditions in healthcare facilities. Most women-respondents were also satisfied with the facility conditions and the perceived skills of healthcare professionals. A few women indicated that some facilities need renovation and suggested that some (publicly funded) gynaecologists and midwives lacked skills and knowledge in case of complications or high-risk pregnancies. Furthermore, eight out of 50 women stated that their personal connections helped them to receive better and faster maternal care. These women highly differed in their characteristics, i.e. education (high school – bachelor), household income (€251–€3000), health complications, type of childbirth and number of antenatal check-ups (3–25). Decision-makers claimed that the national Health Inspectorate reported inadequacies in childbirth services and gynaecology/obstetrics outpatient care. They said that the improvement of quality of childbirth services has been their priority (see Table 3, quotation 1, 12–15).

Decision-makers explained that antenatal care in the public and private sector is provided according to Regulation No 611, which sets out the minimum standard for antenatal and postnatal care. This includes a checklist of routine procedures for each visit. Furthermore, each facility has protocols for childbirth care. There are also various guidelines and tools developed in collaboration with WHO Europe and specifically adapted for Latvia, such as the maternal nutrition guidelines and the healthcare quality assessment tool.

Table 3
Participant quotes about appropriateness of maternal care.

Decision-makers
1. "The Health Inspectorate is the only institution in Latvia which receives and deals with patient complaints. Most complaints are about childbirth services, about gynaecologists that people are not satisfied with. . . Maternal death I cannot imagine being unregistered or misrepresented in Latvia, because there is an investigation of each case that takes place." (WHO Latvia)
2. "This is something that I totally do not support in the situation of Latvia that there are such paid contracts made between the doctor and woman and that might have an influence on quality." (WHO Europe)
3. "To deliver good quality, institution should deliver a minimum of 700 births per year. There are many institutions that cannot reach the 700 births." (Management of Maternity House, public sector).
4. "Regulation No 611 is a standard, no doubt. Guidelines are not obligatory, they are a suggestion and a support in decision-making. We cannot judge in cases where guidelines have not been used – it is not mandatory at the moment. . .If we are looking at maternal death causes then actually there are many socio-economic causes. There were also a few maternal deaths with indirect maternal causes, such as flu, HIV and suicide." (Ministry of Health)
5. "Lacking are guidelines for different pathologies. We are adapting, but it is more depending on – the more I know myself, the more I will be able to adapt." (Management Gynaecology/Obstetrics clinic, private sector).
Healthcare providers
6. "Providers in the private sector are not going to be the worst. Quality differs based on how much each of us wants to know. Many are surviving on knowledge received 20 years ago and continue to work in this manner and we see that very well." (Gynaecologist/Obstetrician, public sector).
7. "Besides, women also have a feeling that they can buy quality. You can choose your doctor freely and if you are not satisfied with any quality aspects, you can change a provider." (General Practitioner, do not provide maternal care)
8. "Our re-certification is every five years and we have good association which offers seminars that are very interesting and we are also offered various guidelines, but they are not mandatory." (Gynaecologist/Obstetrician, public sector)
9. "Quality is also affected by the volume of patients and the fee per patient you receive." (Gynaecologist/Obstetrician, private sector)
10. "We are quite a small population and we also have few births in absolute numbers. Therefore, every single maternal death case brings makes statistics look catastrophic." (General Practitioner, do not provide maternal care)
11. "Every guideline in nature is recommendation. Also, gynaecologists and obstetrician association is developing and updating them, but unfortunately it is not a normative act from ministry, which would put the responsibility on me." (Midwife, public sector)
Women
12. "Was not satisfied with publicly funded gynaecologist's and midwife's attitude and skills. Might have been sufficient for a physiological pregnancy, but not in case of complications."
13. "During childbirth safety procedures were not ensured (my partner heard midwives speaking of some medical equipment). After childbirth child developed an infection due to inadequate care. Inpatient care facilities were outdated (Soviet time), depressive and not comfortable."
14. "I was not appreciated by the doctor. In those five days he ignored me, did not come to check-up during discharge, only in a rough manner took out the stiches and gave rude instruction to not get pregnant within two years."
15. "In Daugavpils hospital, they did not want to do a caesarean even after 30h in pain, luckily mother in law had connections in Kraslava hospital. The director called them and asked to rescue us. Unfortunately, due to the long waiting, my daughter got some movement complications."

Healthcare professionals and decision-makers agreed that there is a need for better compliance with standards and protocols, and for making guidelines mandatory (see Table 3, quotation 4–5, 8, 11).

Another quality-related problem that emerged in the study is related to patient data. Healthcare professionals saw women in labour coming from other providers without appropriate patient files and health information, which created a potential threat to women's health. Problematic cases such as these were discussed in the meetings of the Association of Obstetricians and Gynaecologists to give providers a stimulus to improve their care while not risking to lose their reputation. Decision-makers said that institutions with lower case volumes (less than 700 births per year), especially in rural areas, might also have problems with inexperienced staff, which might undermine quality of care (see Table 3, quotation 3). They suggested that institutions with low case volumes should in principle be closed.

Healthcare professionals and decision-makers agreed that the procedures related to the registration of pregnancies, childbirths and maternal deaths are very accurate. Decision-makers described a few isolated cases of avoidable maternal deaths caused by absence of or inappropriate care, e.g. due to the absence of antenatal care and attendance during birth, insufficient capacity and resources, poor diagnostics, and logistic problems with urgent blood supply. Healthcare professionals and decision-makers also explained that Latvia has implemented a confidential inquiry program to investigate maternal deaths that identifies reasons behind maternal deaths and possible insufficiencies in care (see Table 3, quotation 4, 10).

Healthcare professionals and decision-makers noted that healthcare providers need recertification every five years and are obliged to follow training and various seminars to stay up to date. However, healthcare professionals indicated that not all maternal care providers are motivated to improve their skills, and some continue practicing based on the knowledge obtained 20 years ago. According to healthcare providers, this can also be seen in the private sector even though private providers rely on patient payments (in case they do not contract with the state). However, some healthcare professionals and decision-makers thought that women feel they can buy maternal care quality, i.e. rather pay than take chances of receiving inapropriate care (see Table 3, quotation 2, 6–9). This notion was confirmed by women-respondents.

3.3. *Affordability*

Healthcare professionals and decision-makers indicated that salaries of maternal care providers in Latvia are low and, to improve their salaries, health professionals often switch from public inpatient care to private outpatient care. They also claimed that women receiving maternal care in the public sector have been exempted from (official) patient charges, although they still have to cover the cost of medications (to some extent) if needed and transportation (see Table 4, quotation, 1, 3–5, 7). Almost half of the women-respondents informed us that they paid out-of-pocket charges for maternal care (ca. € 200 in total), which for one woman amounted to € 1500. The rest of the women in this study paid nothing or only a minimal fee. Only two women claimed that the payment obligations resulted in an underutilisation of maternal care.

All three respondent groups explained that women who have their yearly check-ups with a private gynaecologist are more likely to remain with the same provider during their pregnancy, in which case they have to pay, unless the private provider has a contract for government funding. Women are free to opt for private care but healthcare providers indicated that the overall ability to pay in Latvia is rather low. According to one of the decision-makers, there is a demand for private providers because women are willing to

Table 4
Participant quotes about affordability of maternal care.

Decision-makers
1. "I know that some obstetricians leave hospitals because they get paid less than what they have to pay their babysitter - that is they go to some outpatient clinic where they can earn more. I believe there is much less out-of-pocket and under-the-table payments. There is still that attitude that is being shown with bringing flowers for example." (WHO Europe)
2. "Contracting obstetrician is 600 euros, midwife 450 euros, private room per night 60 euros. We need to sell these services to break even. In case of postnatal complications, we hospitalise mother and baby free of charge." (Management of Maternity House, public sector)
3. "In our clinic, antenatal care visit is 35 euros, if you have contract with government – reimbursement is 22 euros. If a woman needs endocrinologist, they have a 6-month waiting list in the public system and if a woman does not want to pay privately she has a risk during childbirth and to her child. If woman has ability to pay she knows where she invests." (Management Gynaecology/Obstetrics clinic, private sector)
4. "Additional charge for contracts with midwives and gynaecologist is really for the extra service I think – for smile, for communication, additional time and politeness." (WHO Latvia)
5. "Woman is free from patient charges during pregnancy week 2-42 in public system. Home-birth is currently not reimbursed – these services are more expensive. Private gynaecologist can contract government program "money follows pregnant woman." (Ministry of Health)
Healthcare professionals
6. 30 euro per antenatal care visit, additional tests about 100 euros in total. . .I think to some extent informal payments exist in public and private sector" (Gynaecologist/Obstetrician, private sector)
7. "There is a governmental program that ensures free of charge maternal care since 2012. Not all gynaecologists participate in this program and women that have regularly been for yearly check-ups to a private doctor are most likely to stay with the same provider during the pregnancy." (General Practitioner, do not provide maternal care)
8. "Visiting private provider for which you have to pay is a free choice of a woman." (Gynaecologist/Obstetrician, public sector)
9. "Latvia is a very stratified society. I read once that 2700 houses in Latvia do not even have electricity supply." (Anaesthesiologist & Reanimatologist, public sector)
10. "I think informal payments are not required for better quality services, but more as a tradition of showing gratitude which has been there for decades." (Midwife, public sector)
Women
11. "Paid informally for childbirth services, after the service provision, made fruit bowl and a card as a gratitude for helping with giving with to the baby."
12. "Epidural anaesthetics -220€, oculist - 427€, Rheumatologist (4 visits) ~100€, Blood test ~ 20€, Glycose test - 4€, Ultrasound pictures - 25€, cost of transportation ~50€."

invest in safe pregnancies and childbirths (see Table 4, quotation 7–9).

Decision-makers indicated that public maternal care providers or private providers with a public service contract receive a reimbursement of € 22 per antenatal visit. Although this amount had increased almost four-fold in recent years, it is still lower than the one asked for in the private sector, which is why some private providers still resist contracting with the public sector. In addition to antenatal visits, women in the private sector pay for all tests and ultrasound examinations. Prices vary per provider and are based on services utilised, but one vaginal childbirth, as indicated by providers, could cost around € 500–1000. Decision-makers explained that, to break even, public inpatient service providers have to sell extra services such as private/family rooms (€ 60 per night). Women may also contract either an obstetrician (€ 600) or a midwife (€ 450), so that these are present during birth. Women confirmed purchasing such services. Additionally, women-respondents said that they paid for anaesthetics during birth, additional tests outside the scope of maternal care, medications and travel costs (see Table 4, quotation 2–3, 6, 12).

Healthcare professionals and decision-makers agreed that overall and even informal out-of-pocket payments in maternal care have decreased even more due to the latest (2012) State Maternal Care Program "Money follows pregnant women". Though there is still gratitude being shown by patients to staff by giving small gifts in kind, especially after childbirth. Most women noted that they did not provide any informal payments but a few women reported giving small gifts in kind as a token of appreciation for friendly attitudes and good services (see Table 4, quotation 1, 6–7, 10–11).

3.4. Approachability

Healthcare professionals and decision-makers claimed that the attitudes and communication skills of maternal care providers are an important problem in Latvia, although they had improved tremendously in recent years, partly due to better financial incentives and more rights to patients. Decision-makers added that women are free to choose their provider and are encouraged to request appropriate attitudes, communication and information. However, all respondent groups also opined that attitudes and communication still have much room for improvement, since they might affect women psychologically and emotionally (see Table 5, quotations 2–3, 7, 12–15).

These two groups of respondents also noted that poor attitudes and communication might be related to the overall motivation and attitudes of healthcare professionals towards their work and not only to their rates of reimbursement. However, they also pointed out that providers' socio-economic situation and long working hours across multiple jobs are bound to affect attitudes and communication. In this area, there are no strict guidelines or controls, but, as noted above, women are free to change their maternal care provider when they are not satisfied with them (see Table 5, quotation 1, 8).

Decision-makers indicated that, perhaps in order to avoid the possible risk of experiencing poor attitudes and communication during childbirth, women sign contracts with obstetricians and midwives. In this way, their impression is that women feel that they have done a great deal to ensure support in case of any emergencies or complications. The general expectation is that attitudes, communication and attention are better in the private sector, but one decision-maker pointed out that, due to the overall economic situation in Latvia, most women will continue utilising public maternal care services (see Table 5, quotation 3).

With respect to the provision of information, healthcare professionals claimed that it is difficult to provide sufficient information to women in the 20 min allocated per visit, especially if it is a high-risk pregnancy. They explained that sometimes there are social and psychological problems to discuss, such as smoking and alcohol consumption, which are not their areas of expertise, but are still important for the pregnancy. Decision-makers indicated that there is an interactive online source of information ["grutnieciba.lv"] provided by the government and maternal care providers, which provides women with essential information about pregnancy. However, there is also plenty of misleading information

Table 5
Participant quotes about approachability of providers & acceptability of maternal care.

Decision-makers
1. "There are myths with incorrect information that you are struggling with and the healthcare professional in his 20 minutes does what he can do. Grūtniecība.lv is a governmental website containing good information about pregnancy." (WHO Latvia)
2. "I can say that the attitude is and has always been an issue. It has improved tremendously, that is no doubt." (WHO Europe)
3. "The poor attitude or communication does not affect health directly but psychological and emotional influence there is." (Management of Maternity House, public sector)
4. "We were fighting multiple times with the Ministry of Education to re-introduce health education in schools. Example: baby is crying in nights, not gaining weight and mother is breastfeeding. Who could even imagine that the first milk, which is the most nutritious and important she pumps and throws out and then continues breastfeeding with the watery milk." (Ministry of Health)
5. "Of course, there are women who are socially and economically deprived and not educated – then they are not utilising antenatal care and these are the unplanned and acute cases." (WHO Latvia)
6. "Women have access to good informative websites, magazines evidence-based, WHO has been involved. We speak here about an average, women within the society, but there are women without smartphone without any interest to read whatsoever." (WHO Europe)
Healthcare professionals
7. "I do not think it is the problem number one, but it still an important problem. Provider needs to be interested in what he is doing, it is not really dependent whether it is private or public provider – we see this problem in both sectors." (Gynaecologist/Obstetrician, private sector)
8. "From all women I see, maybe 20% are physiological pregnancies, the rest are with complications and visits take longer time, I spend at least 30 minutes while government standards are 20 minutes." (Gynaecologist/Obstetrician, Public sector)
9. "If simultaneously it is necessary to fulfil functions of social worker or phycologist – in general it is not our competency, but how much time do I need to address to (let's take the easiest example – smoking)." (Midwife, public sector)
10. "Most problematic cases are related to education level and socio-economic status - there are such women who come for childbirth drunk and the next day do not understand it is her child." (Gynaecologist/Obstetrician, public sector)
11. "Often, we face no interest about herself, her body and her health (to mention the smoking again)." (Midwife, public sector)
Women
12. "Attitude was good, gynaecologist listened to me, gave advice. When I gave birth, specialists were supportive and encouraging."
13. "After caesarean section, nurses were very impolite, even midwives were strict, careless and did not communicate."
14. "Very good attitude from all providers, despite one incident when in one morning in I went to Stradins hospital where the doctor was very rude and in a bad mood. I was surprised that it is a young doctor in residency who already hates night shifts."
15. "Not that I did not receive services, but according to me I received inadequate comments from General Practitioner who told me 'do you really need that many children', also judging my family status (we were not married).
16. "In period when a woman is expecting a child, it is important to feel safe about her and her child's health, to feel taken care of."
17. "Important to know that with me and my unborn child everything is ok. Was important that my baby is born healthy. There were no services that were unnecessary."
18. "During pregnancy, all information I received from my gynaecologist, but what I did not understand found in online forums where mums are sharing their experience. In post-natal period, big support received from friends who have recently given birth."

in the general media and the women's social networks (see Table 5, quotation 1, 8–9).

Most women were overall satisfied with the attitudes, communication and information from healthcare providers during their maternal period. Only a few women reported negative experiences in this respect with maternal care providers in inpatient and outpatient care. In contrast, none of the women who reported utilising maternal care in the private sector mentioned negative experiences with the providers' attitudes or communication (see Table 5, quotation 12–15).

3.5. Acceptability

Healthcare providers noted that maternal care providers often get the blame for women's health outcomes, despite the fact that women are also responsible. They pointed out that some women are lacking (health) literacy and awareness about the need for maternal care, and some women have reportedly little to no interest in their bodies and health during the maternal period. Healthcare providers also noted problems such as smoking, illicit drugs and alcohol use. A manager of a private maternal clinic shared that, since they started contracting for public funding, they provide services to women from various socio-economic groups, including those with lifestyle-related problems. Healthcare providers also claimed that there are women who arrive for childbirth drunk and unaware of the situation, or women who refuse to receive antenatal care. They also noted that there are women who refuse ultrasound examinations, thinking it will harm their babies (see Table 5, quotation 4–6, 10–11).

Healthcare professionals and decision-makers noted that there is much information available for women in the maternal period (e.g. on websites or in magazines) if they are interested to read it. They found that the overall situation has improved because young women read online sources and communicate with peers about their experience during pregnancy. However, they must also be able to filter which information is adequate. Healthcare professionals pointed to the need for improving women's (health) literacy and overall socio-economic status (see Table 5, quotation 4–6, 10).

All women-respondents except one claimed that all maternal care services were important, not only for their and their baby's physical health, but also for psychological and emotional support. Women said they received a lot of information from their maternal care providers and this helped them during their maternal period. Overall, women gained the necessary information from a mix of sources, including the internet, books, courses, healthcare providers and peers from their social network. None of the women mentioned any other barriers related to culture, family traditions, religion or gender relationships, which hindered them from utilising any of the maternal care services (see Table 5, quotation 16–18).

4. Discussion

As indicated by our results, women in Latvia find important to receive adequate maternal care which includes adequate provider attitudes and clinical quality. Assuring such care can be challenging even for well-off and better-informed women, but even more so for less informed women and women who cannot afford care in the private sector and whose choice is limited by the publicly funded services. Geographical distance can also be problematic to some extent in rural population groups and high-risk pregnancies, due to the urbanisation of care and the related time and traveling costs involved.

In line with what has been described in the literature [13,28], the stakeholders in our study confirmed that affordability of maternal care is generally not a problem in Latvia. Affordability might become problematic when a woman during her maternal period

requires care outside the maternal care sector [1]. Nevertheless, there are clear inequities in being able to afford (maternal) care in the privately financed sector. All three stakeholder groups perceive maternal care in the private sector to be of good quality. Currently about 70–85% of antenatal care is by private providers, although women do not have to pay if these providers have contracts for public funding.

The participants in our study also noted social problems, as also identified by some other studies [1,19], such as little interest in one's own health and poor health literacy (e.g. not using antenatal care or not treating existing infectious diseases), combined with lifestyle-related problems, as factors in not seeking maternal care. This underutilisation is also related to the absence of sexual health education in schools and poor family planning [18,19]. All women in our study indicated the importance of maternal care services, but this may reflect selection bias, as they were members of on-line discussion groups, and thus might be more interested and eager to be informed than other women in Latvia. Overall, our findings suggest that many sources are being used to gain information during the maternal period. It is however important to stimulate the use of adequate sources such as the government online resource "grutnieciba.lv", which aims to provide women with trustworthy information [15].

In terms of human resources, the stakeholders mentioned an increasing shortage of maternal care providers, especially in rural areas and public inpatient care facilities. In order to improve the availability of human resources, participants pointed to the need for greater involvement of midwives and general practitioners in the provision of maternal care. According to the literature, the lack of human resources in healthcare is the result of the emigration of highly trained and qualified professionals and urbanisation trends [1,29]. With the high quality of medical education and low wages, Latvia is witnessing a brain drain and has become a sender country of healthcare workers, resulting in a serious deficit in gynaecology. The total number of health care workers decreased by 14% (nurses −19%, mid-level specialists e.g. midwives -16%) in the period from 2009 to 2014, while the population of Latvia decreased by about 8%. In addition, there is a concentration of healthcare workers in the capital city of Riga (about 60% of doctors). To improve service availability, since 2015 state-funded residency places are given priority if there is an agreement to start employment at a medical institution outside Riga. In return, after completing the residency, medical doctors are required to work for 3 years in a state or municipal medical institution [30,31].

The literature points to concerns over the appropriateness of maternal care (in particular inpatient care), including an insufficient use of medical guidelines [1]. The results of our study suggest that not all providers were aware of the existence of certain medical guidelines, such as EBCOG or bleeding in the postpartum period, which are available on the website of the Obstetrics Association [32]. This may indicate inability or reluctance to use existing resources [4]. The highest volume of complaints that the national Health Inspectorate receives relates to inpatient care for childbirths. Our study suggests that clinical quality, professional skills and attitudes towards women differ among providers. While minimum quality standards in maternal care are regulated by law, many women carefully consider where to use maternal care and some even sign (paid) contracts with maternal care providers to avoid poor attitudes and low clinical quality [13]. Although maternal care providers have to undergo re-certification every five years, our study suggests that certain providers practice outdated knowledge and principles. Decision-makers and women showed consensus that the low salaries in the public (inpatient) care system may also undermine the motivation of maternal care providers to provide appropriate services, which might be one of the reasons why women believe that maternal care in the private sector is better. News articles report that gynaecologists/obstetricians working in inpatient care received about €5.20 per hour, while midwives received only €3.15 per hour before taxes. Since 2018, their salaries are increased to €10 per hour to gynaecologists/obstetricians and €5 per hour to midwives [12,33,34].

Although this study focuses on Latvia, it is relevant for data collection in other countries. Our results show the importance of micro-level indicators, such as the use of clinical guidelines, provider knowledge, provision of care, communication and attitudes, and health literacy. In addition to already existing macro-level indicators, these micro-level indicators should be taken into account for a comprehensive evaluation of the provision of maternal care. The study results are also relevant for countries with similar contextual factors, such as many countries in Eastern Europe where maternal care problems might remain concealed by comparatively good macro-level indicators. Access-related problems similar to the ones found in our study have been reported in Serbia, Russia, Ukraine, Bulgaria, Georgia and Albania, including geographical barriers, a shortage of skilled staff, inadequate attitudes of health professionals, and poor quality of care [27,35]. In all countries, it is important to consider factors that influence women in utilising maternal care, including perceived quality of care and attitudes of health professionals.

4.1. Strengths and limitations of the study

The mixed-methods research design allowed us to capture a detailed picture of this under-researched topic, but makes it difficult to generalise findings. To mitigate researcher bias, a group of experienced researchers was involved in the development of the online questionnaire and the interview guide; we also checked the face validity of both research instruments. The recall bias was avoided to a certain degree by including only women who gave birth in the past 4 years, as well as stakeholders who were directly involved in maternal care decision-making or provision. Our study only included women who were members of Facebook "mommy" groups, which, as discussed above, might give rise to selection bias. Moreover, since this study has a qualitative nature and design, it might be that not all groups of women are well represented. Finally, an important advantage of our study was the possibility to triangulate the opinions of the three stakeholder groups, which allowed for validation.

5. Conclusions

This study explored stakeholder views on access to adequate maternal care in Latvia, distinguishing five access domains: availability, appropriateness, affordability, acceptability and approachability. It identified access barriers related to a shortage of human resources, insufficiencies in maternal care quality standards, health literacy in women (knowledge of behaviour during maternal period and the importance of maternal care services) and inequalities across population groups. There are also problems with the application of clinical guidelines and inequalities in providers' knowledge and the care provided, especially in emergency situations. Addressing these factors could help to improve access to adequate maternal care.

Declaration of interests

None.

Acknowledgements

We thank all stakeholders who took part in the online survey and interviews. Furthermore, there is no external funding nor other sources of outside support for this research.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.healthpol.2018.10.012.

References

[1] OECD. OECD reviews of health systems: Latvia 2016; 2016. Paris.
[2] Wildman K, Bouvier-Colle MH. Maternal mortality as an indicator of obstetric care in Europe. Gynaecology 2004;111(2):164–9.
[3] Maruthappu M, Ng KY, Williams C, Atun R, Agrawal P, Zeltner T, et al. The association between government healthcare spending and maternal mortality in the European Union, 1981–2010: a retrospective study. Bjog 2015;122(9):1216–24.
[4] Bouvier-Colle MH, Mohangoo AD, Gissler M, Novak-Antolic Z, Vutuc C, Szamotulska K, et al. What about the mothers? An analysis of maternal mortality and morbidity in perinatal health surveillance systems in Europe. Bjog 2012;119(7):880–9, discussion 890.
[5] Segen's medical dictionary. *maternity care*. n.d. [cited 2018 25 May]; Available from: https://medical-dictionary.thefreedictionary.com/maternity+care.
[6] World Health Organization, n.d. [cited 2018 25 May]; Available from: What is quality of care and why is it important? Maternal, newborn, child and adolescent health; 2018 http://www.who.int/maternal_child_adolescent/topics/quality-of-care/definition/en/.
[7] World Health Organization. European health information gateway; 2018.
[8] Index Mundi [cited 2018 23.03.]; Available from: Latvia maternal mortality rate; 2018 https://www.indexmundi.com/latvia/maternal_mortality_rate.html.
[9] Rezeberga D, Jansone M, Bathena V, Irša S, Lapiņš E, Bļodiece I, et al. Mātes mirstība konfidenciālā analīze Latvijā. Ziņojums par situāciju Latvijā 2013.–2015.gadā; 2017. Riga.
[10] The World Bank. Maternal mortality ratio (modeled estimate, per 100,000 live births); 2018, worldbank.org.
[11] Mitenbergs Uldis, Taube M, Misins J, Mikitis E, Martinsons A, Rurane A, et al. Latvia: health system review. Health Systems in Transition 2012;14(8). p. xv-xxii, 1-191.
[12] Upite I [cited 2018 17th June]; Available from: Uzlabojumu «ēnas puse» – speciālisti vairs negrib strādāt ginekoloģijas stacionāros; 2016 https://www.lsm.lv/raksts/zinas/latvija/uzlabojumu-enas-puse-specialisti-vairs-negrib-stradat-ginekologijas-stacionaros.a177662/.
[13] Nacionalais Veselibas Dienests [cited 2018 23.03]; Available from: Grūtniecība un dzemdības; 2017 http://www.vmnvd.gov.lv/lv/veselibas-aprupes-pakalpojumi/grutnieciba-un-dzemdibas.
[14] Rigas Dzemdibu Nams [cited 2018 27th August]; Available from: Pēcdzemdību aprūpe sievietei; 2018 https://www.rdn.lv/lv/mate-un-berns/pecdzemdibu-aprupe-sievietei/.
[15] Veselibas Ministrija [cited 2018 23.03]; Available from: Valsts portāls grutnieciba.lv; 2014 http://www.vm.gov.lv/lv/tava_veseliba/sievietem/valsts_portals_grutniecibalv/.
[16] OECD and European Observatory on Health Systems and Policies, *State of the health in the EU: Latvia country health profile 2017* in 2017.
[17] World Health Organization. Global health expenditure database. World Health Organization; 2018.
[18] Putniņa A. Iedzīvotāju reproduktīvā veselība. Pārskats par situāciju Latvijā (2003–2011); 2011. Riga.
[19] Centre for Disease Prevention and Control of Latvia. Statistical yearbook of health care in Latvia; 2017. p. 253–88.
[20] Escuriet Ramón, White Joanna, Beeckman Katrien, Frith Lucy, Leon-Larios Fatima, Loytved Christine, et al. Assessing the performance of maternity care in Europe: a critical exploration of tools and indicators. BMC Health Services Research 2015;15(1):491.
[21] Rechel B, Richardson E, McKee M. Trends in health systems in the former Soviet Union. Europe: European Observatory on Health Systems and Policies/WHO; 2014.
[22] Tunçalp Ö, Pena-Rosas Juan Pablo, Lawrie Theresa, Bucagu Maurice, Oladapo Olufemi T, Portela Anayda, et al. WHO recommendations on antenatal care for a positive pregnancy experience—going beyond survival. BJOG: An International Journal of Obstetrics & Gynaecology 2017;124(6):860–2.
[23] Polit DF, Beck CT. Nursing research: generating and assessing evidence for nursing practice. Lippincott Williams & Wilkins; 2008.
[24] Githens Penny B, Glass Cheryl A, Sloan Frank A, Entman Stephen S, et al. Maternal recall and medical records: an examination of events during pregnancy, childbirth, and early infancy. Birth 1993;20(3):136–41.
[25] Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qualitative Health Research 2005;15(9):1277–88.
[26] Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. International Journal for Equity in Health 2013;12(1):18.
[27] Miteniece E, Pavlova M, Shengelia L, Rechel B, Groot W, et al. Barriers to access adequate maternal care in Georgia: a qualitative study. BMC Health Services Research 2018;18(631):1–12.
[28] Veselibas Ministrija [cited 2018 24 May]; Available from: Mātes un bērna veselības uzlabošanas gads 2012; 2013 http://www.vm.gov.lv/lv/aktualitates/mates_un_berna_veselibas_gads_2012/mates_un_berna_veselibas_uzlabosanas_plans1/.
[29] Index Mundi [cited 2018 01.04.]; Available from: Latvia – rural population; 2018 https://www.indexmundi.com/facts/latvia/rural-population-SP.RUR.TOTL.ZS.
[30] Ministry of Health of the Republic of Latvia. Konceptualais zinojums "Par veselibas aprupes sistemas reformu"; 2017. p. 1–77. Riga, Latvia.
[31] Araujo C Edson, Lobo Maria Stella, Mozhaeva Irina, Buchan James, et al. Human resources review; 2018. p. 1–42, n.d.: Riga, Latvia.
[32] GINASOC, n.d. [cited 2018 25 May]; Available from: EBCOG izstrādātie un pieņemtie aprūpes standarti; 2018 http://www.ginasoc.lv/ebcog-aktualitates.
[33] LETA [cited 2018 20th August]; Available from: Dzemdību nama mediķu algas varētu palielināt, pārskatot dzemdību tarifu; 2017 http://www.delfi.lv/news/national/politics/dzemdibu-nama-mediku-algas-varetu-palielinat-parskatot-dzemdibu-tarifu.d?id=48522641.
[34] Brikmane E [cited 2018 20th August]; Available from: Veselības aprūpe 2018. gadā – lielākais budžets, e-veselība un obligātā apdrošināšana; 2018 https://lvportals.lv/skaidrojumi/292421-veselibas-aprupe-2018-gada-lielakais-budzets-e-veseliba-un-obligata-apdrosinasana-2018-komentari.
[35] Miteniece Elina, Pavlova Milena, Rechel Bernd, Groot Wim, et al. Barriers to accessing adequate maternal care in Central and Eastern European countries: a systematic literature review. Social Science & Medicine 2017;177:1–8.