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Comparison of Frequency of Home Births in the Member States of the EU Between 2015 and 2019

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Abstract

Introduction. The disagreement of the general public's views on home births is practically identical for the professional public and specialists also. The core of the problem lies in the disunity between individual countries of the European Union—complete prohibition under the risk of committing a crime on one side and standard procedure perceived as something completely common on the other side. *Methods.* The authors focused on the prevalence of home births in individual EU countries, together with the proportion of neonatological mortality compared to the number of live births, which are data that, unlike home births, are mandatory in each EU Member State. Data on home births were obtained from available official and verified sources such as the Ministry of Health, reviews published by the WHO, or published peer-reviewed scientific and professional works. Secondary data were procured via Web of Science, Scopus, or PubMed. *Results.* The aim of the study was to trace the documented numbers of home births in the individual states of the European Union in the years 2015 to 2019, to analyze them with data on live births together and with data on infant mortality. A comparative analysis of the compiled data can be used to conclude which countries have the highest domestic birth rates and how the birth rate is manifested in these countries. Based on the analysis of available data, it can be determined that the Netherlands, Denmark, and Germany have the highest share of domestic births. The link between home births and increased neonatal mortality has not been established. Eastern Europe countries have the highest neonatal mortality, namely Romania (1.19%) and Malta (0.63%). *Conclusion.* The Netherlands has the highest domestic birth rate per 100 000 inhabitants with a 5-year average of 161 922 (overall average of all live births 993.40), but is also in 11th place in neonatal mortality, together with Denmark and Belgium, which have 0.35% neonatal neonatal mortality. The country with the lowest neonatal mortality of 0.19% is Slovenia. The total average of all children born in 5 years (915 live births) is 1.422. When monitoring the number of domestic births in other countries in the years 2015 to 2019, an increasing tendency of this trend is observed.

Keywords

home births, labor difficulties, neonatal mortality rate, European Union

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Introduction

The study deals with the rising trend of home births, which are becoming more and more popular with the general public. Home births are not registered by any country of the European Union, with the exception of the Netherlands, where the frequency of home births is the highest. The limit for the paper is the non-existent statistics related to this topic. The percentage is calculated off estimation in each country of the European Union. These estimations are the numbers of children's births with a missing concrete place of birth. Simultaneously there was no study concerning the topic of home births in the EU found.

This report shows the summary of home births in each member state of the EU. Alling with that it

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compares the data of children born alive with a prevalence of home births and neonatal mortality rate.

At present, home births are on a continuous, albeit gradual, rise. EU countries have different approaches to this issue. While the Netherlands and Denmark support their residents in the issue of home births, other countries such as the Czechia, Slovakia and others do not have legally prohibited births, but midwives are not allowed to work outside hospital facilities. In the event of a breach of these regulations, midwives risk heavy penalties or a ban on activities for up to 1 year.

The prevalence of home births is rather similar in all the countries with being around 1% or less of all the births. An exception could be seen in the Netherlands where the number is much higher (around 16.3% of all births.) In the Netherlands, the hospital care divides their patients into 2 groups—primary and secondary one. The primary group consists of labors with a low chance of any complication. The labor is guided only by the midwife without the presence of any doctor who is called only in case there's any problem that is unsolvable by the midwife herself. Three hours after the labor these women could be sent home but only if nothing went wrong. Women in the second group have a higher risk of potential complications. In these cases, a doctor must be present. This kind of care can be also found in Denmark. The rest of the EU doesn't have any kind of system which would similarly divide their patients. Both a midwife and a doctor are presented during any labor. In cases where the patients request it, there's a chance to be given drugs to dull the pain.[1]

Countries that allow mothers to give birth at home also offer other alternatives, such as maternity homes, where a woman avoids the stress that the hospital environment puts on her. The maternity wards are almost fully managed by midwives and the doctor is called to give birth only in the event of complications. The mothers report a more pleasant environment in which they can give birth to the offspring and feel less pressure on their person from the staff.

The aim of the paper is to compile an overview for EU countries on the issue of domestic birth rates and subsequent comparison with data on neonatal mortality and the number of live births in a given country for a particular year.

Methods

The report is based on a wide scale of sources. The data of children born alive are taken from the official state resources such as national statistical offices. The data about the prevalence of home births are mostly taken from research papers or academic publications. In 2 cases the data are taken from the overview given by the local ministry of health. And there are 6 different cases where the data are from the overview given by WHO.

The estimated number of home births was individually calculated by basic mathematical methods where the input was the number of children born alive and the estimated percentage of home birth in given states. The comparison and the evaluation proceeds from the highest to the lowest represented percentage.

The median value of home births is calculated via the MEDIAN function.

The data of neonatal mortality rate are taken from the official online sources.

In the case of 3 different countries, the data are taken from their national statistical institutes. In the rest, the data are taken from the European statistics. Next, there were made percentual calculations of deaths in each country in given years. The average percentage of 5 years of neonatal deaths is calculated based on these calculations via basic mathematical operations. Next, the data of all the countries are benchmarked. All data in were converted to 100 000 inhabitants using basic mathematical methods.

At the same time, the work is limited by non-existent statistics on the number of births that take place outside the hospital environment.

Results

The highest rate of home births can be found in the Netherlands. Women there trust the health care system which allows them the labor at home. As explained above the health care for pregnant women there is divided into primary and secondary one. The patients with a low risk of any complication are classed to the primary care. Vice-versa if there's a chance of any complication, the patient gets into secondary care also knows as specialized care. A similar situation can be observed in Denmark which ranked second out of the countries of the EU in the prevalence of home births. The women choose the option of home birth in 1.4% of all cases. Denmark offers their patients to choose the place of labor. In case they choose the home birth they must arrange their midwife.[2,3]

The third-highest number of home births was reached in Germany. Although there is a 4 times higher count of labors in Germany than there is in the Netherlands, the count of home births is only 1.3% out of all the labors. Belgium places as the fourth with the rate of 1.1% home births out of all labors. The data of children born alive in Belgium are registered with 2 times higher prevalence

Table 1. A Brief Overview of Countries of the EU and Their Approximate Counts of Home Births.

Countries of EU (per 100 000 habitants)	Children born alive					Home births (%)	Number of home births				
	2015	2016	2017	2018	2019		2015	2016	2017	2018	2019
Belgium[5,6]	1080	1069	1047	1031	1006	1.1*	11.88	11.76	11.52	11.34	11.07
Bulgaria[7]	919	912	904	885	882	-***	-	-	-	-	-
Czechia[8,9]	1050	1066	1080	1073	1052	0.25*	2.63	2.67	2.70	2.68	2.63
Denmark[10]	1024	1076	1065	1061	1052	1.4*	14.34	15.06	14.91	14.85	14.73
Estonia[11,12]	1057	1068	1046	1087	1063	0.45**	4.76	4.81	4.71	4.89	4.78
Finland[13,14]	1012	961	914	863	826	0.2*	2.02	1.92	1.83	1.73	1.65
France[15,16]	1143	1116	1091	1073	1062	1*	11.43	11.16	10.91	10.73	10.62
Croatia[17]	891	901	885	903	888	-***	-	-	-	-	-
Ireland[12,18]	1394	1343	1286	1254	1212	0.2**	2.79	2.69	2.57	2.51	2.42
Italy[19,20]	688	727	749	775	804	0.1*	0.69	0.73	0.75	0.78	0.80
Cyprus[21,22]	1082	1110	1074	1072	1083	-***	-	-	-	-	-
Lithuania[12,23]	1084	1068	1015	1007	992	0.8**	8.67	8.54	8.40	8.06	7.94
Spain[24,25]	905	883	840	789	763	0.32*	2.90	2.83	2.69	2.52	2.44
Sweden[26,27]	1172	1183	1148	1138	1114	1*	11.74	11.83	11.48	11.38	11.14
Hungary[28,29]	932	949	1079	638	941	0.9*	8.39	8.54	9.71	5.74	8.47
Malta[2,30]	997	995	936	927	880	0.3**	2.99	2.99	2.81	2.78	2.64
Germany[3,4]	903	962	950	950	936	1.3*	11.74	12.51	12.35	13.35	12.17
The Netherlands[9,31]	1007	1013	991	978	978	16.3*	164.14	165.12	161.53	159.41	159.41
Poland[32,33]	972	1007	1059	1022	987	0.03*	0.29	0.30	0.32	0.31	0.30
Portugal[34,35]	825	844	836	846	842	1**	8.25	8.44	8.36	8.46	8.42
Austria[12,36]	976	1004	966	968	957	1*	9.76	10.04	9.66	9.68	9.57
Romania[37,38]	589	525	606	738	591	0.25*	1.47	1.31	1.52	1.85	1.48
Greece[39,40]	849	862	823	805	781	0.3*	2.56	2.59	2.47	2.42	2.34
Slovakia[9,41]	1025	1060	1066	1058	1046	0.25*	2.56	2.65	2.67	2.66	2.62
Slovenia[12,42]	1000	985	980	844	926	0.15**	1.50	1.48	1.47	1.27	1.39
Latvia[12,43]	1111	1121	1072	1002	982	1*	11.11	11.21	10.72	10.02	9.82
Luxembourg[12,44]	1074	1040	1035	1028	1005	0.5**	5.37	5.20	5.18	5.14	5.03

The results are calculated out of estimated counts of home births in each country with the number of children born alive each year. This is caused by the limit of this report considering the non-existent statistics and data. The approximate percentual estimation is the result of the missing data that the child was born in the hospital.
*scientific or professional published article.
**Ministry of Health, WHO.
***untraceable value.

than in Denmark, but anyway, the difference of home births is only 0.3%. The difference in the number of children born alive is around 50 000 infants a year which is not so dramatic variance in comparison to the other countries, but the disparity of home births is 15.2%. The difference is that in Belgium no system would divide their patients into the primary and secondary groups as there is in Netherlands and Denmark. All the patients can expect to have specialized care from a doctor and such in case they decide to give birth in a hospital. This system works in most of the countries in the EU.[4]

The lowest count of home births is found in Poland. There are only registered about 120 home births a year. Poland is followed by Italy where is registered only 0.1% of home births out of all the labors. In this case, Italy is very similar to the Western countries. Patients, there are free to choose the home birth, but this option is not that popular in Italy.

Slovenia is placed third with the rate of 0.15%, despite out of hospital premises is not prohibited. Women there trust the local healthcare system, so they don't necessarily need to choose otherwise (Table 1).

Next, there are the countries in the north of Europe. The typical rate of home births there is around 0.2%. The only exception is Sweden with the rate of 1% home birth out of all the labors.

The third country with the lowest domestic birth rate is Slovenia with a value of 0.15%, although births outside the hospital environment are not prohibited.

Table 2. The Data of Children Born Alive and the Data of Neonatal Mortality Rate.

Countries of EU (per 100 000 habitants)	Neonatal mortality					Percentage (%)					Average (%)
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Belgium[46]	3.548	3.415	3.771	3.886	3.734	0.32	0.31	0.36	0.38	0.37	0.35
Bulgaria[46]	6.046	5.934	5.766	5.098	4.903	0.66	0.65	0.64	0.58	0.56	0.62
Czechia[47]	2.579	3.000	2.869	2.747	2.699	0.25	0.28	0.27	0.26	0.26	0.26
Denmark[46]	3.800	3.387	4.007	3.901	1.113	0.37	0.32	0.38	0.37	0.30	0.35
Estonia[46]	2.661	2.508	2.429	1.740	1.658	0.25	0.24	0.23	0.16	0.15	0.21
Finland[46]	1.770	1.820	1.852	1.831	1.737	0.18	0.19	0.20	0.21	0.21	0.20
France[46]	4.424	4.378	4.440	4.331	4.259	0.39	0.39	0.41	0.40	0.40	0.40
Croatia[46]	3.660	3.859	3.584	3.838	3.516	0.41	0.43	0.41	0.43	0.40	0.42
Ireland[46]	4.785	4.080	3.890	3.575	3.344	0.34	0.30	0.30	0.29	0.28	0.30
Italy[46]	2.302	2.209	2.067	2.032	1.688	0.34	0.30	0.28	0.26	0.21	0.28
Cyprus[46]	2.949	2.936	1.370	2.529	2.835	0.27	0.26	0.13	0.24	0.26	0.23
Lithuania[46]	4.544	4.846	3.005	3.427	3.221	0.42	0.45	0.29	0.34	0.32	0.36
Spain[46]	2.405	2.360	2.284	2.133	2.013	0.27	0.27	0.27	0.27	0.26	0.27
Sweden[46]	2.878	2.943	2.764	2.310	2.306	0.25	0.25	0.24	0.20	0.21	0.23
Hungary[46]	3.891	3.750	3.351	3.110	3.400	0.42	0.40	0.31	0.33	0.36	0.36
Malta[46]	5.617	7.247	6.200	5.159	5.753	0.56	0.73	0.66	0.56	0.65	0.63
Germany[48]	2.944	3.279	2.627	3.022	2.991	0.32	0.34	0.33	0.32	0.32	0.33
Netherlands[46]	3.312	3.506	3.543	3.378	3.557	0.33	0.35	0.36	0.35	0.36	0.35
Poland[46]	3.886	4.008	4.224	3.934	3.719	0.40	0.40	0.40	0.39	0.38	0.39
Portugal[46]	2.414	2.731	2.223	2.613	2.392	0.29	0.32	0.27	0.33	0.28	0.30
Austria[49]	2.997	3.079	2.910	2.613	2.815	0.31	0.31	0.29	0.27	0.29	0.29
Romania[46]	7.605	7.101	6.983	6.296	5.838	1.29	1.35	1.15	1.17	0.99	1.19
Greece[46]	3.364	3.591	2.845	2.795	2.929	0.40	0.42	0.35	0.35	0.38	0.38
Slovakia[46]	5.255	5.727	4.835	5.288	5.354	0.51	0.54	0.45	0.50	0.51	0.50
Slovenia[46]	1.599	1.985	2.033	1.591	1.915	0.16	0.20	0.21	0.17	0.21	0.19
Latvia[46]	3.098	2.824	3.041	2.177	2.256	0.41	0.37	0.41	0.31	0.34	0.37
Luxemburg[46]	2.985	3.952	3.354	4.441	4.677	0.28	0.38	0.32	0.43	0.47	0.38

These readings are displayed in a spreadsheet that shows accurate numbers of neonatal deaths in each state of the EU and the average rate of neonatal mortality in the monitored 5 years.

However, women here trust the health care system and do not use it much.

Next, there are the countries in the north of Europe. The typical rate of home births there is around 0.2%. The only exception is Sweden with the rate of 1% home birth out of all the labors.

The median value of home births across the countries of the EU is 0.3. This rate does not factor in the prevalence of home births in the Netherlands and Poland since these are the limit values. The median value of home births in the EU is quite low but based on the growing demand for hospital labors it could be assumed that this value will grow in time.[45]

The state with the highest neonatal mortality rate in Romania where the rate is over 1.19%. Romania is the only country in the EU where this rate is above 1%. In the second place in Malta where the rate of neonatal mortality is 0.63. As third-placed Bulgaria which has lower rate only by 0.01%. Following countries are Slovakia with the rate approximately 0.5%, Croatia with 0.42%, France with 0.40 and Poland with 0.39%. All the other countries have a rate of approximately 0.3%.

The lowest neonatal mortality rate is found in Slovenia with a rate of 0.19%. The second best is Finland with the rate of 0.20%. Similar rates are displayed in Estonia and Cyprus. Czechia has the best rate in Central Europe and giving the count of labors with the other countries the care of new-borns is exceptional (Table 2).

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The state with the highest neonatal mortality rate in Romania where the rate is over 1.19%. Romania is the only country in the EU where this rate is above 1%. In the second place in Malta where the rate of neonatal mortality is 0.63. As third-placed Bulgaria which has lower rate only by 0.01%. Following countries are Slovakia with the rate approximately 0.5%, Croatia with 0.42%, France with 0.40 and Poland with 0.39%. All the other countries have a rate of approximately 0.3%.

The lowest neonatal mortality rate is found in Slovenia with a rate of 0.19%. The second best is Finland with the rate of 0.20%. Similar rates are displayed in Estonia and Cyprus. The Czechia has the best results in Central Europe and when comparing the number of births with other countries with excellent results in newborn care.

Discussion

According to available professional sources, it can be assumed that the analysis of domestic births has not yet received adequate professional attention. This is therefore the first systematic comparison of domestic birth rates within the European Union together with neonatal mortality.

The country with the highest percentage of domestic births per 100 000 inhabitants is clearly the Netherlands. At the same time, it holds neonatal mortality at an average of 0.35%, which is 600 neonatal deaths per year. This knowledge documents a highly qualified approach to home births. A possible reason for the high home birth rate in the Netherlands is probably the hospital care of the mothers, which is set in the very early release of the mother and the newborn after the birth to the home environment. Hendrix et al[50] also presents this theory in his publication, "*Cost Analysis of the Dutch Obstetric System: low-risk nulliparous women preferring home or short-stay hospital birth - a prospective non-randomised controlled study.*"

There is a relatively sparse network of hospitals in the Nordic EU countries, and it takes even several hours for mothers in some areas to get to the hospital. The assumption is that there will be a high home birth rate. Based on the research, this has not been confirmed; on the contrary, the Nordic countries are below average in the birth rate. The rationale for the result is found in a study by Blix et al,[35] which states the possibility of securing a midwife, but there is a high risk that, due to the long range, women are not guaranteed that a midwife will reach them in time.

Data shows that Spain is one of the countries where home births and labors off hospital premises, in general, are not a common thing. The prevalence of home births in Spain is 0.32%. The work of Galera-Barbero et al[51] reports that this value is 0.36%. The difference is caused by the longer monitored period. Galera-Barbero et al monitored home births between 1989 and 2019, on the contrary, this study reviews only the last 5 years. The conversion of results of this report shows a stable situation of home births in Spain.[51]

In most Central and Southern European countries, the proportion of domestic births is small. This is due to historical developments in these countries. Home births in the Czech Republic are rather an exceptional event, because the legislation does not allow midwives to work in the home environment. Obstetricians and gynecologists have issued consensus on domestic births, which they do not approve of and are outlawed.[52,53] At the same time, the Czech Republic holds one of the lowest neonatological mortality rates among EU countries. The reason that contributes greatly to this fact is the high level of neonatology care that newborns receive here. In his work, Zuidberg et al also presents an overview of neonatal mortality rates, in which the Czechia has one of the lowest in Europe, which correlates with our findings.

Slovenia is one of the countries where home births are really minimally sought after. While birth rates are below average compared to other EU countries, Slovenia has the lowest neonatal mortality rate in the EU. Based on empirical opinions, we explain low domestic birth rates by the fact that women trust hospital facilities and obstetricians, and at the same time do not want to endanger their child's lives by giving birth outside the hospital environment, where they may not receive timely help in case of complications.

Limits of Study

The research is also limited by the non-existed statistics of labors that happen off the hospital premises.

Conclusion

The submitted study explores the topic of alternative options for labor. The purpose of this study is to review the current situation of labors off hospital premises. This study focuses on the respective countries of the EU to be specific. Considering the non-existent statistics about this topic, the data are retrieved out of the available official and verified resources—for example, Ministry of Health, WHO, published and reviewed scientific articles written by experts and specialists.

All the data were summarized to a spreadsheet which shows the numbers of children born alive in 5 years

period, the percentage of home births, and respective numbers of children born off hospital premises. For comparison the chart also shows a neonatal mortality rate in each country of the EU.

Giving the growing popularity of home births their count may be going to be growing as well. Therefore, a respective country should take notes from the countries with low neonatal mortality rates and a high count of home births. In the case of the EU, the best option is the Netherlands.

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Author Contributions

Gabriela Galková and Pavel Böhm led study design. Tomáš Heřman and Radan Doubrava contributed expert opinions to study design and implementation. Zdeněk Hon and Leoš Navrátil provided scientific oversight for the study. Material preparation, data collection, and analysis were performed by Gabriela Galová, Pavel Böhm and Tomáš Heřman. The first draft of the manuscript was written by Gabrile Galková and all authors reviewed and contributed to subsequent versions of the manuscript. All authors read and approved the final manuscript.

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References

1. Hermus MAA, Wiegers TA, Hitzert MF, et al. The Dutch Birth Centre Study: study design of a programmatic evaluation of the effect of birth centre care in the Netherlands. *BMC Pregnancy Childbirth*. 2015;15(1):1. doi:10.1186/s12884-015-0585-1
2. Gatt M, Zahra C. NOIS annual report, 2019. Directorate for Health information & Research. 2020. Accessed March 26, 2021. https://deputyprimeminister.gov.mt/en/dhir/Documents/rpt_NOIS_19_Annual_finalz.pdf
3. Statistisches Bundesamt. Births. 2020. Accessed March 26, 2021. https://www.destatis.de/EN/Themes/Society-Environment/Population/Births/_node.html
4. Skeide A. Enacting homebirth bodies: midwifery techniques in Germany. *Cult Med Psychiatry*. 2019;43:236-255. doi:10.1007/s11013-018-9613-8
5. STATBEL. Births and fertility. 2020. Accessed March 26, 2021. https://statbel.fgov.be/en/themes/population/births-and-fertility#figures
6. Christiaens W, Bracke P. Place of birth and satisfaction with childbirth in Belgium and the Netherlands. *Midwifery*. 2009;25(2):e11-e19. doi:10.1016/j.midw.2007.02.001
7. National Statistical Institute. Births by place of residence, statistical regions, districts and sex. 2020. Accessed March 26, 2021. Sofia, Bulgaria. https://www.nsi.bg/en/
8. Český Statistický Úřad. Živě narození a zemřelí v ČR od roku 1814. 2020. Accessed March 26, 2021. https://www.czso.cz/csu/czso/zive-narozeni-a-zemreli-v-cr-od-roku-1814
9. Křepelka P, Velebil P, Měchurová A, Straňák Z, Feyereisl J. Complications of planned home births in the Czech Republic between 2016–2017. *Cent Eur J Public Health*. 2020;28(3):230-236. doi:10.21101/cejph.a5641
10. Statistics Denmark. Births. 2020. Accessed March 26, 2021. https://www.dst.dk/en/Statistik/emner/befolkning-og-valg/foedsler/foedsler
11. Eesti Statistiaka. Live births by birth order. 2020. Accessed March 26, 2021. http://andmebaas.stat.ee/Index.aspx?DataSetCode=RV124
12. WHO. Place of birth in Europe. 2015. Accessed March 26, 2021. https://www.euro.who.int/data/assets/pdf_file/0010/277741/Place-of-birth-in-Europe.pdf?ua=1
13. Statistics Finland. Birth rate. 2020. Accessed March 26, 2021. https://www.stat.fi/tup/maahanmuutto/perheet/syntyvyys_en.html
14. Jouhki M-R, Suominen T, Åstedt-Kurki P. Supporting and sharing—home birth. *Am J Mens Health*. 2015;9(5):421-429. doi:10.1177/1557988314549413
15. Ined. Births by parents' place of birth. 2020. Accessed March 26, 2021. https://www.ined.fr/en/everything_about_population/data/france/births-fertility/births_nationality_parents/
16. Midwifery Around the World. Midwifery in France. 2018. Accessed April 2, 2021. https://medium.com/midwifery-around-the-world/midwifery-in-france-450b3b5821e2
17. Eurostat. Marriages and births in Croatia. 2020. Accessed March 26, 2021. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Marriages_and_births_in_Croatia&oldid=252071
18. Central Statistics Office. Vital Statistics Yearly Summary. 2020. Accessed March 26, 2021. https://www.cso.ie/en/releasesandpublications/ep/p-vsys/vitalstatisticsyearlysummary2019/

19. Istat. Births. 2020. Accessed March 26, 2021. https://www.istat.it/en/archivio/births
20. Campiotti M, Campi R, Zanetti M, Olivieri P, Faggianelli A, Bonati M. Low-Risk planned out-of-hospital births: characteristics and perinatal outcomes in different Italian birth settings. *Int J Environ Res Public Health*. 2020;17(8):2718. doi:10.3390/ijerph17082718
21. Cystat. Population. 2020. Accessed March 26, 2021. https://www.cystat.gov.cy/en/SubthemeStatistics?s=46
22. Hadjigeorgiou E, Kouta C, Papastavrou E, Papadopoulos I, Mårtensson LB. Women's perceptions of their right to choose the place of childbirth: an integrative review. *Midwifery*. 2012;28(3):380-390. doi:10.1016/j.midw.2011.05.006
23. Statistics Lithuania. Births. 2020. Accessed March 26, 2021. https://osp.stat.gov.lt/paieska?q=births
24. Spanish Statistical Office. Births in Spain. 2020. Accessed March 26, 2021. https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177007&menu=ultiDatos&idp=1254735573002
25. Sánchez-Redondo MD, Cernada M, Boix H, et al. Home births: a growing phenomenon with potential risks. *An Pediatr*. 2020;93(4):266.e1-266.e6. doi:10.1016/j.anpede.2020.04.012
26. Statistics Sweden. Number of births. Central Statistical Population Statistics. 2020. Accessed March 26, 2021. https://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-composition/population-statistics/
27. Lindgren HE, Rådestad IJ, Hildingsson IM. Transfer in planned home births in Sweden–effects on the experience of birth: a nationwide population-based study. *Sex Reprod Healthc*. 2011;2(3):101-105. doi:10.1016/j.srhc.2011.03.001
28. Hungarian Central Statistical Office. Births. 2020. Accessed March 26, 2021. https://www.ksh.hu/search?q=births
29. Papp RK. Decriminalizing childbirth. Eurozine. 2018. Accessed April 2, 2021. https://www.eurozine.com/decriminalising-childbirth-power-dynamics-in-hungarian-birthing-care/
30. Government of Malta. Birth & life with your new-born. 2020. Accessed March 26, 2021. https://www.gov.mt/en/Life%20Events/Pages/Pregnancy%20and%20Birth/Birth-And-Life.aspx
31. StatLine. Population dynamics. 2020. Accessed March 26, 2021. https://opendata.cbs.nl/statline/#/CBS/en/dataset/83474ENG/table?ts=1616745401228
32. Statistics Poland. Demographic situation in Poland up to 2019. International migration of population in 2000–2019. 2020. Accessed March 26, 2021. https://stat.gov.pl/en/topics/population/internationa-migration/demographic-situation-in-poland-up-to-2019-international-migration-of-population-in-20002019,6,1.html
33. Doroszewska A. Home births in Poland – the method of demedicalization of births or professionalization of midwifery? In: European Sociological Association Mid-Term Conference of the Research Network on Sociology of Health & Illness New Directions in Health Care Work and Organisations, Lisbon Portugal, May 2016. doi:10.13140/RG.2.2.27973.24804
34. Statistics Portugal. Demographic statistics. 2020. Accessed March 26, 2021. https://ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=463528456&PUBLICACOESmodo=2
35. Associacao Gravideze Parto. Experiences of birth in Portugal. 2019:1-44. Accessed March 26, 2021. https://associacaogravidezeparto.pt/wp-content/uploads/2019/04/SURVEY-ON-EXPERIENCES-OF-BIRTH-IN-PORTUGAL.pdf.pdf
36. Statistik Austria. Geborene. 2020. Accessed March 26, 2021. http://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bevoelkerung/geborene/index.html
37. National Institute of Statistics. Vital statistics in December 2020 in the framework of the health crisis. 2020. Accessed March 26, 2021. https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pop12e20.pdf
38. MEDIHELP International. Birth choices in Romania: At home or in a hospital? Public or private? What if complications arise? 2016. Accessed March 26, 2021. https://www.medihelp-assistance.com/press/Press-releases/study-birth-choices-in-romania-at-home-or-in-a-hospital-public-or-private-what-if-complications-arise/
39. Hellenic Statistical Authority. Births. 2020. Accessed March 26, 2021. https://www.statistics.gr/en/statistics/-/publication/SPO03/2018
40. Nusbaum J. Childbirth in modern Athens: the transition from homebirth to hospital birth. *Penn Bioeth J*. 2006;2(2):33-37.
41. Statistical Office of the Slovak Republic. Population and migration. 2020. Accessed March 26, 2021. https://slovak.statistics.sk/wps/portal/ext/themes/demography/population
42. Statistical Office. Births and deaths. 2020. Accessed March 26, 2021. https://www.stat.si/StatWeb/en/Field/Index/17/95
43. Central Statistical Bureau of Latvia. Number of births. 2020. Accessed March 26, 2021. https://www.csb.gov.lv/en/statistics/statistics-by-theme/population/fertility/key-indicator/number-births
44. Statistics Portal. Births, deaths, surplus of births, birth rate and mortality rate by nationality 1967-2019. 2020. Accessed March 26, 2021. https://statistiques.public.lu/stat/TableViewer/tableViewHTML.aspx?sCS_ChosenLang=en&ReportId=12869
45. Offerhaus P, Jans S, Hukkelhoven C, de Vries R, Nieuwenhuijze M. Women's characteristics and care outcomes of caseload midwifery care in the Netherlands: a retrospective cohort study. *BMC Pregnancy Childbirth*. 2020;20(1):517. doi:10.1186/s12884-020-03204-3
46. Eurostat. Infant mortality. 2020. Accessed March 26, 2021. https://ec.europa.eu/eurostat/databrowser/view/demo_minf/default/table?lang=en
47. UZIS. Narození a zemřelí do 1 roku. 2020. Accessed March 26, 2021. https://www.uzis.cz/index.php?pg=vystupy–knihovna&id=243

48. DESTATIS. National data for UN-SDGs 2018. 2018. Accessed April 3, 2021. https://www.destatis.de/EN/Themes/Society-Environment/Sustainable-Development-Indicators/Publications/Downloads/national-data-un-sdgs-2018-xlsx.html
49. Statistics Austria. Births and deaths in 2019. 2020. Accessed April 3, 2021. https://www.statistik.at/web_en/statistics/PeopleSociety/population/births/122659.html
50. Hendrix MJ, Evers SM, Basten MC, Nijhuis JG, Severens JL. Cost analysis of the Dutch obstetric system: low-risk nulliparous women preferring home or short-stay hospital Birth–a prospective non-randomised controlled study. *BMC Health Serv Res*. 2009;9(1):211. doi:10.1186/1472-6963-9-211
51. Galera-Barbero TM, Aguilera-Manrique G. Planned home birth in low-risk pregnancies in Spain: a descriptive study. *Int J Environ Res Public Health*. 2021;18(7):3784. doi:10.3390/ijerph18073784
52. Pařízek A. ed Plánovaný porod doma v České republice: Stanovisko České lékařské společnosti J.E. Purkyně a České asociace sester. Česká lékařská společnost J.E. Purkyně, 2012. Accessed July 16, 2021. https://www.cls.cz/stanovisko-k-porodum-doma
53. Vintrová J, Pařízek A. Plánovaný domácí porod – Česká republika 2018. *Čes Gynekol*. 2018;83(3):204-211.