

# ARAŞTIRMA / RESEARCH

# Opinions of Turkish maternity care providers in different provinces on women's preferences for mode of delivery

Farklı illerdeki sağlık çalışanlarının kadınların doğum şekli tercihlerine ilişkin görüşleri

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#### Abstract

**Purpose:** The study aims to find out the opinions of physicians, midwives and trainees working in the different regions of Turkey on women's mode of delivery preferences.

Materials and Methods: This descriptive study was conducted between January- March 2016 with maternity care providers (MCPs) who had worked in Adana and Siirt for at least six months. The study sample was selected using the cluster-sampling method. The data were collected from 320 MCPs with semi-structured interview form.

Results: The study showed that according to the MCPs, women preferred caesarean section (CS) due to their concerns about health care providers behaviors during birth, requests for birth time planning and their suggestion from the physician or suggestions from other women. The MCPs expressed that women's preference of vaginal delivery (VD) was affected by physician suggestions and from the opinion that the natural way of giving birth was healthier for their babies and it is traditional attitudes. The MCPs in Siirt stated more often that women preferred VD due to their traditional attitudes, comparing to the MCPs in Adana

**Conclusion:** This study has strengthened the opinion that physicians play a key role in women's delivery mode preferences. It is intriguing that in Siirt, where the rate of CS is lower than the average rate in Turkey, women commonly preferred VD due to their traditions attitudes.

**Key words:** C- Section on maternal request, Vaginal delivery, Maternity care providers

#### Öz

Amaç: Bu çalışma, Türkiye'nin farklı bölgelerinde çalışan hekim, ebe ve stajyerlerin kadınların doğum şekli tercihlerine ilişkin görüşlerini araştırmak amacıyla yapılmıştır.

Gereç ve Yöntem: Bu tanımlayıcı çalışma, Ocak-Mart 2016 tarihleri arasında Adana ve Siirt'te en az altı ay kadın doğum alanında çalışmış sağlık çalışanları ile gerçekleştirildi. Çalışma örneği, küme örnekleme yöntemi kullanılarak seçildi. Veriler, yarı yapılandırılmış görüşme formu ile 320 sağlık çalışanından toplandı..

Bulgular: Sağlık çalışanlarının görüşlerine göre; doğumda sağlık çalışanlarının davranışlarına yönelik endişeler, doğum zamanını planlama isteği, doktor önerilerii veya diğer kadınlar tavsiyeleri kadınların sezaryen tercihine neden olmaktadır. Sağlık çalışanları, hekim tavsiyesinin kadınların vaginal doğum tercihini etkilediği görüşündedir. Kadınların doğumun doğal yolunun vaginal doğum olduğu, vaginal doğumun bebekleri için daha sağlıklı olduğu düşünmeleri ve geleneksel tutumlar nedeniyle vaginal doğum tercih ettiklerini düşünmektedirler. Siirt'te çalışan sağlık çalışanlarına göre kadınların geleneksel tutumlarından dolayı vaginal doğum tercih etmeleri Adana'da çalışan sağlık çalışanlarına göre daha belirgindi.

Sonuç: Bu çalışma, hekimlerin kadınların doğum yöntemi tercihlerinde önemli bir rol oynadıkları görüşünü güçlendirmiştir. Türkiye'de sezaryen oranı ortalamasının altında olan Siirt ilinde, geleneksel tutumlar nedeniyle kadınlar daha çok vaginal doğum tercih etmektedirler.

Anahtar kelimeler: İsteğe bağlı sezaryen, Vaginal doğum, sağlık çalışanları

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#### **INTRODUCTION**

The rate of Caesarean section (CS) delivery has increased rapidly in the last 20 years. This increase has been observed more in Turkey. Turkey has the highest CS rate among OECD countries<sup>1</sup>. The CS rate in Turkey increased from 21% in 2002 to 51% in 2013, which is a 2.5-fold increase<sup>2</sup>. Nowadays, the complications that occur during anesthesia and surgery are the third most common causes of maternal mortality following hemorrhage and hypertensive disorders<sup>3</sup>.

Previous studies reported that physicians agreed to CS on maternal request even no obstetric indications existed<sup>4-6</sup>. Turkish healthcare providers, particularly physicians, think that CS delivery is the best opinion for them as well. Previous studies indicated that Turkish healthcare providers tended to prefer CS more than public population did7. One of every two obstetricians prefer CS for themselves or their partner even if no medical indications exist<sup>5</sup>. The 2014 Women's Health Survey conducted in Turkey reported that the reason for 36% of 1,272 women who underwent CS was because it was their physicians' suggestion. Same study found the rate of CS due to medical indications was 49%. No evidence was verified by randomized controlled trials that constitute a basis for any practice recommendation regarding planned CS for nonmedical reasons at term9. Furthermore, optional CS posed maternal and neonatal risks<sup>10</sup>. A study indicated that women who had optional CS experienced post-traumatic stress disorder and depression more frequently than women who preferred vaginal delivery<sup>11</sup>.

The CS rate in Turkey differs by region and by hospital, probably because of different cultures and practices of health care providers in different regions<sup>2</sup>. The present study was conducted in two cities with different CS rates to find out the various opinions of maternity care providers. Siirt is one of the two cities with the lowest caesarean section rates (22%), located in the southeastern Anatolia Region of Turkey. Adana is the sixth largest city in Turkey located in the Mediterranean Region and the CS rate is 40%<sup>12</sup>

Various studies were conducted on obstetricians' and midwives' attitudes towards CS on maternal request<sup>13–15</sup>. However, a little information about the opinions of maternity care providers on pregnant

women's preferences of vaginal delivery (VD) and C-section (CS) was found. Maternity care providers may be responsible for the rapid increase of optional CS, which is an issue to be tackled. The education and clinic experiences of the maternity care providers, as well as their own delivery experiences may cause an increase in the CS rates. The survey on maternity care providers opinions on women's preferences VD and CS aims to find out the opinions of physicians, midwives and trainees who worked in two different regions on women's mode of delivery preferences.

#### MATERIALS AND METHODS

This descriptive study was carried out with Turkish maternity care providers (MCPs) working in two different provinces. The occupation and provinces stratified by random sampling of 384 MCPs in the provinces in these two regions of Turkey were queried. All participants received the same letter describing the aim of the study. From a sample of 384 MCPs in the Siirt (Siirt-MCPs) and Adana provinces (Adana-MCPs) of Turkey, 320 suitable surveys were included in the final analysis (an 83.3% return rate). The study sample was selected using the cluster-sampling method. Physicians (MD group), midwives (MW group), and trainees (TRNE group) who had worked in maternity care for at least six months were contacted for the study. From Siirt, 152 MCPs; 73 TRNEEs, 52 MWs and 27 MDs and from Adana, 168 MCPs; 80 TRNEEs, 58 MWs and 30 MDs were included in the study.

Following the theoretical dimension of the study, a semi-structured interview form was prepared to collect the views of the maternity care providers on the reasons for the women's preference for VD and CS. The questions were first determined in the process of preparing the interview form. Openended questions were used to obtain the MCPs' views. After the form was prepared, it was first given to five individuals in each professional group and the answers were noted separately. The items on the form were constituted by their answers related the reasons given by the women for VD and CS. The participants who were interviewed first were excluded from the study. The questions were:

- -Please note the reasons why the women preferred CS.
- - Please note the reasons why the women preferred VD.

To ensure the content validity of the interview form, experts in the field from the Faculty of Health Sciences at Istanbul Medipol University were consulted. The final semi-structured questionnaire included sociodemographic questions and items on the MCPs' opinions about women's preference of VD and CS, which were scored depending on whether the participants agreed or disagreed with these items. The forms were prepared specifically for the MCPs in the study and included 8 items for VD and 9 items for CS. The data were collected between January and March 2016. This study was approved by the Ethics Committee of Istanbul University with protocol number 2014/10840098-375. The study participants were provided with information about the study and written informed consent forms were received.

## Statistical analysis

Statistical analysis was performed using SPSS 22.0 software package, p values less than 0.05 were considered significant with 95% confidence interval.

In the data analysis, descriptive statistics and chisquare tests were applied. The differences between the groups were analyzed using the independent samples t-test and one-way analysis of variance (ANOVA) among the advanced analysis techniques.

#### **RESULTS**

The study was performed on 320 MCPs in different provinces of Turkey. The mean age of the MCPs was 25.0±6.7 (min 16-max 49), the majority of MCPs (%68.4) were in 16-27 years age group, and 18.8% of MCPs were male. Of the MCPs 60.6% were working 40 hours or less per week. Details on the socio-demographic characteristics of MCPs are presented Table 1.

The MCPs agreed that the most common reasons for preferring CS were "concerns related to the healthcare providers' behaviors during birth", "request for planning of their birth time", "suggestions from the physician", and "suggestions from other women".

Table 1. Socio-demographic characteristics participants

		n	%
Age [mean±SD], years	25.0 ±6.7 (min=16, max:49)		
	16-27 years	219	68.4
	28-39 years	93	29.1
	≥ 40 years	8	2.5
Sex, n (%)	·		
,	Female	260	81.2
	Male	60	18.8
Education status			
	Health vocational high school	77	24.1
	Bachelor degree	196	61.2
	Master's degree	14	4.4
	Doctorate	33	10.3
Weekly working time			
	40 hours or less	194	60.6
	Over 40 hours	104	32.5
	Unanswered	22	6.9

Members of the 'Adana-MCP' group strongly believed that women preferred CS due to "concerns related breastfeeding" at postpartum period and "concerns about poor sex life" (p=0.002, p=0.005 respectively) (Fig 1).

The MD group most strongly agreed that women preferred CS through "concerns related labor pain", "concerns related breastfeeding", "request for

planning of their birth time" and "suggestions from other women" reasons (p=0.001, p=0.000, p=0.013 respectively). The MD group most strongly disagreed that the preferred CS was "concerns about poor sex life". For these items, the TRNE group showed a pattern which is opposite to pattern of the MD group, while the opinions of the MW group fell in the middle between the TRNE group and the MD group (see Fig. 2).

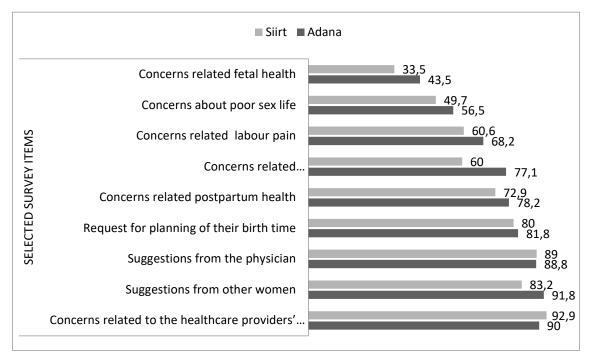


Figure 1. Distribution of reasons for preferences of CS in the provinces

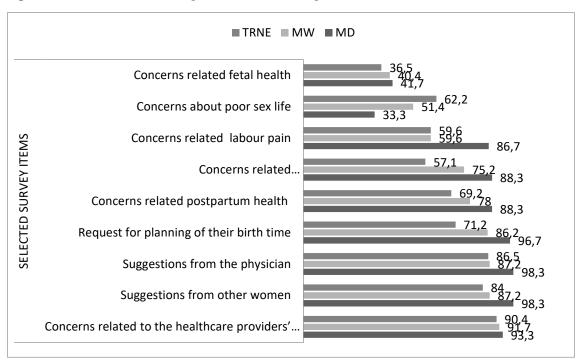


Figure 2. Distribution of reasons for preferences of CS in the professions

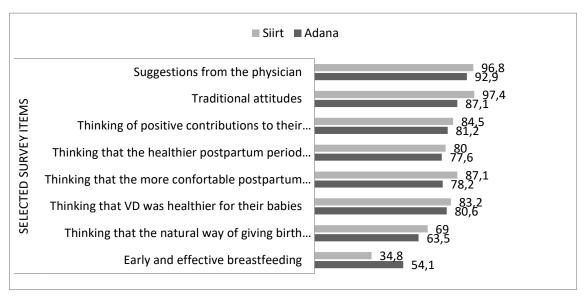


Figure 3. Distribution of reasons for preferences of VD in the provinces.

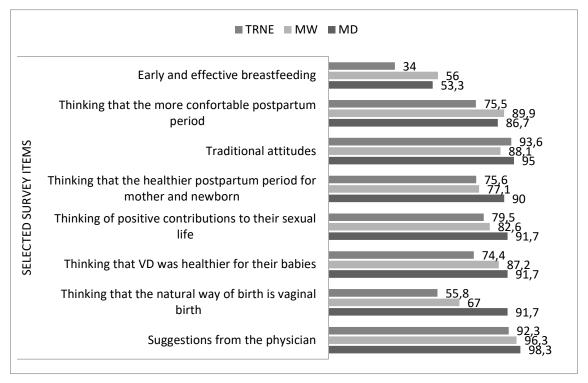


Figure 4. Distribution of reasons for preferences of VD in the professions.

The MCPs agreed that most common reasons for preferring VD were "suggestions from the physician" and "traditional attitudes". The Siirt-MCP group most strongly agreed that "traditional attitudes" have an impact on the women's VD preferences (p=0.003), the Adana-MCP group participants strongly agreed that "early and effective breastfeeding" were important determinants for VD preferences (p=002) (Fig 3).

The MD group most strongly agreed that women preferred VD "thinking that the natural way of giving birth was VD", "thinking that VD was healthier for their babies" and "traditional attitudes" reasons (p=0.000, p=0.009, p=0.040 respectively). The MW group agreed most strongly that "thinking that the more comfortable postpartum period" and "early and effective breastfeeding" has an impact on the women's preference for VD (p=0.005 and p=0.000 respectively) (Fig 4).

#### DISCUSSION

The MCPs played a key role in reduction of the CS rate in Turkey. The MCPs in Adana and Siirt had similar opinions on the reasons why women preferred CS. A statistically significant higher number of MCPs in Siirt considered traditional attitudes as common reason for women's VD preference compared to the MCPs in Adana.

In Turkey, physicians make antenatal visits. The CS rate is higher in the countries where antenatal visits are carried out by physicians<sup>16,17</sup>. Women who prefer physicians during pregnancy tend to prefer CS<sup>18</sup>. A study in Canada found that family physicians who provided antenatal care could affect women's opinions about the potential negative effects of VD<sup>19</sup>. In the present study, most MCPs thought that physicians had an important effect on the preference of both VD and CS.

A study by Aslan (2016) showed that the number of patients checked in shorter time increased thanks to a new performance system. This has increased the access to healthcare services while it has decreased the quality of services and treatments. The new performance system can be a result of high CS because doctors get higher payments when they do more CS operations. In private hospitals the main reason of CS can be the economic because hospitals charge patients more and get more payment from

the government which is an additional cost of government budget.

Midwives are particularly responsible for supporting pregnant women during delivery<sup>21</sup>. In this study, more than 90% of the maternity care providers agreed that the "concerns regarding the behaviors of health care providers during birth" is a reason for CS preference. Turkish studies found that women were not sufficiently supported during vaginal delivery. According to a study that women evaluated midwives, it was found that one out of two women evaluated midwives as poor<sup>22</sup>. Kitapçıoğlu et al. (2008) found that the first reason why women concerned during pregnancy and postnatal period was their concerns about health care providers' behaviors during birth<sup>23</sup>.

Many published studies found that women experienced various levels of concern, fear and anxiety about the delivery during their pregnancies<sup>24,25</sup>. Most pregnant women were afraid of giving birth because of the rumors they heard rather than their personal experiences<sup>26</sup>. In this study, the MCPs considered that one of the most agreed-upon reasons for women's CS preference was "suggestions of other women". Women may prefer CS because they are afraid of labor pain<sup>25,27,28</sup>. It was also reported that the fear of childbirth and CS rates declined when women were provided prenatal education<sup>29–31</sup>. The fact that suggestions of other women are mostly considered as a reason for CS preference. It showed that women were not sufficiently supported in childbirth preparation classes.

"Request for birth time planning" is another issue that was commonly considered by most of the MCPs as a reason for women's CS preference. Women have high level of urge to control their time in the modern era so they tend to plan their delivery time<sup>13</sup>. A statistically significant difference was found between the number of physicians who agreed the statement of "request for birth time planning" and midwives and trainees. This might be stem from the reason that most women tend to plan the time of their delivery and share it with their physicians. According to the MCPs, "traditional attitudes" was the most common reason women's VD preference. A statistically significant higher rate of MCPs in Siirt agreed on this item than those did in Adana. This may be because Siirt is located in a remote, enclosed area and has a conservative

culture<sup>32</sup>; therefore, same traditional attitudes are often transferred through generations. For example, there is a strong intergenerational transfer between mothers and daughters<sup>33</sup>. Mothers tell stories of their childbirth experiences to their daughters. The traditional mode of delivery is vaginal delivery, and women living in societies whose traditions are still widespread may therefore prefer vaginal delivery. A comprehensive systematic review concluded that vaginal delivery is generally safer than CS for both mothers and their babies, for both first and subsequent pregnancies<sup>34</sup>. A large number of maternity care providers agreed that "thinking that the healthier postpartum period for mother and newborn". The fact that maternity care providers received this feedback from women inspired the thought that still there is a chance to increase public awareness, and thereby to reduce the CS rates to reasonable levels.

The use of a cross-sectional design was a limitation of the current study. The results cannot be generalized to all MCPs because they were obtained from only two provinces with the highest (Siirt) and the lowest (Adana) rates of CS. Another limitation of this study was the low number of participants. Evaluations were made according to the answers given by the participants. Therefore, further studies should be conducted in order to contribute to literature.

This study supported the fact that physicians play a key role in women's mode of delivery preferences. The MCPs also considered the following reasons among the most frequent ones for women's CS preference; "concerns related to the healthcare providers' behaviors during birth". The MCPs found that "thinking that VD was healthier for their babies" and "traditional attitudes" led women to prefer vaginal delivery. CS rates were lower in Siirt where traditional attitudes still prevail the average rate in Turkey. These results indicate that evidencebased prenatal education should be provided to the expectant mothers. Midwives should make antenatal visits and the number of midwives should be increased to provide one-on-one support during delivery. Future studies should also seek a better understanding of the relationship between traditional attitudes and vaginal delivery.

### REFERENCES

1. OECD. Health at a Glance 2015: OECD Indicators.

- Paris, OECD Publishing, 2015.
- Hacettepe University Institute of Population Studies. 2013 Turkey Demographic and Health Survey. Ankara, Hacettepe University Institute of Population Studies, 2014.
- Uzuncakmak C, Ozcam H. Association between maternal mortality and cesarean section: Turkey experience. PLoS One. 2016;11:e0166622.
- Al-Mufti R, McCarthy A, Fisk NM. Survey of obstetricians' personal preference and discretionary practice. Eur J Obstet Gynecol Reprod Biol. 1997;73:1–4.
- Arikan DC, Ozer A, Arikan I, Coskun A, Kiran H. Turkish obstetricians' personal preference for mode of delivery and attitude toward cesarean delivery on maternal request. Arch Gynecol Obstet. 2011;284:543–9.
- MacDonald C, Pinion SB, MacLeod UM. Scottish female obstetricians' views on elective caesarean section and personal choice for delivery. J Obstet Gynaecol. 2002;22:586-9.
- Koken G, Cosar E, Sahin FK, Tolga Arioz D, Duman Z, Aral I. Attitudes towards mode of delivery and cesarean on demand in Turkey. Int J Gynaecol Obstet. 2007;99:233–5.
- 8. The Ministry of Health of Turkey. National Women's Health Study Vol.943. Ankara, The Ministry of Health of Turkey The General Directorate of Health Research, 2014.
- Lavender T, Hofmeyr GJ, Neilson JP, Kingdon C, Gyte GM. Caesarean section for non-medical reasons at term. Cochrane Database Syst Rev. 2012;(3):CD004660.
- American College of Obstetricians and Gynecologists. ACOG committee opinion no. 559: Cesarean delivery on maternal request. Obstet Gynecol. 2013;121:904-7.
- Olieman RM, Siemonsma F, Bartens MA, Garthus-Niegel S, Scheele F, Honig A. The effect of an elective cesarean section on maternal request on peripartum anxiety and depression in women with childbirth fear: a systematic review. BMC Pregnancy Childbirth. 2017;17:195.
- The Ministry of Health of Turkey. Public Hospital Unions. Ankara, The Ministry of Health of Turkey, Public Hospitals Institution, 2014.
- Karlström A, Engström-Olofsson R, Nystedt A, Thomas J, Hildingsson I. Swedish caregivers' attitudes towards caesarean section on maternal request. Women Birth. 2009;22:57-63.
- Klein MC, Kaczorowski J, Hall WA, Fraser W, Liston RM, Eftekhary S et al. The attitudes of Canadian maternity care practitioners towards labour and birth: Many differences but important similarities. J Obstet Gynaecol Can. 2009;31:827-40.
- Sahlin M, Andolf E, Edman G, Wiklund I. Mode of delivery among Swedish midwives and obstetricians and their attitudes towards caesarean section. Sex

- Reprod Healthc. 2017;11:112-6.
- Brick A, Layte R. Exploring trends in the rate of caesarean section in Ireland 1999-2007. The Economic and Social Review. 2011;42:383-406.
- Euro Peristat. European Perinatal Health Report: Health and Care of Pregnant Women and Babies in Europe in 2010. Paris, INSERM, 2010.
- Okumus F, Sohbet R. Antenatal care before caesarean section in rural Turkey. Br J Midwifery. 2013;21:32–9.
- Klein MC, Kaczorowski J, Tomkinson J, Hearps S, Baradaran N, Brant R et al. Family physicians who provide intrapartum care and those who do not: Very different ways of viewing childbirth. Can Fam Physician. 2011;57:139-47.
- Aslan I. Healthcare Management: Optimization of Resources and Determining Success and Performance Factors. Karachi, Shamsi Publishers. 2016.
- Sauls DJ. The Labor Support Questionnaire: development and psychometric analysis. J Nurs Meas. 2004;12:123–32.
- Taşçı KD. Doğum yapan hastalarin aldiklari bakimi hasta haklari açisindan değerlendirmeleri. Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi. 2007;10(3):26–33.
- Kitapçıoğlu G, Yanıkkerem E, Sevil U, Yüksel D. Gebelerde doğum ve postpartum döneme ilişkin endişeler; bir ölçek geliştirme ve validasyon çalişmasi. Adnan Menderes Üniversitesi Dergisi Tıp Fakültesi Dergisi. 2008;9:47-54.
- Lukasse M, Schei B, Ryding EL; Bidens Study Group. Prevalence and associated factors of fear of childbirth in six European countries. Sex Reprod Healthc. 2014;5:99-106.
- Nilsson C, Lundgren I, Karlström A, Hildingsson I. Self reported fear of childbirth and its association with women's birth experience and mode of delivery: A longitudinal population-based study. Women

- Birth. 2012;25:114-21.
- Scollato A, Lampasona R. Tokophobia: When fear of childbirth prevails. Mediterranean Journal of Clinical Psychology. 2013;1:1–18.
- Haines H, Rubertsson C, Pallant JF, Hildingsson I. Womens' attitudes and beliefs of childbirth and association with birth preference: A comparison of a Swedish and an Australian sample in mid-pregnancy. Midwifery. 2012;28:e850–6.
- Hildingsson I. Swedish couples' attitudes towards birth, childbirth fear and birth preferences and relation to mode of birth - A longitudinal cohort study. Sex Reprod Healthc. 2014;5:75–80.
- Toohill J, Fenwick J, Gamble J, Creedy DK, Buist A, Turkstra E et al. A randomized controlled trial of a psycho-education intervention by midwives in reducing childbirth fear in pregnant women. Birth. 2014;41:384–94.
- Masoumi SZ, Kazemi F, Oshvandi K, Jalali M, Esmaeili-Vardanjani A, Rafiei H. Effect of training preparation for childbirth on fear of normal vaginal delivery and choosing the type of delivery among pregnant women in Hamadan, Iran: A randomized controlled trial. J Family Reprod Health. 2016;10:115–21.
- Afshar Y, Wang ET, Mei J, Esakoff TF, Pisarska MD, Gregory KD. Childbirth education class and birth plans are associated with a vaginal delivery. Birth. 2017;44:29–34.
- Tez S. Siirt şehrinin kuruluşu ve gelişimi. Fırat Üniversitesi Sosyal Bilimler Dergisi. 2008;19:61-82.
- Moen P, Erickson MA, Dempster-Mcclain D. Their mother's daughters? The intergenerational transmission of gender attitudes in a world of changing roles. J Marriage Fam. 1997;59:281-93.
- 34. Wax JR, Cartin A, Pinette MG, Blackstone J. Patient choice cesarean: an evidence-based review. Obstet Gynecol Surv. 2004;59:601–16.