პაციენტის და ოჯახის წევრების ჩართულობა საკეისრო კვეთის გადაწყვეტილების მიღებასთან დაკავშირებით

ჭეიშვილი ჯილდა პარტნიორების საერთაშორისო განვითრებისათვის, ემორის უნივერსიტეტის წარმომადგენლობა საქართველოში

ამ თემაში საუბარია,რომ საკეისრო კვეთის რიცხვის რაოდენობამ იმატა, განსაკუთრებით ხშირია კვეთა დედის "დაჟინებული" მოთხოვნით. მოცემული პრობლემის გამოსაკვლევად მიზნად დავისახეთ კვლევის ჩატარება, რომელსაც უნდა ეპასუხა მთავარ კითხვაზე – საკეისრო კვეთის გადაწყვეტილების მიღების მომენტში პაციენტისა და მისი ოჯახის წევრები ფლობდნენ თუ არა სწორ და სათანადო ინფორმაციას. კვლევა ჩატარდა იმერეთის რეგიონში, ქუთაისის დედათა და ბავშვთა სამხარეო დიაგნოსტიკურ ცენტრში. 2010 წლის მონაცემების საფუძველზე საკეისრო კვეთა გაკეთდა 792 შემთხვევაში, რანდომიზაციის წესით ამორჩეულ იქნა რესპოდენტები განხილული იქნა ისტორიების მონაცემები და გაკეთდა მათი ანალიზი, დედებმა უპასუხეს სპეციალურად შემდგარ კითხვარს. კვლევის საფუძველზე შეჯვიძლია ვიმსჯელოთ, რომ საკეისრო კვეთით მშობიარობა პირდაპირკორელაციურ კავშირშია ნაყოფის/ახალშობილის და დედის (ადრეული, მოგვიანებითი) შემდგომ გართულებებთან. კვლევის შედეგად ნათელი გახდა, რომ მთავარ პრობლემას წარმოადგენს യ്യൂയറിന്ദേറി ინფორმაციის യ്യുള്റ്ററ്ററ്ററ ωs მშობიარობის მართვის არცოდნა. პრობლემის აღმოფხვრისათვის აუცილებელია არამარტო დედის არამედ ზოგადად საზოგადოების იწფორმატიულობა ბუნებრივი მშობიარობის უპირატესობის შესახებ. ამისათვის საჭოროა ყველა საინფორმაციო საშუალების გამოყენება.

Engagement of Patient and Her Family Members into Cesarean Section Decision

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Cesarean section is one of the most commonly performed surgical operations in the world today. However, in a growing number of cases worldwide, caesarean section is being performed without any medical need. In the last decade, increasing numbers of cesarean section were observed in the most developed countries of the world. In Georgia, 17,722 cesarean sections were performed, representing 28,7 % of total deliveries in 2009 (for comparison, in 2007, it was 22,2% and in 2008, it was 24,7%). (Figure 1).

The rising number of such deliveries suggests that both health-care workers and their clients perceive the operation to be free from serious risk. Many epidemiological studies have attempted to evaluate the risks (and benefits) associated with caesarean section performed without medical indication, but a clear causal relationship between the surgery and maternal complications has been elusive.

Based on the study, we are able to conclude, that the number of Cesarean section is increased, and main contributing factor for that being the mother's request.

We were interested, what was the reason, that the mother and other family members decided to have a C-section.

Based on the conducted study, it was determined that the mother receives the information, but it is not necessary. A lack of personnel to oversee the delivery process conditions that mothers use to make wrong decisions (Cesarean section for pain relief).

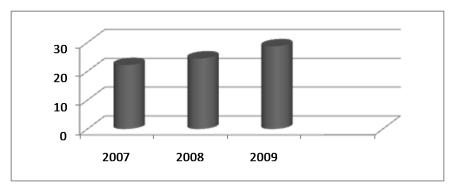
Materials and Methods

According to the available data, the population of Georgia as of 1 January 2010 was 4,436,400 (National Center for Disease Control and Public Health).

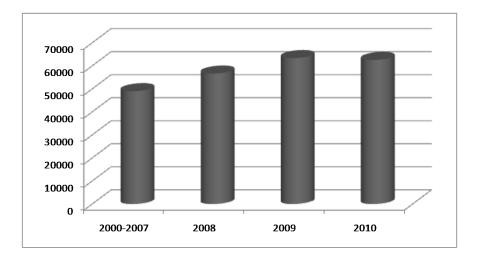
In January 2011, the population of Georgia was 4,469,200. Compared to the previous year, the population increased by 0.7% (data from Abkhazia and Tskhinvali region are not included). 52.4% of population are women, and 47.6% are men.

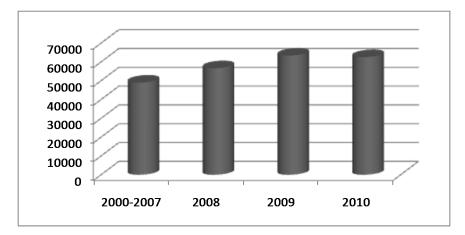
In 2000-2007, the birth rate did not change significantly. Every year the number of newborns fluctuated in the range of 47,000 and 49,000.

In 2008, the number of births increased to 56,656, and in 2009 it reached 63,377. In 2010, it decreased to 62,585. (Figure 2)











A children's generation in Georgia makes up only 70-80% of their parent's generation (in absolute numbers). According to same data, there are only 14 countries with similarly low indicators. The increase of the use of C-section can cause a decrease in the birth date.

In the last decade, an increase in the number of Cesarean sections performed was observed in the most developed countries of the world.

In Georgia, the Primary C-sections were accounted for 67,9 % of the total number of performed Cesarean sections; 57,9% from them represented urgent cases. Obstetrical forceps's were used in 81 cases; vacuum extraction was used in 149 cases. The share of trauma complicated delivery cases to total number of deliveries was 4,7%.

The number of Cesarean sections especially increased in the private maternity hospitals (in some cases to 40-80 %). (Ncdc.ge.)

Despite the World Health Organization (WHO) recommendation, which states that Cesarean sections in a country should not exceed 15 %, in Georgia the number of C-sections reached 30%, according to the lastest statistical data. (Ncdc.ge.)

If years ago the C-section surgery was conducted only if there were medical indications, during the past 5-6 years this operation has been performed more frequently solely because it is requested by women in labor. Although C-section is included in the list of high risk surgery operations not only in the Georgia, but also in other European countries, it becomes more and more popular. The alternative of "suffering" labor, which could have further complications and even fatal cases. Today the patient has the right to choose C-section, in this cases surgery is performed according the patient's request.

Cesarean Delivery on Maternal Request (CDMR) has become a very important issue for many countries. Based on the available information, an increasing number of Cesarean sections are performed precisely because of the mother's request (while the doctor has to act in compliance with the patient's rights).

We became interested in the reason for that fact, and conducted a study, which examine how women in labor and their relatives are informed about Caesarian section, what positive and negative sides it has, which complications might developed for the mother and the fetus, how much are they aware about the advantages of natural delivery, what was the reason family members decided to make C-section, what was the main reason which led to the decision.

The study was conducted in the Imereti region, where percentage of C-sections is the highest (39,5%).

Facilities chosen had to met two main criteria: The availability of effective prenatal patient care practice since 2005 and a large annual number of deliveries (approximately 1,500 delivery per year).

Based on these criteria, in the Imereti region the pilot facility of women healthcare program was chosen: The Mothers and Children Regional Diagnostic Center, where principles of effective perinatal care were first established.

This maternity facility covers the city of Kutaisi and its suburban geographic areas. Every year this facility receives about 1,500 women in labor. Facility's specializations include term pregnancies, deliveries at term, it also manages also premature labor.

In the 2010, 2,016 women in labor were admitted to the abovementioned facility. 1,189 children were born through physiological delivery, in 792 cases Cesarean sections were performed, and stillbirth was observed in 35 cases (figure 3).

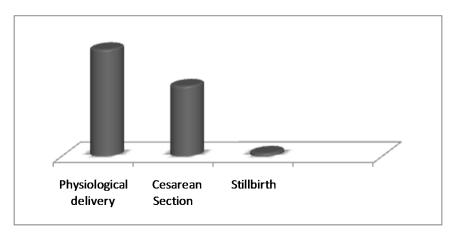


Figure 3.

As we discovered by interviewing the doctors, the indicator of Caesarian section is quite high (39%) and very often Cesarean sections are performed at the patient's request (non-medical indication).

Selected patients were Georgians by nationality. Age was in range from 14 to 45, most of them were 20-24 years old women.

Most of the patients were urban residents, and more than half of them had higher education.

More than half of the patients were in a registered marriage.

Mothers filled in a specially designed questionnaire, based on which we are able to make some conclusions.

Most of the patients visited gynecologist at the outpatient's clinic in the first or second month of pregnancy (the first trimester).

65% of the patients attended antenatal educational courses; 35 % percent stated that they had been advised to attend these courses by their doctor, but because of a lack of time (work, family problems, etc), they

were not able to attend them. Only 3 mothers mentioned that they had never heard about those courses.

It should be noted that these courses were attended only by mothers, no cases of fathers' attendance were registered, although all patients were advised by doctors to attend this course with a partner (spouse, mother, friends and etc)

In 100% of the cases, the pregnant women were provided by doctors with recommendations regarding healthy food, lactation, life style changing, and proper management of pregnancy.

Delivered information was clear to 85% of patients, although 10% stated that the medical personnel used terminology that was unclear or they could not understand.

85% of pregnant women mentioned that the antenatal period of pregnancy was going physiologically, and 15% indicated that they had a pathological pregnancy.

The C-section surgery decision was made by the doctor in 30% of the cases; in 60% of cases, this decision was made by the mother; and in 10 % of the cases, the decision was made by a family member (in three cases, it was made by mother of the woman in labor when the woman was 17 years old; in 5 cases it was made by the mother of the woman in labor because she had painful labor herself and did not want to her daughter to "suffer;" in the remaining two cases, the decision was made by the husband).

The "driving force" for these decisions was a fear of labor pain, 37% of the mothers said that they were very emotional and would not be able to endure pain, 28 % of the mothers had already undergone Cesarean section (2 and more years go). The patients' histories were reviewed and it was found out that 63% of the mothers were unipara and 36% were pluripara (Figure 4).

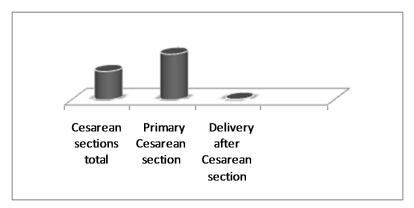
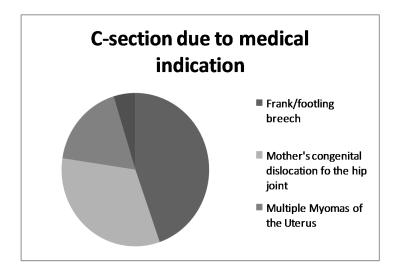
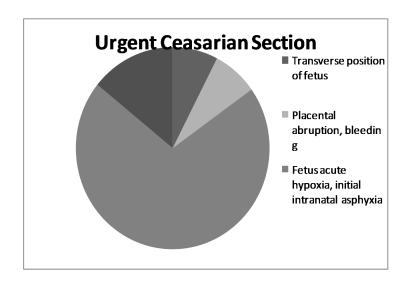


Figure 4.

Cesarean section due to a medical indication was performed in 35% of cases (frank/footling breech in 15% of the cases, mother's congenital dislocation of the hip joint in 11%, multiple myomas of the uterus in 6%, and preeclampsia in 1.6%).



Emergency C-section was performed in 21% of cases (transverse position of the fetus in 1.6%, placental abruption, bleeding in 1.6%, fetus acute hypoxia, initial intranatal asphyxia in 15%, premature rupture of membranes, arrested labor in 3% of the cases).



Review of the mother's histories revealed that they had multiple medical problems: preeclampsia, most of the pregnant women were complaining of increased tonus of uterus (expected abortion, expected premature labor, chronicle hypoxia of the fetus). Cases of anemia were also present (mild and severe forms).

Four cases of previous obstetrical problems were indicated in medical history (stillbirth, spontaneous abortion).

Cesarean delivery on matenal request (no medical indications, the patient's request) was performed in 44% of the cases.

Four mothers noted, that they were not informed about that. In 17 % of cases, it was impossible because of newborns health conditions (resuscitation measures were required). Sixty percent of the mothers announced, that fathers refused to put baby on the belly.

In most cases, first breast catching was performed after two hours of delivery. Only 8 cases of late breast feeding wee observed, when baby was brought on the second day (due to mother/child pathology)

Most of the mothers said that they had problems with baby feeding; in 80% of the cases, natural breast-feeding was completely substituted with artificial meal in one or two months after the childbirth. Only 10% of the mothers were exclusively breast-feeding during the first 6 months, and the remaining 10 % were taking breast milk even now (1.5 year old children).

The Mothers had complaints regarding baby's sleep in 30 % of cases; neurologist was needed for 60% of the newborns, usually at the age of 5 or 6 months. Symptoms included tremors, capricious behavior, etc.

In 85% of Cesarean sections, the mothers wanted to deliver their second baby using the same method; in 15% of the cases, they wanted to deliver by natural delivery (because of complicated post-operational period).

Results

Based on this study we can suppose that in the hospital under study, the percentage of Cesarean section performed at the patient's request (with no medical indications) is quite high.

The facts that fathers (including child's fathers) tried to avoid attending the antenatal educational course and that upon delivery only 16% of the newborns were put on the father's bellies demonstrate that our society does not correctly perceive the necessity of these and not only the father, but the society is not appropriately aware about the importance of its engagement in the pregnancy and labor periods.

Although all mothers emphasized that the doctor clearly explained that they were able to deliver physiologically, the information provided was verbal, not written, and it was mentioned that they would like to receive additional information during the doctor visits.

Only one case of physiological delivery after Cesarean section was observed.

Early beginning of breast-feeding (first breast catching) is very important for the baby's health. According to the CDC data based on metaanalysis, women after Cesarean Section (planned, urgent) more often feed child with artificial food, rather than mothers after physiological delivery. Social and medical factors are also very important (early breast catching and newborn isolation). They reduce chances for proper management of natural, long-term breast-feeding.

Based on interviews with the mothers, we discovered that they are very well-informed about advantages of breast-feeding, what skin to skin contact means, the right positioning of of the baby during the feeding, and correct breast-feeding. They have this information, but in the first and second day afre the surgery, they feel fatigue. These are exactly the days, when the mother actively has to be involved in the breast-feeding process, but the lack of her engagement very soon (1-2 months) leads to the substitution of natural feeding with the artificial one.

It should be mentioned that most of the interviewed mothers are pregnant now and decided to deliver baby using Cesarean section.

Based on this study we can suppose, that Cesarean section delivery is in direct correlation with fetus/newborn later complications. (Figure 5)

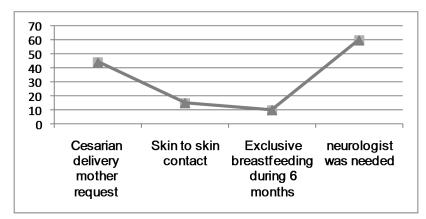


Figure 5.

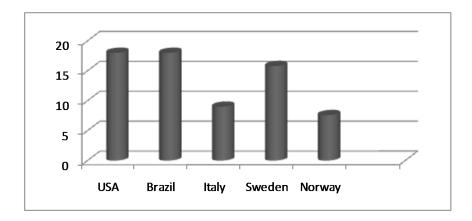
The outcome is very clear, as more Cesarean sections are performed, more medical interventions are needed with newborns.

All mothers mentioned that the doctor (outpatient's clinic or obstetrician-gynecologist) explained the advantage of physiological delivery, but no one new, why it was better, how Cesarean section can affect the mother and the child, what complications may ensue for the mother and the newborn. Mother was not prepared psychologically for the labor.

We interviewed a doctor from outpatient's clinic and found out that in this clinic they have a fully functional parents' school, all doctors advise mothers to attend the antenatal educational course, they have possibility to receive comprehensive information about pregnancy, advantages of breast-feeding, the importance and necessity of skin to skin contact in the language understandable to them.

The Center is equipped with modern video and audio equipment. As it was discovered, after a consultation with the doctor, most mothers are interested in attending these courses. Mothers come to lectures alone (without a partner). If we consider that most of unipara mothers are 18-24 years old, they are interested also in community's (not only doctor's) opinion about delivery (which is more "easy" –physiological delivery or C -section?)

As it is shown in this study, the number of CDMRs is higher in Georgia than in other countries (in the USA and Brazil, it is 18%, in Italy the number stands at 9%, in Sweden at 15,8%, and in Norway it stands at 7,6%.) (Figure 6).





The National Institute of Child Health and Human Development (NICHD), the National Institutes of Health (NIH), the Office of Medical Application of Research (OMAR) are all currently working on this issue.

The FIGO (International Federation of Gynecology and Obstetrics) supports physiological labor and argues that in such cases (non-medically necessary C-section) we not so much defend the patient's rights as violate the Ethical Code. They recommend that surgical intervention without indication is not a high quality medical service. Cesarean section should be

performed only if there are (medical) indications, to provide of the mother's and child's wellness and improve the outcome.

According to the ACOG (American College of Obstetrical and Gynecologist) Ethical Committee, the doctor violates the Ethical Code if he or she provides the mother with information leading her to believe that Cesarean section will provide her and baby's wellbeing.

According to the Georgian legislation and medical law, in the case of absence of medical indications, denying a C-section request IS NOT considered a crime for the doctor.

It should be emphasized that the main goal of the delivery is wellbeing of the mother and the baby. (Cesarean section increases the risk for the mother and the newborn.)

Based on the conducted study, it was determined that expectant mothers receive the information, but it is not enough. A lack of personnel - to supervise the delivery process – results in a wrong decision by the mother (Cesarean section for the purpose of pain relief).

Various life experiences, personal pressures, painful delivery in the past, various pathological conditions in the antenatal period may lead to stressful changes, depression and excessive fear of "delivery pain." The community's, friend's, relative's experiences have a big influence on the expectatnt mother. The fear of "suffering" delivery still circulates throughout the community. Most likely, people are not aware of achievements in the field of Gynecology and Obstetrics. That is why we advise to inform not only the mother, but the whole community the advantages of natural delivery. It should be stressed that modern medicine has made big advances compared with the situation 20-30 years ago. It is possible that the lack of information is the reason why expectant mothers prefer (85%) to deliver through Cesarean section.

Acknowledgements

Based on the study, we are able to conclude that the number of Cesarean section has increased, and that the main contributing factor for it has been maternal request. The mothers and their relatives engagement in the decision-making process is high, which is the result of the following factors:

Expectant mothers do not possess sufficient information about the risks and benefits of C-section versus natural delivery;

Pain relief should not be the motivation for a C-section request - other options should be found;

(The expectant) mother should know the indications (relative and absolute) and possible complications (early and late) of C-section;

The information delivered to the patient should be clear and understandable, with full compliance with the Ethical Code; it is better to submit the information in the written form;

It is very important to increase the awareness of the advantages of natural delivery not only among expectant mothers, but also in the community. The Internet is available everywhere, and using it for the purposes of community education is a good strategy.

References

- JSI. (2008). *Reproductive Age Death Research.* [reprodukciuli asakis sikvdilianobis kvleva]. Sakartvelo.
- World Health Organization. (2007). WHO Recommended Interventions for Improving Maternal and Newborn Health. WHO/MPS/07.05. Geneva: WHO; World Health Organization. (2000). Managing Complications in Pregnancy and Childbirth. Geneva: World Health Organization.
- World Health Organization. (2003). *Managing Newborn Problems: A guide for doctors, nurses, and midwives*. Geneva: WHO.
- World Health Organization. (2006). *Pregnancy, Childbirth, Postpartum and Newbor Care: A Guide for Essential Practice.* Geneva: WHO.
- World Health Organization, UNFPA, UNICEF and AMDD. (2009). *Monitoring Emergency Obstetric Care: a Handbook.* Geneva: WHO.
- Villar J, Valladares E, Wojdyla D, Zavaleta N, Carroli G, Velazco A, et al. (2006). *Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America.* Lancet;367(9525):1819–29.
- Villar J, Carroli G, Zavaleta N, Donner A, Wojdyla D, Faundes A, et al. (2007). Maternal and neonatal individual risks and benefits associated with caesarean delivery: multicentre prospective study. BMJ; 335(7628):1025.
- Henderson J, McCandlish R, Kumiega L, Petrou S. (2001). *Systematic review of economic aspects of alternative modes of delivery.* BJOG;108 (2):149–57.
- Essen B, Johnsdotter S, Hovelius B, Gudmundsson S, Sjoberg NO, Friedman J, et al. (2000). *Qualitative study of pregnancy and childbirth experiences in Somalian women resident in Sweden*. BJOG;107 (12):1507–12.
- Ezechi OC, Fasubaa OB, Kalu BE, Nwokoro CA, Obiesie LO. (2004). *Caesarean delivery: why the aversion?* Trop J Obstet Gynaecol; 21:164–7.

- Dumont A, De Bernis L, Bouvier-ColleMH, Breart G. (2001). *Caesarean* section rate for maternal indication in sub-Saharan Africa: a systematic review. Lancet; 358(9290)
- Shah A, Faundes A, Machoki M, Bataglia V, Amokrane F, Donner A, et al. (2008). Methodological considerations in implementing the WHO Global Survey for Monitoring Maternal and Perinatal Health. Bull World Health Organ; 86(2): 126–31.
- Ronsmans C, Holtz S, Stanton C. (2006). *Socioeconomic differentials in caesarean rates in developing countries: a retrospective analysis.* Lancet; 368(9546):1516–23.
- Belizan JM, Althabe F, Barros FC, Alexander S. (1999). Rates and implications of caesarean sections in Latin America: ecological study. BMJ; 319(7222):1397–400.
- Pai M, Sundaram P, Radhakrishnan KK, Thomas K, Muliyil JP. (1999). *A high rate of caesarean sections in an affluent section of Chennai: is it cause for concern?* Natl Med J India; 12(4):156–8.
- Sreevidya S, Sathiyasekaran BW. (2003). *High caesarean rates in Madras* (*India*): a population-based cross sectional study. BJOG; 110(2):106 –11.
- Wanyonyi S, Sequeira E, Obura T. (2006). *Caesarian section rates and perinatal outcome at the Aga Khan University Hospital*, Nairobi. East Afr Med J; 83(12):651–8.
- World Health Organization. (2005). *The World Health Report 2005: Make every mother and child count.* Geneva: WHO.