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CHANGING TREND OF CAESAREAN SECTION RATE IN KASHMIR DIVISION

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ABSTRACT

Introduction: Major change in the practice of obstetrics over the past century is a progressive increased frequency of caesarean section deliveries which has been associated with an increased risk of post-operative complications and increased risk of fetal distress which in turn increases maternal and neonatal morbidity and mortality. Therefore we tried to determine the rate of caesarian section deliveries in Kashmir division.

Objectives: To determine the caesarean section Rate in Government Hospitals and Private Hospitals of Kashmir division.

Study design: Descriptive study based on secondary data.

Methodology: We collected secondary data from all twelve districts of Kashmir division regarding number and mode of deliveries conducted in government /private institutions from 1st April 2010 to 31st January 2015 from Directorate of Health services Kashmir. The data of all patients who underwent normal/caesarean section delivery in Government/Private institutes of all twelve districts was analyzed in the form of %ages to see the changing trends of deliveries in Kashmir division with passing years.

Results: Our study findings showed that the proportion of caesarean section deliveries in government hospitals was 15.5% in the year 2010-2011 .Thereafter there has been an increase in the proportion of caesarean section deliveries in these hospitals and it has reached to 20.2% for the year 2014. Out of all the caesarean section deliveries conducted in Kashmir division 8.02% were conducted in private hospitals in the year 2011 which increased to 36.2% upto the year 2014.

Discussion: An increasing trend of caesarian section deliveries was seen in both Government and Private hospitals in the Kashmir division which is an alarming sign and puts an increased risk of post-operative complications to females and increases the risk of respiratory distress in the new born.

Recommendations: It is recommended to follow proper monitoring and adhere to WHO guidelines for caesarean section deliveries which is the need of the hour. Obstetrical audit will help us a lot in reducing the caesarean section rate. Besides Continued Medical Education should be conducted from time to time.

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INTRODUCTION

Birth of a child is a universally celebrated event throughout the world, an occasion for happiness, dancing, flowers, fireworks and gifts. Yet every day for thousands of women child birth is experienced not as a joyful event as it should be, but as a hell that may even end in death.

Caesarean section is a surgical procedure in which incision is made through a mother's abdomen and uterus to deliver one or more babies (Rajeswari, ?). It is usually performed when a vaginal delivery would put a baby's or mother's life or health at risk. The WHO recommended that the rate of caesarean section should not exceed 15% in any countryand further states that no additional health benefits are associated with a caesarean section rate above10 – 15% (Finger, 2003; Fear a

factor in surgical births - National - smh.com.au; Kiwi caesarean rate continues to rise - New Zealand news on Stuff.co.nz). But unfortunately this rate has been put on backburner in the modern obstetric practice in India because of many factors especially commercialization of health sector and new indication of caesarean section i.e, Women's will. Major changes in the practice of obstetrics over the past century include a progressive increased proportion of caesarean section delivery which has been associated with an increased risk of post- operative complications and increased risk of fetal distress which in turn increases maternal and neonatal morbidity and mortality. In modern obstetrics women have four times more chance of caesarean section than thirty years ago. The increase in caesarean section rate has been a global phenomenon. Studies have shown that mothers who deliver their babies by caesarean section take longer to first interact with their child when compared with mothers who deliver their babies vaginally. Due to extended hospital stay, both the mother and the child are at risk for developing hospital borne infections (Pai. Madhukar, 2000).

In India the rise of caesarean section rate is due to the higher fees charged by the doctors for caesarean section when compared to normal delivery. To earn more money the hospital adminstration and doctors force caesarean section on the patients, even if the patient is unwilling (Campbell, 2008). Caesarean section rate in U.S.A is 29.1 % (Hamilton et al., 2004), in England 21.5 % (Thomas, 2001) and in Latin American countries 40 % (Belizan et al., 1999).

RATIONALE OF THE STUDY

It is good to say the right thing at the right place, but it is much more important to leave unsaid the wrong thing at a tempting moment. All pregnant women are at risk of complications, out of total pregnancies about 15% develop the complications who may require hospitalization for medical and surgical intervention[10]. Globally every minute at least one woman dies from complications related to pregnancy or childbirth, that means 5, 29,000 women a year. In addition, for every woman who dies in childbirth around 20 more suffer injury, infection or disease; approximately 10 million women each year[11]. The WHO estimates the rate of LSCS at between 10% and 15% in developed countries (://www.ctv.ca/servlet/ ArticleNews/ Canada'sCaesarean Section rate highest ever CTV, April 21, 2004.). About 17% of maternal deaths happen during child birth itself and between 50%-70% in the postpartum period. This can be attributed to pregnancy related complications occurring throughout the pregnancy, labor, and childbirth and in the postpartum period (Maternal Mortality, 2000). According to surgical site infection project, adverse outcomes for women for infection after caesarean section can result in an increased length of stay [LOS] and associated cost in the health service. Surgical site infection project review shows a post-operative infection of upto 30% following LSCS[14].

Shearer (1993) states that the 4 major indications provided for caesarean section were previous caesarean section(35%), failure to progress(30%), breech presentation(10%) and fetal distress(8%) (Myles, ?; Park, 2004). Women and infants reflect a very poor health status in our country. Focus should be on women's education, so that they can fight for their rights[17]. Until there are opportunities to obtain quality post-natal care and education to the mother about its lifesaving potential, post-natal care services may continue to be regarded by many as having little values. So proper guidelines and knowledge should be given regarding the outcomes and complications. Post-natal care is life saving and essential for improving the health and survival of both mothers and babies (Park, 2004).

Aims and Objectives

- To determine the caesarean section Rate in Government Hospitals for last five years and to assess the changing trends of caesarean section in Kashmir division.
- To determine the caesarean section rate in private hospitals and introspect the trends of caesarean section in Kashmir division.

METHODOLOGY

Study design

Descriptive study based on secondary data which was collected from HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS)

METHODS

We collected secondary data from all twelve districts of Kashmir division regarding number and mode of deliveries conducted both in government and private hospitals from 1st April 2010 to 31stJanuary 2015 from HMIS. The data of all patients who underwent Normal/caesarean section delivery in all twelve districts was analyzed in the form of %ages to see the changing trends of deliveries in Kashmir division.

RESULTS

Our study findings showed that the frequency of caesarean section deliveries in Government as well as private hospitals has increased over the last five years. Where as in Government hospitals the proportion of Caesarean section deliveries has increased to a good extent, in private hospitals it was the actual number which has increased tremendously. The caesarean section rate was found to be 15.5% in Government hospitals in the year 2010-2011.

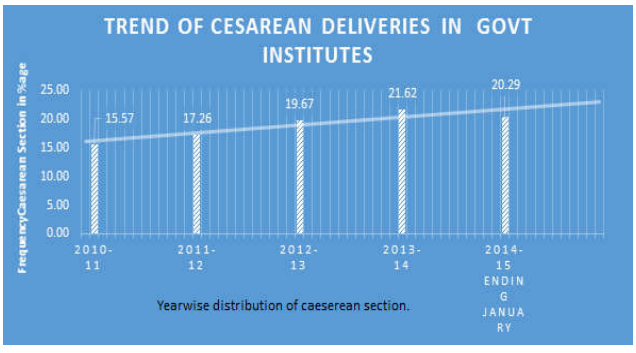

Figure 1. Trend of Cesarean Section deliveries in Government hospitals of Kashmir division

Thereafter there has been an increase in the frequency of caesarean section in these hospitals and it has reached to 20.2% for the year 2014-upto January 2015. In the year 2010-2011, 8.02% of total caesarean sections were conducted in private hospitals which increased to 36.2% for the year 2014 upto January 2015.

It was also seen that 96% of deliveries which were conducted in private hospitals in district kupwara from 2010 to 2015 (January) were caesarean section in nature. Similarly 82% of deliveries which were conducted in private hospitals in district Baramulla were caesarean section in nature and 100% of deliveries which were conducted in private hospitals in district Pulwama were caesarean section in nature in the said period. For district Ganderbal the said figure was 100% and for district Anantnag it was 83%.

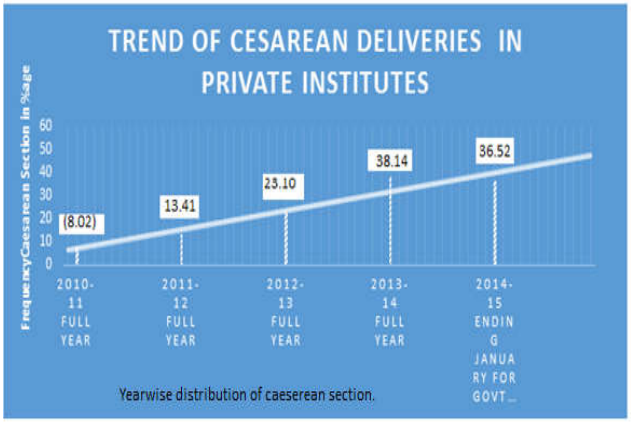

Figure 2. Proportion of Cesarean Section deliveries conducted in Private hospitals out of all the Cesarean Section deliveries in Kashmir division

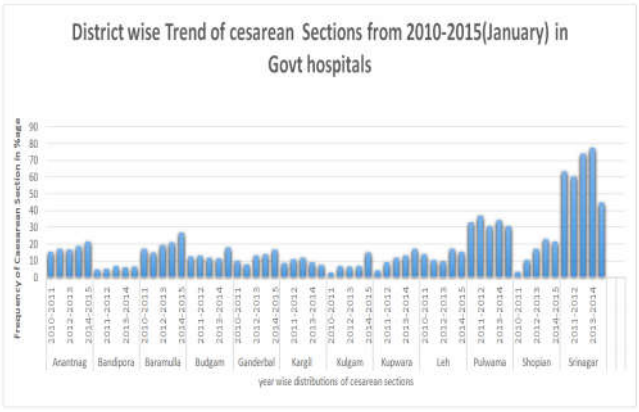

Figure 3: District wise trend of caesarian section from 2010 -2015 (Upto January) in government hospitals of kashmir division

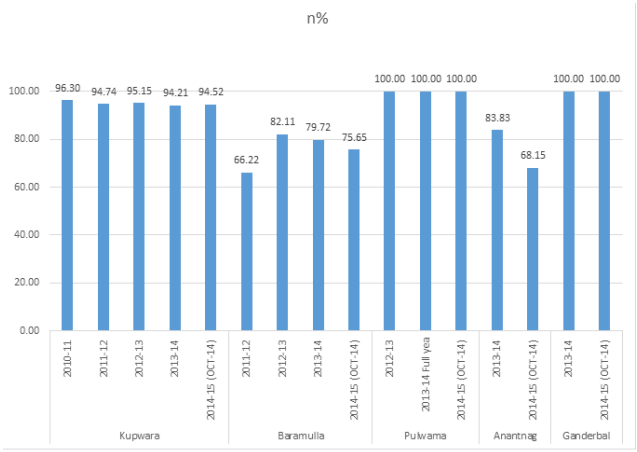

Figure 4. District wise trend of caesarian section from 2010 -2015 (Upto January) in private hospitals of north, central and south zone of kashmir division

DISCUSSION

There has been a steady increase in the rate of caesarean section mode of deliveries both in developed and developing countries. This rising rate has become a public health concern worldwide. Our study findings showed that the proportion of caesarean section deliveries in government hospitals was 15.5% in the year 2010-2011 .Thereafter there has been an increase in the proportion of caesarean section deliveries in these hospitals and it has reached to 20.2% for the year 2014. Out of all the caesarean section deliveries conducted in Kashmir division 8.02% were conducted in private hospitals in the year 2011 which increased to 36.2% upto the year 2014.
The reasons for this worrying trend are varied. The medical records will be misleading as they often cite the indication of caesarean section as EMERGENCY INTERVENTION in face of maternal or fetal distress. But in most instances it is a different story. There are many instances where the real reasons are often Non-Clinical (like profit motivated, Self-decision of pregnant females, increased pressure on doctors by administrators to conduct caesarean sections) and there is a need to introspect as early as possible so that we are able to decrease Maternal Mortality Rate (MMR) and Neonatal Mortality Ratio(NMR) to the lowest possible figures in near future. These results are the alarming signs for the Government to introspect why there is an increasing trend of caesarean section both in Government as well as private hospitals which has not only put unnecessarily women of child bearing age on increased risk of morbidity and mortality from caesarean section but also the newborns have to face the brunt of it by getting neonatal complications.

Conclusion

In modern obstetrics, Caesarean section is a major surgical procedure. In spite of its low rate of maternal morbidity and mortality due to improved surgical technique and modern anesthetic skill, it still carries a slightly greater risk than normal vaginal delivery and risk is more in subsequent pregnancies. Those risks can be reduced by giving advice for strict and regular antenatal checkups during pregnancies to emphasize the need for an elective operation, if the indication is a real one.

Recommendations

- Regular antenatal checkups should be done during pregnancy and early registration as early as before 12 weeks of pregnancy.
- Birth attendants and other family welfare visitors should be trained adequately to detect and refer high risk cases to referral Centre for proper management.
- Improvement of transport system in the rural and remote areas.
- Accurate and early decision to be taken in performing LSCS to ensure healthy outcome.
- Detailed critical review of all LSCS at morning sessions should be done whether the indications were justified or not.

To reduce the post-operative complications with LSCS, some definite measures should be taken during and after operation:

- Catheterization should be avoided if possible & if necessary, strict aseptic pre-caution must be taken to prevent ascending infection.
- All-out effort should be taken to implement infection prevention.
- Prophylactic antibiotic should be used in our country as maintenance of optimum level of sterility because cleanliness may not be possible in majority of cases.

- It is recommended to follow proper monitoring and adherence to WHO guidelines for caesarean section deliveries which is the need of the hour (i.e.5-15%).
- Obstetrical audit will help us a lot in reducing the rate.
- Besides, Continued Medical Education programs of doctors should be conducted from time to time to update information on various guidelines related to caesarean section deliveries.

Declarations

- **Conflict of interest**: none.
- **Source of funding**: none.

REFERENCES

Belizan JM, Althabe F; Barros FC; et al. 1999. Rates and implications of caesarean section in latin America: ecological study. BMJ 319: 1397-402.

Campbell, Denis."Fear of Pain,causes a big rise in Caesareans." 26 October 2008. The Guardian. Retrieved 27 October 2008.

Department of family welfare, New Delhi; Manual and Supervisors, August 2005.

Fear a factor in surgical births - National - smh.com.au

Finger. C. 2003. "Caesarean section rates skyrocket in Brazil. Many women are opting for Caesareans in the belief that it is a practical solution.". *Lancet***362**: 628. doi:10.1016/S0140-6736(03)14204-3. PMID12947949

Hamilton BE, Ventura SJ, Martin JA; Sulton PD. Preliminary births for 2004. Infant and maternal health. Health E – Stats. Released Nov 15, 2005

http://www.ctv.ca/servlet/ArticleNews/Canada'sCaesarean Section rate highest ever CTV, April 21, 2004.

Kiwi caesarean rate continues to rise - New Zealand news on Stuff.co.nz

Maternal Mortality in 2000, estimates developed by WHO, UNICEF and UNFPA, Geneva, WHO, 2004.

Myles, Text Book for Midwives,14th Edition, Churchill Livingstone, London; 583-587.

NSW Department of Health 2007- Future directions for Health in NSW - towards2025.

Pai. Madhukar 2000. "Medical Interventions: Caesarean Sections as a Case Study". Economic and Political Weekly **35** (31): 2755–61.

Park, K. 2004. Essential of Community Health Nursing, 4th Edition, M/S Banarsidas Bhanot Publication, 332.

Park, K. 2004. Text Book of Preventive and Social Mdicine,18th Edition, M/S Banarsidas Bhanot Publication,; 365-367

Rajeswari. C. Prevention of Postnatal and Neonatal Infection. Nightingle Nursing Times: February; 2;11. 36.

The World Health Report 2005 developed by WHO, Geneva, 2005.

Thomas J, Paranjothy S; Royal College of Obstetrician and gynecologist: Clinical eff ectiveness support unit. The Nation Sentinel caesarean section Audit report London. RCOG press ,2001.

United Nation Fund for population activities. Safe motherhood 2002.

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