

Rising Caesarean Section Rates in Bani Walid: Incidence and Underlying Causes

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ارتفاع معدلات الولادة القيصرية في بني وليد: معدل الحدوث والأسباب الكامنة

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Abstract:

The global rise in cesarean deliveries (CDs) has become a significant public health concern due to its implications on maternal and neonatal outcomes, healthcare costs, and resource utilization. This paper explores the causes and incidence trends of cesarean deliveries and reviews common medical and non-medical indications. A cross-sectional study was conducted from 2018 to 2023 at Bani Walid General Hospital, where data were collected from a hundred randomly selected pregnant women using a structured, self-developed questionnaire. The questionnaire included demographic data and questions related to obstetric history and health conditions influencing delivery mode. Data analysis was performed using Microsoft Excel. This research seeks to provide valuable insights into the factors influencing surgical deliveries in this region.

Keywords: Caesarean section, maternal health, delivery methods, obstetric indications, fetal distress, Bani Walid, Libya.

المخلص

أصبح الارتفاع العالمي في الولادات القيصرية مصدر قلق كبير للصحة العامة نظرًا لتأثيراته على نتائج الأمهات والمواليد، وتكاليف الرعاية الصحية، واستخدام الموارد. يستعرض هذا البحث أسباب واتجاهات حدوث الولادات القيصرية، ويحلل المؤشرات الطبية وغير الطبية الشائعة. أجريت دراسة مقطعية في مستشفى بني وليد العام خلال الفترة من 2018 إلى 2023، حيث جُمعت البيانات من مئة امرأة حامل تم اختيارهن عشوائيًا باستخدام استبيان منظم تم تطويره ذاتيًا. شمل الاستبيان بيانات ديموغرافية وأسئلة تتعلق بالتاريخ التوليدي والحالات الصحية المؤثرة على طريقة الولادة. تم تحليل البيانات باستخدام برنامج Microsoft Excel. يهدف هذا البحث إلى تقديم رؤية قيمة حول العوامل المؤثرة في اللجوء إلى الولادة الجراحية في هذه المنطقة.

الكلمات المفتاحية: الولادة القيصرية، صحة الأم، طرق الولادة، المؤشرات التوليدية، اختناق الجنين، بني وليد، ليبيا.

1. Introduction:

The Caesarean section (also called C-section or CS) is the surgical procedure by which one or more babies deliver through an incision in the abdominal wall (laparotomy) and uterine wall(hysterotomy), this definition does not include removal of the fetus from the abdominal cavity in case of rupture of the uterus or abdominal pregnancy (1). The incision is done through several abdominal layers, including skin, subcutaneous tissues, sheath, muscles, and uterus.

Cesarean delivery, also known as C-section, is one of the most performed surgical procedures globally. It is a lifesaving intervention for both mothers and neonates in situations where vaginal delivery poses risks. However, in recent decades, and according to the WHO, the rate of cesarean deliveries has increased significantly across both high-income and low- to middle-income countries, raising concerns among healthcare professionals and policymakers regarding its overuse, particularly in cases without clear medical indications (2,3). While higher rates of cesarean delivery can reflect improved access to life-saving care, they also raise concerns about overuse, especially when driven by non-medical factors. Elective cesareans, medico-legal concerns, maternal request, and provider convenience are among the factors contributing to unnecessary procedures. Therefore, these rising rates may suggest an increasing number of unnecessary medical operations with more complications for the mother and fetus.

When medically justified, a CS can prevent maternal and perinatal mortality and morbidity. There is no evidence, however, showing the benefits of the procedure for women or infants where it is not required (3).

A systematic review and an ecological analysis were performed

and concluded that at the population level, CS rates higher than 10% were not associated with reductions in maternal and newborn mortality rates (3,4).

Worldwide studies have shown that the caesarean delivery is associated with more complications as compared with the normal vaginal delivery, especially postoperative complications. Villar and associates (2007) reported that maternal morbidity rates were twofolds higher with caesarean delivery than with vaginal birth (1). A retrospective cohort study, based on Swedish national registers and included 714 326 deliveries from 2008 to 2017, found that among patients without medical indication for planned cesarean section, the risks of short-term maternal complications were higher with planned cesarean section than with planned vaginal delivery (5). These complications are associated either with the operation itself, such as bleeding, infection, etc., or because of the anesthesia used during this operation, for example, but not limited to, aspiration of gastric content and lung infection, and complications due to immobilization of the patient, e.g., thromboembolism, etc. Anesthetic complications have a greater incidence with caesarean delivery compared with vaginal birth (1,6,7). In addition to the adverse outcome after a CS, the subsequent pregnancies show increased risks of hysterectomy, abnormal placentation, uterine rupture, stillbirth, and preterm birth (8,9). A higher frequency of bleeding, need for blood transfusion, adhesions, intraoperative surgical injury, and hysterectomy occurred with increasing number of CSs (10,11).

This paper delves into the incidence of cesarean deliveries, the causes behind their rise, and the indications—both medical and elective—that lead to the procedure. This research intends to analyze why the rate of cesarean section as a mode of delivery seems to have increased in the last few years in Bani Walid. To prove or negate this note and to discuss the possible cause.

We have submitted 100 women from Bani Walid, who have undergone CS in the last 5 years, for this study.

- **Importance of this research:**

We have noticed as an obstetrician in Bani Walid an increase in the Cesarean delivery rate among the patients we care for and follow them in my Outpatient clinic, this evoked me to carry on a research on a sample from the city to find out the possible causes of this assumed increase in the rate of cesarean deliveries to identify some of these leading causes, as this may in turn will decrease the overall impact of the complications of this operation, medically and financially, on the individual and community in attempt to decrease the overall morbidity and mortality rate among pregnant women and newborns in our geographical area.

- **Aims of the research:**

1. To focus on the different causes of rising cs section rates globally and locally in Libya, particularly in Bani Walid.
2. To discuss the possible causes of the increasing cs rates in Bani Walid and to find some applicable solutions to avoid unnecessary C-sections and thus to decrease complications of this procedure.
3. To decrease the costs on the community and, of course, on the individuals in the first place.

1.1. General Indications for Cesarean Delivery:

1.1.1. Maternal:

Prior cesarean delivery is the most common indication, in addition to prior classical hysterotomy, unknown uterine scar, or Prior full-thickness myomectomy type. Abnormal placentation, including placenta previa,

accrete, and percreta, which are associated particularly with repeated cs. Genital tract obstructive mass and invasive cervical cancer or pelvic deformity which interfere the normal vaginal delivery. Prior pelvic reconstructive surgery or a history of significant perineal trauma necessitates a caesarean delivery. Permanent cerclage is also a known indication for cs. In case of HSV or HIV infection, cs indicated as a protection to the newborn. Other indications include some maternal diseases like: Cardiac or pulmonary disease, Cerebral aneurysm, and cs on maternal request ⁽¹⁾.

1.1.2. Maternal-Fetal:

Cephalopelvic disproportion, failed operative vaginal delivery, placenta previa or vasa previa and placental abruption ⁽¹⁾.

1.1.3. Fetal:

Non-reassuring fetal status, malpresentation, macrosomia, congenital anomaly, abnormal umbilical cord Doppler study, thrombocytopenia, and prior neonatal birth trauma ⁽¹⁾.

1.2 Cesarean Delivery on Maternal Request (CDMR):

Caesarean delivery on maternal request CDMR is defined as a primary cs in the absence of any maternal or fetal indications. Some reasons for maternal request to deliver by cs are; fear of vaginal delivery, protection of pelvic floor support and convenience. The incidence of caesarean delivery on maternal request and its contribution to the overall increase in the caesarean delivery rate are not well known, but it is estimated that 2.5% of all births in the United States are caesarean deliveries on maternal request ⁽¹²⁾.

According to the American College of Obstetricians and Gynecologists; If a patient decides to pursue cesarean delivery on maternal request, the following is recommended: in the absence of other indications for early delivery, cesarean delivery on maternal request should not be performed before a gestational age of 39 weeks; and; given the high repeat cesarean delivery rate, patients should be informed that the risk of placenta previa, placenta accrete spectrum, and gravid hysterectomy increase with each subsequent cesarean delivery ⁽¹²⁾.

1.3 Types of Cesarean sections:

1.3.1 Based on the types of incision into:

I. Lower uterine segment CS:

This is the commonest CS procedure, because it is easier in technique, and Blood loss and infection rate are much less compared with upper segment CS ⁽¹³⁾.

II. Midline vertical incision:

Called also classical CS, this incision is reserved for specific indications because of the difficulty of the technique, increased blood loss, inadequate approximation at closure, higher incidence of scar rupture so that, the trial of vaginal delivery in the next pregnancy is not possible to be offered, also the risk of hernia is increased because this type of incision weakens the muscles of the abdominal wall. Indications of the midline approach include a difficult approach to the lower segment because of fibroid or anterior placenta previa, preterm breech with poorly formed lower segment, transverse lie with congenital anomaly of the uterus, or impacted transverse lie with ruptured membranes ⁽¹³⁾.

The caesarean operation has undergone a number of technical changes, and the procedure has evolved. Many different obstetricians prefer some techniques over others and glorify the benefits of various techniques of skin incision, uterine incision, uterine closure, and many other technical aspects of the procedure ⁽¹⁴⁾. There are many variations in surgical technique and an awareness of different available approaches to caesarean section allows the obstetrician to adapt to unexpected situations that might occur during the operation.

1.3.2. Based on the timing or the urgency of the CS grouped into four categories:

I. Emergency CS: There is an immediate threat to the mother or the fetus; ideally, CS should be done within the next thirty minutes. Indications include cord prolapse, scar rupture, abruption, and fetal distress (for example, prolonged fetal heart rate (FHR) deceleration below 80 bpm).

II. Urgent CS: there is maternal or fetal risk, but it is not immediately life-threatening. The procedure should be done within 60-75 minutes. Indications of this type include those with FHR abnormalities of concern.

III. Scheduled CS: the mother needs early delivery, but currently there is no maternal or fetal risk, the continuation of pregnancy is likely to affect the mother or fetus in hours or days. This group has a wide range of indications, including failure to progress, growth-restricted fetus in the preterm period, preeclampsia with gradually deteriorating liver or renal functions, etc...

IV. Elective CS: delivery timed to suit the woman and staff, there are cases where there is an indication for CS, but there is no urgency. Examples are placenta previa with no active bleeding, malpresentation (brow, breech or face), history of previous hysterotomy or vertical incision, HIV or Herpes simplex infection, history of anterior or posterior vaginal repair, previous perineal trauma (e.g., IV-degree tear), cardiac or pulmonary disease of mother, previous major shoulder dystocia, maternal request (will be discussed later)

Elective CS is generally done around 39 weeks to reduce the risk of respiratory distress; however, the medical or obstetric condition determines the gestation at which the elective CS is planned ⁽¹³⁾.

Notably, most of the maternal and neonatal outcomes examined in more than one study had insufficient data to permit recommendations. Guidelines from the American College of Obstetricians and Gynecologists (2020a) note that CDMR should not be performed before 39 weeks of gestation ⁽¹²⁾. CDMR is ideally avoided in women desiring several children because of the earlier-described morbidity from accruing cesarean operations ⁽¹⁾.

1.4 Preoperative evaluation and preparation:

In case of a planned procedure, the preoperative patient evaluation should include a full history and physical examination. History should involve past medical and surgical history, any medications, drug allergies, and discussion of the indications for the cesarean section with the patient, and taking her written informed consent ⁽¹⁴⁾. All routine investigations should be done, and the availability of compatible blood must be ensured. The obstetrician should assess and identify patients at high risk of anesthetic complications during the antenatal period; in these cases, preoperative consultation with an anesthetist or other relevant specialist should be considered. On the other hand, in case of an emergency CS, once the decision to operate has been made, discussion with the patient, consent, and preoperative preparation should be carried out as much as possible, as instances allow.

To avoid complications due to neonatal immaturity, assurance of fetal maturity before a planned elective cs is essential.

Solid food intake is stopped at least 6 hours before the procedure. Uncomplicated patients may consume moderate amounts of clear liquids up to 2 hours before surgery (American Society of Anesthesiologists, 2016)⁽¹⁾.

Once the woman is supine, a wedge beneath the right hip and lower back creates a left lateral tilt to aid venous return and avoid hypotension. Data is insufficient to determine the value of fetal monitoring before scheduled cesarean delivery in women without risk factors. Our practice is to obtain a 5-minute tracing before elective cases. At minimum, fetal heart

sounds should be documented in the operating room before surgery ⁽¹⁾. Abdominal shaving should be performed in the operating room and not the night before surgery, as the latter may increase the bacterial count on the maternal abdomen. A Foley catheter should be placed to allow the bladder to drain during the operation, keeping the operative field clear and allowing urinary output to be evaluated intra-operatively ⁽¹⁴⁾. The risk of venous thromboembolism is increased with pregnancy. For all women not already receiving thromboprophylaxis, the American College of Obstetricians and Gynecologists (2020c) recommends initiation of pneumatic compression stockings before cesarean delivery ⁽¹⁾. Antithrombosis prophylaxis is recommended, and early ambulation should be encouraged postoperatively.

1.5 Complications of Cesarean Delivery:

Although the Caesarean as a surgical procedure is considered a safe operation, some complications can arise during or after the operation. Morbidity and mortality associated with the procedure cannot be avoided ⁽¹³⁾:

1.5.1 Intra-operative complications include:

Hemorrhage that, when excess and uncontrolled, may lead to shock, injury to the nearby structures like ureters, urinary bladder, intestine, complications due to general anesthesia, particularly aspiration or inhalation of the gastric contents into the lungs, especially associated with urgent cs. In case of placenta

accreta, increta, percreta, which are associated with repeated caesarean sections, severe bleeding may occur after extraction of the baby, which may end in hysterectomy to save the patient's life. In addition, complications related to regional blockades may be serious, such as cardiovascular collapse due to high spinal anesthesia or overdose of local anesthetics, infections and epidural abscess, meningitis, epidural hematoma, and trauma, which may be transient or permanent due to direct damage to the spinal cord or nerve root. Complications also include those related to the newborn: breathing problems and respiratory distress syndrome ⁽¹³⁾.

1.5.2. Postoperative complications:

As with any other surgical procedure, nausea, vomiting can occur, and severe headaches, especially after spinal anesthesia. Postpartum bleeding and its consequences, infection of the wound site, and risk of thromboembolism, which can be fatal. Paralytic ileus, atelectasis, is a collapse of a part of the lung, especially after general anesthesia are known complication of any surgical procedure. Urinary tract infection is not uncommon after CS. Some patients experience low back pain, pain at the epidural site, and thoracic pain. Adhesions resulting in chronic pain and infertility may lead to future pregnancy complications such as placenta previa or placenta abruption ⁽¹⁴⁾. Diastasis recti abdominis and hernia are also known complications of CS, particularly after classical CS. Vescio-vaginal or uretero-vaginal fistulae due to visceral injury are extremely rare ⁽¹³⁾.

1.6 Postoperative care:

To avoid most of the above-mentioned complications, preoperative preparation and postoperative care are very important to consider. In addition, some other special necessary precautions should be taken into consideration for high-risk patients, on a case individually.

Intravenous fluids are given throughout the procedure, and subsequently, while in the recovery room, the blood pressure, pulse, and urine output are closely monitored. The amount of bleeding per vagina must be also closely monitored, and the uterine fundus must be palpated frequently to assure that the uterus is firmly contracted.

Analgesia is necessary postoperatively; this will minimize the discomfort and pain after surgery and thus encourage the patient to walk. With early ambulation, venous thrombosis and pulmonary embolism are uncommon ⁽¹⁵⁾.

Bladder and bowels support, breast care. Discharge from the hospital, unless there are complications, may be safely allowed on the third or fourth postpartum day. It is advantageous to perform the initial postpartum evaluation during the third week after delivery rather than at the more traditional time of 6 weeks ⁽¹⁵⁾.

Prophylactic antibiotic therapy: Cesarean delivery is considered a clean-contaminated case, and postoperative febrile morbidity is common ⁽¹⁾. Numerous trials show that a single dose of an antibiotic given at the time of cesarean delivery significantly decreases infectious morbidity ⁽¹⁶⁾.

2. Literature review

2.1 Incidence and prevalence:

According to the latest research from the World Health Organization (WHO), caesarean section use continues to rise globally, now accounting for more than 1 in 5 (21%) of all childbirths ⁽²⁾. Worldwide CS rates have increased from about 7% in 1990 to 21% in 2018 and are expected to continue to rise over the coming decade ⁽¹⁷⁾. This increase is more obvious in the high-income countries (15 to 35%) compared to low-income countries (< 9%) ^(17,18). In Germany, for example, as the federal Statistical Office reports, the cesarean section rate was 29.6% in 2019; over the last 30 years, the proportion of these surgical procedures has almost doubled. In 2021 CS rate in Germany was 30.9%, i.e., almost a third of all births, and in 2023, the CS rate rose to 34.8% (according to "Deutsches Aerzteblatt" magazine, May 2024) ⁽¹⁹⁾. In the United States, the percentage was 32.1% of live births in 2022 ⁽²⁰⁾.

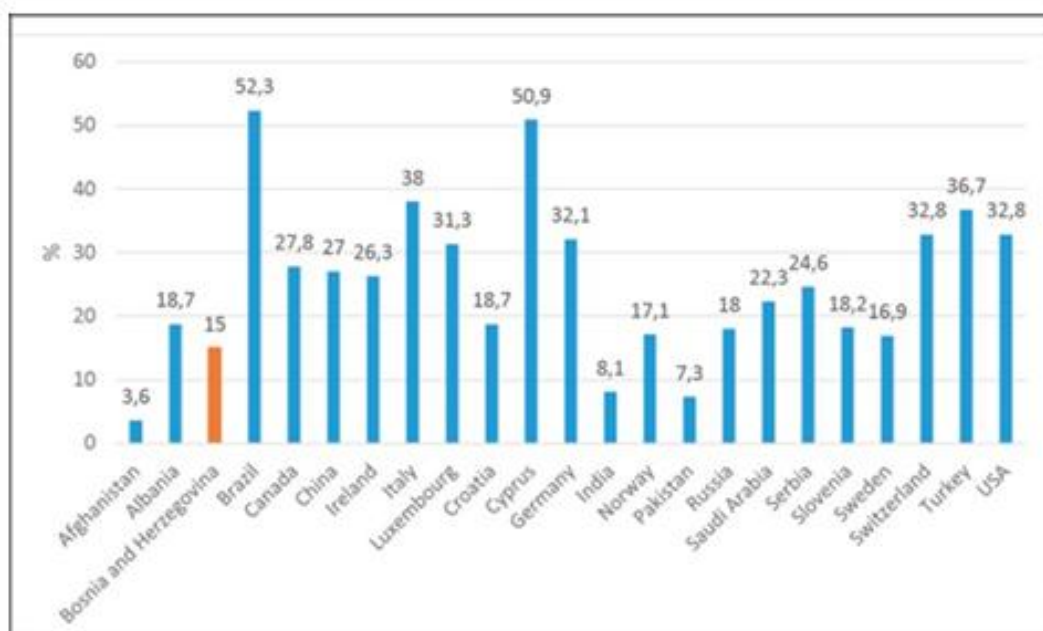


FIG. 1: Percentage of deliveries by Caesarean sections in the world..

In Egypt, according to the family health survey, the rate has steeply increased from 52% of all births in 2014 to 72% in 2021. This means that Egypt currently has the world's fourth-highest share of C-sections – nearly five times the World Health Organization's recommended rate of 10-15%. In Egypt, however, the problem is exacerbated by economic instability, insufficient health-care funding, and an overreliance on private providers (21).

Quoted from a publication of the Libyan Ministry of Health dated 4. October .2019.

The rate of caesarean sections in private clinics has increased by 90% compared to the results of a study conducted 11 years ago. The rate of cesarean deliveries in the residential clinics operating in the private health sector has increased by 90% compared to the recent results of the number of cesarean deliveries revealed by the study conducted on the private health sector in Libya 11 years ago. The results of the private health sector survey in 2007 show that the total number of cesarean deliveries within private residential clinics reached 3404, while the results of the last survey of the private health sector showed that the number of cesarean deliveries reached 6478. According to the results of the latest survey prepared by the Information and Documentation Center at the Ministry of Health in cooperation with the European Union and the World Health Organization, the total number of births registered in 2019 residential clinics reached 13,384 births, including 6,478 cesarean deliveries, meaning that cesarean deliveries constitute 48% of the total number of births. While the caesarean sections represented only 31% of the total number of births, which amounted to 10,867 in 2007. The results of a private health sector survey in Libya in 2007 showed that the neonatal mortality rate inside clinics was 3.2 per 1,000 births, while the results of the latest study did not reveal the neonatal mortality rate inside private residential clinics (22).

A retrospective study carried out in Derna showed that the overall rate of C-section in Derna city was 23.5%. which is considered by the Authors as it is higher than the World Health Organization standard (23).

The cause of this global rise in the rate of Caesarean delivery vary widely between and within countries (2), it can be due to different factors; Increase in repeat caesareans, better surgical techniques, availability of blood transfusion and antibiotics, difficult instrumental delivery and vaginal breech delivery, identification of risk of mother and fetuses., by electronic fetal monitoring, and increased diagnosis of intrapartum fetal distress, increase in pregnancies by assisted reproduction, and thus increase the rate of multiple pregnancies, average maternal age is increasing, older nulliparas have a higher risk for caesarean delivery, increases in the incidence of maternal obesity, caesarean delivery on maternal request: reasons include fear of childbirth, protection of pelvic floor support, reduced risk of fetal trauma and convenience (1,2).

3. Methods:

Study Design and Setting: A cross-sectional study was conducted using a structured questionnaire to assess factors related to caesarean section among pregnant women. The study was carried out at Bani Walid General Hospital, located in Bani Walid city, Libya. Study Period Data was collected over five years, from 2018 to 2023.

Study Population and Sampling: The study included 100 women who were selected randomly from those attending the maternity unit during the study period. Eligible participants were women of reproductive age who had experienced pregnancy and consented to participate in the study.

Data Collection Instrument: A self-developed questionnaire consisting of 6 sections and 24 questions was used for data collection. The questionnaire covered demographic information, obstetric history (including previous pregnancies and caesarean sections), history of abortions, and the impact of chronic diseases on pregnancy. The questionnaire was designed in simple language to ensure clarity and ease of understanding.

Ethical Considerations: Ethical approval was obtained from the appropriate institutional review board before the commencement of the study. All participants provided informed consent, and confidentiality was strictly maintained throughout the research process.

4. Results and Discussion:

4.1 Data Analysis:

Data was entered and analyzed using Microsoft Excel. Descriptive statistics were used to summarize participant characteristics and questionnaire responses. Frequencies and percentages were calculated for categorical variables.

The following Table 1 and Figures 2 and 3 show the average number of total deliveries in the Bani Walid general hospital and the percentage of cesarean deliveries in the period of 2018-2023.

As shown in the figures and table, the total number of births registered in 2018 was 2463, including 906 cesarean deliveries, meaning that cesarean deliveries represented about 36% of the total number of births, while in 2023 the total number of births was 2468, including 1270 cesarean deliveries, this number represented about 51% of total births.

TABLE I: The Cases of Cesarean Deliveries in Bani Walid General Hospital (2018-2023).

Number of Cesarean Sections Performed per Year			
Year	Average number of births	Number of Cesarean sections	% of Cesarean sections
2018	2463	906	36.8
2019	2244	970	43
2020	2439	1139	46.7
2021	2021	940	46.5
2022	1824	898	49
2023	2468	1270	51

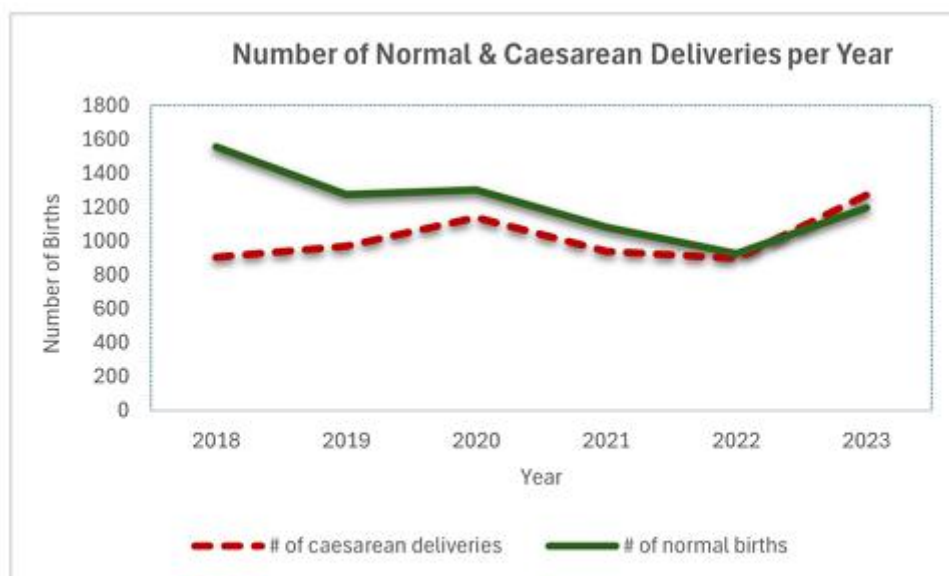


FIG. 2: Comparison between the number of normal births and cesarean deliveries

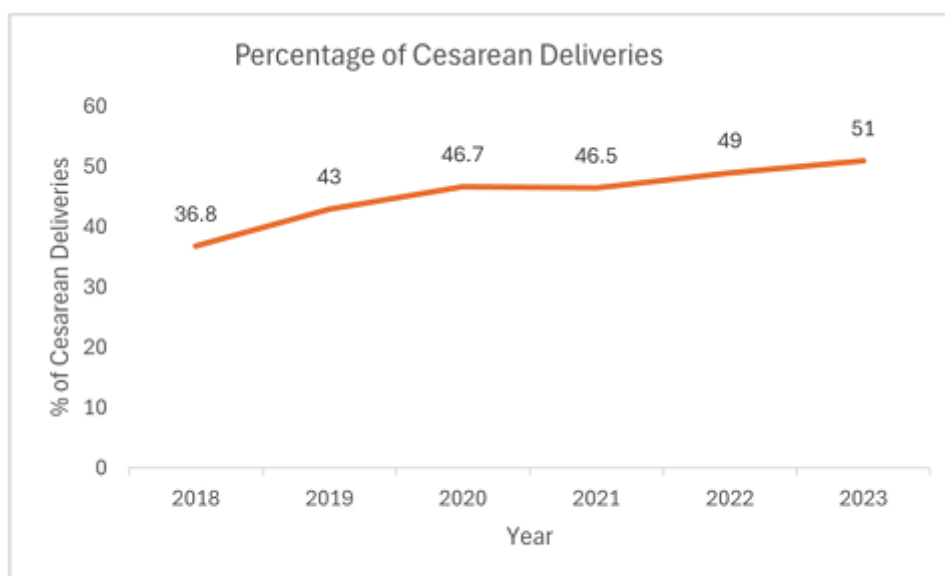


FIG. 3: Percentage of cesarean deliveries per year.

The possible causes of this rise in the cesarean delivery rate in Bani Walid are shown in Figure 3, where the study included 100 pregnant women who participated in a questionnaire-based survey. The commonly reported indication for CS was previous caesarean delivery, accounting for 18% of cases. This was followed by fetal distress or non-reassuring fetal status (17%), maternal diseases (13%), cephalopelvic disproportion (10%), and the other reported indications are included in Figure 4.

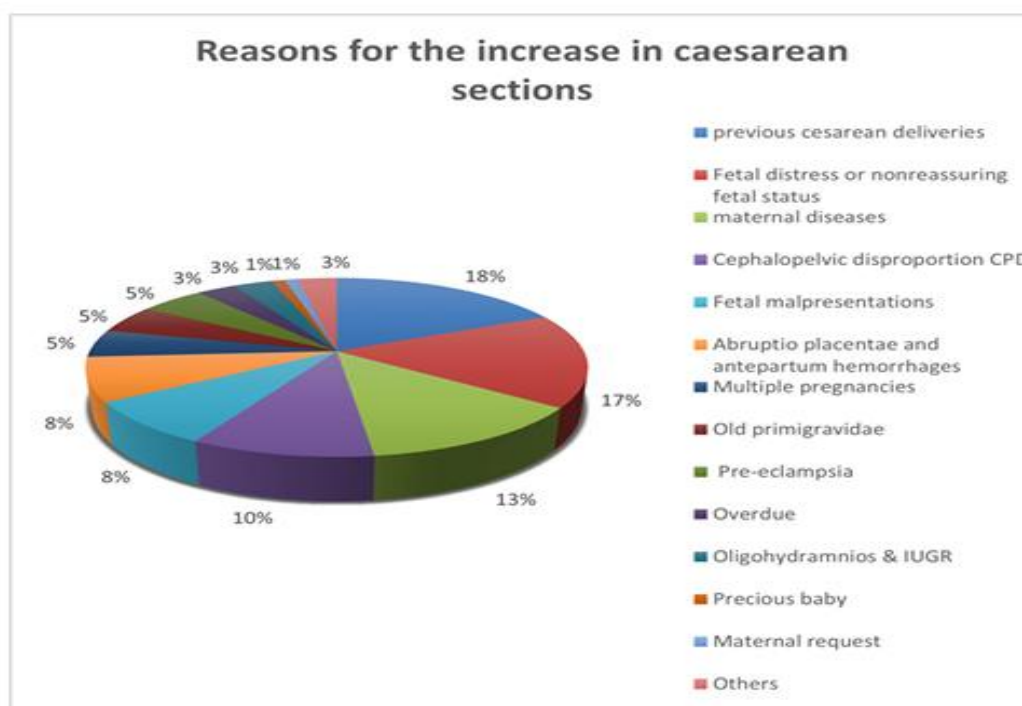


FIG. 4: Reasons for the rise in the rate of cesarean deliveries.

4.2 Discussion:

This study sheds light on the most prevalent clinical reasons why pregnant women in Bani Walid, Libya, need a cesarean delivery. With a few notable exceptions, the results show patterns that are in line with both regional and worldwide trends.

A prior C-section was the most common reason for a cesarean section (18%), indicating the continued need for recurrent cesarean deliveries after the initial procedure. This is consistent with WHO data showing that a prior C-section is the main cause of the global increase in surgical birth rates. It highlights the necessity for improved assessment of candidates for trial of labor after cesarean (TOLAC), when appropriate. Fetal distress or non-reassuring fetal status (17%) ranked second, reflecting a common acute indication aimed at preventing adverse neonatal outcomes. Maternal diseases (13%)—such as diabetes, hypertension, or other chronic conditions—also played a significant role, indicating how maternal comorbidities influence obstetric decision-making.

Cephalopelvic disproportion (10%) and fetal malpresentation (8%) are traditional clinical indications and remain important contributors. The relatively high percentage of antepartum hemorrhage-related conditions (8%), such as abruptio placentae, indicates the importance of antenatal monitoring and emergency preparedness.

5. Recommendations:

Although CS has proven benefits in reducing maternal and infant mortality when performed with a clear medical indication, it is not without risks to the mother and newborn. Therefore, a cautious medical evaluation is required to justify the procedure, considering all potential consequences. The decision to subject the patient to this operation as a delivery method should be thoroughly discussed; the benefits and risks to both the mother and infant should be weighed carefully in deciding, particularly for elective, planned operations.

To reduce the adverse outcomes of the increasing rate of caesarean sections on individuals and communities, including medical and financial impacts, it is essential to adopt a standardized strategy and evidence-based guidelines in line with WHO recommendations ⁽²⁴⁾. Health education is a crucial component of antenatal care. WHO recommends a variety of educational intervention programs aimed at reducing cesarean births, some of which target women, such as childbirth training workshops, relaxation training programs, and psychoeducation programs for women experiencing pain, fear, or anxiety. Other interventions target health

care professionals, including the enforcement of evidence-based clinical practice guidelines and mandatory second opinions regarding indications for cesarean sections, all to help reduce cesarean births.

Regular training for midwives and obstetricians should be conducted, focusing on procedures such as instrumental delivery (like the use of vacuum and forceps) and external cephalic version, as well as vaginal birth after cs. The methods of instrumental delivery should be considered and encouraged during delivery if their indications for use are met in clinical practice.

Other interventions aimed at health organizations in the community along with the enforcement of financial strategies (e.g., insurance reforms equalizing physician fees for vaginal births and cesarean sections) should also be implemented.

Finally, although Cesarean Delivery on Maternal Request (CDMR) represents only a minor proportion of births in Bani Walid, healthcare professionals should be obligated to provide comprehensive counseling on the potential short- and long-term risks associated with the procedure. This includes informing mothers about possible complications for both the mother and the newborn, as well as any implications for future pregnancies and subsequent generations.

6. Conclusion:

While cesarean sections remain a crucial medical intervention, their overuse, particularly in the absence of clear medical indications, poses a significant challenge to maternal and neonatal health systems worldwide. This study highlights that the most common indications for caesarean section at Bani Walid General Hospital were previous caesarean delivery, fetal distress, and maternal diseases.

The overall rate of C-sections at Bani Walid General Hospital in 2023 was 51%. This rate is higher than the standard set by the World Health Organization. The most common indication was prior cs, followed by fetal distress and non-reassuring fetal status. Maternal conditions such as hypertensive disorders and DM follow, along with cases of CPD. Other non-medical indications, such as CDMR and financial factors, represent only 1%. Fortunately, in Bani Walid, the trend for CDMR is still not prominent and has not yet been accepted by our community. Discussion of the causes showed that the lack of training among healthcare professionals (GPs and Midwives) in Bani Walid regarding instrumental delivery and trial of labor after CS (TOLAC), as well as the interpretation of fetal wellbeing parameters, is likely contributing to the increasing CS rate in the past few years.

Enhanced antenatal care, informed decision-making, and patient education can contribute to optimizing delivery outcomes while avoiding unnecessary surgical interventions. Public health policies should aim to balance access to life-saving interventions with the prevention of avoidable surgical births.

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