

# INTRA UTERINE FETAL DEATH in ADVANCED MATERNAL AGE AND GRAND MULTIPARA: CASE REPORT

*Case Report*

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Conflict of Interest: None

Grant Support & Financial Support: None

## ABSTRACT

**Background:** IUFD remains a significant public health issue globally, particularly in developing countries where access to prenatal care is limited. This report explores the compounded risks associated with advanced maternal age and high parity in such settings.

**Case Details:** The patient, with a history of 12 prior pregnancies, lacked any form of prenatal monitoring and sought medical attention only after the onset of severe complications. Diagnostic assessments at the hospital confirmed the absence of fetal life through ultrasound. The patient underwent an emergency cesarean section to manage the stillbirth, highlighting the severe healthcare disparities and the need for emergency obstetric care in remote regions.

**Conclusion:** This case underscores the urgent need for enhanced prenatal care and healthcare infrastructure in rural areas to prevent adverse pregnancy outcomes. Strategies should focus on educational programs and accessible healthcare services to manage high-risk pregnancies effectively in underserved populations.

**Keywords:** Intrauterine fetal demise, advanced maternal age, grand multipara, prenatal care, rural healthcare.

## INTRODUCTION

Intrauterine fetal death (IUFD) remains a poignant issue within the realm of obstetrics, particularly as it pertains to cases involving advanced maternal age and high parity, which are associated with increased risks. The phenomenon of stillbirth, defined as the death of a fetus after the 24th week of pregnancy, continues to pose significant public health challenges globally, especially in developing nations (1,2). The tragic reality is highlighted by the substantial stillbirth rates in countries like Pakistan, where limited access to healthcare, socioeconomic constraints, and geographical isolation exacerbate the situation (4,5). This case report focuses on a 42-year-old woman from a remote area of Kohistan, Khyber Pakhtunkhwa (KPK), who presented with IUFD at 34 weeks of gestation under distressing circumstances. Her condition underscores the complex interplay of individual health status, lack of prenatal care, and systemic healthcare deficiencies. Prior studies have noted that the risks associated with stillbirths are multifactorial, including maternal health issues like hypertension and diabetes, fetal anomalies, and placental complications (10,11). Additionally, the socio-demographic factors unique to this region of Pakistan further complicate the accessibility and quality of maternal healthcare (6).

The objective of this case report is to draw attention to the harsh realities faced by pregnant women in underprivileged regions and to underscore the urgent need for tailored healthcare strategies that address the specific needs of these populations. By documenting and analyzing such cases, healthcare professionals and policymakers can better understand the factors leading to high rates of IUFD and stillbirth, particularly in settings plagued by economic and logistic constraints. This case not only adds to the existing body of knowledge but also highlights the critical need for comprehensive antenatal care programs that can adapt to the cultural and socioeconomic context of rural Pakistan. The ultimate aim is to foster a healthcare environment that reduces preventable maternal and fetal mortality, thereby improving outcomes across these vulnerable groups (6).

## CASE DESCRIPTION

A 42-year-old woman, gravida 13 para 12, at 34 weeks of gestation, was admitted to the emergency department in a semi-conscious state with symptoms of vaginal bleeding and an offensive smell. The patient, from a remote area in Kohistan, Khyber Pakhtunkhwa (KPK), had no antenatal records and was unaware of her last menstrual period and expected date of delivery. Her precarious condition upon arrival was marked by severe hypotension (blood pressure at 60/40 mmHg), tachycardia (139 beats per minute), and a raised temperature of 100 degrees Fahrenheit. These initial findings pointed to a critical state requiring immediate medical intervention (1). Upon admission, the patient was rapidly administered 1000 ml of crystalloids and 1000 ml of colloids to stabilize her condition. The initial lack of antenatal care and her inability to recall critical pregnancy milestones complicated the diagnostic process. Early in the morning on the day of her admission, she experienced labor pains and vaginal bleeding. She initially sought assistance from a nearby untrained birth attendant. When attempts at vaginal delivery failed, she was brought to the emergency department in a worsened state (7).

Physical examination revealed that the patient was experiencing frequent contractions, occurring three to four times every ten minutes and lasting between 40 to 50 seconds each. Fetal heart tones were not audible on auscultation, raising immediate concerns for fetal well-being. An ultrasound was promptly performed, confirming intrauterine fetal demise. The vaginal examination showed full dilation, a macerated fetal head, and the presence of a strong, offensive odor resembling rotten eggs, indicative of infection and prolonged fetal demise (2). Laboratory investigations revealed a hemoglobin level of 7.3 g/dl, white blood cell count at 24,000 per microliter indicating infection, platelets at  $551 \times 10^9/l$ , and a random blood sugar level of 105 mg/dl. The patient's deteriorating condition and lab findings necessitated urgent surgical intervention. An emergency cesarean section was performed, during which a macerated male baby weighing 2.6 kg was delivered. The procedure was executed without further complications, and postoperatively, the patient was stabilized with three units of whole blood transfusion and high-dose broad-spectrum antibiotics to manage infection and prevent septic conditions (3).

Post-surgery, the patient's condition gradually improved. Reflecting her cultural and personal needs, she was given the opportunity to see the deceased infant, which is an essential part of the grieving and psychological healing process in such tragic circumstances. The patient and her husband declined an autopsy of the fetus, opting instead for immediate burial. This decision often reflects the cultural sensitivities and personal preferences in rural Pakistani settings, where familial consent is crucial and autopsy rates are low due to various socio-cultural factors (4). The cause of the intrauterine death remained unexplained, largely due to the absence of prenatal care and a lack of medical records. This case underscores the critical need for accessible and comprehensive maternal healthcare in remote areas, emphasizing the importance of routine antenatal visits that could potentially prevent such adverse outcomes. The situation highlights the significant impact of socio-economic factors and geographical isolation on maternal-fetal medicine in developing

countries. The provision of targeted healthcare services in these regions could reduce the incidence of preventable conditions such as IUFD, thereby improving pregnancy outcomes and maternal health in underserved populations (5).



Figure 1 (BP after resuscitation)



Figure 3. macerated baby (IUFD )

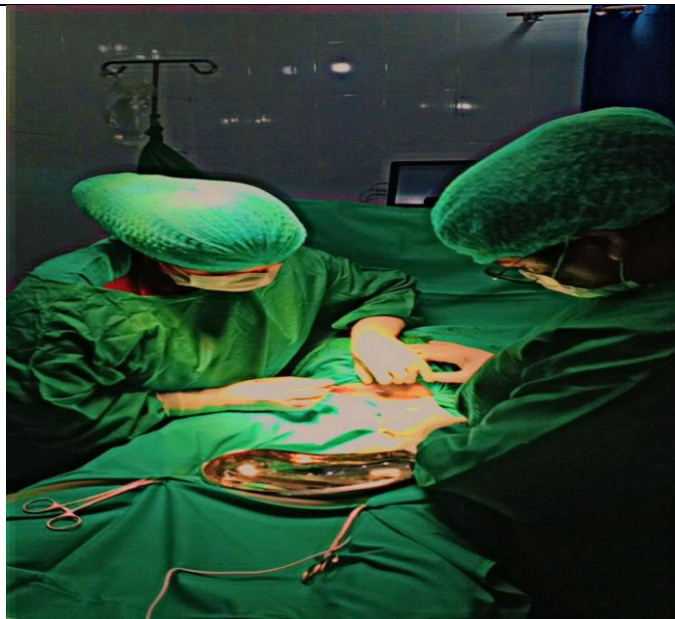


Figure 2.cesaren section on IUFD macerated baby

## DISCUSSION

The case of intrauterine fetal demise (IUFD) in a 42-year-old grand multipara from a remote area provides a poignant illustration of the challenges faced in providing adequate maternal healthcare in resource-limited settings. This case aligns with existing literature that describes increased risks of adverse pregnancy outcomes associated with advanced maternal age and high parity, particularly in settings lacking adequate healthcare infrastructure (1,2). While the incidence of IUFD in developed countries has seen a decline, the persistence of high rates in developing countries like Pakistan highlights significant disparities in healthcare access and quality (3). Research indicates that factors such as lack of prenatal care, socioeconomic barriers, and limited healthcare resources contribute significantly to the risk of stillbirths. The patient's lack of antenatal visits and unrecognized signs of fetal distress until severe symptoms prompted emergency care exemplify these issues (4). This situation underscores the importance of improving healthcare delivery in isolated regions, where cultural, economic, and logistic barriers often prevent women from seeking and receiving necessary care (8,9).

The case also highlights the crucial role of routine antenatal care in identifying and managing risks in pregnancies complicated by advanced maternal age and high parity. Regular monitoring could potentially have prevented the adverse outcome by detecting signs of fetal distress or maternal health issues earlier in the pregnancy. The importance of educating women in rural areas about the signs of potential complications and the need for regular antenatal visits cannot be overstated, as awareness is a critical component of preventive healthcare (5,10). From a clinical perspective, the case offers several learning points, including the importance of a thorough and rapid evaluation of pregnant women presenting in critical conditions, the utility of ultrasound in the immediate assessment of fetal well-being, and the need for emergency preparedness in obstetric care, particularly in areas with high rates of unattended home births. Moreover, the need for cultural competence in medical practice is evident, as the patient's initial refusal for more invasive post-mortem procedures reflects broader cultural sensitivities that healthcare providers must navigate when discussing care options with patients and their families (11-13).

However, this case report also has its limitations. The absence of a comprehensive antenatal record and detailed patient history restricts a full understanding of the underlying causes of IUFD in this instance. This limitation is common in case reports from rural areas and should be addressed in future research by implementing strategies for better record-keeping and patient follow-up in healthcare facilities serving these populations (13). Overall, this case is a critical reminder of the persistent gaps in maternal and fetal healthcare in rural and underserved regions. It emphasizes the need for targeted strategies to improve access and quality of care, which could include mobile health services, community healthcare education programs, and enhanced training for local healthcare workers to manage obstetric emergencies effectively (14).

## CONCLUSION

This case of intrauterine fetal demise in a grand multipara from a resource-limited setting underscores the profound impact of socio-economic and geographical barriers on maternal and fetal health outcomes. It highlights the critical need for improved access to prenatal care and robust healthcare systems that can address the unique challenges faced by women in remote areas. For clinical practice, it emphasizes the importance of routine antenatal monitoring, especially in populations at higher risk due to factors such as advanced maternal age and high parity. The insights gained from this case advocate for the implementation of targeted educational programs and the development of infrastructure that enables timely and effective obstetric care. By focusing on these areas, healthcare providers can better serve their communities and potentially reduce the incidence of preventable adverse outcomes in pregnancy.

## AUTHOR CONTRIBUTIONS

Author	Contribution
Sadia Muzaffar*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Mehwish Saeed	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Nazneen Hameed	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published

## REFERENCES

1. Confidential Enquiry into Maternal and Child Health (CEMACH). Perinatal Mortality 2007: United Kingdom. CEMACH: London; 2009. Available from: <http://www.cmace.org.uk/getattachment/1d2c0ebc-d2aa-4131-98ed-56bf8269e529/PerinatalMortality-2007.aspx>.
2. Maslovich MM, Burke LM. Intrauterine Fetal Demise. StatPearls Publishing; 2020. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557533/>.
3. Murguía-Peniche T, Illescás-Zárate D, Chico-Barba G, Bhutta ZA. An ecological study of stillbirths in Mexico from 2000 to 2013. Bull World Health Organ. 2016;94:322-30.
4. Planning Commission. Pakistan 2025-One nation-One vision. Ministry of Planning, Development & Reform, Government of Pakistan. Islamabad; 2015.
5. Nasrullah M, Bhatti JA. Gender inequalities and poor health outcomes in Pakistan: A need of priority for the national health research agenda. J Coll Physicians Surg Pak. 2012;22(5):273-4.
6. Jehan I, McClure EM, Salat S, Rizvi S, Pasha O, et al. Stillbirths in an Urban Community in Pakistan. Am J Obstet Gynecol. 2007;197(3):257e1-8.
7. Lawn JE, Shibuya K, Stein C. No cry at birth: global estimates of intrapartum stillbirth and intrapartum-related neonatal deaths. Bull World Health Organ. 2005;83:409-17.
8. Jokhio AH, Winter HR, Cheng KK. An intervention involving traditional birth attendants and perinatal and maternal mortality in Pakistan. N Engl J Med. 2005;352(20):2091-9.
9. Fikree FF, Gray RH. Demographic survey of the level and determinants of perinatal mortality in Karachi, Pakistan. Paediatr Perinat Epidemiol. 1996;10:86-96.
10. Christiansen DM, Elklit A, Olf M. Parents bereaved by infant death: PTSD symptoms up to 18 years after the loss. Gen Hosp Psychiatry. 2013;35(6):605-11.
11. Mess E, Bartoszczyk I, Jerczak BP, Ornat M, Pirogowicz I. Poród martwego dziecka. Sytuacja kobiety rodzącej w Polsce w świetle badania ankietowego. Medycyna Paliatywna. 2016;8(4):182-5.
12. Singh N, Pandey K, Gupta N, Arya AK, Pratap C, Naik R. A retrospective study of 296 cases of intrauterine fetal deaths at a tertiary care centre. Int J Reprod Contracept Obstet Gynecol. 2016;2(2):6.

13. Naworska B, Drosdzol-Cop A, Kobialka A, Skrzypulec-Plinta V. Pregnancy after 35 years of age. *Prz Menopauzalny*. 2012;11(3):239-46.
14. Jamal S, Agarwal S. IUFD incidence, causes, and complications: a retrospective study done at a tertiary care center in Greater Noida, India. *Int J Reprod Contraception, Obstet Gynecol*. 2017;6(12):5483.