

Introduction

Cystic fibrosis affects 1 in 1600 – 2500 live births and is the most common inherited life threatening disease¹. Improvements in health and survival for people with cystic fibrosis (CF) have led to an increasing number of women with cystic fibrosis starting families of their own. Pregnant women with cystic fibrosis can require intensive monitoring and treatment throughout the pregnancy and it is important to counsel women about what to expect and the likelihood of a positive outcome. The aim of this audit was to assess delivery outcomes in the women with cystic fibrosis over the last 6 years to guide discussions and future care.

Methods

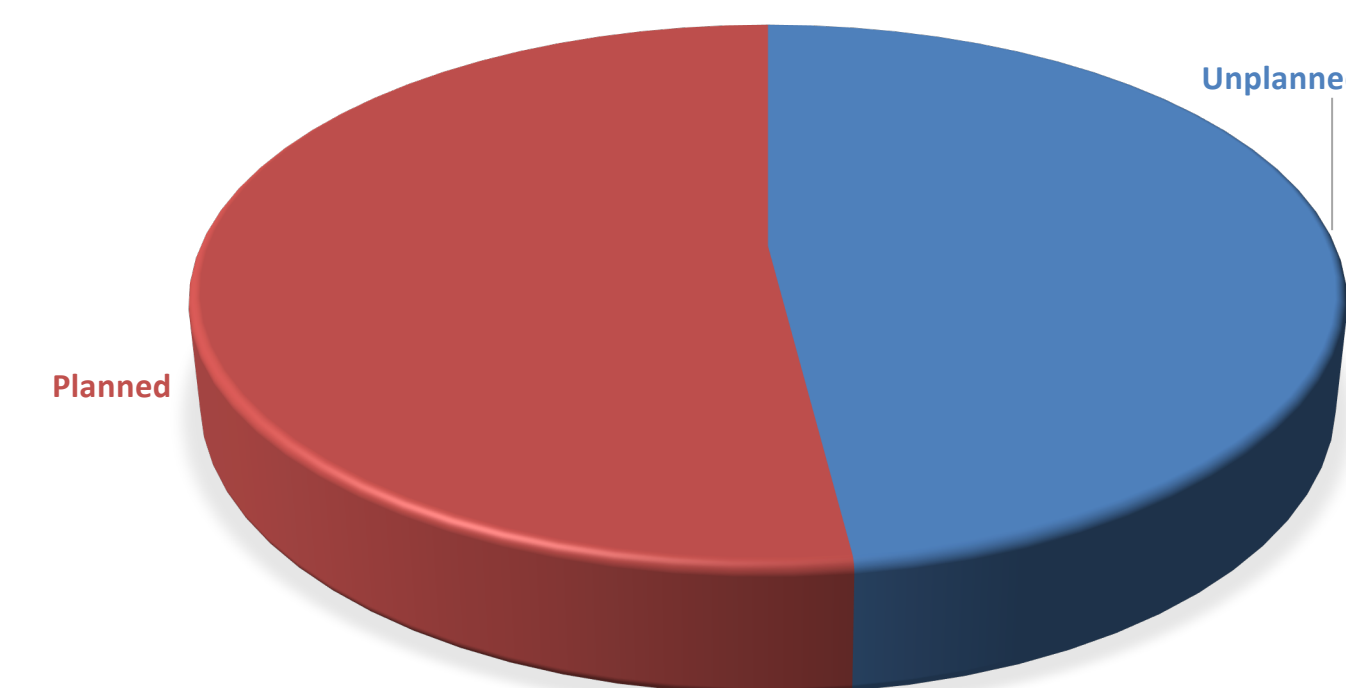
A retrospective audit was carried out on all women with cystic fibrosis delivering in a maternity unit with a regional cystic fibrosis centre on site, from January 2015 to December 2021 using a local maternity database. The main objectives were to analyse gestation at delivery, mode of delivery, birthweight, complications and whether an admission to the special care baby unit was necessary.

Results

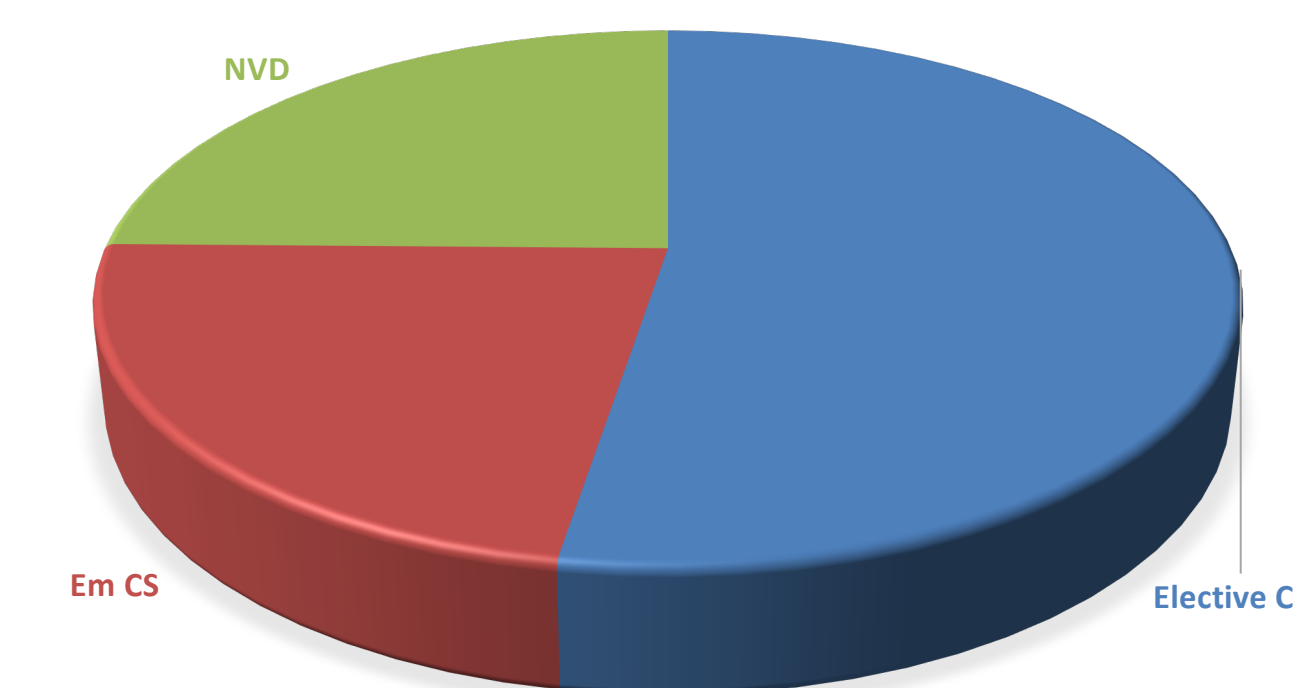
- ❖ A total of 45 cases were identified.
- ❖ The average age at booking was 28 years with an average booking BMI of 22 (lowest BMI was 14) .
- ❖ 60% of the women were primiparous.
- ❖ The pregnancy was unplanned in 48 % of the women and 22% had undergone IVF treatment.
- ❖ The average gestation at delivery was 36 weeks and 1 day with an mean birthweight of 2747g.
- ❖ The pregnancy was complicated by PPRM in 15% of women.
- ❖ 10% of babies required admission to the neonatal unit.
- ❖ Just over half of the women had a planned caesarean section (51%) with emergency caesarean section in 22% of women.
- ❖ Vaginal birth was achieved in 24% of women and 42% of women were breastfeeding at the first feed.
- ❖ There was an average of 4.4 pregnancies per year between 2015-19 increasing to 10 in 2020 and 13 in 2021.

Results

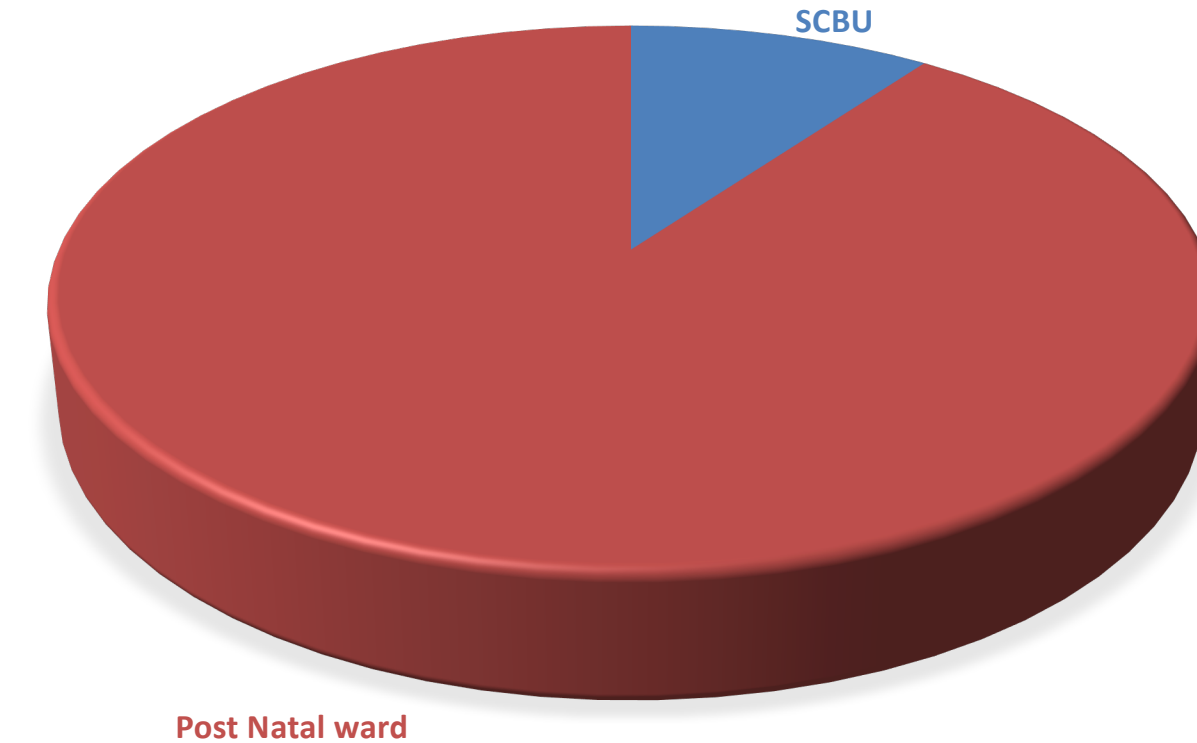
Planned and unplanned pregnancies



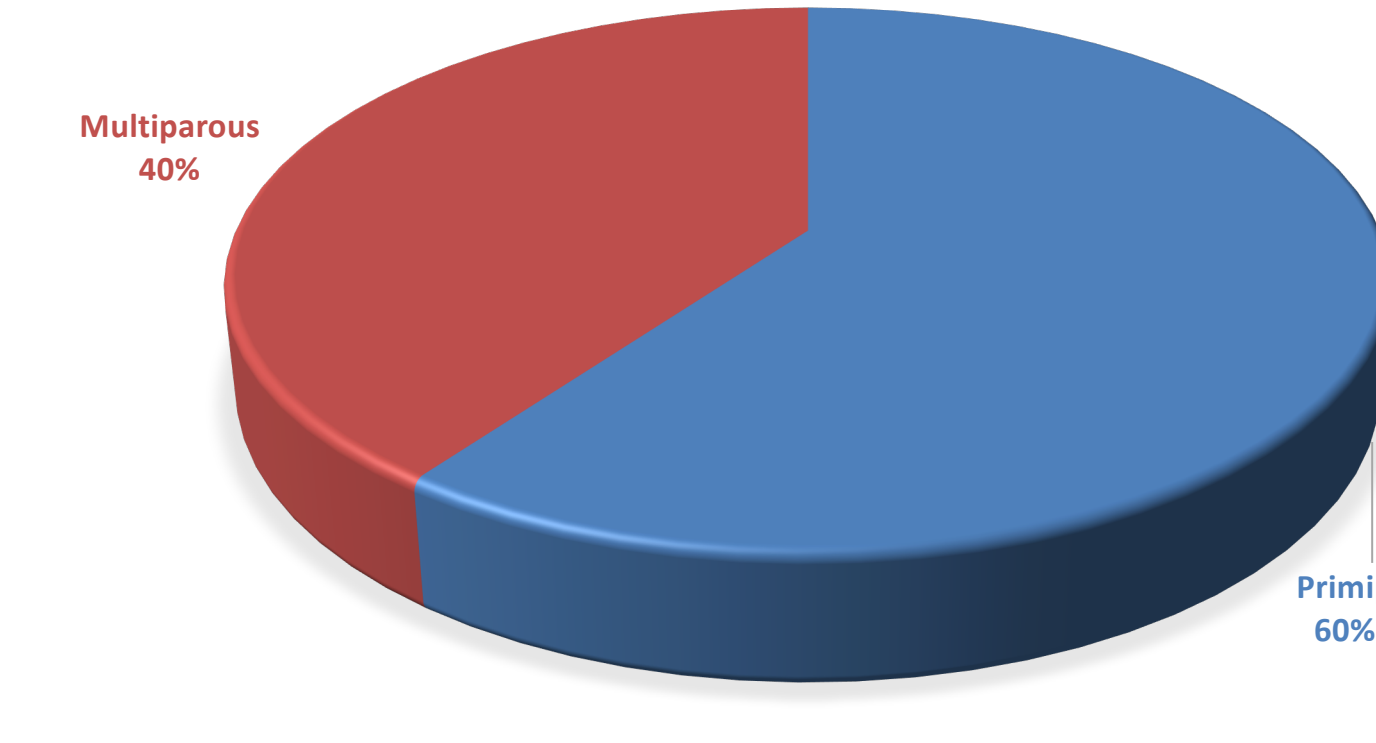
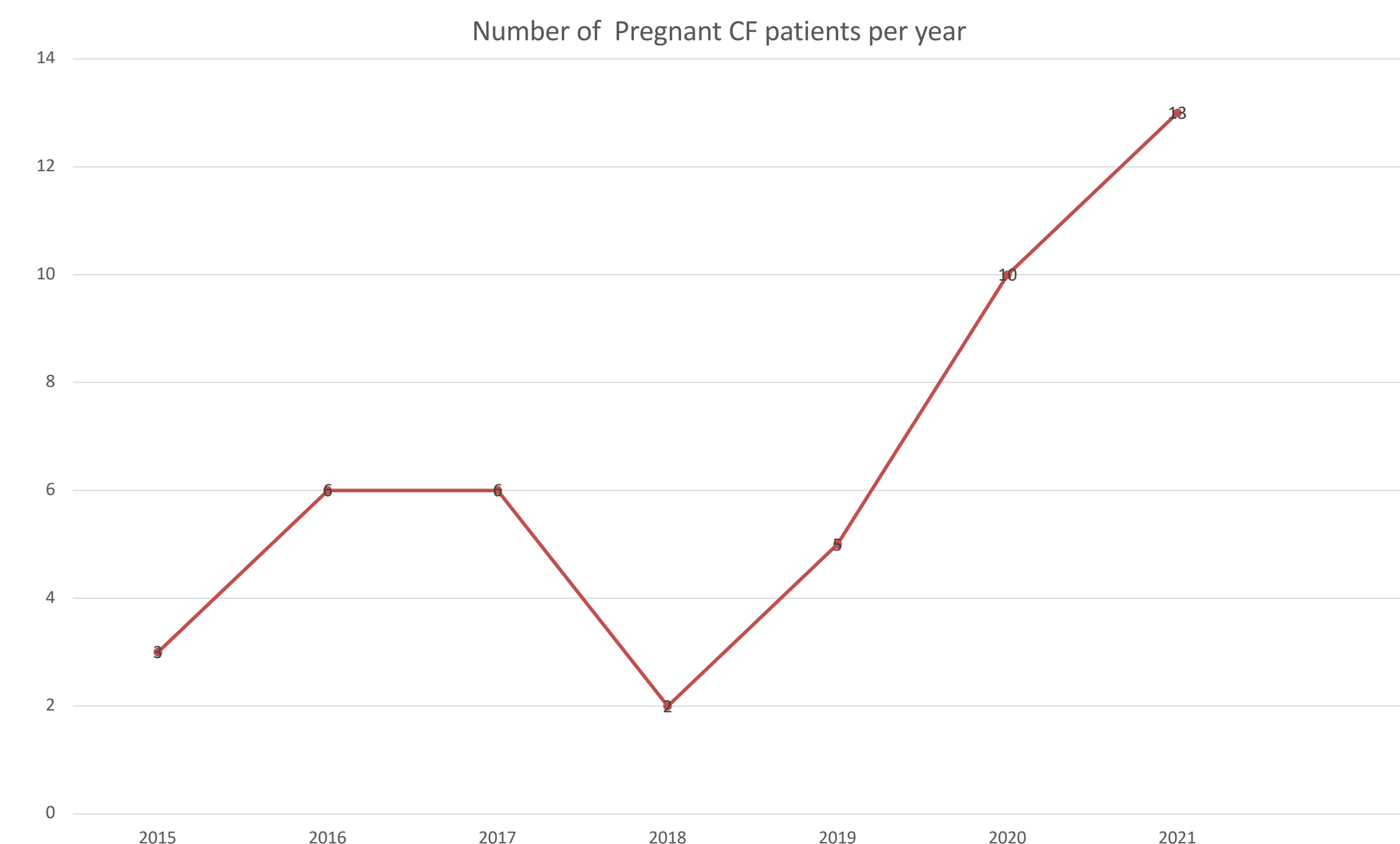
Mode of delivery



Admissions to SCBU



Parity



Discussion

- ❖ The first case report of a successful pregnancy in a patient with cystic fibrosis was over 50 years ago². She delivered a healthy, premature baby but the mother died 5 weeks post delivery from respiratory failure.
- ❖ In the recent years , the outlook for pregnancy in cystic fibrosis has dramatically improved.
- ❖ The number of women with cystic fibrosis who are successfully completing a pregnancy is rising, particularly over the last 2 years. Increasing number of women who are taking modulator therapies are becoming pregnant.
- ❖ The outcomes from this audit are encouraging with all patients achieving a livebirth and 60% delivering at 37 weeks or more.
- ❖ A quarter of women had a successful spontaneous vaginal birth and more than a third were breastfeeding at the first feed.

Key Points

- ❖ Increasing numbers of women with CF who are taking modulator therapies are becoming pregnant
- ❖ This data demonstrates that good outcomes are achievable, even in high-risk pregnancies, when women are managed by MDT with care from on-site cystic fibrosis and a dedicated high-risk obstetrics teams.

References

1. SCystic Fibrosis Trust [www.cftrust.org.uk/aboutcf/whatiscf/].
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3. Gilljam M, Antoniou M, Shin J, Dupuis A, Corey M, Tullis DE. Pregnancy in cystic fibrosis. Fetal and maternal outcome. Chest 2000;118:85–91.
4. Geake J, Tay G, Callaway L, Bell SC. Pregnancy and cystic fibrosis: Approach to contemporary management. Obstet Med. 2014;7(4):147-55.
5. Goddard J, Bourke, S. Cystic fibrosis and pregnancy. The Obstetrician and Gynaecologist; 2009;11:19-24.