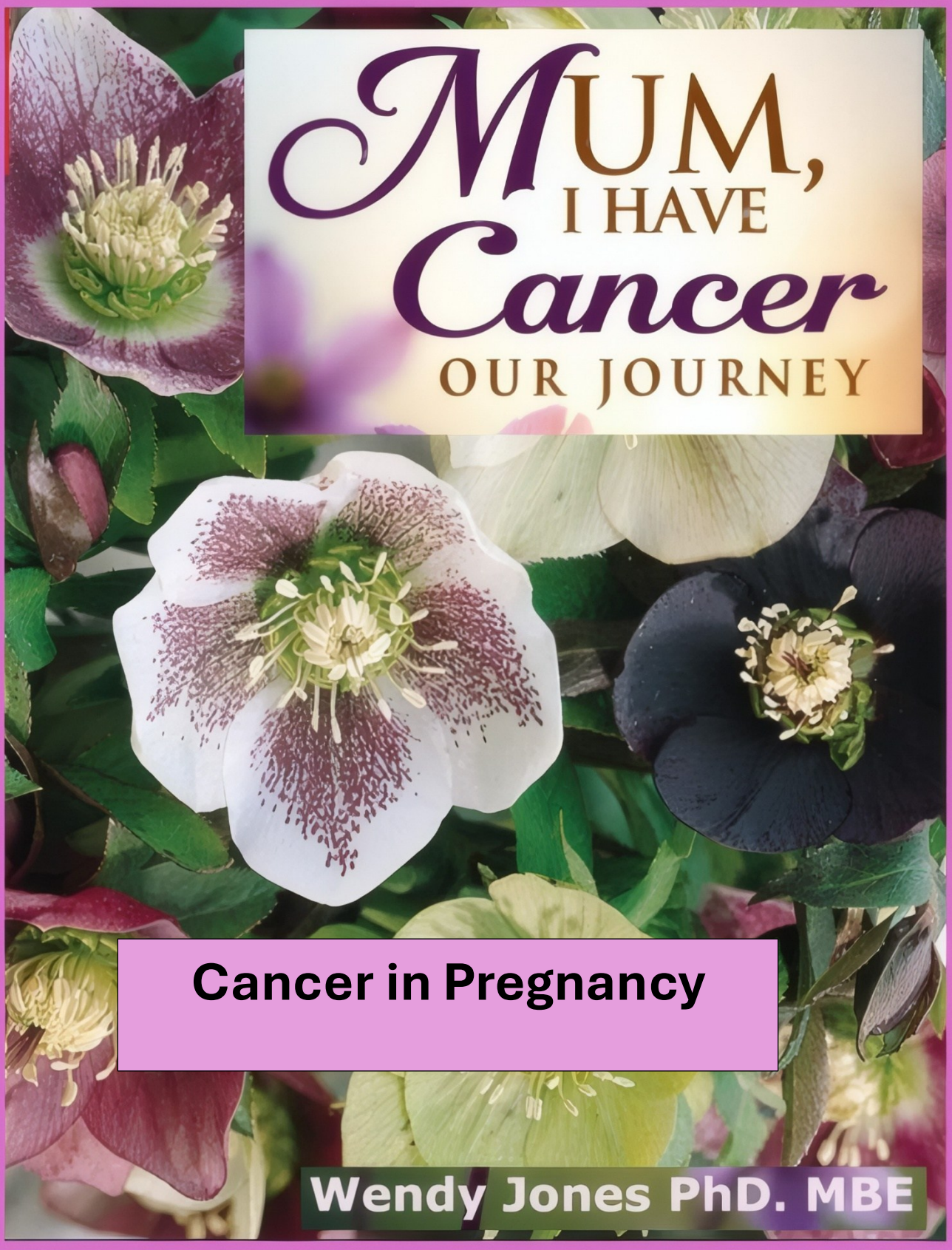

MUM,
I HAVE
Cancer
OUR JOURNEY
Cancer in Pregnancy
Wendy Jones PhD. MBE

This is a chapter from my book Mum I have cancer- our journey. Available from Amazon as book, e-book and kindle unlimited.

Cancer diagnosis in pregnancy.

I guess this is where my first involvement of supporting cancer began thanks to involvement with the Mummy Star team. The thought of chemo when pregnant must be so stressful as you try to grow your little person and maintain your own health. Cancer in pregnancy feels an area which is not largely discussed and may lead to later diagnosis as it is easy to dismiss symptoms as hormonal and due to the pregnancy. You are first of all, a pregnant woman celebrating a new life developing, a new member of your family. You are not simply "the pregnant woman with cancer".

What do we know about cancer in pregnancy?

In a study of the incidence of breast cancer published in 2024, Hardy et al found an incidence of 5.4 per 100,000 pregnancies in the UK which agrees roughly with figures from other countries. This is a very small incidence and if it has affected you, my heart goes out to you.

There are very few published studies on what happens to women diagnosed with cancer in pregnancy and their babies. Hardy's was the first national prospective study of breast cancer diagnosed during pregnancy in the UK. The study was conducted through all maternity units across two years. She claimed to raise awareness of the rare condition among UK obstetricians and oncologists.

She analysed 84 cases in total. Breast cancer was diagnosed in 37 women during their third trimester. This confirmed relatively late presentation, with diagnosis at a more advanced stage, highlighting the need for education of women and those who care for them regarding breast symptoms in pregnancy. The relatively high number of IVF pregnancies requires further investigation according to the authors as this may not be related to increased age alone.

During their pregnancy:

- 30 women underwent surgery
- 37 received chemotherapy beginning on average at 23 weeks.
- 27 breastfed after delivery
- 19 had lactation suppression

Of the 81 babies born (including one multiple birth) 16 spent some time on the NICU units often because they were born before 37 weeks gestation.

Of the deliveries;

- 37 had pre-labour caesarean section, 21 after 37 weeks and 16 preterm.
- 27 had a spontaneous vaginal birth,
- four had a ventouse birth,
- three had a forceps birth,
- one woman had a breech birth
- six women had an emergency caesarean section after the onset of labour

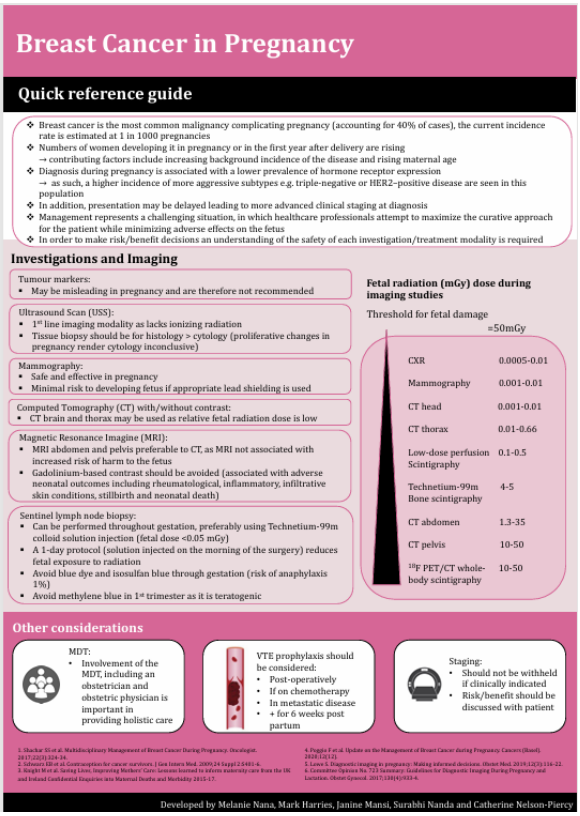
which all seems within the norm of births in the UK.

It is recommended that multi-disciplinary working is necessary involving obstetricians, breast surgeons, and oncologists. You may currently find yourself having multiple appointments with all these specialists which all takes time off from work and is without doubt anxiety promoting. The team are all working together to treat you even if you are not aware of their discussions.

Treatment of cancer in pregnancy

We wait to give chemo to women until they are more than 12 weeks pregnant. This is to avoid the risks to the baby in the first trimester. We have studies on the effect of the drugs and the outcomes of the pregnancy. We might have reports of abnormalities in the baby, premature birth or loss of the baby but sadly these things happen even in the absence of any medication, so it is hard to determine cause and effect. I can't begin to imagine how hard it must be to carry on your pregnancy receiving chemo whilst knowing that you are exposing it to some of the medications that you need to treat your cancer. Oncologists now have experience in treating pregnant women with chemotherapy agents, radiotherapy and surgery. They will be doing their utmost to keep both of you safe and well.

Breast cancer during pregnancy is less often hormone receptor-positive and more frequently triple-negative breast cancer compared to age-matched controls.



A pdf on investigations has been developed by Melanie Nana, Mark Harries, Janine Mansi, Surabhi Nanda and Catherine Nelson-Piercy. It also shows the foetal radiation of the imaging studies (mammograms, CT etc) compared to the threshold for foetal

The RCOG Green Top Guidelines and pregnancy and cancer can be found https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.18270

- Breast cancer surgery can be performed safely during any stage of pregnancy.
- Chemotherapy can be administered starting from 12 weeks of gestational age but should be avoided in the first trimester when foetal organs are developing.
- Where a delay in radiotherapy is not expected to adversely impact maternal outcome, it is recommended that adjuvant breast or chest wall radiotherapy is postponed until after the birth of the baby.

Mummy's Star is an incredible charity set up to support women who have been diagnosed with cancer during pregnancy or in the first 12 months after delivery. Most of the supporters providing information having travelled their own journeys. They are there to listen and to celebrate the new life that is growing and developing as well as answering questions about cancer. This wonderful team emphasise that callers are mothers who are pregnant but happen to have cancer not women with cancer who happen to be pregnant. We need to still celebrate the milestones and the birth of this precious new member of the family.

Chemotherapy Holiday and Breastfeeding

Many oncology teams arrange for the pregnant mother to have a chemotherapy holiday in which the birth is planned and where possible, allows a period of normal breastfeeding and "just" being a family. In this time the mother may choose an induction or planned c-section to spend as much time as possible with her new baby feeding as normal.

However, we often forget to provide the mother and her partner with information on whether the drug is compatible with breastfeeding if only for a little while. We can become so focussed on the cancer we forget that this is a precious and unrepeatable time with the baby. With the best will in the world professionals may suggest not breastfeeding at all considering it an unnecessary stress. Surely it is easier to let the baby's father or grandparent or other relative or friend offer the baby it's bottles of formula milk? Wouldn't the newly delivered mother want to take the time to rest before restarting chemo? Have we stopped to ask the mother what she wants to do? Is breastfeeding important to her, for however limited a time, to give her baby the best start in life? Could we suggest that she expresses colostrum in advance to give her baby? This is now standard for many babies particularly those mothers who have diabetes.

Breastfeeding is about so much more than milk transfer. It is about providing immunity. It is about spending time in skin to skin with the consequential increase in oxytocin which helps to bond and also to calm both. Mothers who have had cancer in pregnancy deserve everyone to go the extra mile to help her achieve pain free, effective breastfeeding from the start. To have the most skilled people available to help whenever she needs support. These days may be incredibly precious to them and will be treasured for life.

Cabergoline is a drug which is frequently prescribed to stop breastmilk production and may be offered as the 'kindest' intervention, forgetting it is yet another drug imposed on her to alter her body when it is trying to behave as any other mother. It is not without side effects. In the past bromocriptine was used for the same purpose but is no longer recommended because it caused fatalities. In 2015, the French pharmacovigilance program published a review of the adverse events associated with bromocriptine use to cease lactation. This group reported 105 serious adverse reactions including cardiovascular (70.5%), neurological (14.4%) and psychiatric (8.6%) events. There were also two fatalities: one 32-year-old female had a myocardial infarction with an arrhythmia, and a 21-year-old female had an ischemic stroke. Cabergoline side effects, include

headache, dizziness, fatigue or insomnia, orthostatic hypotension, oedema, nosebleed, dry mouth, inhibition of lactation, nausea, constipation, anorexia and weakness.

She may decide to breastfeed right up to the moment of starting chemo or transfer towards formula in preparation just as a mother who has been diagnosed during her breastfeeding journey. Again, I feel I must repeat, once chemo has started avoid using domperidone or metoclopramide as anti-emetic and use ondansetron instead to avoid stimulating milk production.

For example, I have received a query from a mother having cyclophosphamide and doxorubicin in pregnancy. The drugs will have cleared from her body in 7-10 days. She has then chosen to have her baby and breastfeed until starting Paclitaxel and Carboplatin when she will transition onto formula feeding.

I asked on my Facebook page about breastfeeding and medication for experiences about a diagnosis in pregnancy and wanting to breastfeed. Overwhelmingly the mothers who replied reported lack of support and encouragement.

" I was 35 years old and 12 weeks pregnant when I was diagnosed. The consultants weren't very helpful to begin with, and the maternity doctors wanted me to terminate my pregnancy. My oncologist was really good and he went abroad for a meeting with other cancer and maternity specialists who discussed my case and said that because the chemo would not cross the placenta to the baby there was a chance that I could have chemo whilst pregnant so after that we went ahead with it although there was still a slight risk to the baby. I did feel very alone at this time as the support for younger women with breast cancer wasn't out there."

"When I was diagnosed, I had a little girl who was 3, my mummy bond went because I started to distance myself from her because I was scared I was going to die. It has mentally scared me even 13 years on because I didn't carry on my pregnancy as normal, I stopped buying stuff and decorating his room because I thought he may not survive. So

looking back to now when I see pregnant ladies it does bring a lot of emotion back because I didn't bond with my pregnancy like you would do normally, so it has left a mark even now. I didn't breast feed Alfie because I was on a lot of medication at the time plus I was still going through chemo at the time. But I never got on with breast feeding my daughter, so I knew I wasn't going to breast feed him because of that. "

"To any mum that has just been diagnosed or is going through it. I just say YOU CAN do this, I won't lie it is one hell of a rollercoaster ride of emotions and physical strength, but you can get through it, always ask questions and get other opinions. But most of all don't let it take your soul and personality because you may have to go through a lot of heart ache and change but it makes you a person who is resilient and you value all the little things in life that it has to offer."

"I went into early menopause 2 years after chemo so was about 38 and still having those horrid hot flushes now what people don't realise is chemo has a lasting effect on your bones and your brain I have a terrible memory for short term stuff "

" I had my first baby 2021, cancer 2016. I was not offered egg freezing in advance, was told there should be no problem (we did ask). This was not the case sadly, we tried for 2yrs to have my little girl and needed fertility medication. I stopped tamoxifen after 3yrs to try to get pregnant, felt kind of supported by team to do this but also a decision they were clear they'd rather I took it for 5. I think lay people assumed I wouldn't be able to breastfeed, but I don't think anyone professional

ever suggested that I shouldn't. Psychologically I think breastfeeding has been hugely important to me in part due to feeling so betrayed and let down by my body. I do wonder how I'll feel when I stop though and left with significant breast differences."

"Why breastfeed you have been through enough?"

" Most healthcare professionals didn't know the answers and breastfeeding was rarely mentioned especially by the obstetrician."

I am eternally grateful to the mothers who gave me permission to quote from their stories. I have protected their anonymity as a courtesy.