

# Malta Midwives' Journal



## Malta Midwives Association

Issue 14 September 2019

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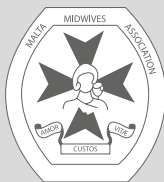
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Pauline Fenech  
& Lauren Marie Grech**

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The views expressed in the Journal are those of individual contributors and are not necessarily those of the Midwives' Association.

## Editorial

Dear Member,

This is our second and last issue for this year. Once again, this September issue delivers a wide range of articles covering topics which each midwife reader will surely find interesting and relevant. We proudly present diverse articles about various aspects in midwifery practice as well as personal experiences relating to midwifery and birth. A few highlights include midwives' experience of their training at a Spinning Babies® workshop and informative papers about the medicalisation of breech births, the safety of cosmetic use during pregnancy, and child care safety.

The journal's editorial team strives to present you with remarkable and current material related to midwifery in every issue you receive. Whilst we thank all sponsors who make this publication possible and all authors for their contribution in this issue, we highly encourage and welcome any midwife or health care professional who would share knowledge with our readers, which is relevant to our practice. *"Knowledge is power; knowledge shared is power multiplied."* – Robert Noyce.

**Lauren Marie Grech**  
Co-editor

### Upcoming Midwifery Conferences

**1<sup>st</sup> International Conference on Clinical Practice in Obstetrics, Gynaecology and Neonatology.**

24<sup>th</sup> - 26<sup>th</sup> October 2019, Poland

<https://www.emedevents.com/c/medical-conferences-2019/serious-problems-simple-solutions>

**3<sup>rd</sup> International Conference on Nursing and Midwifery**

28<sup>th</sup> - 29<sup>th</sup> October 2019, Rome, Italy

<https://www.emedevents.com/c/medical-conferences-2019/3rd-international-conference-on-nursing-and-midwifery-2019>

**Midwifery Today Conference**

30<sup>th</sup> - 3<sup>rd</sup> November 2019, Belgium

<http://midwiferytoday.com/conference/belgium-conference-2019/>

**International Conference on Nursing Research & Midwifery**

4<sup>th</sup>-5<sup>th</sup> November 2019, Berlin, Germany

<https://www.emedevents.com/c/medical-conferences-2019/international-conference-on-nursing-research-and-midwifery>

**2<sup>nd</sup> World Congress in Obstetrics & Gynaecology**

4<sup>th</sup> - 5<sup>th</sup> November 2019, Porto, Portugal

<https://www.emedevents.com/c/medical-conferences-2019/2nd-world-congress-on-obstetrics-and-gynaecology-1>

**The Baby Friendly Initiative Conference**

28<sup>th</sup>-29<sup>th</sup> November 2019, Glasgow, Scotland

<https://www.unicef.org.uk/babyfriendly/training/conferences/annual-conference/>

**6<sup>th</sup> EMA Educational Conference**

29<sup>th</sup> -30<sup>th</sup> November, 2019, Malmo, Sweden

<https://emaeducation2019.se/>

**32<sup>nd</sup> ICM Triennial Congress**

**Midwives of the world: Delivering the Future**

21<sup>nd</sup> - 25<sup>th</sup> June, Bali, Indonesia

<https://www.midwives2020.org/>

**Breastfeeding Seminar Dates**

Malta: 12<sup>th</sup> October 2019 - Dar San Ġużepp: Il-Ħamrun.

Gozo: 19<sup>th</sup> October 2019 - Dar Manresa, Victoria Gozo,



## Message from the President

Dear Member,

Welcome back after the summer period. I hope you had some time for yourself to relax and enjoy yourself at the beach.

I would like to start off by congratulating the newly elected council members on the Nursing and Midwifery Council: Ms Pauline Borg & Ms Antoinette Saliba. On behalf of the Association I wish you every success as Council members and great achievements towards the midwifery profession.

As from September many midwives who were working on rotation are getting a permanent allocation in the obstetrics wards and the neonatal unit. It is a great opportunity to have young, energetic, motivated and enthusiastic midwives to work with. I had the opportunity to work with some of them and I am truly positive of their future contribution to midwifery. These young midwives will be integrated into shifts with new working colleagues. In the beginning it can be challenging and daunting, every senior midwife knows how this feels, and every junior midwife needs to give herself time to integrate in the system.

Midwifery is an art that requires practical thinking, information, a strong intuitive sense, and emotional understanding. Book knowledge is important but when it comes to working in a team it also requires the soft skills of effective communication, collaboration, emotional intelligence, respecting, understanding and supporting each other. On the other hand, it is the duty of the senior midwives to act as role models to the junior personnel. Having working teams that respect and support each other will benefit everybody: midwives, colleagues, mothers and families. In this respect, I wish you all the best of luck in your endeavours to raise the profile of the midwifery profession and to always act in the best interest of mother and baby.

Many midwives continue to study following their degrees. This is very encouraging for the profession and augurs well to pave the way towards the advancement of midwifery. Knowledge which is based on evidence-based research should guide every midwifery practice and procedure. Let us not be afraid to discuss, debate and bring forth evidence to change the way we practice to give the best care that women and their families deserve.

I would like you to consider for example the timing of urinary catheterisation for a woman undergoing an elective caesarean section. Until a few years ago, all Caesarean Sections were done under general anaesthesia and the indwelling catheter was inserted prior to the administration of the general anaesthetic.

The reason for this was to minimise the time from when the general anaesthetic was administered to the time the baby was born. This is not the case anymore, since the majority of sections are done under spinal analgesia which does not have the same affect on the baby. **Inserting the urinary catheter after the woman undergoes the spinal anaesthesia, makes the procedure of catheterisation, pain free.**

Women should be given the **choice** whether they would like to have the catheter inserted prior or after the administration of the spinal anaesthesia.

**Another aspect I would like to point out is the importance of the first feed and the benefits of skin-to-skin within the first hour.** There is a plethora of documentation that highlights the importance of skin-to-skin: babies remain warm, heart rate and respiration rate are stable, cry less, are calmer and feeding is facilitated. Skin-to-skin is also and perhaps more beneficial for babies born by Caesarean section.

Babies born by C/S do not have the chance to experience the physiological process of birth and together with maternal factors (such as mother's post-operative pain, lack of mobility), can have a negative effect on the initiation of breastfeeding. Allowing the baby undisturbed skin-to-skin after C/S may compensate for the adverse effect of a C/S birth.

Normally, most babies are born with a strong sucking reflex and many babies have the ability to latch and suck within the first hour. The importance of the first feed at birth cannot be stressed enough especially for those babies at risk of hypoglycaemia. Babies who are formula fed also requires early feeding and the necessary arrangements are to be put in place to facilitate this first feed especially if the transfer of the mother and baby to the ward is delayed.

The neurochemicals and hormones that develop in a woman's body during a physiological birth play a very important role in the process that prime the mother-baby dyad for breastfeeding and bonding after birth. Sometimes these fine-tuned mechanisms are disturbed by routine interventions which are often considered normal procedures in hospitals.

Hospital practices and procedures must safeguard the close proximity of mother and baby from the moment of birth to the time that mother and baby are discharged from hospital.

My heartfelt wish is that the above observations serve as incentive to reflect and evaluate our practices. Our actions need to reflect our philosophy and our commitment to women and their families.

Simultaneously, the Association will be sending a questionnaire to all its members to gain insight on the way forward of our association. My earnest hope is that many midwives fill in the questionnaire. This will enable us to plan future activities.

In this regard, I would like to encourage more midwives to join in the Association's activities. We are planning interesting free educational sessions. Next session is on the diagnosis of miscarriage and its management. Look out for the poster and book your place.

Finally, I cannot but not thank all those midwives who regularly offer their support, their time and energy to the Association. Their contribution is highly appreciated.

**Pauline Fenech**

## Treasurer's Message

Dear colleagues

It's time of year when I am obliged to provide you with an update.

The MMA has been around for quite some time. And this was possible only because the Association and you the members, adapted over time depending on the exigencies of our target audience – the midwives themselves and our clients. The courses on offer today are a far cry from those offered in the early eighties.

Change is essential. And over the coming days we shall be embarking on a new project. A new website is being developed. Hopefully this will be officially launched over the coming days.

The new website will ensure easier accessibility not least to our members. But more importantly bookings for the various courses on offer will be made easier as one would now be able to book on line.

The Association's Committee decided to take this step and invest in an upgrade since the demand is on the increase. This is obviously thanks to the MMA's enhanced reputation. Obviously the ultimate credit is

yours as it is only thanks to the commitment of those delivering these courses that word gets round that the MMA's training sessions are worthwhile.

But as always, there is a down side to all this. The greater our success, the more the demand. This success brings greater pressure on those midwives managing these courses. And there are only two solutions. Either the current crop of midwives increase their commitment, or, better still, more midwives join their colleagues in offering their time to the Association.

Most of you are aware that this is my last report as an employee since I reach retirement age on the 15<sup>th</sup> of September and unfortunately my request to work part-time was not endorsed. However I shall not be forfeiting my commitment to the MMA and hope that likewise, those colleagues who are not yet fully committed to the Association, have a change of heart and join the rest of the team in providing better and wider ranging services to our client base.

**Doris Grima**



Organizzazzjoni Studenti Qwiebel - Ms Michela Broscoe, Ms Lynn Scicluna & Ms Bernice Scicluna donate flowers to mothers at the Breastfeeding Walk-In Clinic on Mother's Day

## Jum il-Qabla

Tista' tgħid kull tarbija  
Waqg tagħha it-twelid  
Biex tgħin 'l ommu itweldu  
Kien mill-qabla assistit

L-isptar tidhol imbeżża'  
Malli jaqbdek l-uġiġħ  
Tara d-demm jew l-ilma  
Bla ma tkun qed tistennieh

Issib il-qabla tilqgħek  
Tgħidlek 'hawn jien għalik,  
Issa il-kuraġġ għamel,  
Jien sejra nassistik"

B'tant reqqa u attenzjoni,  
Qribek waqt il-proċess  
Sabiex il-wild ta' wliedek  
Flimkien jintemm b'suċċess

Bejn wegħha u bejn oħra  
Tnissillek xi tbissima  
Tgħidlek se tinsa kollox  
Se ssirilna mammina

Grazzi lill-qwiebel kollha  
Li kontu hemm għalina  
Sabiex lil uliedna nwelldu  
Intom l-aqwa medicina

Imbierka dawk idejkom  
Fihom tilqgħu tarbija  
Rigal li żgur m'hawnx prezzu  
U kliem f'dil-poezija

Illum 5 ta' Mejju  
Minn qalbna nawguraw  
Lilkom il-qwiebel kollha  
Mill-qalb niringrazzjaw

**Julia Cutajar**



## Ġuża I-Majjistra Josephine Portelli: Il-Majjistra tar-Rabat

Josephine Portelli started her midwifery career in 1946 at the age of 23 years when she joined the first midwifery course following the end of World War II. During this course that lasted 3½ years, Ms Portelli performed her clinical training at St Luke's Hospital without any compensation since married women were not paid at that time. She indicated that as part of their training, midwifery students were required to conduct 20 normal vaginal deliveries before becoming qualified midwives.

### Antenatal care

Since 1950, following her qualification as a midwife Ms Portelli served the community in Rabat. Two community midwives cared for women and their families throughout the entire journey of childbirth and early parenthood. Ms Portelli stressed the importance of continuity of care, as she claimed that it benefited both the women and the midwife. Soon as expectant women notified the midwife of their pregnancy, the two began to build a relationship based on trust and respect.

Women used to let the midwife know by visiting her at home, by approaching her in the street, or at a wedding reception. Ms Portelli used to commence antenatal visits at the fourth months of pregnancy and performed antenatal examinations every fortnight from seven months onwards.

Additional examinations were held when women were concerned about their baby's movements. In such instances, she reassured the women by inviting them into her home to auscultate the foetal heart.

Antenatal visits involved monitoring of the vital signs, abdominal examination, auscultation of the foetal heart with the Pinard stethoscope (*it-Tromba*) and urinalysis. Since ultrasounds were not carried out, Ms Portelli emphasised the importance of a thorough examination during such visits through *'the touch of the fingers'* as she used to call it. This meticulous examination was especially important as, at the time, most women were unable to recall their last menstrual period. Uncertain dates were mainly because women might be unaware of an unplanned pregnancy as they would think they are in menopause. Below is an excerpt of a typical dialogue with expectant mothers:

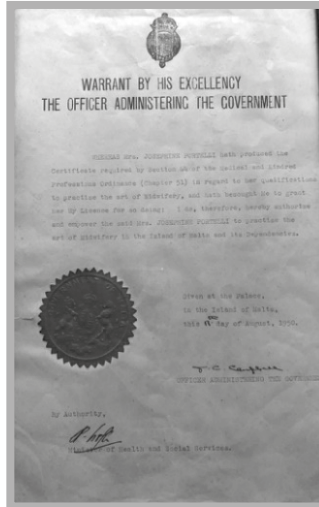
*“Ġuża I-Majjistra: Kemm għandek tqala?”*

*Mara tqila: Hija ma nafx.*

*Ġuża I-Majjistra: Ma tafx ix-xahar bejn wieħed u ieħor?*

*Mara tqila: Iva kien ix-xahar ta' Santa Marija, iiva kien ix-xahar tal-Milied.*

*Ġuża I-Majjistra: Id-data ma għandekx?*



*Mara tqila: Ma nafx.”*

*“Ġuża the Midwife: How far into pregnancy are you?”*

*Pregnant woman: I don't know.*

*Ġuża the Midwife: A month estimation?*

*Pregnant woman: Yes it was the month of the feast of St. Mary/ yes it was the month of Christmas.*

*Ġuża the Midwife: You don't have the date?*

*Pregnant woman: I don't know.”*

Ms Portelli indicated that the promotion of normality during pregnancy and childbirth was common practice amongst all healthcare professionals caring for expectant mothers. In instances of a breech presentation, external cephalic version was routinely practised till the foetus maintained the cephalic presentation even if this practice was performed at the onset of labour. She maintained that she used to sometimes accompany mothers for the procedure at the obstetrician's clinic using her car since most families did not own their private transport.

*“Qalli xħin tigi tgħidlek 'jien mibdija' ġibha dak il-ħin u ħadtha, kien daqs xelin is- 'cervix' bil-'bulging of membranes', u dawwarulha. Dan kien fil-ħdax ta' filgħodu li tlaqna minn hawn u fl-erbgha twieled minn rasu d-dar.”*

*“The obstetrician told me to take expectant mothers immediately to him when they come and tell me 'I'm in labour'. The cervix was the size of a shilling with the bulging of membranes and he rotated the baby. This was at eleven in the morning that we left from here and the baby was born from the head at four o'clock in the afternoon at home.”*

### Homebirth

Ms Portelli explained that during those days, homebirth was a social event whereby immediate family members used to be present throughout the entire duration of labour. It was common practice that the midwife is notified early upon the onset of labour. She highlighted that as expectant women knew and trusted the midwife, her presence was reassuring and encouraging during childbirth.

*“L-ewwel nett il-fiduċja, 'għall-erwieħ imbasta qiegħda hawn' tkun trid tismagħha xi kultant.”*

*“Primarily the trust, 'as long as you're here', you just need to hear it sometimes.”*

Ms Portelli's sense of pride was evident when she explained that the majority of mothers that she supported during childbirth gave birth with intact perineum whereby only a few sustained a small tear. She attributed this to



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## Rubbing

Nappy rash  
Chafing/frictional irritations



## Bites/Stings

Mosquito bites  
Jelly fish stings  
Irritant plants



## Cold

Chapped skin  
Dry patches  
Chillblains or chapped hands/feet



## Saliva

Irritative dermatitis  
Redness around the mouth



## Falls

Minor wounds  
Cuts & grazes  
Scratches or scrapes



## Heat

Minor burns  
Scalds



## Skin damage caused by...

Chickenpox lesions  
Herpes lesions



## Sun

Sunburn



## Dermatological Procedures

Laser  
Superficial peels  
Minor surgery (2/3 days after suturing)  
Cryotherapy/cautery



## Irritations/Broken Skin

Heat rash  
Cracked nipples (breast feeding)  
Waxing/shaving  
Tattoo/piercing  
Hangnail  
Localised eczema patches

40ml

100ml



infants



children



adults

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LITTLE ACCIDENTS**

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the trustful midwife-mother relationship that developed throughout pregnancy and childbirth together with the midwife's ability to patiently guide the mother effectively to listen to her body to birth her child. She concluded that communication, cooperation and sensitivity were fundamental aspects during the second stage of labour. In cases of Deep Transverse Arrest, episiotomy and low forceps were done by the General Practitioner or Obstetrician during a homebirth.

Ms Portelli practised as an autonomous community midwife, referring women to a General Practitioner, obstetrician or hospital when a complication arose. She believed in providing women with tailor-made care especially given any complications. She also expressed the importance of trust, communication and collaboration amongst the multidisciplinary team to be able to provide the optimum individualised care that met the needs of the woman, baby and her family.

She recalled being portrayed as an assertive midwife who had always placed women at the centre of her care by being an advocate for women when needed. Besides these essential qualities, she also highlighted the significance of the midwife's training in a variety of skills during home births since getting help when complications arose used to take quite some time during those days.

*"Fid-djar biex iġġib tabib xi kultant kont iddum siegħa."*

*"Sometimes it used to take an hour to bring a doctor at home."*

She claimed that for the doctor to be summoned to assist women during homebirths in case of an emergency, the midwife or a family member needed to call from the police station. She went on to explain that for this reason, the farmer's wife used to give birth in a rented room (*kerrejja*) which was situated in the Rabat's centre close to the police station but eventually preferred to give birth at their farmhouse once she got her car.

Ms Portelli indicated that for women with a bad obstetric history, previous caesarean section or 40<sup>+10</sup> weeks gestation, a homebirth through a medical induction was performed. She highlighted that before the medical induction, the doctor would provide her with a prescription of the pituitrin, ergometrine and pethidine. She went on to explain the procedure of medical induction.

*"L-ewwel jieħdu l-porga taż-żejt, dik tal-'castor oil' u wara sagħtejn nagħmilha l-enema. Imbagħad nagħtiha 0.5cc, injezzjoni intramuskulari tal-pituitrin għall-uġiġħ kull nofs siegħa. Kont nagħtiha sa tliet kunjetti. Kont inħalli nofs siegħa bejn injezzjoni u oħra u jekk nara l-iċken weġġha nieqaf nagħtiha injezzjoni. Kont nagħmel ġurnata magħhom. Nieħu s-suf miegħi u noqgħod hemm magħhom."*

*"Firstly, they used to take the oil cathartic, that of the castor oil and then after two hours I perform an enema. Then I use to give 0.5cc pituitrin intramuscular injection for the pain every half an hour. I used to give her up to three phials. I used to leave half an hour between one injection and another and I stop giving injections at the sight of the slightest pain. I used to spend the entire day with them. I used to take the wool with me and knit there."*

Ms Portelli explained that, in those days, the midwife used to register the deliveries monthly at the local police station. Throughout this intensive interview, Ms Portelli stressed that the midwife should possess several personal and professional attributes. She acclaimed that midwives should be knowledgeable, altruistic, gentle, patient, continuously updated on the evidence and advancement of the practice and a strong advocate for women.

Honourably she recalled an instance whereby she was praised by the hospital team for managing to transfer the women with severe eclampsia against all odds and despite the conflict with the General Practitioner who insisted on performing a forceps delivery at home. The women returning home with the baby, both safe and sound was one of the most precious peaks in her midwifery career. Strongly determined, but humbly, she insisted that although midwifery care rested on various essential constituents, spirituality remained a vital component of midwifery care whereby prayers are an integral part.

#### Postnatal care

Ms Portelli explained that the birth of a child brought forth joy and happiness at home by stating that childbirth was a celebration.

*"Kif titwieled it-tarbija, naħsluha, jinfetaħ il-flixxkun tal-whisky. Wara l-grokk, min joqtol is-serduq jew it-tiġieġa. Wara li jgħaddi l-lejl, kont immur filgħodu ngħinha tinħasel, inneħħilha l-pannollina li jkollha magħha u tilbes l-aħjar ġakketta tas-sodda. Dak iż-żmien kienu dilettanti tar-rakkmu, kien ikollhom xi liżar u investi kollha rakkmu. Il-mara kienet tkun qisha reġina. Il-ħwejjeġ tat-tarbija kienu kollha bojod silġ u llamtati. U kienu jgħammdu malajr, fi żmien 24 siegħa għax kienu jemmnu li ttella' ruħ mill-purkatorju. Aħna konna nkunu mistednin għall-magħmudija u r-riċeviment."*

*"As soon as the baby was born, we bathe the baby, and the bottle of whiskey was opened. After the toast, someone kills a rooster or the hen. After the night, I used to go in the morning to help the mother get washed, changed pads, and she wears her best bed jacket. At that time, they used to practice embroidery and would have embroidered bedsheets and pillowcases. The mother would look like a queen. The baby's clothes were all white as ice and starched. They used to baptise quickly, within 24 hours because they believed the soul needed to be brought up from purgatory would go to heaven. We used to be invited for the baptism and the reception."*

Postnatally, the community midwife visited women twice daily for the first 2 days after childbirth and subsequently daily for 8 days. The postnatal visit at home involved a baby bath, assistance with breastfeeding and bed bathing. Women were advised to stay in bed for the first 5 days postpartum as it was believed that an upright position would bring forth uterine prolapse or retroversion. For this reason, the hospital stay usually lasted 8-10 days for women who gave birth at the hospital. Ms Portelli gave high significance to infection control.

*“Aħna konna iġjenici fuq l-iġjene.”*

*“We were hygienic on top of hygiene.”*

She claimed that it was evident that unlike the community, women delivering at the hospital had a higher incidence of mastitis.

*“Darba kont mal-profs u staqsejtu, ‘kemm għandkom mastitis, dak l-infezzjoni tas-sider?’, għax jien fil-komunità ma għandix. Qalli għandna daqstant għax hawn mikrobu l-isptar u ma nistgħux neħilsu minnu”.*

*“Once, I had an encounter with the Profs and I asked him ‘how many cases of mastitis, that breast infection do you have?’ because in the community I don’t have. He told me we have so much since we have a microorganism in the hospital that we cannot get rid of.”*

### Community midwifery

*“Kellna responsabbiltà kbira u konna nagħmlu ħafna sforzi. Jekk mietet ommok jew ma tiflaħx bilfors trid tmur u trid taħbi, nibda nieħu l-mistura qabel ma mmur u nibla’ xi żewġ paracetamol. Ma tistax tgħidilhom ‘ma nistax niġi għax għandi riħ.’*

*“We had such great responsibility and we did a lot of efforts. If your mother passed away or you felt unwell, you still had to go, you needed to hide it. I used to take some syrup beforehand and take some paracetamol. We couldn’t tell them I cannot go because I have a cold.”*

Ms Portelli emphasised that the principles of midwifery care in the past, today and in future will always rest on the same pillars. She concluded her intensive interview with a heart-breaking voice. As recommended by evidence-based literature and International Midwifery Organisations, Ms Portelli also argued that women deserve a system that is built around the best interest of women, babies, and their families. Midwifery care that involves continuity community care that respects women’s choices, values, and cultures which empowers them to be active participants of their care. Care that honours birth as a life-changing experience for women and their families.



Ms Portelli receiving the George Cross as an acknowledgement for working as a nurse during the whole duration of World War II (1940-1945)

She urged that midwives should be the voice for women and to provide continuity of midwifery care that initiates from pre-conception to the puerperium. She concluded that midwifery is not simply delivering babies but it mostly involves supporting women to be strong and competent to trust themselves and believe in their inner strength. A midwife should facilitate the lifelong parenthood experience which impacts women and their families.

*“Kelli klijentela ħabbejtha, inħares lura ngħid għandi s-sodisfazzjon. Għax għadni sal-lum immur l-knisja kulħadd jirrispettani, tridx għajnuna? Tridx hekk? u tridx hekk? Irrispettata ħafna. Lanqas jixraqli. Il-Bambin ħabbni, le veru. Sa fejn naf jien dejjem għamilt il-ġid. Ippruvajt nadher ukoll. Ħafna minnhom kont ingaġġalhom biex ma jħallsunex, għax ma kellhomx flus, ingaġġalhom jagħmlu l-karta li ttini l-gvern, itini xi ħaġa biex ma jħallsux. Il-gvern kien jekk ma tistax tħallas tagħmel il-karta u din kont nibgħatha d-dipartiment biex jibgħatli xi ħaġa tal-flus lura. Hawnhekk, ir-Rabat konna nitħallsu lira u 5 xelini, bl-antenatal b’kollox sakemm kienu ndumu tmint ijiem ifisqu. Imma ma nkwetajtx ruħi għax ir-raġel kien jgħidli ma rridekx taħdem, kemm tagħmel il-kors. Imma kont ngħidlu min jiġi għalija b’xejn immurlu”.*

*“I loved my clients, I look back with satisfaction. Even till today, I go to church and everyone respects me, do you need help? and do you need this? and do you need that? I am respected a lot. I don’t deserve it. Baby Jesus loved me, truly. As far as I know, I have always done well. I tried to tolerate as well. Most of them, I used to convince them not to pay me, as they did not have money, I used to make them do the government papers, the government used to give me some money so that they wouldn’t need to pay. At the time, if you couldn’t pay, you would fill in the government papers and send it to the department so that they’ll send you some money. Here, in Rabat, we used to be paid a pound and 5 shillings, with the antenatal and everything until they were eight days postpartum. But I didn’t use to worry since my husband told me that he didn’t want me to work, just to finish the course. But I used to tell him that if someone comes for me, I will still go for free.”*

The last words before leaving her home was a heartfelt message for all midwives.

*“Għidilhom il-‘midwives’ tal-lum meta jkunu fil-mument ħudu ħsiebhom b’gentilezza kbira għax dak huwa mument ta’ tenerezza li fit-tajjeb u l-ħażin jiftakruh ħajjithom kollha”.*

*“Tell today’s midwives to take gentle care of them during that moment as that is a tender moment that in good and bad times, they will remember all their lives”*

Interviewed and Written By  
**Daniela Buttigieg**  
**Mary Buttigieg Said**

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## Vitamin D and its Relevance to Midwifery Practice

There is a massive market for pregnancy, postpartum and child health multivitamins and supplements. An internationally recognised micronutrient for all childbearing age women and pregnant women is folic acid, with an abundance of research and guidelines. Yet there are so many other supplements and vitamins available and marketed for pregnant and breastfeeding women as well as infants. A relatively recent addition to guidelines and healthcare professionals' advice in various countries is vitamin D supplements, there has in fact been an increase in the over the counter use as well as prescriptions for vitamin D. Some may ask; Should we in Malta be implementing guidelines from less sunny countries like the UK when it comes to Vitamin D supplementation? Here's a look at some of the evidence.

### What is Vitamin D and why are we deficient?

Vitamin D assists in the regulation of calcium and phosphate, nutrients that are mostly known for being essential for musculoskeletal and dental health. A lack of vitamin D can lead to bone deformities, for example rickets in children, and osteomalacia in adults. Recent evidence is suggesting that Vitamin D also has a role to play in immunity, cardiovascular health, diabetes and cancer prevention, making it an important vitamin throughout ones lifespan. Vitamin D can be found in foods such as eggs, liver, kidney, oily fish (salmon, mackrel, tuna, sardines), fortified cereals, margarines and infant formula. However mankind's main source of this vitamin is from the skin's synthesis of vitamin D from exposure to the sun's ultraviolet light. Therefore the season, latitude, time of day, use of sunscreen, skin pigmentation and clothing will influence production of vitamin D. It is therefore understandable that those who spend limited time outdoors, wear clothes that cover up most of the skin or are of a darker skin colour

are at an increased risk of being vitamin D deficient. Furthermore, recent sun paranoia- avoiding sunlight and use of sunscreen has disrupted the solar-driven production of vitamin D<sub>3</sub> by the epidermis of the skin. In the general population obesity has also been linked to low levels of vitamin D. Even environmental issues such as urbanisation and air pollution have now been linked to vitamin D deficiency. There is growing evidence from studies in both northern and southern latitudes that many women are deficient in vitamin D, both before and during pregnancy, indicating that vitamin D deficiency has become a worldwide problem. Many European countries have reported a vitamin D deficiency leading to policies on food fortification, recommendations for supplements and dietary recommendations, with particular emphasis for vulnerable groups. Finland, for example do not have a vitamin D deficiency due to recent national policies that include fortification and supplementation, together with a high habitual intake of oil-rich fish. But what defines a deficiency? At present there is no universal consensus on the biochemical definition of vitamin D deficiency. The ongoing standardisation of measurements in vitamin D research will facilitate a stronger evidence base, for future guidelines and policy. A blood test for vitamin D deficiency can be taken - serum 25 (OH) D levels, as an estimated vitamin D status. However routine testing is not recommended in the general population of pregnant women nor infants and children unless there is a clinical indication.

### Vitamin D during pregnancy

Vitamin D deficiency or insufficiency is thought to be common among pregnant women, with reports of low vitamin D levels being associated with a greater risk of developing preeclampsia, gestational diabetes, preterm birth and requiring a cesarean section, therefore vitamin D supplementation during pregnancy has been suggested as an intervention to protect against adverse pregnancy outcomes. In fact the NICE guidelines (2019) for antenatal care for uncomplicated pregnancies states- 'All women should be informed at the booking appointment about the importance for their own and their baby's health of maintaining adequate vitamin D stores during pregnancy and whilst breastfeeding'. It goes on to emphasise that particular importance should be given to those women with





darker skin and women who have limited exposure to sunlight (those who are confined indoors or cover their skin for cultural reasons). However the most recent WHO recommendation, superseding the previous 2012 recommendation, is that healthcare professionals should not routinely recommend vitamin D supplementation for all pregnant women to improve maternal and perinatal outcomes. The WHO goes on to remark that all pregnant women should be advised that sunlight is the most important source of vitamin D together with a well balanced healthy diet, and supplementation should only take place for those women with a documented vitamin D deficiency. This new guidance is linked to the Cochrane review (2016) which included 15 randomised and quasi-randomised trials, with a total of 2833 women. The review examined whether oral supplements with vitamin D alone or in combination with calcium or other vitamins and minerals, given to women during pregnancy can safely improve maternal and neonatal outcomes. The authors concluded that supplementing pregnant women with vitamin D in a single or continued dose may reduce the risk of pre-eclampsia, low birthweight and preterm birth. However, when vitamin D and calcium are combined, the risk of preterm birth may be increased. However clinically the evidence on whether vitamin D supplementation should be given as a part of routine antenatal care to all women to improve maternal and infant outcomes remained unclear. Further rigorous randomised trials are required to confirm the above benefits. None of the trials included reported adverse effects for mother or child. There are currently further ongoing studies, the evidence from which it is hoped will clarify the effects of supplementation during pregnancy.

### Vitamin D during infancy and in relation to breastfeeding

Vitamin D deficiency in infants and children can result in rickets, impaired growth, muscle weakness and seizures due to hypocalcaemia. The American Academy of Paediatrics recommends that infants under 6 months of age have no sun exposure, but that supplementation of infants with 400IU vitamin D should begin in the first days of life. In the United Kingdom the department of health recommends daily vitamin D supplements for all children from 6 months to 5 years, unless they consume over 500ml per day infant formula. For breastfed infants the recommendation is from 1 month of age if the mother has not taken vitamin D supplementation during her pregnancy. Infant formula has vitamin D added to it and at first glance it may seem that as far as vitamin D is concerned formula milk is superior to breastmilk, however according to Hollis (2015) this is not a defect of breastmilk but rather a defect of the lactating mother's vitamin D uptake. Hollis' randomised controlled trial found that by supplementing the mother with 6400IU of vitamin D, infants achieved the same blood level of vitamin D as those infants that received vitamin D directly as drops (400 IU per day) therefore there is no need to then supplement the infants of mothers receiving a high dose supplement.

### What about Malta?

Many European countries' public health organisations are giving attention to micronutrient deficiencies to include vitamin D and calcium with special attention being paid to vulnerable groups including women, infants and children. Locally the Food and Nutrition Policy and Action Plan 2015 - 2020 states that micronutrient deficiencies till now have not been considered to be a major public health concern and unfortunately there have been no local studies carried out to determine the extent of micronutrient deficiencies amongst the Maltese population. An important challenge for public health is to understand the epidemiology of micronutrient deficiencies, to include vitamin D, and then implement successful methods of prevention. There does not seem to be any local guidelines addressing vitamin D deficiency or supplementation in the general population, childbearing women nor children. Earlier this year the Health Promotion and Disease Prevention Directorate published guidelines for parents on feeding infants and young children, the guideline did not include advice on supplementing infants and children with vitamin D. Lack of local research and local guidelines may leave us as healthcare professionals at a loss as to advice giving to those under our care.

### References

- De-Regil L.M., Palacios C., Lombardo L.K., Peña-Rosas J.P. (2016) Vitamin D supplementation for women during pregnancy. Available at [cochranelibrary.com](http://cochranelibrary.com) [Accessed 1 June 2019].
- Health Promotion and Disease Prevention Directorate (2014) Food and Nutrition Policy and Action Plan for Malta 2015-2020. Available at [https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/FNAP\\_EN.pdf](https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/FNAP_EN.pdf) [Accessed 24 June 2019].
- Health Promotion and Disease Prevention Directorate (2019) Dietary Guidelines for Maltese Infants and Young Children Aged 6 months to 3 years A guide for parents.
- Hollis B.W., Wagner C.L., Howard C.R., et al. (2015) Maternal Versus Infant Vitamin D Supplementation During Lactation: A Randomized Controlled Trial. *Pediatrics* 136(4):625-634. Available at <https://pediatrics.aappublications.org/content/144/1/e20191063> [Accessed 15 June 2019].
- National Institute for Health and Care Excellence (2019) Antenatal Care for uncomplicated pregnancies Clinical guideline [CG62] Available at <https://www.nice.org.uk/guidance/cg62/chapter/1-Guidance> [Accessed 25 June 2019].
- Royal College of Obstetricians & Gynaecologists (2014) Vitamin D in Pregnancy Scientific Impact Paper No. 43 Available at [https://www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/vitamin\\_d\\_sip43\\_june14.pdf](https://www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/vitamin_d_sip43_june14.pdf) [Accessed 28 June 2019].
- Spiro A. & Buttriss J.L. (2014) Vitamin D: An overview of vitamin D status and intake in Europe In Wiley-Blackwell Online Open Available at <https://dx.doi.org/10.1111%2Fnbu.12108> [Accessed 10 May 2019].
- Vitamin D in Vitamins and Minerals Available at <https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/> [Accessed 23 May 2019].
- World Health Organisation (2019) Vitamin D supplementation during pregnancy. Available at [https://www.who.int/elena/titles/vitamin\\_d\\_supp\\_pregnancy/en/](https://www.who.int/elena/titles/vitamin_d_supp_pregnancy/en/) [Accessed 10 May 2019].
- Vitamin D & Iron Supplements for Babies: AAP Recommendations (2016) Available at <https://www.healthychildren.org/English/ages-stages/baby/feeding-nutrition/Pages/Vitamin-Iron-Supplements.aspx> [Accessed 22 May 2019].

**Rebecca Mizzi**

BSc. (Hons) MSc. (Midwifery)

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## The Spinning Babies® Approach

In March of this year, midwives Maria Schembri, Adriana Zammit and I travelled to Oslo, Norway to attend a two-day Spinning Babies® workshop. The workshop was delivered by approved Spinning Babies® trainer, Jennifer Walker, a Canadian currently living in The Netherlands. The training was international and multi-disciplinary with participants coming from Norway, Sweden, the Netherlands, Canada, the United Kingdom and of course Malta.



Spinning Babies® is an approach to optimize the physical relationship between the woman's body and that of the baby for an easier birth. It is a new paradigm that gains insight from the baby's position and station for natural and physiological solutions. This approach can be used in birth settings and can also be included in childbirth education programmes. During the workshop we were able to learn a multitude of techniques that can be used in pregnancy and during labour to manage minor disorders, pain during labour and to help the baby find the optimal position in the woman's pelvis in an attempt to ease and facilitate birth. Spinning Babies® stresses the importance of using "The Fantastic Four" which are:

1. **Rebozo sifting**, to encourage deep relaxation of the smooth muscles and mind;
2. **Forward-leaning inversion**, to create space in the lower uterine segment;
3. **Side-lying release**, to give room in the pelvis and soften or balance the pelvic floor;
4. **Standing sacral release**, to allow sacrum and sacral ligaments room for mobility and expansion.

### Rebozo sifting

A Rebozo is a very long, woven scarf created by women for women. Some cultures around the world have beautiful Rebozo traditions and these are passed down from mother to daughter and from midwife to midwife. The Rebozo is used for many activities some of which include: carrying a baby and for relaxing and repositioning women and fetuses in labour.

Rebozo sifting or 'Manteada' is a technique used by Mexican midwives for pregnancy, birth and the postnatal period. This method helps women relax with no drugs at all. Rebozo sifting may be used in pregnancy for comfort and it may also be used in early or active labour, encouraging fetal rotation and optimal positioning.

The hands-and-knees Rebozo technique was demonstrated to us and is described hereunder:

1. Open the Rebozo up completely.
2. Assist the woman to a hands and knees position, with knees at a right angle to hips and wide enough to allow ample room for her abdomen to hang.
3. Have the woman lean on a birth ball, pillows, or a chair: this allows her to relax her arms and upper body.
4. Place the middle of the Rebozo under the woman's abdomen, making sure to also capture her hip bones. The Rebozo should form a sling.
5. At all points, check with the woman to make sure she is not experiencing pain and is feeling comfortable.
6. Slowly lift the weight of the woman's abdomen using both hands to support the weight of the pregnant abdomen. Most women will sigh with relief at this point. You must lift high enough to lift the weight of the womb from the mother's back.
7. Once client and provider have found a comfortable position, sifting may start: slowly at first, alternating pulling up and back with right and left hands to create a gentle and rapid rhythmic motion in the woman's pelvis.
8. The abdomen needs to hang into the sling at all times for optimum relaxation.



### Contraindications for using sifting techniques:

1. Risk of miscarriage (including bleeding, abdominal tightenings or previous history of loss).
2. Anterior placenta.

### Forward-leaning inversion

The forward-leaning inversion helps to create room



in the lower uterus. It is a technique developed by Dr. Carol Philips that allows the fetus to use space in the lower abdominal cavity and with the pull of gravity, find an ideal position for birth. This technique can be done in pregnancy and during labour.

1. Kneel on the edge of a sofa or bed. Kneel high at first.
2. Hold the edge of the sofa or bed and carefully lower yourself to your hands on the floor and then lower yourself more to rest on your forearms. Elbows should be out and hands close.
3. The head should be able to hang freely (without touching the floor) and with chin tucked in.
4. Take 3 breaths while inverted with a loose abdomen and shoulders strong.
5. Come up back onto your hands, then lift yourself up to a high kneeling position again. Take two breaths at this position and then sit on your heels and take an additional breath.

#### **Contraindications for doing the forward-leaning inversion:**

1. Heartburn
2. Glaucoma
3. Hypertension
4. Risk of stroke



#### **Side-lying release**

The Sidelying Release (SLR) uses a “static stretch” to temporarily, slightly enlarge and soften the pelvis. Stretching the muscle spindles in the pelvic muscles lengthens the pelvic muscles for approximately 1-4 hours. The SLR can then be repeated if needed. The SLR increases pelvic mobility and releases muscle spasm.

1. Begin on the woman’s preferred side. Her head should be level on a pillow. Ensure neck is straight.
2. As a midwife, stand in front of her. Put your leg or hip firmly against the edge to keep the mother from tipping off!
3. Holding a chair or table near the edge of the couch, the mother scoots her hip right up to 2” (5 cm) from the edge of the couch. A 3rd-trimester pregnant belly extends beyond the edge.
4. The midwife curves both palms around the edge of the mother’s hip (front and top). The midwife must prevent the mother’s hip from leaning forward after her leg hangs.

5. Slight rocking of the hip helps to relax muscles.
6. The mother straightens her lower leg. But the midwife must not pull the leg straight!! Toes are up (flexed) toward her knee.
7. Once in place, the mother slightly lifts her leg up and over her thigh and then lets it slowly hang down in front of her. Wait 2-3 minutes or until the leg hangs slightly lower. This should be repeated on both sides so you don’t make the pelvis unstable.

#### **Standing sacral release**

The Standing Release is done with a very light touch to release the fascia around the pelvis and the pelvic and respiratory diaphragms. When effective, this may improve fetal positioning, pelvic alignment, and even reduce heartburn and snoring.

To perform a standing release, follow these steps:

1. The client must stand feet hip-width apart and with soft knees. Your feet should also be hip-width apart.
2. Stand by the pregnant woman’s side.
3. Gently place your front hand on her lower abdomen. Your backhand should also be placed lightly on her sacrum.
4. Hold the weight of your arms so they are not resting on the woman. The contact you need to apply is very light.
5. The woman is able to move freely without an agenda. This movement is brought about by your gentle touch on her fascia. She will unwind with instinctual movement and you should follow her movement.
6. Breathe calmly and leave knees soft throughout.
7. Once the woman reaches a natural stop, be encouraged to drink plenty of water together and go for a walk.

Apart from these techniques we also had the opportunity to revise and further understand issues in relation to flexion/extension effect on descent of the LOT and ROT babies. We also went into the role of soft tissue structures on fetal positioning. The overall experience of this workshop was highly rewarding and I fully recommend that each midwife looks into Spinning Babies® to better understand how balance, gravity and movement influence fetal positioning in an attempt to improve local practice.

#### **Suggested reading:**

- Calais-Germain, B. & Vives Pares, N. (2011). *Preparing for a Gentle Birth*, Healing Arts Press: Vermont.
- Simkin, P., Hanson, L. & Ancheta, R. (2017) *The Labour Progress Handbook*, (4th edition), Wiley, Blackwell: New Jersey.

#### **Dr Georgette Spiteri**

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## My Empowering Experience of Natural Birth

I've been blessed with two beautiful healthy gifts, my son Sterling (3 month old) and daughter Violet (3 yrs old) I'm sharing my birth story to empower women to trust their bodies and not fear natural birth. Natural birth is a magical experience and a privilege I will cherish forever.

Born and raised majority of my life in Australia. I spent my early childhood living and attending school in Malta and extended periods as an adult living and now periodically holidaying in Malta with my family. Both my children were born in Australia however I believe no matter where you give birth, what nationality or religion you are, women have the power and ability to give birth naturally and have a positive experience.

As a newly pregnant mother preparing myself for birth I was faced with contrasting ideas and beliefs of birth from other women and medical practitioners. I consider myself a very organised and practical person and initially gravitated to a caesarean. Ease and convenience was front of mind and it wasn't till I began my own journey that I realised ease and convenience is not always best.

My natural journey began the moment I saw my daughter at the 12 week scan. At that moment the idea of pregnancy was visual, a beautiful little human growing inside my body, a perfect little gift and from that moment I was determined to bring this little baby into the world with her best interest in mind.

Whilst there is always the chance that intervention may need to take place I was determined to give birth as naturally as possible. I researched as much as I could and extracted the knowledge to align with my views.

My husband and I found a hypnobirthing practitioner, we completed a short course and left with a folder of information and 2 audio CD's that formed the foundation of my successful natural birth. We listened to the audio each night and during the pregnancy, developing the ability to be calm, still and fall into a sub conscious state. I honestly don't think I could have gone through labour drug free without the hypnobirthing preparation, support and care from my husband, family and midwife. Hypnobirthing empowers you, gives your birth partner or support person/s a sense of purpose, the tools to be actively involved and a critical part of the birth.

The birth of my son was planned through a birth centre



run through the public hospital for a drug free natural birth with water birth facilities. The prerequisite being low risk pregnancy and ensuring your birth goals align with the centre. With a small intake of 4 women a month I was lucky enough to secure a place. The Birth Centre allocates a midwife to each patient, I felt supported throughout my entire experience with the same midwife from start to finish and the first few weeks of aftercare.

During my pregnancy my husband took photos of my growing bump, making me feel confident in my changing body. We read through words of affirmations, highlighting quotes that resonated, my favourite being 'The power and intensity of my surges are never too strong for me... because they are me' We discussed our birthing fears and talked them through with our midwife.

My second birth was very different to my first even though they were both natural births, following the same birth plan. My daughter's birth, my first birth was in a private hospital, I spent majority of the lead up to active labour in the shower with my husband, as a water birth was not permitted. During active labour my obstetrician requested I birth lying down, my birth plan outlined my preferred birth position was a squat or in a vertical position, in my opinion it doesn't physiologically make sense to give birth laying on your back, after protesting I did birth on the bed laying on my back. My obstetrician provided coaching, guidance as to when to push and stop which I found at the time very reassuring, one less thing to think about. A monitor was placed around my stomach, the strap made my stomach itch and I kept grabbing at the strap disturbing the reading, as a result a monitoring device was inserted into my daughter's head whilst still in utero. My husband was invited to birth our daughter with the ob's guidance. The ob also invited me to touch her head as she was crowning and if I wish to watch her birth with a mirror. However I found the birth very overwhelming and could not believe I had survived, as the pain was unimaginable. The birth of my daughter was very much my husband's birth story, he was involved throughout the entire process. When they placed my daughter onto my chest she instinctively found her way to my breast, absolutely amazing, just minutes from being born and already finding her way to the breast by scent.

The birth of my son, early stages of labour extended for days and active labour was much quicker. Once the stronger contractions began they intensified very quickly. By the time my husband and I reached the hospital we were in active labour. My husband placed my hypnobirthing CD on and my midwife filled the bath. At first I found it hard to get comfortable in the water, trying a few positions. The warm water did soothe me as each contraction radiated throughout my entire body. I was able to go into a deeper state of relaxation using the hypnobirthing compared to my first birth, I believe it was because I had worked through my fears and knew the level of pain was not going to kill me. I remember during the birth of my daughter thinking I was going to die as the pain was so unbearable. My midwife did not offer coaching, in the



## Has The Medicalisation of Breech Presentations Gone Too Far?

In Europe, breech births account for 4% of all births and more than 80% are born by caesarean section, but Malta has the second highest rate of caesarean births for breech presentation as 96.1% of all breech presented babies are born via caesarean section (Macfarlane et al., 2015). So have we taken the medicalisation of breech presentations a step too far?

### The argument for medicalised birth

The concept of a medicalized childbirth highlights the discourses of 'needs', 'risks' and 'safety' that continue to construct the idea of medicalisation today (Lee & Kirkman, 2008). The Lancet (2000) reports that the increasing age of first-time mothers, medical comorbidities and assisted reproduction all warrant medical interventions. Unfortunately, the concept of 'risk' is not only confined to women who may be indeed at increased risk of complications due to age or medical comorbidities. It equally refers to all births as being inherently risky (Lee & Kirkman, 2008) as it is an unpredictable (Lancet, 2000) and hazardous journey (MacLennan et al., 2005). As a result, there is increased confidence in technological and medical progress as interventions (including caesarean sections) are perceived as the safer option (Dietz & Peek, 2004) and birth as only normal retrospectively (Cherniak & Fischer, 2008).

With the new language associated with childbirth and the medicalization of birth, changes in the support and management of labouring women have been witnessed, particularly how it encourages society's dependency on the medical model and technology (Jonsdottir, 2012). Henceforth, the occurrence of caesarean sections has increased. The rate of caesarean sections in 1970 was as low as 6% in countries such as USA, Australia and the UK (Cherniak & Fischer, 2008). The rate was very similar in Malta at just 5.8% (Savona Ventura, 1993). However, by the millennium the rates increased to 29.1% (USA, Martin et al., 2006), 28.5% (Australia, Laws & Sullivan, 2005) and 26.2% (UK, HSCIC, 2015). In Malta, there was a similar exponential increase to a rate of 31.5% in 2015 (Zammit, Buttigieg & Caruana, 2016). This is arguably justifiable as such interventions have decreased the rates of maternal mortality (Tew, 1995). MBRRACE (2016) reported that the maternal mortality rate in UK per 100,000 was 8.5 between 2012 and 2014, a significant decline from 500:100,000 in 1950 (Chamberlain, 2006). A similar trend is noted in Malta with a previous mortality rate of 387.3:100,000 in 1926 (Savona Ventura & Grech, 1987) to a current low rate of 9:100,000 in 2015 (WHO, 2016).

Interventions appear to have attributed to the reduction in maternal mortality emphasising that interventions do save lives in high-risk pregnancies and labour. However, other broad initiatives have affected this reduction as well. These include the use of contraception and child spacing, improved antenatal care, better midwifery and obstetric practice, improved nutrition, legalisation of abortion, antibiotics and blood transfusions (Savona Ventura &

Grech, 1987; Chamberlain, 2006). The arguments in favour of caesarean sections due to reduced mortality rate over the past six decades are, therefore, inherently flawed as it has been explored in isolation and ignored other vital developments across the medical and health care systems.

It is also argued that a caesarean birth is relatively safe and unproblematic as it is performed by skilled professionals with ample experience in operative births (Cherniak & Fischer, 2008). However, an operative birth as with any other major surgery carries risks with short- or long-term complications. Liu et al., (2007) report that low-risk women who underwent an elective caesarean section were at increased risk of experiencing postpartum haemorrhage requiring a hysterectomy, major puerperal infection, venous thromboembolism, wound haematoma and cardiac arrest when compared to women having a normal vaginal delivery. Souza et al., (2010) also report that women who have an elective caesarean section at request with no medical comorbidities were at an increased risk of being admitted to the intensive care unit or even death. Additionally, complications for future pregnancies were identified such as placental abruption, placenta praevia or accreta (Solheim et al., 2011; Silver, 2012); ectopic pregnancies (Hemminki & Merilainen, 1996) and antepartum stillbirths (Smith et al., 2003). These major complications are rare, however, despite being life-threatening, they are often overlooked because most caesarean sections go well (Silver, 2012).

### The medicalised breech birth in the local context

Looking at the local Maltese context, it becomes evident that medicalisation is also a reality. A simple look at the mode of birth rates in Malta shows that over a third of women give birth via a caesarean section (Macfarlane et al., 2015). This is significantly higher than the World Health Organisation's recommendations to maintain caesarean section rates at 10-15% since higher rates are not associated with reductions in maternal and neonatal mortality rates (Betran et al., 2016). The most common indication for a caesarean section in Malta is a previous caesarean (53.7% of electives) and malpresentation (13.9% of electives) (Zammit, Buttigieg & Caruana, 2016). While efforts should be made to ensure that a caesarean section is provided to all women in need without striving to achieve a specific rate (Betran et al., 2016), efforts should also be made to ensure that normality is preserved when it is safe to do so. As such in the local context efforts should be made to encourage vaginal births after caesarean sections (Zammit, Buttigieg & Caruana, 2016) but also to consider the ideal mode of birth for breech presented babies.

This significant high caesarean section rate for breech presentations may be due to the debate that has been centered on whether a caesarean birth or vaginal birth will produce better neonatal and maternal outcomes. Prominently, on one side of the argument, large registry and multi-centre studies have found increased neonatal

mortality and/or morbidity such as brachial plexus injury in vaginal breech births compared to caesarean (Hannah et al., 2000; Gilbert et al., 2003; Vlemmix et al., 2014; Lyons et al., 2015). This has caused an exponential increase in caesarean births for breech presentations worldwide, particularly following the findings of the Term Breech Trial (TBT, Hannah et al., 2000).

However, following the identified methodological flaws of TBT (Cunha-Filho & Pandolfi Passos, 2001), further cohort studies have been undertaken in high-resource countries that use targeted screening and skilled practitioners. These studies report little difference in neonatal mortality and morbidity (Giuliani et al., 2002; Goffinet et al., 2006; Daviss et al., 2010; Toivonen et al., 2012; Vistad et al., 2013; Borbolla et al., 2014). These recent studies conclude that vaginal breech birth is still an option for carefully selected women and under midwifery and obstetric guidelines. With the high rates of caesarean births for breech presented babies in Malta which contributes to one of the highest caesarean rates in Europe, efforts should be made to promote physiological vaginal breech birth and to adequately train midwives and obstetricians to support women to achieve a physiological birth with positive outcomes.

#### Turning vaginal breech birth upside down

During vaginal breech births women have traditionally been encouraged to assume a lithotomy position as this is the position with which most health professionals are accustomed (Hofmeyr & Impey 2006). Assisting breech births in the lithotomy position is also the skill set which most obstetricians and midwives are familiar with (Walker, 2015). However, the lithotomy position is in itself an intervention as it disrupts the physiological process of birth, increasing the needs for assistance and further intervention. In fact, there is so much evidence favouring active labour and non-supine positioning, that the National Institute for Health and Care Excellence (NICE) in UK recommend that women should be discouraged from lying supine or semi-supine in the second stage of labour and encouraged to adopt any other position that they find most comfortable (NICE 2014, sec.1.13.9). Bearing this in mind, there is a recent trend to turn vaginal breech upside down and encouraging women to adopt an upright position (such as on all-fours) to encourage a physiological vaginal breech birth.

Evidence is emerging highlighting the benefits of upright vaginal breech births. Bagnor et al (2015) carried out a small scale study comparing upright breech birth outcomes with vaginal breech in a lithotomy position. It found that newborns being born in all fours position had increased prenatal hypoxic stress with a pH of 7.19 compared to 7.24, however, this had no clinical consequence as APGAR scores and neonatal intensive care unit admissions were the same. Women also suffered less perineal injuries. A larger cohort study (Louwen et al., 2017) comparing the outcomes of breech birth via caesarean section (n=315), upright vaginal breech births (n=229) and vaginal breech birth in the dorsal position (n=40) also showed promising positive outcomes. Upright births were associated with significantly fewer delivery manoeuvres being required

and fewer neonatal birth injuries, shorter second stages and decreased serious perineal lacerations. The study also found that when upright position was used almost exclusively, the caesarean rate decreased. Additionally, neonatal morbidity was similar for upright vaginal deliveries compared with planned caesareans.

#### The need for change and adopting new skills

The past few decades have highlighted the need to increase caesarean sections which was informed by the needs of local populations and the evidence at the time. Fast forward a few decades and evidence is showcasing the complications of caesarean sections in low risk women and the benefits of upright vaginal breech for carefully selected women. Thus, a need to review and update local policies for women with breech presentations is warranted. To facilitate this need for change, upright vaginal breech birth training needs to be incorporated into midwifery and obstetrics skills and drills, as well as, becoming a part of pre-registration curriculum.

While most skills required to attend a breech birth are the same as those needed for a cephalic presentation, attendants need to discern when interference is required. This can be achieved through thorough evaluation of the condition of the foetus, a sound understanding of the physiology and mechanisms of the breech birth and having the ability to recognise deviations from the norm and responding swiftly and adequately.

In the next article I will discuss the mechanisms of the vaginal breech births and provide a step by step guide on the manoeuvres that need to be employed when interference is warranted. In the meantime, I hope this article was an opportunity to ponder the local context and consider how as a multi-disciplinary team, efforts can be made to increase physiological breech births in Malta.

#### References

- Betrán, A. P., Torloni, M. R., Zhang, J. J., Gülmezoglu, A. M., WHO Working Group on Caesarean Section, Aleem, H. A., & Deneux-Tharoux, C. (2016). WHO statement on caesarean section rates. *BJOG: An International Journal of Obstetrics & Gynaecology*, 123(5), 667-670.
- Bogner, G., Strobl, M., Schausberger, C., Fischer, T., Reisenberger, K., & Jacobs, V. R. (2015). Breech delivery in the all fours position: a prospective observational comparative study with classic assistance. *Journal of perinatal medicine*, 43(6), 707-713.
- Borbolla Foster, A., Bagust, A., Bisits, A., Holland, M., & Welsh, A. (2014). Lessons to be learnt in managing the breech presentation at term: An 11-year single-centre retrospective study. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 54(4), 333-339.
- Chamberlain, G. (2006). British maternal mortality in the 19th and early 20th centuries. *Journal of the Royal Society of Medicine*, 99(11), 559-563.
- Cherniak, D., & Fischer, J. (2008). Explaining obstetric interventionism: Technical skills, common conceptualisations or collective countertransference? *Women's Studies International Forum*, 31(4), 270-277.
- Cunha-Filho, J. S., & Passos, E. P. (2001). Term breech trial. *The Lancet*, 357(9251), 227.
- Daviss, B. A., Johnson, K. C., & Lalonde, A. B. (2010). Evolving evidence since the term breech trial: Canadian response, European dissent, and potential solutions. *Journal of Obstetrics and Gynaecology Canada*, 32(3), 217-224.
- Dietz, H. P., & Peek, M. J. (2004). Will there ever be an end to the Caesarean section rate debate?. *Australian and New Zealand journal of obstetrics and gynaecology*, 44(2), 103-106.
- Gilbert, W. M., Hicks, S. M., Boe, N. M., & Danielsen, B. (2003). Vaginal versus cesarean delivery for breech presentation in California: a population-based study. *Obstetrics & Gynecology*, 102(5), 911-917.
- Giuliani, A., Schöll, W. M., Basver, A., & Tamussino, K. F. (2002). Mode of delivery and outcome of 699 term singleton breech deliveries at a single center. *American journal of obstetrics and gynecology*, 187(6), 1694-1698.



## The First Breath

For the fetus, intrauterine life is a time of growth and development. It is also a time of preparation for the eventual birth and life outside the uterus. Breathing is an essential part of surviving in the extrauterine environment. Pregnancy, and the onset, course and outcome of birth all have an impact on the newborn's first breaths.

**Pregnancy** is aimed towards preparing the *fetus* to transition to a *newborn*, to have all the essential anatomy necessary at birth. Birth marks the physical separation of the fetus from the mother and the start of a more independent life as a newborn. The evolutionary growth of the bigger human brain requires a well-timed delivery, before the growth of the fetal head surpasses its capacity to pass through the maternal pelvis. Newborns are therefore born relatively immature and woefully co-dependent on their caregivers for survival, compared to other mammalian species. However, from the respiratory aspect, the fetus must be fully developed since the mother cannot breathe for the newborn once the connection to the umbilical cord and the placenta has been terminated. Therefore, human pregnancy sees to developing the respiratory centres, fetal lungs, accessory muscles of breathing and circulatory maturation to completion. There is a slight paradox in the final phases of lung maturation for the fetus. On one end, pregnancy anticipates the birth and prepares all necessary anatomical and physiological structures at approximately 37 weeks. On the other hand, complete readiness for birth occurs at the onset of labour and during the birth itself.

**The onset of labour** may significantly affect how well the baby breathes. The exact mechanism which triggers the onset of labour is still not fully understood. However, studies involving animal models have underlined the importance of the fetus in controlling the timing of labour. Paracrine/autocrine events, fetal hormonal changes and overlapping maternal/fetal control mechanisms trigger a parturition cascade born. This leads to a timely and spontaneous onset of labour at the date when the fetus is truly ready to be born (Reinl & England 2015, Gao et al. 2015, Sunil et al. 2013, Kota et al. 2013).

**The first stage of labour** prepares the fetal lungs for birth. Labour contractions are an intricate part of a process which enables reabsorption of fetal lung fluid. Towards the end of pregnancy there is about 100ml of fetal lung fluid. Through the process of normal labour this is reduced to approximately 70ml (Resuscitation council 2016). Labour is also thought to stimulate the release of maternal catecholamines which increases surfactant production (Tutdibi et al 2010). Together with the mechanical effort this helps the newborn to inflate the lungs at birth and to start the work of breathing.

**Medical interventions and use of drugs** in the first stage of labour may have a bearing on the newborn's breathing effort later on. Common drugs used during the first stage include

Pethidine, Diamorphine and Epidural anaesthesia. The timing of administration of these drugs is guided according to the progress in labour and midwives usually examine the woman prior, to attempt to determine if the second stage is imminent. Ideally, Pethidine is not administered close to the second stage especially since one of the potential side effects of opioids is respiratory depression which may on rare occasions also affect the newborn. A reliable antidote (Naloxone) should be available for these cases. Epidural anaesthesia is also commonly used during labour. Its effect on newborn respiration is unclear. Kumar et al (2014) did report an association between the use of epidural analgesia in labour and the incidence of respiratory distress in newborns but further research is warranted to confirm this.

Another drug often used during labour is synthetic oxytocin, as part of induction or augmentation of a slowly progressing labour. Synthetic oxytocin/pitocin is a high-alert medication and dose-related errors and overuse can be a cause of harm to mother and fetus during labour (Olah & Steer 2015, Wojnar et al 2013). Synthetic oxytocin can cause uterine tachysystole and thus fetal distress, hypoxia and acidosis. This can effect the respiratory centres in the brain and hinder spontaneous breathing in the newborn.

**The expulsive phase of labour**, what is also known as the second stage, is also of crucial importance for the first breath. Through the passage from the birth canal the fetal lungs are compressed, enabling the fetus to expel further lung fluid through the nasal and buccal passageways. Here the newborn is also colonised by the maternal microbiome, an area of growing research (Dunn et al 2017).

**The birth** heralds the most important step, that of the newborn taking the first breaths. The first require a greater effort in order to decrease the intrathoracic pressure and create negative pressure to inflate the lungs – a process often demonstrated by the first cry/cries. Successive breathing efforts can be initially irregular but eventually establish a pattern of approximately 40-60 breaths per minute and an oxygen saturation level which starts at 60% at 2 minutes of

age and increases to 90% or more by at least 10 minutes of age (Resuscitation council 2016). The newborn's skin is blue at birth, what would be termed apparent cyanosis. This is the normal physiological presentation at birth and once breathing is established and the blood oxygen level rises, the newborn's skin colour will change to pink, occasionally with blue peripheries, which is also normal.

The fetus-newborn transition should also be facilitated by what is known as optimal or delayed cord clamping. This means that the cord is left intact for one minute following birth (WHO 2014) or until it stops pulsating, hence allowing a physiological transfusion of essential fetal blood from the umbilical cord and placenta to the newborn. This has





numerous benefits including supporting iron stores for up to 6 months, reducing the risk of hypotension and anaemia and providing hematopoietic stem cells (McDonald & Middleton 2008, Chaparro 2011). The increased blood volume is also beneficial for circulation in the lungs, which in their newfound function will require increased perfusion for gaseous exchange at the alveoli.

**The birth environment** will also impact the newborn. Once outside the uterus, environmental factors are taxing for the newborn. Ambient temperature has a particular weight on the ease with which the newborn can adapt to the external environment. The fetus would have been acclimatised to the maternal temperature of 36.5 to 37 degrees Celsius, and the newborn must adapt to maintain the same temperature for its own bodily functions. It is known that certain birth environments, such as operating theatres, may have a much lower temperature, sometimes even ranging between 14-18 degrees Celsius. This is detrimental to the newborn's transition and recommendations strictly state that a temperature of **25-28 degrees** should be maintained in the birth environment (Resuscitation Council 2016, WHO 1993). Every degree below the optimum bodily temperature can result in an increase in mortality of up to 20% in preterm babies (Resuscitation Council 2016).

Keeping the birth environment quiet and avoiding bright lights is also desirable in order to offer the newborn a peaceful and welcoming environment which is similar to the intrauterine environment. Skin-to-skin and initiation of breastfeeding are key and essential needs of the newborn in the first hour. If possible this **first 'golden' hour** should remain undisturbed.

**A Caesarean birth** accounts for approximately 33% of births locally (Directorate for Health Information & Research 2017). Higher rates of Caesarean section [CS] have been noted in several middle to high income countries. There has been international critique regarding this rise including the fact that a rise in obesity, age, and nulliparity in birthing women do not sufficiently justify the increase in CS rates (The Lancet, 2018).

Newborns born by CS face increased risks of respiratory difficulties including respiratory morbidity (NICE, 2018) and thus potential transfer to intensive neonatal care. Elective CS in particular increases the risk of transient tachypnoea of the newborn [TTN] (Tutdibi et al 2010). Studies have also reported that children delivered by caesarean may have increased risks of asthma, systemic connective tissue disorders, juvenile arthritis, inflammatory bowel disease, immune deficiencies, and leukemia (Sevelsted et al 2015).

NICE guidelines (2018) recommend that planned/elective Caesarean sections are not performed before 39 weeks, if there are no other contraindications. This is aimed towards supporting the newborn to have the best lung maturation possible since early term birth, (i.e. between 37–38 weeks' gestation) is associated with an even higher risk of respiratory conditions (ACOG 2013).

Newborns who experience labour and contractions have a decreased risk of TTN and oxygen requirements (Tutdibi et al 2010). Therefore, even if a CS is performed during labour, the fact that labour started spontaneously and the fetus experienced labour contractions, is protective for the initiation of breathing at birth. This can be an encouraging fact for women who require a Caesarean section in the midst of labour or in an unsuccessful VBAC (Vaginal Birth After Caesarean Section) and thus can form part of the information given to encourage women that the labour had potential benefits for the newborn nonetheless.

## Conclusion

In essence; **how birth starts, how labour progresses and how the fetus is born**, will all have a significant impact on **how well the newborn will breathe at birth**. Knowledge of this physiology is important for mothers, partners and all health professionals providing care in the perinatal period. This promotes informed decision-making regarding birth and good practice to assist the newborn's transition to the extrauterine environment.

## References

- ACOG 2013. (2013). American college of obstetricians and gynaecologists. Definition of term. American congress of obstetricians and gynaecologists committee opinion no. 579. *Pregnancy Obs Gynaecol*, 122, 1139-1140.
- Chaparro, C. (2011). Timing of umbilical cord clamping: Effect on iron endowment of the newborn and later iron status. *Nutrition Reviews*, 69(Supplement s1), S30-S36.
- Directorate for Health Information & Research. (2018). *National obstetric information system (NOIS) report – 2017*. (Annual Report). Malta: Directorate for Health Information & Research. Retrieved from [https://deputyprimeminister.gov.mt/en/dhir/Documents/Births/221018/rpt\\_NOIS\\_17\\_Annual%20finalz.pdf](https://deputyprimeminister.gov.mt/en/dhir/Documents/Births/221018/rpt_NOIS_17_Annual%20finalz.pdf)
- Dunn, A., Jordan, S., Baker, B., & Carlson, N. (2017). The maternal infant microbiome: Considerations for labor and birth. *American Journal of Maternal and Child Nursing*, 42(6), 17th June 2019-318-325. doi:10.1097/NMC.0000000000000373
- Gao, L., Rabbitt, E., Condon, J., Renthal, N., Johnston, J., Mitsche, M., Mendelson, C. (2015). Steroid receptor coactivators 1 and 2 mediate fetal-to-maternal signaling that initiates parturition. *J Clin Invest.*, 125(7), 2808. doi:10.1172/JCI178544
- Kota, S. K., Gayatri, K., Jammula, S., Kota, S., Krishna, V., & Meher, L. (2013). Endocrinology of parturition. *Indian J Endocrinol Metab*, 17(1), 50-59. doi:10.4103/2230-8210.107841
- Kumar, M., Chandra, S., Ijaz, Z., & Senthilvelan, A. (2014). Epidural analgesia in labour and neonatal respiratory distress: A case-control study. *Arch Dis Child Fetal Neonatal Ed.*, 99(2), 116-119. doi:10.1136/archdischild-2013-304933
- McDonald, S., & Middleton, P. (2008). Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes. *Cochrane Database of Systematic Reviews*, (2) doi:10.1002/14651858.CD004074.pub2
- National Institute for Clinical Excellence. (2018). Antenatal care for uncomplicated pregnancies. *NICE Pathway Clinical Guidelines*, 2nd January 2019. doi:<https://www.nice.org.uk/guidance/cg62/chapter/1-Guidance#screening-for-clinical-conditions>
- National Institute for Clinical Excellence. (2018). Performing caesarean section. *NICE Pathway Clinical Guidelines*, 15th February 2019. doi:<https://pathways.nice.org.uk/pathways/caesarean-section>
- Oláh, K. S. J., & Steer, P. J. (2015). The use and abuse of oxytocin. *The Obstetrician & Gynaecologist.*, 17, 265.
- Reinl, E., & England, S. (2015). Fetal-to-maternal signaling to initiate parturition. *J Clin Invest.*, 125(7), 2569. doi:<https://doi.org/10.1172/JCI182576>.
- Resuscitation Council. (2016). *Newborn life support*. (1st ed.). London, UK.
- Sevelsted, A., Stokholm, J., Bønnelykke, K., & Bisgaard, H. (2015). Caesarean section and chronic immune disorders. *Pediatrics*, 135(1) doi:10.1542/peds.2014-0596
- The Lancet. (2018). Editorial. Stemming the global caesarean section epidemic. *The Lancet*, 392(10155), 10th February 2019-1279. doi:[https://doi.org/10.1016/S0140-6736\(18\)32394-8](https://doi.org/10.1016/S0140-6736(18)32394-8)
- The Lancet. (2018). Stemming the global caesarean section epidemic. *The Lancet*, 392 doi:[www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(18\)32394-8.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)32394-8.pdf)
- Tutdibi, E., Gries, K., & Bücheler, M. (2010). Impact of labor on outcomes in transient tachypnea of the newborn: Population-based study. *Pediatrics*, 125, 577-583
- Wojnar, D., Cowgill, K., Hoffman, L., & Carlson, H. (2013). Outcomes of the evidence-based pitocin administration checklist at a tertiary-level hospital. *Western Journal of Nursing Research SAGE*, 36(8), 975. doi:<https://doi.org/10.1177/0193945913515057>
- World Health Organization. (1993). Thermal control of the newborn: A practical guide, 24th June 2019. Retrieved from, [https://apps.who.int/iris/bitstream/handle/10665/60042/WHO\\_FHE\\_MSM\\_93.2.pdf;jsessionid=78C353734F87AE7343A7D44AA9E295?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/60042/WHO_FHE_MSM_93.2.pdf;jsessionid=78C353734F87AE7343A7D44AA9E295?sequence=1).
- World Health Organization. (2014). *Guideline: Delayed umbilical cord clamping for improved maternal and infant health and nutrition outcomes*. (Guidelines No. 1). Geneva: WHO Press, World Health Organization.

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## Safe Cosmetic Use During Pregnancy

Antenatal care is aimed at ensuring a healthy pregnancy and a healthy baby. Mothers are recommended to attend regular antenatal visits, take vitamin supplements, eat healthy and avoid harmful food, tobacco and alcohol. However, there is minimal awareness about the safety of cosmetics during pregnancy.

The European Union Cosmetics Directive (1976) defines a cosmetic product as any substance intended for placing in contact with the various external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or principally to cleaning them, perfuming them or protecting them in order to keep them in good condition, change their appearance or correct body odours.[1]

In a scientific impact paper, The Royal College of Obstetricians and Gynaecologist (2013) states that another important source of chemical exposures for women is cosmetics/personal care products. It also emphasises the fact, that the amount of these products routinely being used by women has increased dramatically in recent decades.[2]

Further more, The Royal College of Obstetricians and Gynaecologist (2013) argue that the reason for the growing concern over everyday chemical exposure effects is because many of these chemicals have the potential to interfere with one or more hormone systems in the body, which play key roles in normal foetal development.[3]

In a cross-sectional study by Marie` et al (2016) identified that few women stopped using cosmetics during pregnancy, with the exception of nail polish and nail polish remover. Almost half of the participants considered the use of cosmetics without risk during pregnancy and few had received advice on the matter by a health professional.[4]

Considering that nowadays women are using several cosmetics as part of their beauty regime, it is of utmost importance to ask what effect the accumulative effect of several cosmetic products being used simultaneously might have on the foetus.

In a cohort study carried out by Huixia et al (2019),

it is observed that there is a 23% increased risk of SGA (small for gestational age) among cosmetic users. They also identified a positive dose-response relationship between the frequency of cosmetics use and SGA by all pregnant women in the sample.[5]

This is of great concern when considering the outcome of SGA-born babies later in life. In a cohort study of consecutive full-term SGA newborns with normal prenatal umbilical artery Doppler compared with a group of full-term, appropriate-for-gestational-age (AGA) infants, Savchev et al (2013) identified that at 24 months of age these babies had lower adaptive and cognitive competencies.[6] This therefore, strengthens the argument that pregnant women should be aware of the products they are using and are educated by professionals in making good choices when choosing products with lesser harmful ingredients.

Kolatorova et al (2018) in a first study reporting the simultaneous detection of BPA, alternative bisphenols, parabens and steroids in maternal and cord plasma, confirmed the transplacental transport of BPA, with likely accumulation in the foetal compartment[7]. Kolatova et al (2018) argues further that the negative association of cord blood parabens and testosterone levels points to possible risks with respect to importance of testosterone for prenatal male development.[8]

Reinforcing this argument is the study conducted by Baron-Cohen et al (2014) where they directly tested the prediction that foetal steroidogenic activity is elevated in autism. They found out that amniotic fluid steroid hormones are elevated in those who later received diagnosis on the autism spectrum. They further argue that another reason for such a result could be the endocrine disrupting compounds as another source of environmentally mediated influence on the early foetal hormonal environment and autism.[9]

Pregnant women should be aware of the following ingredients and try to avoid them as much as possible during pregnancy and throughout breastfeeding.

**Aluminium chloride hexahydrate/chlorohydrate:** found in most antiperspirants.

**Beta hydroxyl acids:** found in some antiaging creams and acne treatment. Also known as salicylic acid, 3-hydroxypropionic acid.

**Diethanolamine (DEA):** found in hair and body products; staying away from diethanolamine, oleamide DEA, lauramide DEA and cocamide DEA is advisable.

**Dihydroxyacetone (DHA):** found in spray-self tanners; could be harmful if inhaled.

**Formaldehyde:** found in hair-straightening treatments, nail polishes and eyelash glue. Look for formaldehyde, quaternium-15, dimethyl-dimethyl(DMDM), hydantoin, imidazolidinyl urea, diazolidinyl urea, sodium hydroxymethylglycinate and 2-bromo-2-nitropropane-1,3-diol (bromopol).

**Hydroquinone:** a lightening agent; abstaining from hydroquinone, idrochinone and quinol/1-4





hydroxybenzene is advised.

**Parabens:** keep away from propyl, butyl, isopropyl and methyl parabens.

**Phthalates:** found in products with synthetic fragrances and nail polishes; avoid diethyl and dibutyl especially.

**Retinol:** vitamin A, retinoic acid, retinyl palmitate, retinaldehyde, adapalene, tretinoin, tazarotene and isotretinoin are some retinol derivatives.

**Thioglycolic acid:** found in chemical hair removers; can also be labelled acetyl mercaptan, mercaptoacetate, mercaptoacetic acid and thiovanic acid.

**Toluene:** found in nail polishes; avoid methylbenzene, toluol and antisal 1a. [10]

Although studies on the effect and safety of cosmetics on the foetus are still at an early stage, the studies that have been conducted up to the present day show its relevance and importance in the present midwifery practice as a key educator.

**References:**

1. European Union Cosmetics Directive: Council Directive 76/768/EEC of 1976-07-27. Available at: [https://ec.europa.eu/growth/sections/cosmetics\\_en](https://ec.europa.eu/growth/sections/cosmetics_en)
2. Royal College of Obstetricians & Gynaecologists (May 2013). *Chemical Exposures During Pregnancy: Dealing with Potential but Unproven Risks to Child Health*: Scientific Impact Paper no.37. pg 4 paragraph 5. Available at: [www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/sip\\_37.pdf](http://www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/sip_37.pdf)
3. Royal College of Obstetricians & Gynaecologists (May 2013). *Chemical Exposures During Pregnancy: Dealing with Potential but Unproven Risks to Child Health*: Scientific Impact Paper no.37. pg 5

paragraph 8.

Available at: [www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/sip\\_37.pdf](http://www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/sip_37.pdf)

4. Marie' et al. (2016). *Changes in Cosmetic Use During Pregnancy and Risk Perception by Women*. Int J Environ Res Public Health, 13(4):383 Available from: [www.ncbi.nlm.gov/pmc/articles/PMC4847045/](http://www.ncbi.nlm.gov/pmc/articles/PMC4847045/)
5. Huixia et al. (2019). *Maternal cosmetics use during pregnancy and risks of adverse outcomes: a prospective cohort study*. Scientific Reports 9, Article number:8030 (2019) Available from: [www.nature.com/articles/s41598-019-44546-z](http://www.nature.com/articles/s41598-019-44546-z)
6. Savchev et al. ( August 2013). *Neurodevelopmental outcome of full-term small-for-gestational age infants with normal placental function*. Ultrasound in Obstetrics & Gynaecology, Volume 42, Issue 2, Pages 201-206 Available from: <https://doi.org/10.1002/uog.12391>
7. Kolatrova et al. (February 2018). *Exposure to bisphenols and parabens and relations to steroid changes*. Environ Res. Vol 163:115-122. Available from: [www.sciencedirect.com/science/article/pii/S001395118300306](http://www.sciencedirect.com/science/article/pii/S001395118300306)
8. Kolatrova et al. (February 2018). *Exposure to bisphenols and parabens and relations to steroid changes*. Environ Res. Vol 163:115-122. Available from: [www.sciencedirect.com/science/article/pii/S001395118300306](http://www.sciencedirect.com/science/article/pii/S001395118300306)
9. Baron-Cohen et al. (2015). *Elevated foetal steroidogenic activity in autism*. Molecular Psychiatry. Vol 20, pg 369-375. Available from: [www.nature.com/articles/mp201448](http://www.nature.com/articles/mp201448)
10. Foresto A. (2019). 12 Cosmetic Ingredients to avoid during Pregnancy. Parents. Retrived from: [www.parents.com/pregnancy/complications/health-and-safety-issues/12-cosmetic-ingredients-to-avoid-during-pregnancy/](http://www.parents.com/pregnancy/complications/health-and-safety-issues/12-cosmetic-ingredients-to-avoid-during-pregnancy/)

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AFFECTED AREA



## Blood Transfusion on the Wards...

Blood transfusion can be potentially lifesaving to severely ill patients. Guidelines were implemented which health care professionals (HCP) should follow, in order to safeguard the patient and to minimize any risks and errors associated with blood transfusion. HCP are not only bound by the guidelines issued by the hospital they work in, but also by the National Standard for Blood Transfusion which was implemented by the Superintendence of Public Health (2012), with the aim 'to provide an equitable high quality level of safe care for all people receiving a blood transfusion, irrespective of the health care setting in which the transfusion is provided'.

Blood is only voluntarily donated by the public at The National Blood Transfusion Service, which is responsible for collecting, processing, storing and distribution of all blood components to hospital blood banks in Malta and Gozo. The blood components are then stored and issued by the Hospital Blood Bank (HBB) at Mater Dei Hospital, where its main role is to perform compatibility testing and to issue blood components for transfusion in wards in MDH, other health care establishments and for domiciliary transfusion.

A transfusion may be needed in order to increase the oxygen carrying capacity of the blood by raising the haemoglobin level, to restore blood volume and thus maintain effective tissue perfusion or to replace platelets, coagulation factors and other plasma proteins. The most common reasons why a patient might require a blood transfusion are: anaemia of chronic diseases, to replace the loss of blood during or after surgery, in a number of chronic conditions/blood disorders and prophylactically (platelets to prevent bleeding).

The process of blood transfusion starts when the doctor examines a patient, prescribes blood components and then orders a blood transfusion. It is the doctor's decision to evaluate the benefits and risks of transfusion, to prescribe blood components or decide whether other methods or drugs may be used to improve the patient's haemoglobin level. However, it is us midwives and nurses who are to make sure that we follow the guidelines when taking samples for blood transfusion and when administering blood products. It is by this method that we ensure the best quality and safety of blood transfusion to our patients.

Blood transfusion is a common procedure which is carried out on most of the wards. In fact in 2018, a total of 14,221 units of red blood cells were transfused to 3028 patients. Additionally, a total of 2994 fresh frozen plasma units and 1985 platelets units were transfused to 531 patients and 378 patients respectively. Patients can be transfused one or different blood components. This depends on the condition of the patient and/or if the patient is bleeding. Blood transfusion might be more frequent in some wards than in others. However, all of us health care professionals should be highly knowledgeable on the correct procedure to follow when transfusing blood products to try and eliminate any risks associated with

blood transfusion, and this can be achieved only if we follow the guideline diligently.

During blood transfusion, a number of errors can occur. Some of these are easily avoidable, and most often occur when we take things for granted and assume that such errors will never happen to us. Sometimes, we are so busy on the wards that unintentionally we disregard the safety of our patients. Most of the time the patients are unharmed, but the event could easily lead to serious complications, especially in transfusion medicine.

Patients are being punctured more than once, because blood samples received at the HBB are not taken properly and not in line with the guideline and thus not accepted by the laboratory. In fact in 2017, the HBB received 89 samples which were unlabelled. In 2018 this number increased to 139, registering an increase of more than 56% over the previous year. Other unacceptable samples are those which do not include sufficient information, are erroneously labelled and/or request forms which are not signed. These are a few errors which can easily be avoided. Due to these errors the patient might have to wait longer for transfusion, thus hindering the patient's health. In the past five years, there were also 45 reports of 'wrong blood in tube' at the HBB in Mater Dei Hospital. These errors were detected when laboratory scientist, compared the result to a previous blood group record, that is the 2<sup>nd</sup> sample received was not of the same blood group as previously recorded, meaning that one of the samples received was erroneously taken, and the identification details on the tube were not those of the patient from whom the blood sample was taken. Such errors cannot always be identified in the laboratory since not all patients would have a historical blood group on record. This could potentially lead to the transfusion of ABO incompatible blood, which the World Health Organisation classifies as a 'never event'.

Nurses and midwives are to vigilantly follow The Guideline to the Administration of Blood Components at every step of transfusion.

When taking a sample it is very important to ensure that the patient is wearing an ID bracelet and also **NOT to pre-label sample** tubes at the nursing station. Also the HCP is to positively identify the patient, write clearly the Name, Surname, ID card number directly on the sample tube of the patient exactly before or after drawing the sample. Labelling of sample tubes should always be done next to the patient.

Before collecting the blood product from the HBB, one is to ensure that the patient is ready to be transfused, i.e. the parameters have been checked and recorded on the Nurses Record – Blood Transfusion Form and that the patient has a patent intravenous access. The parameters are to be re checked 15 minutes from starting the transfusion and also at the end of transfusion (not more than 60 minutes post transfusion).

Once the blood is at the ward, the unit is to be



Practice Nurse  
Transfusion  
Medicine

checked and positively identified by two nurses next to the patient's bedside. Transfusion is to start immediately (not more than 30 minutes after blood is issued from the HBB) and the transfusion should be completed within 4 hours. For routine administration it is generally safe to administer red cell concentration between 90 and 120 minutes per unit. The administration line is to be changed after 2 units. No blood product is to be stored at the wards (medicine fridges are not suitable for storing of blood products) and is to be returned back to the HBB if the patient is not going to be transfused. The Blood Transfusion Compatibility Form is to be kept readily available during transfusion.

It is the responsibility of the HCP administering the blood products to explain to the patient the purpose of transfusion, to regularly observe, and to take the parameters of the patient during the transfusion episode. If an untoward reaction or event is observed during transfusion, the patient should be managed appropriately according to the clinical situation and it is the responsibility of the HCP administering the transfusion to report serious adverse reactions and events to the HBB.

At the end of the transfusion one is to ensure that all observations are recoded appropriately. Each transfusion is to be regarded as a new transfusion and all the checks and observations are to be done and repeated for every single unit.

There are a number of transfusion reactions which are described as "*an unintended response in donor or in patient associated with the collection or transfusion of blood or blood components that is fatal, life-threatening, disabling, incapacitating, or which results in, or prolongs, hospitalisation or morbidity*" (Article 3(h) of Directive 2002/98/EC). During transfusion the patients may experience a slight increase in temperature or mild pruritus. This can be treated and sometimes the unit can then be fully transfused. Some may experience more serious complications, which might even lead to a longer hospital stay and serious morbidity. Paula Bolton-Maggs and Mark Bellamy (2018) report that Transfusion-

associated circulatory overload (TACO), and other pulmonary complications remain the most commonly reported cause of major morbidity and death. They also stated that there was just a single ABO-incompatible red cell transfusion reported in 2017 in the UK, which was a clinical administration error, due to failure to complete the bedside check next to the patient. Staff must not assume that the bag in their hands is necessarily safe. The compatibility check is one of the essential steps in the bedside check (BSH Robinson et al. 2018, DH 2017).

Another important aspect in transfusion is the traceability and fating of every unit of blood component. This should be reported, documented and the data retained for at least 30 years (Directive 2005/61/EC). The HCPs who started transfusion to the patient are to duly complete the traceability form, sign it and send it back to the HBB so that the information is then stored electronically on the patient's file. The traceability of blood components remains a concern, with a number of HCPs failing to send the receipt back. If no information can be retrieved (ex: the patient could have been discharged) the units could not be fated as per their true fate.

Through the years I have seen the practice of blood transfusion improving and with time further safety measures and precautions were introduced in order to always improve the practice of blood transfusion. Communication is important at all stages in the transfusion process, i.e. during handover, between laboratory and clinical areas, between departments, and with the patient. Unambiguous communication is pivotal in every aspect of the transfusion process (SHOT, 2017). Knowing our patients and caring for them in a safe manner is crucial in health care. Irrelevant of whether one is taking a sample, transporting blood or identifying the unit, each step carries its risks and should be carried out with thoughtfulness and professionalism.



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## Child Car Safety

Since car crashes remain a leading cause of death for children, car safety for children remains a frequently revisited topic. The American Academy of Paediatrics recommends children remain in a rear-facing car safety seat for as long as possible, that is, until they reach the highest weight or height allowed by their seat<sup>1</sup>. This removes the age brackets given in the previous recommendations but rather focuses on the size of each individual child.

When a child rides a car rear-facing, the head, neck, and spine are all supported by the hard casing of the car safety seat, ensuring that the car seat itself absorbs most of the crash forces, protecting the child as much as possible. When children ride forward-facing, their bodies are restrained by the harness straps, but the head is thrown forward, possibly resulting in spine and head injuries, especially since their head is very large and heavy compared to the rest of their body size<sup>11</sup>.

The AAP recommends<sup>1</sup>:

- Infants and toddlers should ride in a rear-facing car safety seat as long as possible, until they reach the highest weight or height allowed by their seat. Most convertible seats have limits that will allow children to ride rear-facing for 2 years or more.
- Once they are facing forward, children should use a forward-facing car safety seat with a harness

for as long as possible, until they reach the height and weight limits for their seats. Many seats can accommodate children up to 30kg or more.

- When children exceed these limits, they should use a belt-positioning booster seat until the vehicle's lap and shoulder seat belt fits properly. This is often when they have reached at least 145cm in height and are 8 to 12 years old.
- When children are old enough and large enough to use the vehicle seat belt alone, they should always use lap and shoulder seat belts for optimal protection.
- All children younger than 13 years should be restrained in the rear seats of vehicles for optimal protection.

The most important thing is to use a car seat for every trip. An infant should never be carried on one's lap when riding in a vehicle<sup>9</sup>. The safest place for a child's seat is in the center of the back seat, as it is the furthest from active airbags, as well as to minimize risk of injury from a crash. Children should be kept on the back seat up to, and including, the age of 12. While, in the eventuality that the baby must be placed in the front passenger seat, then the airbag must be deactivated<sup>3</sup>. The use of side airbags in cars have significantly affected the safety of children in the car, as airbag deployment on a child can

## THE CAR SEAT STAGES

Age



### Rear-facing car seat

Kids under 2 are 75% less likely to be seriously injured in rear-facing seats. The AAP recommends rear-facing seats until toddlers reach the chair's size limit (usually ~35 lbs).

2



### Front-facing car seat

Once they've outgrown the rear-facing seat, it's time to flip the chair around. They should stay in a front-facing seat until at least age 5, or once they reach the next size limit.

5



### Booster seat

Starting around 5, kids should sit in a booster chair until the seat belt fits properly. For maximum safety, kids should be buckled in the backseat until age 12.

8



### Graduation!

Your kiddo can safely use the seat belt at 57 inches. The lap belt should cross the thighs, and the shoulder belt should lay against the chest, not the neck.

lead to serious injury or fatality, hence the central positioning and deactivation if possible. Using the right car safety seat or booster seat lowers the risk of death or serious injury by more than 70 percent<sup>2, 3</sup>.

In seats with an integral harness, the harness should be quite tight, with only one or two fingers fitting between the child's chest and the harness, and it should be checked every trip. The buckle should not rest over the child's tummy.

In seats with an impact shield (like in the image on the left), the child is held in place with an impact cushion rather than a harness, which is secured by the car's own seat belt.

Booster seats use a regular seatbelt, where the lap belt should go over the pelvic region, not the stomach; and the diagonal strap should rest on the shoulder, not the neck<sup>2</sup>.

According to the new regulations, cars must have ISOfix connectors to be able to use i-Size seats with the new European safety standards<sup>4</sup>. These will eventually replace the current regulations. In view of these changing safety regulations and the inability to determine if a car seat has been damaged in a previous car accident, it is NOT recommended to purchase second-hand used car seats<sup>4, 7</sup>.

At all costs, car seats or seatbelts should not be modified in any way as it may interfere with the mechanism and possibly cause further damage to the child or baby<sup>5</sup>. According to research in various countries, even though the use of child restraints was quite high, the level of misuse was also alarmingly high<sup>3, 6</sup>. Common mistakes included amongst others: loose straps, car seat not adequately secured, wrong car safety seat, infants and toddlers travelling forward-facing, diagonal belt behind the back or under the arm, bulky clothes, and misuse of safety belt locking clip and harness positioning clip<sup>3</sup>.

The lesser level of misuse was noted in parents who actively sought information on child safety and positioning in cars. With this in mind, the AAP recommends, in its policy statement for the 'safe transportation of newborns on hospital discharge', the provision of information and training with a demonstration for parents prior to discharge from hospital on the correct use of child car



seats with emphasis on common errors<sup>3</sup>. Key information needs to include: ensuring that the car seat is rear-facing, that it is tightly secured using lower anchors or seatbelts and that it is reclined correctly, while in accordance with the manufacturer's instructions<sup>3</sup>.

It is recommended that prospective parents are informed of the importance of car seat safety prior to delivery through antenatal visits with the midwife or obstetrician, parentcraft classes, as well as paediatrician; while demonstration and training should be included in the pre-discharge checklist before a newborn leaves the hospital<sup>4</sup>. With 100% correct use, thousands of injuries and hundreds

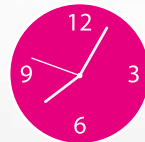
of deaths under the age of 4 can be prevented<sup>4</sup>; and, as health care professionals, it is our duty to correct deficiencies when possible, and the hospitals' duty to provide sound up-to-date information for its patients.

## References

1. American Academy of Paediatrics: <https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/AAP-Updates-Recommendations-on-Car-Seats-for-Children.aspx>
2. <https://www.childcarseats.org.uk/choosing-using/using-child-car-seats/>
3. Hoffman B, Gallardo A, Carlson K., *Unsafe from the Start: Serious Misuse of Car Safety Seats at Newborn Discharge*, The Journal of Paediatrics, April 2016, Vol 171: p48-54
4. <https://pediatrics.aappublications.org/content/pediatrics/104/4/986.full.pdf>
5. <https://www.nhs.uk/conditions/pregnancy-and-baby/child-car-seats-and-child-car-safety/>
6. Anund A et al., 2003, Swedish National Road Administration: Child safety in cars - Literature review
7. [https://www.nhtsa.gov/equipment/car-seats-and-booster-seats\(USA\)](https://www.nhtsa.gov/equipment/car-seats-and-booster-seats(USA))
8. McMurry TL, Arbogast KB, Sherwood CP, et al. Rear-facing versus forward-facing child restraints: an updated assessment. *Injury Prev*. Published Online First: 25 November 2017. DOI: 10.1136/injuryprev-2017-042512
9. <https://www.webmd.com/parenting/guide/baby-safety#1>
10. <https://www.webmd.com/baby/car-seat-features>
11. [https://carseat.org/Technical/tech\\_update.htm](https://carseat.org/Technical/tech_update.htm)
12. <https://www.mayoclinic.org/healthy-lifestyle/infant-and-toddler-health/in-depth/car-seat-safety/art-20043939>

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1. Cazzola et al (2010) 'Efficacy of a synbiotic supplementation in the prevention of common winter diseases in children: a randomized, double-blind, placebo-controlled pilot study.' *Therapeutic Advances in Respiratory Disease*. 0(0) 1-8





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lead up she said your body will know what to do, thinking she was crazy at the time and concerned I would tear because I wouldn't know when to push. However during the labour I did feel confident and listened to my body for the urge to push. I found the breathing techniques I had practised through hypnobirthing I was able to push and breath down my baby with each contraction. My mind and body worked harmoniously, my mind was relaxed, confident, knowing my body had the ability to birth my baby. Yes the pain was intense and to be honest I did lose confidence, during the last few pushes, trying to rush the labour with intense pushing, but with the support of my midwife and husband they helped me re-focus, build up my confidence to believe in myself and my amazing body. My midwife supported me through the last few surges slowing the labour down completely, my sons face emerged underwater, she captured his first breath as my husband birthed our son, he was very calm in the water, we could see him still breathing amniotic fluid before slowly rising him to the surface my husband handed me Sterling for skin to skin, we sat in the bath together and the midwife placed a warm towel over us,

the water was warm and I cradled Sterling in my arms with my husband wrapped around us, such a surreal feeling. We did delayed cord clamping, Sterlings cord pulsed for over an hour, longer than my active labour. I found the after labour contractions very uncomfortable and did not remember having them with my first born, the contractions lasted a few days. I had my placenta encapsulated and the cord dried as a keepsake. Once I had birthed the placenta I was absolutely ready to shower and freshen up, my husband sat in the bath with our son spending hours bonding skin to skin.

After giving birth naturally I feel empowered, our bodies are so very amazing to create life, nurture and sustain it. Delivering a gift you treasure so dear. When I look in the mirror rather than criticise, I look at my body and think wow how amazing you are! And thank my body for all the it has done for me! I am conscious about what I put into my body, eating foods that will nourish it! Help it heal, keep me strong and healthy. A woman's body was created to birth our children naturally, the benefits of natural birth are endless.

**Janine & Douglas Cannon**

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- Goffinet, F., Carayol, M., Foidart, J. M., Alexander, S., Uzan, S., Subtil, D. & PREMODA Study Group. (2006). Is planned vaginal delivery for breech presentation at term still an option? Results of an observational prospective survey in France and Belgium. *American journal of obstetrics and gynecology*, 194(4), 1002-1011.
- Hannah, M. E., Hannah, W. J., Hewson, S. A., Hodnett, E. D., Saigal, S., Willan, A. R., & Collaborative, T. B. T. (2000). Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. *The Lancet*, 356(9239), 1375-1383.
- Health and Social Care Information Centre (HSCIC). (2015). Hospital episode statistics - NHS maternity statistics, England (2013 - 2014). ( No. 2.0). England: HSCIC.
- Hemminki, E., & Merileinen, J. (1996). Long-term effects of caesarean sections: Ectopic pregnancies and placental problems. *American Journal of Obstetrics & Gynecology*, 174(5), 1569-1574.
- Hofmeyr, G.J., & Impey, L.W.M. (2006). *The management of breech presentation*. London: RCOG.
- Knight, M., Nair, M., Tuffnell, D., Kenyon, S., Shakespeare, J., Brocklehurst, P., & Kurinczuk, J.J. (eds) on behalf of MBRRACE-UK. (2016). Saving lives, improving mothers' care - surveillance of maternal deaths in the UK 2012-14 and lessons learned to inform maternity care from the UK and Ireland confidential enquiries into maternal deaths and morbidity 2009-14. (). National Perinatal Epidemiology Unit: University of Oxford: Oxford.
- Lancet. (2000). Caesarean section on the rise. *The Lancet*, 356(9243), 1697.
- Laws, P., & Sullivan, E. (2003). Australia's mothers and babies. ( No. Perinatal statistics series 16). Sydney: AIHW National Perinatal Statistics Unit.
- Lee, A. S. M., & Kirkman, M. (2008). Disciplinary discourses: rates of cesarean section explained by medicine, midwifery, and feminism. *Health Care for Women International*, 29(5), 448-467.
- Liu, S., Liston, R. M., Joseph, K. S., Heaman, M., Suave, R., & Kramer, M.S. for the Maternal Health Study Group of the Canadian Perinatal Surveillance System. (2007). Maternal mortality and severe morbidity associated with low-risk planned caesarean delivery versus planned vaginal delivery at term. *Canadian Medical Association Journal*, 176(4) doi:10.1503/cmaj.060870
- Louwen, F., Daviss, B. A., Johnson, K. C., & Reitter, A. (2017). Does breech delivery in an upright position instead of on the back improve outcomes and avoid cesareans?. *International Journal of Gynecology & Obstetrics*, 136(2), 151-161.
- Lyons, J., Pressey, T., Bartholomew, S., Liu, S., Liston, R. M., & Joseph, K. S. (2015). Delivery of breech presentation at term gestation in Canada, 2003–2011. *Obstetrics & Gynecology*, 125(5), 1153-1161.
- MacFarlane, A. J., Blondel, B., Mohangoo, A. D., Cuttini, M., Nijhuis, J., Novak, Z. & Euro-Peristat Scientific Committee. (2016). Wide differences in mode of delivery within Europe: risk-stratified analyses of aggregated routine data from the Euro-Peristat study. *BJOG: An International Journal of Obstetrics & Gynaecology*, 123(4), 559-568.
- MacLennan, A., Nelson, K. B., Henkins, G., & Speer, M. (2005). Who will deliver our grandchildren: Implications of cerebral palsy litigation? *Journal of American Medical Association*, 294(13), 1688-1690.
- Martin, J. A., Hamilton, B. E., Osterman, M. J., Curtin, S. C., & Matthews, T. J. (2015). Births: Final data for 2013. *National Vital Statistics Report*, 1-65.
- National Institute for Health and Care Excellence (2014). *Intrapartum care: care of healthy women and their babies during childbirth*. London: NICE.
- Savona-Ventura, C. (1993). Caesarean section in the Maltese Islands. *Medical history*, 37(1), 37-55.
- Savona-Ventura, C., & Grech, E. S. (1987). Maternal mortality in the Maltese Islands. *International Journal of Gynecology & Obstetrics*, 25(4), 283-290.
- Silver, R. M. (2012). Implications of the first caesarean: Perinatal and future reproductive health and subsequent caesareans, placenta issues, uterine rupture risk, morbidity and mortality. *Seminars in Perinatology*, 36(5), 315-323.
- Smith, G. C. S., Pell, J. P., & Bobbie, R. (2003). Caesarean section and risk of unexplained stillbirth in subsequent pregnancy. *The Lancet*, 362(9398), 1779-1784.
- Solheim, K. M., Esakoff, T. F., Little, S. E., Cheng, Y. W., Sparks, T. N., & Caughney, A. B. (2011). The effects of caesarean delivery rates on the future incidence of placenta praevia, placenta accreta, and maternal mortality. *The Journal of Maternal-Foetal and Neonatal Medicine*, 24(11), 1341-1345.
- Souza, J. P., Gulmezoglu, A. M., Lumbiganon, P., Laopaiboon, M., Carroli, G., Fawole, B., WHO Global Survey on Maternal and Perinatal Health Research Group. (2010). Caesarean section without medical indications is associated with an increased risk of adverse short-term maternal outcomes: The 2004-2008 WHO global survey on maternal and perinatal health. *BMC Medicine*, 8(71) doi:10.1186/1741-7015-8-71
- Tew, M. (1995). *Safer childbirth? A critical history of maternity care* (2nd edition ed.). London: Chapman and Hall.
- Toivonen, E., Palomäki, O., Huhtala, H., & Uotila, J. (2012). Selective vaginal breech delivery at term—still an option. *Acta obstetrica et gynecologica Scandinavica*, 91(10), 1177-1183.
- Vistad, I., Cvancarova, M., Hustad, B. L., & Henriksen, T. (2013). Vaginal breech delivery: results of a prospective registration study. *BMC pregnancy and childbirth*, 13(1), 153.
- Vlemmix, F., Bergenhenegouwen, L., Schaaf, J. M., Ensing, S., Rosman, A. N., Ravelli, A. C., ... & Kok, M. (2014). Term breech deliveries in the Netherlands: did the increased cesarean rate affect neonatal outcome? A population-based cohort study. *Acta obstetrica et gynecologica Scandinavica*, 93(9), 888-896.
- Walker, S. (2015). Turning breech upside down: upright breech birth. *MIDIRS Midwifery Digest*, 25(3), p325-330.
- Zammit, D., Buttigieg, S. M., & Caruana, M. (2016). Caesarean sections at Mater Dei Hospital, Malta. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, 206, e192.

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## M.A. in Bioethics

### Ethical Issues in Predisposing Genetic Testing for Breast Cancer

The aim of this dissertation is to examine the ethical issues involved in the predisposition genetic testing for breast cancer.

The Introduction will give light on the reality of breast cancer, focusing on statistics of breast cancer deaths in Europe. Recent local statistics pertaining to predisposition genetic testing for breast cancer will also be presented. A brief historical outline of the localisation of the BRCA1 and BRCA2 genes, the main two genes responsible for breast cancer susceptibility, will also be given.

The first chapter will focus on the decision-making process of eligible candidates for predisposition genetic testing, focusing on the possible pros and cons which may accompany such a decision. Since testing is not a means to satiate one's curiosity regarding genetic status, eligibility criteria will also be pointed out. In addition, the importance of genetic counselling will be emphasised accordingly. Are we, as human beings, trying to 'play God,' aiming to predict a future which might be better left unknown and untouched?

The following chapter will look into the available surveillance and management options following a positive predisposition test result. Focusing on both positive and adverse possible implications, a critical appraisal of both primary as well as secondary prevention strategies will be provided. In order to ascertain protection of autonomy and to respect the principles of beneficence as well

as non-maleficence, the role of genetic counsellors in providing education and support will also be stressed in this chapter.

The first part of the third chapter focuses on the disclosure of positive predisposition genetic information to family members. Since genetic test results are not exclusively relevant to the woman undergoing testing but also to her biological relatives, the possibly conflicting rights of both parties will be examined. The resulting medical quandary that may ensue will also be considered. This chapter will then briefly discuss the injustice of genetic discrimination.

Finally, the sensitive issue of predisposition genetic testing in minors will be thoroughly scrutinized, emphasising the importance of protecting their best interests as much as possible.

Owing to their incapability of providing or withholding consent pertaining to their own predisposition genetic testing, minors are in a vulnerable state, relying on surrogates to make decisions on their behalf. Should decision-making concerning testing be suspended, leaving it to the discretion of minors once they reach age of majority?

The Conclusion will point out some final considerations, identify recommendations for future research and practice.

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### The Ethical and Regulatory Aspects of Umbilical Cord Blood Banking

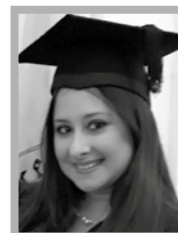
During the past thirty years, since the first efficacious umbilical cord blood transplantation in 1988, huge advances have been made in this field. The perception of cord blood has changed dramatically, namely from "biological waste" to a valuable resource of huge potential. However, one must acknowledge that the need to distinguish between the verified uses of cord blood transplantation and the hype created by the potential future uses must be clearly outlined. This change observed in the area of cord blood banking, has inevitably brought with it the need to collect and adequately store this resource. Public and private cord blood banks have since been established worldwide with the aim to provide this service. The main difference between the two banks is that public banks rely on free cord blood donation whilst private banks involve remunerated storage of cord blood for future personal or familial use only.

Undoubtedly, the field of cord blood banking gives rise to numerous ethical challenges. The management

of a biological resource by for-profit companies is at the centre of such ethical concerns. The ethical principles relevant to the area of cord blood banking will be discussed in the dissertation. Moreover, the need for standardization and regulation in cord blood banking is of paramount importance in order to ensure that the cord blood units are of high quality and fit for transplantation. Ultimately, established national and international legal frameworks are required in order to prevent cord blood exploitation, guarantee fair access to cord blood units in public banking as well as ensure appropriate regulation of the private market of cord blood banking. The Opinions of the National and European Bioethics Committees as well as the various European regulatory frameworks will be outlined in the dissertation.

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BSc (Hons) (Melit.) Midwifery, Pg.Dip Nutrition and Dietetics, M.A. in Bioethics.



## “Ethical Considerations in Breastfeeding Promotion”

Breastfeeding is a practice that is highly recommended by many acclaimed international sources for the multitude of infant health benefits, as well as for maternal and economic benefits. Promotion of this has vastly increased, and hospitals have become or are striving to become breastfeeding friendly. Many mothers are greatly motivated to breastfeed and intention is high, yet breastfeeding rates remain low, and have not improved. While initiation rates are promising, yet these rates dwindle, with discouraging figures for continued and exclusive breastfeeding, well below those proposed by WHO and others.

Efforts have increased worldwide to reverse this let-down, and many policies have been reviewed and have amended or introduced new guidelines. Many policies acknowledge that the decision to breastfeed and the

ability to carry this out successfully depend on a series of complex factors, and that the wider community needs to welcome and support breastfeeding.

Education must also be ethical and respect the mother's dignity, increasing her self-worth and self-efficacy, and diminishing feelings of guilt and concern over the need to be a “good” mother

Education is a vital tool in this regard. However, education is not just essential for the mother, but for health professionals and for the whole of society. In addition, education must not only focus on the benefits of breastfeeding, but needs to address personal, cultural, moral and structural constraints.



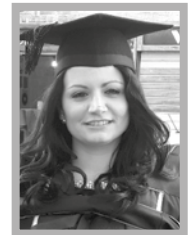
**Marie Louise Bugeja,**

SRN,, SCM,, MA Bioethics (Melit); PGDip Systemic Family Psychotherapy

## The Ethical Aspects of Postnatal Depression

Through a systematic review of literature, this research project explores the ethical aspect of postnatal depression focusing on the diagnostic and managerial aspects of this illness. The first year is the most sensitive time where postpartum women are at the greatest risk of developing such illness; with an estimate of seven to fifteen percent of women suffering from postnatal depression. Postnatal depression does not only effect the new mother, but can recur in subsequent pregnancies,

while effecting the child and other siblings, fathers and society at large. Thus, this review of literature emerged the importance of appropriate and effective screening and diagnoses of such illness, with the safest route of treatment being administered, while keeping in mind the family dynamics and safety.



**Kylie Meilak**

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## Posthumous Reproduction – Ethical and Legal Issues

This dissertation seeks to explore the numerous ethical and legal issues which are associated with posthumous reproduction. Its main aim is to demonstrate that due to the complex ethical and legal issues that are involved, which predominantly impact the deceased man and the posthumously conceived child, the local legislation regulating assisted reproductive technologies should not be liberalized to introduce posthumous reproduction. Currently, amendments to the Embryo Protection Act (EPA, 2012) are being proposed to widen access to assisted reproductive technology and to introduce other assisted reproductive techniques which presently are legally forbidden, including gamete donation, embryo freezing and surrogacy. Introducing these assisted reproductive techniques within the EPA could act as a catalyst to the introduction of posthumous reproduction. Therefore, this dissertation aims to demonstrate that although advances in reproductive technology make posthumous reproduction a possibility, the multiple ethical and legal issues involved demand that extreme caution

is exercised when requests are made for posthumous use or retrieval of gametes. The conclusion drawn is that in countries where posthumous reproduction is already practised, it should only be considered if the deceased man had provided clear disposition instructions authorising posthumous use of his gametes by his surviving spouse or partner and if the welfare and best interests of the posthumously conceived children are guaranteed and promoted through appropriate legislation. The legal landscape surrounding the practice of posthumous reproduction and its regulation demonstrates a lack of homogeneity both within European countries and outside European countries, which enhances the phenomenon of cross-border reproduction. Irrespective of whether a country's legislation governing posthumous reproduction is liberal or restrictive, the emotional welfare and financial support of the posthumously conceived child should remain of supreme concern.



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(B.Sc Midwifery, MA Bioethics)



## Introduction

Advances in assisted reproductive technology (ART) have made it increasingly possible for couples experiencing fertility problems to become parents. Whereas in the past, the possible achievements of assisted reproductive technology were unheard of, its extensive use has led to new applications of the technology, such as posthumous reproduction. Posthumous reproduction can be defined as the process which allows the creation of a child using the gametes of a dead human being.<sup>1</sup> The use of assisted reproductive technologies leads to posthumous reproduction in two principal ways.

The first method involves the use of gametes of dead individuals, which can be extracted either during the individual's life, whether in the competent or incompetent state, or following the individual's death.<sup>2</sup> The second

method involves the creation of embryos prior to the death of at least one genetic parent, but embryo transfer, implantation, pregnancy and birth occur following the parent's death.<sup>3</sup> Posthumous birth has occurred naturally over the years, when a woman becomes pregnant but her husband dies before the birth of their offspring.<sup>4</sup> The creation of offspring by posthumous reproduction using ART, and naturally occurring posthumous birth lead to an identical outcome - that of children being born fatherless.<sup>5</sup> However, whereas being born fatherless is an uncontrollable and undesired outcome in the latter instance, the creation of fatherless children through the use of assisted reproductive technology for posthumous reproduction is predominantly an intended, predictable act.

## Post-Script

This dissertation was finalised and submitted to the Faculty of Theology when discussions of the Government's proposed amendments to the Embryo Protection Act (2012) were still ongoing. Since the Government's proposed amendments to the EPA (2012) passed through and received approval by Parliament on June 19, 2018,<sup>6</sup> this brief post-script was necessary to demonstrate in which contexts posthumous reproduction can be legally practised in Malta.

Paragraph 2 of article 4 of the EPA (2012) had already conditionally accepted the posthumous use of embryos through donation when "after the fertilisation of the egg cells but before the implantation of the fertilised embryos into the womb has taken place, death of the woman ensues...".<sup>7</sup> Hence, embryos created from the oocytes of a woman who dies prior to having the created embryos transferred to her uterus for implantation, can be donated by the Embryo Protection Authority to other prospective parents.

Fertilisation using the gametes of deceased individuals was forbidden by local legislation. However, since the local legalisation and introduction of gamete donation, donated sperm and ova can still be used following the death of the donor, as elucidated in article 12 of the Embryo Protection (Amendment) Act (2018).<sup>8</sup> Additionally, article 7 of the EPA (2018) states

that sperm cells can only be cryopreserved and stored during the lifetime of the individual from whom they originate, meaning that any frozen sperm cells should be discarded following the death of their progenitors.<sup>9</sup> Moreover, oocytes may remain frozen in storage up to the maximum permissible age for fertilisation,<sup>10</sup> which has in the amended legislation been increased from less than 43 years of age to 48 years of age,<sup>11</sup> unless the woman dies prior to fertilisation of her oocytes, in which scenario the cryopreserved oocytes have to be discarded. Finally, article 7 of the amended legislation forbids oocyte retrieval from deceased women to commence oocyte cryopreservation.<sup>12</sup> However, the same article makes no reference to retrieval of sperm for cryopreservation from deceased men.<sup>13</sup>

Therefore, the only instances where posthumous reproduction is legally permissible by the Embryo Protection Act (2018) include the use of embryos whose progenitor of oocytes had died prior to the embryos being transferred to her uterus, and in scenarios involving donated sperm and donated oocytes whose donor had died before the donated gametes had been used in the creation of embryos. In conclusion, the legal introduction of posthumous reproduction locally does not abolish the numerous ethical concerns and legal issues that are intrinsically associated with it.

## References

1. Browne Lewis, *The Ethical and Legal Consequences of Posthumous Reproduction: Arrogance, Avarice and Anguish*, ed. Sheila A.M. McLean (Oxon: Routledge, 2017), i.
2. Cynthia E. Frutchman, "Tales from the Crib: Posthumous Reproduction and ART," *Whittier Law Review* 33, no. 2 (Winter 2012): 313.
3. *Ibid.*
4. John A. Robertson, "Posthumous Reproduction," *Indiana Law Journal* 69, no. 4 (Fall 1994): 1027.
5. Browne Lewis, "Introduction," in *The Ethical and Legal Consequences of Posthumous Reproduction: Arrogance, Avarice and Anguish*, ed. Sheila A. M. McLean (Oxon: Routledge, 2017), 1.
6. The Times of Malta, "Parliament Approves Controversial Amendments to Embryo Protection Law," Times of Malta, June 19, 2018, accessed August 10, 2018, <https://www.timesofmalta.com/articles/view/20180619/local/parliament-approves-controversial-amendments-to-embryo-protection-law.682227>
7. Embryo Protection Act, December 4, 2012, chap. 524, accessed October 24, 2017, [www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18](http://www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18)
8. Embryo Protection (Amendment) Act, June 21, 2018, chap. 524, accessed October 19, 2018, [www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18](http://www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18)
9. *Ibid.*
10. *Ibid.*
11. Max Dingli, "Embryo Freezing and Gamete Donation: Malta's Laws on Assisted Reproduction Have Just Changed, And Here's What That Means," *lovinmalta*, accessed October 19, 2018, <https://lovinmalta.com/lifestyle/health/embryo-freezing-and-gamete-donation-maltas-laws-on-assisted-reproduction-have-just-changed-and-heres-what-that-means>
12. Embryo Protection (Amendment) Act, June 21, 2018, chap. 524, accessed October 19, 2018, [www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18](http://www.justiceservices.gov.mt/LOM.aspx?pageid=27&mode=chrono&p=18)
13. *Ibid.*

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