

Malta Midwives' Journal

The Stork



Malta Midwives Association

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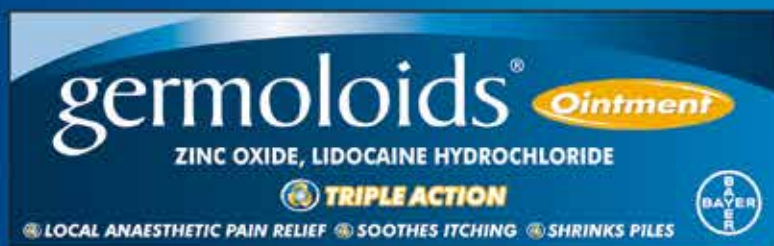
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Editorial

Dear Member,

A new year always brings with it hopes and new ideas. I am pleased to say that once again this edition has extra pages with the aim to keep midwives informed and abreast of developments that may be of interest to them.

In a changing world, midwives need to be open to new realities and adapt to change since midwifery roles have developed and expanded considerably over the years. Midwives today work in ways that extend far beyond the expectations of a midwife twenty years ago. Supporting midwives to rise to new challenges is the responsibility of both education and service providers. The relationship between education and practice needs to move in parallel with each other, in order to ensure that midwifery practices are evidence informed. Utilizing best evidence is essential for delivering safe, effective and person-centred healthcare. Achieving this requires excellence in research quality and partnership between university and clinical services. Maltese midwives must be ambitious in building on the expertise in midwifery research, to achieve aspiration for midwifery practice in Malta. Furthermore, the introduction of evaluation and monitoring of the quality of the learning and practice environment and its relationship with the quality of care will identify more/new areas for improvement.

As the Association maps out its future, this edition portrays an article which marks 100 years of midwifery education. Furthermore, a short biography by Guiseppina Sghendo who practised midwifery independently in the early 1900 is of historical interest; as was the practice in those times. These two articles help us to understand the history of midwifery in Malta.

Our congratulations go to the eleven newly qualified midwives whose dissertation abstracts can be found in this publication.

For your diary, please take note on the coming Annual General Meeting on the 26th February, the Public Speaking Course and the Half Day Retreat for midwives and friends.

Finally, the Association would like to thank all those who have contributed to this publication. The editorial board is willing to consider any opinions and suggestions you may have. Those midwives who wish to give feedback on this publication are requested to contact the editorial board. We look forward to hearing from you.

Pauline Fenech

Forthcoming events

Royal College of Paediatrics and Child Health Annual Conference.
26th – 28th April 2016, Liverpool, UK
<http://www.rcpch.ac.uk/events/annual-conference>

Swedish Association of Midwives. NJF CONGRESS 2016.
May 12-14, 2016. Gothenburg, Sweden. <http://njfcongress.se/>

4th Global Conference. Women Deliver. 16-19 MAY 2016
COPENHAGEN, DENMARK <http://wd2016.org/>

2nd ICM Southern European Region Conference. Listening to women, thinking as
midwives. 26th – 28th May 2016, Tarragon Spain. [https://midwives2016.org/home/
welcome/](https://midwives2016.org/home/welcome/)

RCM Annual Conference. 19th – 20th October 2016,
Harrogate International Centre, UK <http://www.rcmconference.org.uk/>

5th EMA Education Conference, hosted by the Royal College of Midwives. Midwifery
education for the 21st century – innovations in education, practice and regulation.
2nd & 3rd December 2016, London,

31st Tirrenial Congress: ICM 2017. Midwives - Making a difference in the world.
18 -22 June 2017, Toronto, Canada. <http://www.midwives2017.org/>



Message from the President

Transforming Stumbling Blocks into Stepping Stones

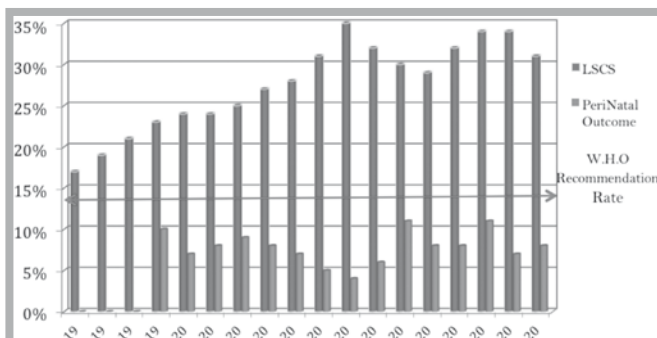
2016 is a crucial year for Midwifery in Malta; this year provides us with the golden opportunity to join forces and collectively transform the stumbling blocks into stepping stones to improve the maternity care in Malta and Gozo. There is full consensus around the world that the high rates of routine intervention during pregnancy and childbirth are posing detrimental effect on the mother, baby and their family, the organisation and the nation.



The current system of maternity care in Malta is a one size fits all approach, where all women whether categorised as low or high risk pregnancy are expected to book and give birth in an obstetric led unit in hospital even though for the vast majority of women, pregnancy and birth are a normal life event which requires no medical interventions.

The increase use of investigations, procedures, drugs, and restrictions has not paid off in healthier mothers and babies¹.

- The increase in operative deliveries has not been accompanied by measurable improvements in the outcome of the baby¹.
- No important association between Caesarean section rate and maternal and neonate mortality was observed when Caesarean section exceeded 10%²
- The national caesarean section rate is 32% "Caesarean Section rate in Malta is the highest, when compared to the EU 27 figures". (WHO 2013)³



National Caesarean Section Rate / Perinatal Mortality Rate 1996 – 2013

The Amnesty International argue the maternal morbidity and mortality rate is rising.⁴ While the physical causalities are increasing, what is not even on the screen is the psychological damage inflicted by a system that systematically undermines the women's self confidence and traumatize many. 'Listening to Mother II'⁵ National US Survey identify that in the first year after birth two out of three mothers reported depressive symptoms and in a follow up survey 9% met all the diagnostic criteria for childbirth-related posttraumatic stress disorder. Nearly 30% reported that their emotional wellbeing interfered with their ability to care for their babies, while five percent of the mother had considered suicide.

'Transforming Maternity Care⁶,' Corry 2010 highlight that: **All women deserve access to high quality, comprehensive, coordinated, and cost effective care in the communities where they live, with informed choice among appropriate caregivers, care practices, and birth settings.**



Strong scientific evidence by numerous established bodies continuously emphasis the major benefits in giving birth in Midwifery led Unit. Health care professionals should unite to give low risk women in Malta a safe choice based on scientific evidence now more than ever, keeping in mind the changes being planned for the coming year.

We need to continue to stress for a pathway based on the Vision of transformation on the fundamental principles of a Safe, Women centred care that respects the values, culture, choice and preferences within the context of optimal health outcomes. Effective and efficient care delivered in time equitable to all women that minimise overuse, underuse and misuse of care practices and services.

Women who planned birth in a midwifery unit had significantly fewer interventions, including substantially

fewer intrapartum caesarean sections, instrumental deliveries, episiotomies and more normal births than women who planned birth in an obstetric unit. There were no significant differences in adverse perinatal outcomes.

Midwifery led care was recognized as efficient, evidence based, safe and person centred by the European Strategy direction towards health 2020. Moreover it perfectly fits in line with the National Health System Strategy for Malta 2014 – 2020.

Colleagues the Malta Midwives Association welcome and invite all midwives to collaborate with us in our journey, striving to challenge the delivery of care in a system that follows practices, policies and procedures simply because that is the way they has been done.

We are determined to work in partnership with Mater Dei Hospital, policy makers, **ALL** Maltese stakeholders and the International Confederation of Midwives to transform the culture of maternity care toward physiology of birth.

A high-quality, high-value maternity care system is within reach, but requires unity, great effort, determination and perseverance, together we will continue to be part of the transformation, the truth touches all service users and service providers.

Whilst thanking all midwives for your valuable input to Midwifery in Malta looking forward to see you at the Annual General Meeting which is going to be held on the 26th February 2016. Together we will continue to build a better

future for expectant / new parents and their babies and a better future for midwives. We will persist with our share vision and continue to build a Culture of health that meets the holistic needs and positively impact on the wellbeing of the new mothers, babies and the family.

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- ³ National Obstetrics Information System 2014
- ⁴ Amnesty International Deadly Delivery: The Maternal health care crisis in the USA. London: Amnesty International; 2010
- ⁵ Declercq E, Sakala C, Corry MP, et al. Listening to Mothers II Report of the second national US survey of women's childbearing experiences, New York: Childbirth Connection 2006
- ⁶ Corry MP 'Transforming Maternity Care,' 2010
- ⁷ Hamilton BE, Martin JA, Ventura SJ, Birth: preliminary data for 2009. National Vital statistics Rep 2010; 59(3) 1-29

Mary Buttigieg Said
President

Public Speaking



The course objective focuses on effective public speaking particularly dealing with the fear of speaking. It shows participants that public speaking is fun and easy. The course provides practice in both impromptu and prepared speeches and also addresses the important issue to "wake 'em up!" during presentations! Participants are introduced to the principles of adult education.

Another area which is discussed in these sessions is stage fright. This is a phenomenon that one must learn to control. Participants are encouraged to think of any presentation as a friendly conversation rather than a formal speech. Communication with confidence is the key.

Humour can be a useful tool in public speaking. So in these sessions participants are provided with guidelines on how to use humour in a presentation.

Sessions are conducted in groups of 10 to 12 persons

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Wed: 27th April
Wed: 4th May
Wed: 11th May
Wed: 18th May
Wed: 25th May
Wed: 1st June
Wed: 8th June

Time: 6.00pm – 8.30pm

Fee: Members 130 Euros

Non-Members 150 Euros

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Malta Midwives Association Annual General Meeting

26th February,
2016
18:00
Refreshments



Treasurer's Message

The year that has just ended was, yet again, another successful year. The Association experienced an increase in both Members as well as Associate Members. This is a good sign as it shows that although not all midwives can dedicate time to help out with the Association's activities, at least through membership, one is rendering support to those of us who offer of their time and services.

Regarding membership, allow me to remind you two things: one that the membership fee can be claimed from the CPD and that we introduced the bank transfer method, thus making it easier for us all to renew membership.



It was a good year also because a number of activities for both mothers as well as midwives were retained.

We held the usual Annual General meeting where members are given an overview of the Association's activities. Thank you for your participation. Midwives participated in 2 conferences: Early Neonatal Assessment Conference, and IVF conference. Also a half day seminar led by Professor C Savona Ventura and Dr.M. Cordina, a film and discussion on migration and a public speaking course all held at the association premises. Moreover we organised a visit to the Balzan Open Centre and a half day retreat during Lent

On the social front, midwives celebrated the usual Midwives Day but this time, for the first time, the activity was held also in Gozo. The social programme also included a picnic and a summer barbeque.

As for our clients, several couples benefitted from our services and there was a marked increase. In this regard, further investments were required: new chairs were bought to replace the ones that had been used for some time, a laptop and projector were installed in the second floor. This means that both floors can be used simultaneously. Moreover, a problem cropped up with regards to the tiling of the first floor hall but this has now been addressed.

On a final note, you may be interested in knowing that the Association is producing a set of vouchers which can be given as a gift. The vouchers will allow the holder to attend, for example, baby massage, pilates or parental skills sessions.

Once again I thank fellow committee members and those providing voluntary assistance as well as all midwives who duly pay their membership dues.

Doris Grima
Treasurer

Half Day With A Difference

Date: 14th March 2016

Time: 8.45am - 1.00pm

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Centenary Celebration of Midwifery Education at the University of Malta

The year 1915 has gone down in the history of Maltese midwifery as the year where Midwifery Education formally passed under the auspices of the University of Malta. Hence, 2015 marks 100 years since the official Midwifery Practice programme was inaugurated, following the passing of the Act that regulates midwifery studies in 1901.

The first legal enactment to organise midwifery in Malta dates back to the 17th century in 1624, however at that time there was no formal teaching of midwifery (Savona Ventura, 1997). The initial attempts to introduce midwifery teaching in Malta were made by Dr. Creni in the late 18th century (Savona Ventura, 1997). In 1802 Dr F. Buttigieg was appointed teacher of Obstetrics in the Women's hospital, to deliver lectures to medical students and to hold a separate class for midwives who were taught in the Maltese language (Cassar, 1978). However, education of midwives was inconsistent. In 1869 Dr Pisani reorganised the midwifery programme and introduced the teaching of both theory and practice. The course lasted 16 months. Dr Pisani also published the first Midwife's textbook in Maltese in 1883 (Cassar 1978).

More than a decade later Professor G. B. Schembri published two Midwifery textbooks in English and Maltese in 1896-7. He also formulated the Regulations for midwifery practice which were "subsequently legislated by a Government Notice in 1899" (Savona-Ventura, 1977, p.93). Midwives were consequently listed as a profession in the Health Act of 1901 (Rizzo Naudi, Midwifery International week speech, May, 5 2008). Midwifery activities and responsibilities were thus regulated by the First Sanitary Ordinance of 1901.

In 1915, 100 years ago, six midwives commenced a three year Midwifery education programme leading to a Diploma under the auspices of the University of Malta, the focus of our celebration. It is amazing to note how Midwifery education in Malta evolved since then given that the programme subsequently passed under the Department of Health, was discontinued and the school of midwifery reopened again in 1970 by Ms Elizabeth Thompson, with Ms. Mary Vella Bondin subsequently taking the lead.

It was on the personal initiative of Professor Rizzo Naudi, that Midwifery Education returned under the auspices of the University of Malta. The Midwifery school was joined with the Nursing school as one Division to develop courses on an academic level within the Institute of Health Care, University of Malta in 1988.

When we had our first PhD graduate, myself in 2008, we were academically strong enough to put forward our plans for midwifery education to be raised to a Division. I drafted a memorandum and with the support of my colleagues, sent in our request to become a Division separate from Nursing. The request was first approved by the IHC Board. Subsequently it was approved by Senate

on 28th April and endorsed by Council of the University of Malta on 4th June 2009. Within the same year Dr. Mary Carmen Spiteri successfully defended her Ph.D. thesis. We became a Department of Midwifery in 2010.

Today Midwifery education in Malta is avant garde to several European countries and this should do us proud. We are one of the few European countries which offer not only B.Sc. (Hons). Degree, in Midwifery but a Masters degree and we are also in a position to support PhD students. We can boast of a department where all its lecturers have either a PhD or are in the process of obtaining a PhD.

The Academics of our department have likewise excelled in their research, academia and international work concerning midwifery and the well being of women and infants. Two midwifery lecturers successfully defended their thesis this year. Dr Josephine Attard and Dr Rita Pace Parascandalo were also the main speakers during this celebration of midwifery. They are both building a name for themselves as experts in their respective areas

As for myself I am an elected board member of the International Confederation of Midwives, with a membership of over 500,000 midwives across the globe. I am also the ICM liaison person for Midwifery education, a temporary advisor for the World Health Organisation, (WHO) and have done consultancy work with UNFPA, with regards to the setting up of midwifery education and practice programmes and midwives Associations.

The ultimate goal of the midwifery profession on a global level is to work towards lowering the maternal mortality and morbidity rate and the neonatal and infant mortality rate. We need to remember that an estimated 289,000 women still die during pregnancy, childbirth and postpartum period each year. Additionally, nearly 2.6 million newborns are still-born each year and another 3 million infants die during the first months of life. (State of the World's Report, 2014). This global situation emphasises the importance of midwives under the leadership of the International Confederation of Midwives to increase its global commitment with regards midwifery education, regulation, research and to further strengthen the Midwives Associations.

According to the State of the World's Midwifery report: A woman's right to health (SoWMy, 2014), midwives when educated and regulated to international standards, have the competencies to deliver 87% of the essential care needed for women and new-borns (page 3, 5). We have come a long way since those six brave women who dared their own society by undertaking a programme at a University level, to study Midwifery, to save women's and neonates' lives in a male dominated university and society. These are our pioneers. We should take the example of these women and be proactive in our work, to take the lead and not to be afraid of moving on into unchartered waters. If the profession is to remain alive



in a changing world, it needs to evolve, adapt, change, and open itself to new realities. Midwives have been and will continue to be the advocates of parents and their families. Midwifery students are prepared for a midwifery career – to become midwifery practitioners who are accountable, ethical, proactive and responsive to the health care needs of the woman, her family, community and society.

This year our Masters and BSc graduates' dissertations focused on contemporary phenomena and included experiences of immigrant women of pregnancy and childbirth, intimate partners' violence in pregnancy, use of complimentary therapies during pregnancy and women's choices in childbirth, just to mention a few. These dissertations, their findings, and recommendations if implemented are full of promise that midwives can create a better future not only for the midwifery profession but for women, neonates, infants, children, fathers and families.

During the centenary celebration of midwifery education, Professor Maria Cordina spoke about Ms

Sghendo, her grandmother, a midwife who obtained a Diploma in Midwifery from the University of Malta almost a century ago. Professor Cordina thrilled the audience with her accounts and we were all inspired by Ms Sghendo's dedication to her profession and her support to women. I am sure that she has instilled a lot of enthusiasm and zeal among the many midwives present including the sixty student midwives who spoke for days about this experience.

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Dr Rita Borg Xuereb

Head of Dept. Midwifery
Faculty of Health Sciences
University of Malta

EMA call for action statement

Pregnant women and children first!

Call for action by European midwives to refugee crisis

The refugee crisis has reached dramatic proportions. Human suffering is immense; however the European parliament has yet to come with an adequate coordinated solution to this emergency. Of all refugees, pregnant women and infants are the most vulnerable group (notes 1). Reports in the media of births in trains, boats and train stations are just the tip of the iceberg (notes 2, 3, 4).

The evidence confirms what European midwives already know; all pregnant women need safe and respectful care during pregnancy, birth and the postnatal period [1-5]. Appropriate information for refugees on *how, where and when* to find midwifery care is a human right. This is non-negotiable.

European midwives (notes 5) are united in one voice and calling for action concerning these basic rights for all pregnant women, their infants and families by providing:

Free access to midwifery care during pregnancy, birth and postnatal period, including breastfeeding support.

Priority in safe housing and food.

Information that is understandable and readily available.

The thirty five members of the European Midwives Association, representing thirty one countries (notes 5) will provide this care and will support their governments to organise the provision of this care for all pregnant refugees in their respective countries.

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Notes

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- ² Birth on boats: <http://www.independent.co.uk/news/world/europe/refugee-crisis-pregnant-woman-rescued-from-sinking-boat-gives-birth-to-healthy-baby-at-sea-10492872.html>
- ³ Woman gives birth at railway station: <http://www.dailymail.co.uk/news/article-3220480/The-fight-Hope-Shelter-thousands-starving-refugees-wait-start-new-life-Europe-two-newborn-babies-born-migrant-couples-huddled-outside-Budapest-station.html>
- ⁴ Woman gives birth on train: <http://www.usnews.com/news/world/articles/2015/09/14/refugee-women-give-birth-on-way-to-europe-even-on-boats>
- ⁵ Members of EMA: <http://www.europeanmidwives.com/membership/members-map>

EMA General meeting, Bucharest,
Romania. 26th September 2015

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Giuseppina Sghendo – Il-Majjistra

Giuseppina Sghendo, née Sillato, was born in the late 1800 to a very wealthy family of merchants who lived in Cathedral Street, Sliema. She was the favourite daughter of her father Toninu who had envisaged her married off to an equally wealthy man who could keep her in the style that she was accustomed to. However, this was not to be, as Giuseppina a young woman who was 5 feet and 9 inches tall, fell in love with Giuseppe, a young man who was charming but of very modest means. When her father found out, he forbade her any association with this young man. She, however, decided to defy her father, left home and went to live with the family of this man. She proceeded to get married without her father's consent and blessing.

Her father was deeply saddened by this, but once the deed was done, he accepted her back into the fold. Is-Sur Toninu Sillato was not a man to be disobeyed and her affront to his authority could not go unpunished. He made this very clear to her. He would disinherit her, yet he would help Giuseppina to further her education, as he believed that her husband would not be able to support her and a family. This is how she came to be enrolled in the Practical Midwifery School of the Malta University.

She followed her course of studies diligently for 24 months. Her text books, indicate that the course of studies had a very good academic basis. The text book entitled *A Manual of Midwifery*, authored by Thomas Watts Eden (Third Edition, 1911), published by J&A Churchill, London, was an excellent text containing 339 illustrations. Of particular interest were the text books written in the Maltese language for Midwifery students. *Tagħlim għal L-istudenti Ta' L-Iskola Tal-Kwiebel Ta' L-Isptar Ċentrali*, authored by Prof G.B. Schembri and printed in Malta at Stamperija Tal Gvern in 1897, is of particular interest not only for its content but from a linguistic point of view. The orthography was rather different to that which is in use today. Some examples include 'Chif (how), Il-kafas tas-sider (rib cage), custilja (rib). Another text book written in the same manner was 'Il-Ctieb ta L'Infermier; Lezionijit Mgħotia Lil Infermieri ta Li Sptar' written by Dr J.S. Galizia in 1904. Giuseppina also possessed a First Aid book in Maltese: 'L-Euuel Ghajnunna Għal Dauc li Icorru'. It contained a Forward (Kabel Xejn) and an Index (Urrej) illustrating that it had 'Hdax it-Taksima' (eleven chapters).

Coming from a privileged background, Giuseppina was well educated before entering the Midwifery course. Her primary language was Italian which can be seen from the annotations on her books which she wrote in Italian. This helped her to do well in her midwifery studies. Giuseppina successfully followed her course of studies and graduated on the 16th February 1920



'after having regularly and diligently attended for a period of twenty four months, the special course of clinical lectures of this maternity and the requisite practical training, including not less than twenty-four confinements... was duly admitted to the prescribed examinations in theory and practice... Having duly passed those examinations... declared to be entitled to practice as a fully qualified Practical Midwife.'

Giuseppina did so well in her studies that she was encouraged to take up medical studies. She apparently started studying medicine, but sometime during her first year she became pregnant with her first child,

Joseph, shortly followed by Tony, and had to terminate her studies.

Giuseppina had a total of 9 children, including a set of twins, who died shortly after childbirth. Following the passing away of the twins, she took in a neonate whose mother had passed away during childbirth and raised her as one of her own until her teens. She worked throughout her life not only to support her family but also because she loved and believed in her work.

Her household was managed by 2 live in maids initially, and later on just one, Mannani. Eventually her eldest daughter, Lina, took over. Giuseppina would not do any chores, such as cooking or cleaning. She would however dictate what was needed, for example, the menu, which by today's standards is considered to be healthy. She advocated the eating of fruit and vegetables and kept red meat to a minimum, preferring to opt for chicken and fish. Portion sizes were also controlled. She insisted on small portions. She did however, have a sweet tooth. Another aspect of her professional life which was engrained in her was personal hygiene and most especially hand washing, which she insisted upon.

Giuseppina practised her profession as an autonomous and independent midwife. There were no shifts, no sick leave, no days off. She was on call 24hours a day, every day. She would be away from her home for days at a time when necessary, especially when she assisted difficult births. When she was called out at night, many a time, she would have an escort who would either be a male member of the household or a police man. If the distance was far, she would be collected by the means of transport available, in the earlier years this would have been a horse drawn cart.

Nanna's clients were families rather than individuals. As women would tend to have many children, the same women would ask for her midwifery service. This also provided her with the opportunity to know the history of the mother and also of the family in her care.

As soon as it was known that the woman was pregnant and a due date was estimated, Giuseppina was informed and booked. She would be resorted to throughout the

pregnancy if the need arose. Her involvement increased toward the end. She apparently also kept meticulous records relating to maternal and child health as well as pending payment documents. On her retirement she unfortunately disposed of all these.

Nanna was fiercely protective of the women in her care. She was their confidant and they trusted her explicitly. She would confront any man who was not taking proper care of his wife and put him on the straight and narrow. The medics were only too happy to leave matters in her hands as she had earned their respect. They had no doubt that if their intervention was necessary she would call them, as it would be in the best interest of mother and child which was always her top priority. There were times when she disagreed with medics but matters were always resolved professionally.

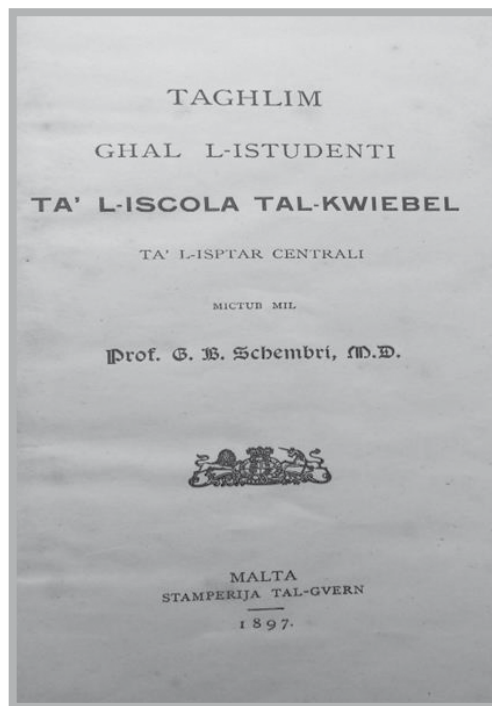
It was common place for the medics in the area to come to nanna's home and have a word with Mrs Sghendo, il-Majjistra, about patients in their care. Her home was turned into an informal meeting place for doctors, clients and members of the clergy.

Women, at times manage to get pregnant when their husband is not around and it was no different in nanna's time. The women used to confide in nanna and she would have to find a way to sort everything out with the husband being none the wiser. She would come up with a convincing reason as to why the baby decided to be born when he did and not when he was expected. She never betrayed anyone's trust!

Many of Nanna's clients were wealthy families, some of noble lineage. When there was a birth involving twins the identification of the 'primo genito' was an issue, as wealth or title and wealth had to be passed on to the eldest son. She also carried significant responsibility in this regard and was the one to identify the first born.

During the second-world-war, the Apap Bologna family transferred my grandmother and her family to Mdina. They were provided with lodging and all the necessary to live comfortably in Mdina where nanna assisted the women of the family and other women in the vicinity throughout their pregnancy, delivery and post-partum care.

Nanna led a very interesting and colourful life. She was a formidable woman of unwavering principle and always chose to do what was right no matter the cost. Giuseppina loved her profession, took her responsibilities very seriously and was not one to be crossed. She was very highly protective of the mothers in her care and unwavering in her commitment to the neonates. She worked hard and earned the respect of all who knew her. She was very proud to be a midwife. Interestingly, she had a devotion to San Espedito, with his statute looming over the front door, as he can be reconciled being



patron saint of urgent causes. He 'defeats procrastination, ensures rapid solutions to problems, and promises an end to delays'.

Giuseppina promised herself that she would not retire before delivering her last grandchild which she did at age 63. Yet fate had more in store for her. One of her daughters, Frances, married at a late age. Notwithstanding, sometime later Frances started to notice changes in her body and went to her doctor who told her that she definitely was not pregnant and that she was experiencing a false pregnancy. Nanna was of a different opinion altogether and warned her daughter to take due care. Frances, deeming herself to be a modern woman with a career, did not heed what she termed to be a mother's emotional advice.

Frances continued to grow in size, yet the doctor was still convinced that there was 'nothing there' and even prepared her husband to expect the worst.

One Carnival weekend in February of 1968 Frances started to experience what felt like contractions at night. She attempted to awaken her husband to assist her but he told her to go back to sleep as it would pass. Frances would not relent and made him call her mother who heard her cries for help over the phone and was over with her bag, which had been prepared for what she knew as the inevitable, immediately. Nanna delivered me at home 4am on the 25th of February 1968 at the age of 78.

Giuseppina Sghendo passed away at the venerable age of 86 years. Loving, caring, gentleness, kindness, and softness of heart were her overarching qualities, however, they did not translate into mollycoddling or spoiling of her children and grandchildren. She was there for them during their own difficulties. Her being a 'working mother' was never an issue. One did what one had to do to succeed and move on. This is the principle that she instilled in all her children and grandchildren. The passion with which she lived her life stayed with her till the very end. She was a champion for women during difficult times. Her legacy was not in material wealth but in the manner she lived her life. Her life was governed by principles and discipline, commitment to women and neonates and the choice of right over wrong. A number of those babies which she delivered are still around today, most are grandparents or great grandparents who still speak about her fondly, some from the stories related to them by their own mothers, while others knew her personally. This was her wealth, this was her legacy.

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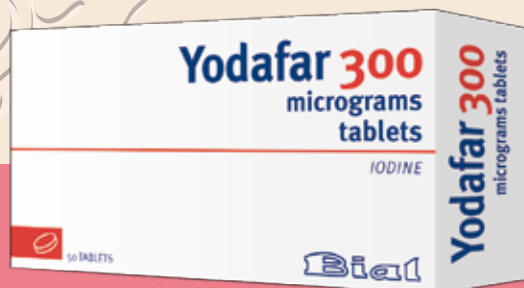


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The use of excessive doses or for long periods of iodides may produce hyperplasia of the thyroid gland, thyroid adenoma, goitre and serious hypothyroidism.

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Safely Preventing the First Caesarean Section

Last November, whilst everyone was heading to London for the well renowned exceptional sales, a group of midwives attended a conference on how to safely prevent the first caesarean section, organised by the Royal Society of Medicine.

Various health care professionals presented recent studies and findings on the matter, and as much as it is desirable, it is impossible to mention all that was discussed. This article will focus on a recent suggestion to structurally audit caesarean sections (CS) in order to identify those groups in the obstetric population that contribute substantially to the high rates and for which focused interventions may bring about change.

High CS rates are not only costly but associated with significant perinatal and maternal morbidity and mortality. The World Health Organisation (WHO) states that CS rates should be between 10% and 15% (WHO, 2005). It has been reported that if the CS rates were reduced to 15% there would be a worldwide cost savings of around 2.13 billion Euros (Gibbons et al., 2010). However, others argue that reasons for CS should be assessed to evaluate whether high rates are appropriate or not, rather than focusing on the rates themselves (Robson et al., 2001). Rates can be affected by the population of patients served and the expertise of the attending clinician.

One of the most important decisions in obstetrics is the decision to end a pregnancy before spontaneous labour has started. This may be for a maternal, or more commonly, a foetal reason and it may be by induction of labour or a pre-labour caesarean delivery. Likewise, if labour has started spontaneously or has been induced, it may sometimes be necessary to perform a caesarean delivery for either a foetal reason or lack of progress in labour. There is no standardized classification or methodology used for analysing the outcome and the results of these decisions (Robson, 1997). It is therefore difficult to compare results over time in one organization or between different organizations. There is often little consensus on the way we diagnose labour, the methods we use to accelerate labour, the way we monitor the foetus during labour, the indications and methods for inducing labour, or the indications for caesarean delivery.

The CS debate continues to be amongst the most controversial issues in obstetrics and gynaecology. The debate has focused on what the "ideal" CS rate (overall) should be against a background of increasing CS rates worldwide. The Robson Ten group Classification System (RTCGS) is a structured auditing method that has been developed to monitor CS rates in various European countries. This classification

system is a simple method providing a common starting point for further detailed analysis within which all perinatal events and outcomes can be measured and compared (Robson, Murphy and Byrne, 2015). This ten-category classification system is based on the following obstetric concepts: category of pregnancy; previous obstetric record; course of labour and delivery; and gestational age. The system is said to be easily reproducible and is not dependent on whether the population is at low or high risk (Robson et al, 2001). Various studies, in different countries that have taken up this classification system have shown that the RTGCS is a feasible tool for auditing CS rates and helped identify the patient groups warranting interventions thus reducing the high CS rates (Makhanya, Govender and Moodley, 2015).

The RTGCS warrant a realistic picture of the quality of care. The real marker of quality care is not what the CS rate is but whether each individual delivery unit knows what it is, why, the implications and whether they feel it is appropriate? This classification system provides the quality assurance needed in labour and delivery. The method must be simple and consistent, and be of universal value. It needs to be clinically relevant, robust, and prospective, and must incorporate epidemiological variables (Robson, Murphy and Byrne, 2015). This system requires the routine data collection and reliable patient records, which is the responsibility of all health care professionals.

Interpretation of the classification can be easily taught. The standard table can provide much insight into the philosophy of care in the population of women studied and also provide information on data quality. With standardization of audit of events and outcomes, any differences in either sizes of groups, events or outcomes can be explained only by poor data collection, significant epidemiological variables, or differences in practice. In April 2015, WHO proposed that the RTGCS to be used





The 10 Groups Classification System

Group	Description
1	Nulliparous, single cephalic, ≥ 37 weeks, spontaneous labour
2	Nulliparous, single cephalic, ≥ 37 weeks, induced or caesarean before labour
3	Multiparous (excluding previous caesareans), single cephalic, ≥ 37 weeks, spontaneous labour
4	Multiparous (excluding previous caesareans), single cephalic, ≥ 37 weeks, induced or caesarean before labour
5	Previous caesarean, single cephalic ≥ 37 weeks
6	All nulliparous breeches
7	All multiparous breeches (including previous caesareans)
8	All multiple pregnancies (including previous caesareans)
9	All abnormal lies (including previous caesareans)
10	All single cephalic, ≤ 36 weeks (including previous caesareans)

as a global standard for assessing, monitoring, and comparing caesarean delivery rates within and between healthcare facilities.

The purpose of this article is to introduce the RTGCS and how these can be possibly used as a common starting point to routinely audit induction of labour and caesarean deliveries. However, other information including perinatal and maternal morbidity and mortality is required to ensure overall quality of care. The challenges of implementing the system include; explaining the philosophy of this new way of thinking and encouraging the importance of routine, standardized audit of each delivery unit. The emphasis in current obstetrics of practicing evidence-based medicine is appropriate, but continually collecting the evidence is as important towards achieving quality of care and must be acknowledged and encouraged. Ideally this should result in an annual clinical report. The benefits of the RTGC system are that it could be used to audit all perinatal outcome globally. This will allow all clinicians to learn from each other and on the basis of their results examine their practice. The representative numbers gathered from these databases will inevitably help to improve the quality of perinatal care.

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Gestational Diabetes Mellitus

What is Gestational diabetes?

Gestational diabetes mellitus (GDM) has been defined by several authors as an episode during pregnancy, during which glucose intolerance and high blood sugar is formed or first recognized, and which can be of variable severity (Kaaya and Ronnema, 2009; NICE, 2008). Particularly during the third trimester of pregnancy, an increase in insulin resistance is usually observed, in order to meet the glucose demands of the developing foetus. This is affected by placental hormones lactogen and cortisol, which are both insulin antagonists; as a result women develop impaired glucose tolerance resulting in gestational diabetes (Holmes and Baker, 2006).

Several studies have attempted to discover the percentage of GDM occurrence in pregnancies worldwide, however, it has been noted that such percentage varies according to the ethnicity of the population as well as the criteria used for diagnoses. As stated in Mulla *et al.* (2010), associated with a few symptoms whilst being one of the most common complications diagnosed during pregnancy, GDM occurs in 1% to 14% of pregnancies every year around the world. On the other hand, Cheung (2009) states that such incidence occurs between 2.2% to 8.8% of pregnancies, having a consistent higher incidence in certain populations such as: Hispanic, Black, indigenous Australian, Chinese, Native American, South or East Asian, Pacific Islander and Middle Eastern (Ali *et al.*, 2013). Additionally, Henderson and Macdonald (2004) state, that about 15% to 20% of women with gestational diabetes develop insulin-dependent diabetes later on in life.

Predisposing factors for Gestational diabetes

A variety of factors have been found to increase the risk of developing gestational diabetes mellitus. Nankervis *et al.* (2013) state that, both moderate and high non-modifiable risk factors are associated with GDM, where women with specific ethnicities as previously mentioned or a body mass index (BMI) of between 25 and 35 kg/m² solely, are at a moderate risk for Gestational Diabetes. On the other hand, women with previous GDM, polycystic ovarian syndrome, family history of type 2 diabetes mellitus, maternal age greater than 40 years, previous poor obstetric history, previously elevated blood glucose level, previous infants with macrosomia, BMI greater than 35kg/m² or women on medications such as corticosteroids and antipsychotic treatment, are all at a higher risk of developing GDM. Additionally, certain lifestyle related risk factors such as physical inactivity, having low-fibre high-glucose diets and excessive weight gain during pregnancy, can all be avoided.

How can Gestational diabetes be diagnosed?

In a position statement produced by the American Diabetes Association (2003) it is stated that the incidence of GDM in a pregnant woman should be assessed as early as the first antenatal visit. Additionally, it is stated that women with pre-existing high risk factors for GDM

should immediately undergo a glucose tolerance test. In fact, Kaaja and Ronnema (2009) state that in such cases an OGTT should be performed between the 12th and 16th week of pregnancy. Consequently, if the latter test results negative, they should then be retested between the 24th and 28th weeks of pregnancy. Diagnostic criteria of GDM do however vary throughout the world.

As observed in the International Association of Diabetes and Pregnancy Groups (IADPSG), universal screening for GDM is recommended. Moreover, a set of criteria in order to diagnose GDM had been proposed. As cited in Karagiannis *et al.* (2010), GDM is diagnosed if after performing a 75g OGTT (Oral Glucose Tolerance Test), at least one value of plasma glucose concentration is equal or more than 92mg/dl for fasting, 180mg/dl one-hour post glucose load and 153mg/dl after 2 hours of a glucose load.

On the other hand, the American Diabetes Association (2003) mentions a two-step approach in diagnosing GDM, where an initial plasma or serum glucose concentration 1 hour after a 50-g oral glucose load, also known as the glucose challenge test (GCT), is assessed. An OGTT should then be performed on the sample of women whose GCT value was exceeded.

Maternal and foetal health risks for Gestational diabetes

The pregnancy outcomes of a mother with GDM are very often worse than those of non-diabetic women. Gestational diabetes mellitus is known to have both short-term and long-term effects on both infants and their mothers.

Being the main long-term maternal effects of GDM, women with this condition are at a seven-fold risk of developing Type 2 Diabetes Mellitus later on in life, where cumulative incidence is higher within the first five years after post-partum (Kaaja and Ronnema, 2008). Additionally, Kim (2002) states that as much as up to 50% of pregnant women with gestational diabetes will develop type 2 diabetes within 10 years of the pregnancy.

The HAPO Study Cooperative Research Group (2008) states that a higher rate of preeclampsia and increased rates of caesarean sections are listed to the short-term effects of GDM. Additionally, adverse outcomes such as shoulder dystocia, large for gestational age (LGA) and macrosomic babies are also associated with GDM (Cheung, 2009). Consequently, Han *et al.* (2013) state that there is an increased incidence of cephalopelvic disproportion, perineal lacerations and uterine rupture, resulting from LGA and macrosomic babies.

On the other hand, similar long-term and short-term effects exist on the foetus. As previously mentioned macrosomic and large-for-gestational-age babies are at an increased risk of birth injuries such as shoulder dystocia, perinatal asphyxia, bone fractures and nerve palsies. Additionally, Kaaja and Ronnema (2009) mention hypoglycaemia and hyperbilirubinaemia as additional complications associated with GDM, which as



a result, increases the number of babies admitted to the neonatal intensive care unit (NICU). Moreover, as cited in Han *et al.* (2013), babies born to women with GDM are more prone to being overweight or obese at any age during their lives and being at a higher risk of developing Type 1 or Type 2 diabetes later on in life.

In view of the latter universal effects of GDM, in order to prevent such consequences, one should emphasize on the importance of early diagnosis and education of pregnant women at increased risk of GDM, whilst providing adequate nutritional advice in order to prevent it.

Management of Gestational diabetes and the importance on nutritional advice

Management of GDM can be done in several ways including; diet, exercise, self blood glucose monitoring and insulin. The diet should provide adequate amounts of nutrients, limiting the carbohydrate intake to 40% of the total caloric intake in a day. Carbohydrates should be mainly based on low glycaemic index food which together with moderate regular exercise will minimize the need for insulin therapy (Ross, 2006). When glycaemic goals are out of control and cannot be reached by a controlled diet, insulin therapy is needed.

Following the risk factors to the mother and her baby, most of which have been mentioned above, one cannot ignore the importance of providing nutritional advice to all pregnant women, particularly to those women at a higher risk of developing GDM and which is preferably provided by skilled professionals (Kaaja and Ronnema, 2009). As stated in Piirainen *et al.* (2006) there is a dearth of relevant data and studies on the relationship between diet and GDM. The risk factors mentioned should put more light on the importance for research to focus on the advantages for providing nutrition advice from the very early stage of foetal life. Additionally, as cited in Han *et al.* (2013), even though it is a widely known fact that diet therapy is very effective in preventing and managing gestational diabetes mellitus, evidence is still lacking with regards to specific nutritional approaches and nutrient distribution. Ideally, a pregnant woman should follow a balanced diet which includes adequate amount of nutrients for her own health and the needs of the growing foetus, simultaneously minimizing excessive weight gain.

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Gestational Diabetes Dietary Guidelines																								
Principles	Suggestions	Action Plan																						
<p>Gain weight gradually</p> <p>Weekly weight gain goal: (circle) + 0.5 lb + 0.75 lb + 1.0 lb</p>	<p>Pre-pregnancy Body weight</p> <p>Normal 25-35 lbs. Underweight 28-40 lbs. Overweight 15-25 lbs.</p> <p>First 3 months... + 2 to 4 lbs Next 6 months... + 1 lb per week</p>	<p>Sit at a table for meals and try not to multi-task while eating.</p> <p>Enjoy <i>planned</i> meals and snacks.</p> <p>Any sudden large weight gain should be reported to your doctor.</p>																						
<p>Combine food groups for blood sugar control</p> <p>Carbohydrate → The energy food that quickly turns into sugar in the blood Fast (20 minutes)</p> <p>Protein → Slow (2 hours)</p> <p>Fats → Slowest (3 to 9 hours)</p>	<p>Control CARBOHYDRATE foods</p> <p>STARCHES bread flour pasta potato cereal corn chips crackers rice other root vegetables</p> <p>FRUIT MILK SWEETS</p> <p>Include PROTEIN with meals meats chicken cheese yogurt beans tofu egg seeds peanut butter nuts lentils wild caught salmon</p>	<p>Keep meal carbs near 45 grams. Starchy foods, fruit, and milk = carbs Have milk or fruit as part of planned snacks rather than with meals.</p>																						
<p>Carbohydrate budgeting at meals and snacks</p> <p>15g = 1/2 cup cooked rice or pasta = 1/2 cup cereal grains = 1 slice pizza bread or tortilla</p>	<p>Nutrition Facts Serving Size 1 slice (90g) Servings Per Container 5</p> <p>Amount Per Serving</p> <table border="1"> <tr> <td>Calories 150</td> <td>Calories from Fat 30</td> </tr> <tr> <td colspan="2">% Daily Value*</td> </tr> <tr> <td>Total Fat 3g</td> <td>5%</td> </tr> <tr> <td>Saturated Fat 0.5g</td> <td>3%</td> </tr> <tr> <td>Trans Fat 0g</td> <td></td> </tr> <tr> <td>Cholesterol 65mg</td> <td>22%</td> </tr> <tr> <td>Sodium 220mg</td> <td>9%</td> </tr> <tr> <td>Total Carbohydrate 27g</td> <td>9%</td> </tr> <tr> <td>Dietary Fiber 2g</td> <td>8%</td> </tr> <tr> <td>Sugars 9g</td> <td></td> </tr> <tr> <td>Protein 8g</td> <td></td> </tr> </table>	Calories 150	Calories from Fat 30	% Daily Value*		Total Fat 3g	5%	Saturated Fat 0.5g	3%	Trans Fat 0g		Cholesterol 65mg	22%	Sodium 220mg	9%	Total Carbohydrate 27g	9%	Dietary Fiber 2g	8%	Sugars 9g		Protein 8g		<p>My carbohydrate plan:</p> <p>Breakfast</p> <p>Snack</p> <p>Lunch</p> <p>Snack</p> <p>Dinner</p> <p>Snack</p> <p>How many carbohydrate grams in: One cup of cooked rice? A turkey sandwich? A banana?</p>
Calories 150	Calories from Fat 30																							
% Daily Value*																								
Total Fat 3g	5%																							
Saturated Fat 0.5g	3%																							
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Dietary Fiber 2g	8%																							
Sugars 9g																								
Protein 8g																								
<p>Select Healthful Foods</p> <p>vegetables 3-5 serving = 1 cup raw, 1/2 cup cooked</p> <p>fruits (NO JUICE) 2-4 serving = 1 med</p> <p>milk, yogurt, cheese 3 serving = 8 oz milk/ yogurt, 1 1/2 oz cheese</p> <p>meat, poultry, fish, eggs, beans, nuts or nut butters 3 serving = 2 oz meat, 1 cup beans, 2 eggs, or 2 Tbsp peanut butter</p>	<p>Food Group Minimum # Servings</p> <p>breads, cereals, rice, pasta 7+ serving = 1 sl bread, 1/2 cup rice or noodles</p>	<p>I'm eating the <i>right amount</i> of:</p> <p>I may be eating <i>too much</i> of...</p> <p>I need to <i>eat more</i> of...</p>																						
<p>Eat at Regular Hours.</p>	<p>Space meals about 5 hours apart. Plan snacks. Avoid skipping meals.</p>	<p>Target Blood Sugars</p> <p>Before breakfast: 70 – 90 mg/dl</p> <p>2 hours after meals: Under 120 mg/dl</p>																						
<p>Observe Blood Glucose for Patterns.</p> <p>Test your blood before breakfast and 2 hours after each meal.</p>	<p>Foods likely to cause higher blood sugars:</p> <p>cold cereal pies syrup applesauce juice soda banana potato donut candy grapes cake</p>	<p>Target Blood Sugars</p> <p>Before breakfast: 70 – 90 mg/dl</p> <p>2 hours after meals: Under 120 mg/dl</p>																						

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Dilemmas in the Second Stage of Labour

Part 1

Introduction

There have been many advances in the care and management of labouring women to ensure the best possible outcome for both mother and baby. Various research has been carried to enable the development of guidelines, policies and protocols to enable midwives, obstetricians and other healthcare professionals to make appropriate decisions and provide optimum care. However, dilemmas still exist and controversies are still present in certain aspects of care in which different schools of thought argue a different course of action for the same situation. One such dilemma exists for the method of pushing that should be encouraged or allowed in hospital guidelines. What this short article aims to do, is to shed light on the clinical implications of different methods of pushing and what the current set of literature recommends.

Directive pushing

Debate has existed around directive vs non-directive pushing when women are in the second stage of labour (Bloom et al, 2006). Directive pushing (or coached pushing) has been achieved using the Valsalva manoeuvre where women are asked to "take a deep breath in, hold it and push" (RCM, 2012). Other aspects of directive pushing involve, directing the woman to pull back on both knees and to put the chin on her chest (Bloom et al, 2006). On the other hand, non-directive pushing (or spontaneous pushing) simply involves the midwife supporting the woman to "do what comes naturally or whatever the patient feels the urge to do" (Bloom et al, 2006). Observational studies (Roberts et al, 1987; Thomson, 1995) have shown that women's behaviour during spontaneous pushing is significantly different from that during directive pushing as they would intuitively wait for the contraction's intensity level to increase as this would invoke an involuntary urge to push. This would then result in the

woman pushing several times for a few seconds during the rest of the contraction, in which the woman would take several breaths in between pushing.



In recent years, directive pushing has been associated with adverse physiological effects for the baby as some authors (Roberts, 2002; Simpson, 2006) have argued that Valsalva manoeuvre has been associated with foetal heart rate changes suggestive of hypoxia, and foetal hypoxia and acidosis at birth. This has been based on a number of observational studies. Calderyo-Barcia et al (1981) (n=12) and Barnett & Humenick (1982) (n=10) report that following spontaneous pushing the average values of the arterial and venous cord pHs and pO₂ and pCO₂ were more optimal when compared to the normal values (Martell et al, 1976). Aldrich et al, 1995 (n=10), also reports that maternal pushing during the second stage of labour leads to a significant decrease in foetal cerebral oxygenation, together with an increase in cerebral blood volume.

Yet, these studies have a limited sample, are not the strongest type of evidence and were undertaken at a time when both midwifery and obstetrics differed significantly (such as the strict use of the birthing chair used by Calderyo-Barcia et al, 1981), however a more recent randomised control trial (RCT) (Yildirim & Beji, 2008), with a larger sample (assessed by power calculation to be sufficient to represent the population), supports these findings and reports that infants had higher 1- and 5-minute Apgar scores, and higher umbilical cord pH and pO₂ levels when women pushed spontaneously.

In contrast, the RCT by Parnell et al (1993) found no difference in levels of oxygenation in babies born by either pushing method. Bloom et al (2006) also reports that there was no significant difference between Apgar scores, cord pHs, NICU admissions, morbidity or mortality. These findings are supported by Prins et al's (2011) systematic review of





RCTs and the recent Cochrane Review of RCTs (Lomas et al, 2015).

In the Cochrane review by Lomas et al (2015) seven RCTs from 1986 to 2013 compared directive vs spontaneous pushing and included 851 women from the United States, Iran, England, Turkey and Hong Kong. The review reports that there were no differences between Apgar scores, cord pHs, need for resuscitation in the room or admissions to NICU and therefore it concludes that there is no conclusive evidence to support or refute any specific style or recommendation as part of routine clinical practice. Lomas et al (2015) also adds that in the absence of strong evidence, it should be the patient's preference and the clinical situation that guides decision making. Clinical situations in which directive pushing may be beneficial include circumstances when women are fearful of pushing, women who do not feel the urge to push due to epidural analgesia or in women who despite spontaneous pushing no descent of the presenting part is observed (Roberts, 2002).

Equally debatable are the negative implications of directive pushing on the women as a number of conflicting studies are present in the literature. There is some evidence that suggests that directive pushing can increase the risk of perineal trauma and lacerations (Yeates & Roberts, 1984; Sampsel & Hines, 1999). A RCT (Yeates & Roberts, 1984) concluded that spontaneous pushing protects the perineum from trauma. However this was only a pilot study involving 10 participants. Nevertheless, a slightly larger albeit retrospective survey (Sampsel & Hines, 1999) also examined the relationship between directive and spontaneous pushing with perineal trauma in 39 women and also found that women who pushed spontaneously were more likely to have an intact perineum. Even though this study was retrospective in nature and might therefore involve some recall bias, it would be worth remembering that women can have accurate recall of the birth experience for up to 20 years (Simkin, 1992).

Other studies (Chang et al, 2011; Schaffer et al, 2005) report different yet equally important implications of directive pushing. In a quasi-experimental study by Chang et al (2011), it is reported that women who pushed spontaneously had lower feelings of fatigue, a lower pain index, a shorter duration of the second stage and a more positive birth experience however a number of limitations were present in this study including the fact that it was a relatively small sample with only 33 women being assigned to each group, having the primary researcher as the primary care giver during the pushing stage which could lead to biased results and the fact that routine episiotomies were performed on all women and hence these findings may not be applicable to other populations and

practices. Schaffer et al (2005) also reports on the benefits of spontaneous pushing following a RCT with 127 participants. The purpose of this study was to determine if refraining from directive pushing during the second stage of labour affects postpartum urogynecologic measures of pelvic floor structure and function and it was concluded that decreased bladder capacity and decreased first urge to void was evident with directive pushing. A trend towards stress incontinence was also reported in women following directive pushing three months following the birth (Schaffer et al, 2005). In view of this short-term effect, longer-term studies are required to determine whether these urogynecologic problems resolve in the first year or not.

In contrast, two systematic reviews report otherwise (Prins et al, 2011; Lemos et al, 2015). The four studies (n=425) included in the first systematic review (Prins et al, 2011) conclude that even though no statistical significant difference was found in the number of instrumental deliveries or perineal repair, directive pushing should be avoided due to the adverse outcomes in urodynamic function (Schaffer et al, 2005). However this review also contains some limitations, particularly concerning its external validity as the majority of the women were Chinese or Hispanic and that no details were provided on the birthing position of the women as this is known to affect maternal outcomes in labour (Gupta et al, 2004).

In the previously mentioned Cochrane review by Lomas et al (2015) which included seven RCTs from 1986 to 2013 comparing directive vs spontaneous pushing (with or without epidural analgesia) and including 815 women from the United States, Iran, England, Turkey and Hong Kong; the birthing position was also reported. Women in this review adopted a lithotomy position; sitting or birthing chair; supine, sitting, squatting or standing; or free position depending on the women's wishes whereas three trials did not report the birth position. The review reports that there was no difference in the length of second stage between directive and spontaneous pushing, no difference in perineal lacerations, and no difference in risk of episiotomies between the two groups. It also reports that women who pushed spontaneously spent less time pushing (around five minutes) than women who used directive pushing, were at no higher risk of requiring augmentation in the second stage or requiring an instrumental delivery or caesarean delivery. The review reports that the rate of spontaneous vaginal delivery did not differ between the two groups and nor did the level of maternal fatigue or maternal satisfaction with the birth experience. In view of these findings Lomas et al (2015) once again conclude that there is no conclusive evidence to support or refute any specific style or recommendation as part of routine clinical practice and that in the absence of strong evidence, it should be the patient's preference and the clinical situation that guides decision making.

Conclusion

It appears that some lower hierarchy research evidence provides evidence that spontaneous pushing is more beneficial in view of neonatal and maternal benefits, however higher hierarchal research evidence refrains from providing recommendations for routine clinical practice due to inconclusive evidence. It therefore seems reasonable to urge midwives and other health professionals to encourage women to follow their own instincts and their own bodies, and for midwives to support women during pushing instead of directing women. Midwives should then use their clinical judgment to determine whether direction is required in each specific situation. Furthermore, the current evidence



suggests that even more high quality evidence is required to assess maternal and neonatal outcomes of spontaneous and directive pushing. This could be an incentive to carry out an adequately powered trial among the Maltese population to guide our practice.

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The 'Walking' Epidural in Labour

The pain of labour is severe and many women seek ways to reduce it. Non-regional techniques include supportive measures, inhalation of nitrous oxide and parenteral opioid administration. Epidural analgesia provides good quality pain relief in labour. Well conducted studies confirm there is no increase in the rate of caesarean delivery or in long term back ache; however epidural analgesia is associated with increased duration of labour and increased incidence of operative vaginal delivery.

Epidural blockade in labour should extend between dermatomes T10-S1; in order to provide analgesia for both first and second stages of labour. The term walking epidural, also known as ambulatory epidural, has been developing since early 1990s. The aim of which is to provide a barely perceptible sensory block, with retention of sensation without pain and maintenance of motor power. This is in contrast to blockade required for abdominal surgery e.g. Caesarean section, whereby one would require a dense sensory and motor block up to T4.

The way of achieving epidural analgesia without anaesthesia and loss of motor power is to reduce the rate of usage of local anaesthetic per hour. A large number of obstetric anaesthetic clinical studies have investigated several different techniques, local anaesthetics, opioid adjuncts and delivery modes in order to establish the best way to achieve this state.

Some of the advantages in clinical practice of maintaining motor power during regional analgesia are the mothers' preference for retaining the ability to move her legs, reduced need to catheterise the bladder and a considerable reduction of the nursing problems experienced by midwives looking after a patient with dense motor block. It is also possible for the woman to get up and walk about or sit in a chair rather than be confined to the bed, if she wishes to do so. It would be quite sensible to avoid long hours of recumbent positions in view of the hypercoagulable state of pregnancy. The authors of a recent Cochrane database have suggested that walking and upright positions during first stage of labour reduces duration of labour, risk of caesarean birth and analgesia requirements. Besides, it does not seem to be associated with increased intervention or negative effects. Another consideration for the local practice include that such epidural regime could be used even during the second stage as the mother is able to coordinate better the pushing with contractions.

Walking about during epidural analgesia may be discouraged because of fears of medicolegal consequences of falls. These could possibly result from hypotension, dizziness, loss of motor power or loss of proprioception. Other complications include all standard complications associated with epidural insertion and management. Since, low doses of local anaesthetic are used analgesia might not be adequate in up to 30% of patients. In fact, it is normal for the mother to feel considerable pressure and mild discomfort during contractions; which should be tolerable. If not, higher doses might be required which would preclude further ambulation as per normal epidural protocol. Besides, analgesia might not be adequate for forceps or episiotomies, requiring a stronger top up. Nevertheless, voluntary urinary voiding can be inhibited in up to 30% of patients – who would still require catheterisation.

Fetal monitoring requires telemetry, intermittent monitoring or allowing the woman to be upright within the confines of the fetal monitor leads. It is always advisable to have the patient accompanied by at least another adult when walking about. There is obviously no need for a woman to walk around in order to be in upright position; she may wish only to stand by the bed or at most walk to the toilet.

Ambulatory epidurals are one result of balanced analgesia, which aims to find the right balance between a light sensory block and deep anaesthesia with compromised motor function. This is usually attempted by the use of lower doses of more than one drug in order to reduce the unpleasant side effects. This fine balance can sometimes be tricky and might not be reached. Ultimately, the main aim should be to provide adequate analgesia in order to meet the expectations of the parturient mother.

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Dr Josef Zahra
MD, DESA

The Importance of Vitamin and Mineral Supplementation for a Healthy Pregnancy Outcome

Definition and assessment of a healthy pregnancy

A healthy pregnancy is without physical or psychological pathology in the mother and results in the delivery of a healthy baby. The hormonal milieu during pregnancy is important for maintaining the flow of nutrients to the fetus, stimulating uterine growth, promoting mammary development, and relaxing smooth muscle which decreases gut motility Allen (2012)

Absorption of iron and calcium increases during pregnancy. Blood volume expands in the course of a normal, healthy pregnancy, mainly due to a 35%–50% increase in plasma volume. Red cell mass also increases but to a lesser extent (15% to 20%), so that haemoglobin concentration and haematocrit decline until the end of the second trimester. Concentrations of total plasma proteins and many nutrients including vitamins and minerals also decline during pregnancy, but most plasma lipids, including triglycerides, total cholesterol, and high-density lipoprotein cholesterol, increase.

Declines in plasma vitamin and mineral concentrations are generally due to normal, physiological changes secondary to the expansion of blood volume and changes in renal function. During pregnancy, dramatic changes in renal function occur and are associated with marked excretion of glucose, amino acids, and water-soluble vitamins.

Comparing neonatal mortality reported from European countries, Malta has a high rate most marked for deaths due to congenital anomalies. Gatt et. al. (2015) cites that major congenital anomalies occur at the rate of 3% of all births or one in every 33 babies born. That is an infant with one or more major birth defects is born every 3 days. In Malta, over the 10 year period 2003-2012, birth defects have led to 104 infant deaths, accounting for 43.5% of all infant deaths

Back in the late 1980's, micronutrient deficiencies were not considered to be a major public health challenge in the Food and Nutrition Policy for Malta (DH 1990) and thus far, no studies at national level have been carried out, to determine to what extent micronutrient deficiencies exist amongst the Maltese population.

Recommendations by the Department of Public Health Malta in 1994, targeting the Maltese female population that is 'Pregnant women and women intending to become pregnant' were to increase their intake of foods rich in folate.

Subsequently in 2000 in the Malta Congenital anomalies register-half yearly report (1999) women of child-bearing age were advised to take a supplement of Folic Acid 400 µg supplements daily - avoid high doses unless prescribed by a physician'.

The more recent European Recommendations for Primary Prevention of Congenital Anomalies: A Joined Effort of EUROCAT and EUROPLAN Projects (2014) is not solely based on Vitamin and Mineral supplementation, as these though important cannot be foreseen in isolation (Table 2).

Although several congenital anomalies have no known cause, we know today that several exposures such as certain medications and alcohol may lead to certain birth defects. Methods of primary prevention are available, these

include: maintaining healthy nutrition, preconception folic acid supplementation, control of maternal infections and chronic conditions such as obesity, diabetes and epilepsy. Taruscio, D et al (2014).

Preconception Guidance

A key indicator to monitor in women of childbearing age includes the use of folic acid supplements Korst et al (2005). Another factor to consider according to Inskip et al (2009) and Lum et al (2011) is that among women planning to become pregnant, relatively few implement nutrition and lifestyle changes in the preconception period.

Based on Inskip et al (2009) findings from their large prospective study in the United Kingdom, less than 3% of women are estimated to be compliant with folic acid recommendations during the preconception period. In addition, no changes were observed in smoking, fruit/vegetable intakes, or physical activity behaviours. Women may reduce caffeine intake prior to pregnancy but not alcohol or cigarette use, demonstrating a need for preconception guidance related to a wide range of nutrition and lifestyle behaviours Lum et al (2011). Adequate folic acid intake may reduce risk of coronary heart disease in the mother, as well as prevent birth defects in a subsequent pregnancy USDA (2010).

Screening and Assessment

Nutritional assessment needs to encompass changes in anthropometric, biochemical, and clinical indicators throughout the course of pregnancy.

Serum ferritin may be useful as a screening tool to identify pregnant women who would benefit from additional counselling about iron-rich foods and supplements. Walsh T et al (2011).

Vitamin D screening is not routinely recommended but may be considered for pregnant women who are at risk of deficiency for example those with little sun exposure, living at northern latitude, dark-skin, vegan, ACOG (2011)

Micronutrient Needs and When to Recommend Supplements

The consumption of more food to meet energy needs and the increased absorption and efficiency of nutrient utilization that occurs in pregnancy are generally adequate to meet the needs for most nutrients when good food choices are made.

The American Dietetic Association (ADA) (2009), advises that vitamin and mineral supplementation may be important in vulnerable cases, including food insecurity; alcohol, tobacco, or other substance dependency; anaemia; strict vegetarian (vegan) diet; or poor eating habits. In general, pregnant women should seek nutritional consultation before taking a supplement that exceeds the Tolerable Upper Limits (UL) for a particular vitamin or mineral.

Table 2: shows recommended safe dosage of Vitamins and Minerals (IOM 2006).



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² IRI HBA outlets, 52 w/e 27th October 2010.

³ D. McKenna (Royal Victoria Hospital) et al. 'a randomised trial investigating and iron-rich natural mineral water as a prophylaxis against iron deficiency in pregnancy' in Clinical and Laboratory Haematology, 2003, 26 99-103.

⁴ M. Worwood (University of Wales College of Medicine) et al. 'iron absorption from a natural mineral water' in Clinical and Laboratory Haematology, 1996, 18 23-27.

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Micronutrients and Recommended Supplementation

Iron. The RDA for iron during pregnancy is 27 mg per day and the UL is 45 mg per day IOM (2006). Pregnant women should be encouraged to consume iron-rich foods such as lean red meat, fish, poultry, dried fruits, and iron-fortified cereals.

Meat and ascorbic acid-rich fruits enhance the absorption of non-heme iron for example, from plants and iron-fortified foods.

Foods that inhibit iron absorption, such as whole-grain cereals, unleavened whole-grain breads, legumes, tea, and coffee, should be consumed separately from iron-fortified foods and iron supplements. Calcium supplements may also inhibit iron absorption.

Currently CDC (1998) recommends, a low-dose iron supplement (30 mg per day) for pregnant women, starting early in pregnancy. A Cochrane review of 49 studies by Penas-Rosas JP et al (2009) concluded that daily or intermittent (1–2 times per week) iron supplementation schemes are similarly effective in reducing maternal anaemia or iron deficiency. However, risk of hemoconcentration (Hgb > 13.5 mg/dL) in the second or third trimester is higher with daily compared to intermittent iron supplements, especially at doses >60 mg per day.

Folate. IOM (2006) recommends the RDA for folate during pregnancy as 600 mcg per day of dietary folate equivalents. The major natural sources of dietary folate are legumes, green leafy vegetables, liver, citrus fruits and juices, and whole wheat bread. Compared to naturally occurring folate in foods, the synthetic form of the vitamin (folic acid), contained in fortified foods and supplements, is almost twice as well absorbed, so that 1mcg from these sources is equivalent to 1.7 mcg dietary folate equivalents. To prevent neural tube defects, women of childbearing years and pregnant women should consume 400 mcg per day of folic acid from fortified foods (cereals and other grains), supplements or both, *in addition to* consuming folate from foods in a varied diet beginning at least 1 month before conception USDA (2010), IOM (2006).

Zinc. The RDA for zinc during pregnancy is 12 mg per day for ages 14–18 yrs and 11 mg per day for ages 19–50 yrs; the ULs are 34 and 40 mg per day, respectively. Food sources of zinc include meat, some shellfish, fortified cereals, legumes, and whole grains. However, bioavailability can be low in vegetarian diets due to the presence of phytate, fiber, and/or calcium that may inhibit zinc absorption.

High intakes of supplemental iron may also inhibit zinc absorption when both are taken without food.

Hovdenak N et al (2012) asserts that Zinc supplementation may be prudent in any of the following conditions: 1) gastrointestinal disorders that affect absorption; 2) high intakes of supplemental iron; or 3) cereal and plant-based diets that are high in phytates.

Vitamin B-12. The RDA for B-12 during pregnancy is 2.6 mcg per day, and no UL has been set IOM (2006). Naturally found in animal products, vitamin B-12 is particularly high in shellfish, organ meats such as liver, some game meats (venison), and fish such as herring, trout, and sardines.

Primary sources of vitamin B-12 are mixed dishes containing meat, fish or poultry; milk beverages; and ready-to-eat fortified cereals. Pregnant women who consume little or no animal products need guidance on choosing a reliable source of vitamin B-12 such as a fortified cereal or supplement.

Calcium. The RDA for calcium during pregnancy is

1,300 mg per day for ages 14–18 yrs and 1,000 mg per day for ages 19–50 yrs IOM (2011). The ULs are 3,000 mg per day and 2,500 mg per day, respectively. Milk, cheese, yogurt, and foods containing milk products provide about 72% of the calcium in US diets.

Increasingly, other foods and beverages, such as orange juice and ready to eat cereals, have been fortified with calcium. Antacids may also contain calcium carbonate and need to be counted towards total calcium intake. For women with lactose intolerance, dairy products with less lactose, such as cheese, yogurt, or milk with added lactase enzyme, can be substituted for regular milk. For pregnant women who do not consume milk products, due to milk allergy or other reason or calcium-fortified foods or beverages, such as those containing soy or nut milks, a calcium and vitamin D supplement may be needed.

Vitamin D. The IOM (2011) recommends the RDA for vitamin D during pregnancy to be 600 IU per day and the UL is 4000 IU per day. Synthesized in the skin through exposure to ultraviolet B rays in sunlight, vitamin D is also found in the flesh of fatty fish, fish oils, fortified cow's and plant milk products, ready-to-eat fortified cereals, and eggs of hens fed vitamin D. According to the American College of Obstetricians and Gynaecologists (ACOG), supplements of 1,000 to 2,000 IU per day are probably safe for pregnant women who are deficient in vitamin D, ACOG (2011). Pregnant women at increased risk of vitamin D deficiency include those with little exposure to sunlight, vegan diets, and darker skin.

n-3 fatty acids. The major n-3 long chain polyunsaturated fatty acids that may be of concern during pregnancy are docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). These n-3 fatty acids can be synthesized in the body from α -linolenic acid (ALA during pregnancy is 1.4 g per day) but the conversion is less than 10% IOM (2006), ADA (2009). Some experts have recommended that at least 200 mg per day of DHA be consumed during pregnancy Koletzko et al (2008).

Seafood (salmon, trout, sardines) is a good source of n-3 fatty acids. While vegetarians and people who do not consume fish or DHA-enriched eggs should be encouraged to consume flaxseed, walnuts, canola oil, and products fortified with n-3 fatty acids (soy milk and breakfast bars), an algae based DHA supplement may also be recommended due to low bioconversion of α -linolenic acid from plant sources to DHA, ADA (2009).

Choline. While an RDA has not yet been set for choline, the adequate intake (AI) for pregnancy is estimated to be 450 mg per day, with a UL of 3 g per day for ages 14–18 yrs and 3.5 g for ages 19–50 yrs IOM (2006). Many pregnant or lactating women may not be consuming adequate amounts of choline. Multivitamin and mineral supplements for pregnant women typically do not contain choline; as mentioned previously, the diet for pregnant mothers may fall short in choline for some women. Therefore, pregnant women should be advised to include good sources of choline in their diets. A few examples of the choline content include: egg, one large (145 mg); salmon, (100 mg); kidney or navy beans, 1 cup (60 mg); and low-fat milk, 1 cup (45 mg).

Other Supplements and Substances

Herbal and botanical. Dante et al (2013) asserts that, very few randomized, clinical trials have examined the safety and efficacy of complementary and alternative



Table 1 European Recommendations for Primary Prevention of Congenital Anomalies: A Jointed Effort of EUROCAT and EUROPLAN Projects (2014)

- to improve folate status through periconceptional supplementation with folic acid, promotion of the consumption of foods rich in natural folates, and the appropriate use of fortified foods
- to prevent overweight/obesity and underweight
- to promote effective information on diet and nutrition in women at childbearing age, minimizing the risks of deficiency and/or overdosing of vitamins and essential trace elements
- to further the implementation of EU food safety strategies to prevent food contamination by recognized developmental toxicants
- to reduce active and passive smoking
- to promote alcohol avoidance in women who are pregnant or wishing to get pregnant
- to pay special attention to diet and lifestyles in communities with low socio-economic status or of recent immigrants

Table 2 Nutrient Supplements

Source:

IOM (2006); Dietary Guidelines for Americans (2010); Center for Disease Control and Prevention (1998)

Vitamins

Vitamin A: **770 mcg**

Vitamin C: **85 mg**

Vitamin D: **15 mcg**

Vitamin E: **15 mg**

Thiamin: **1.4 mg**

Riboflavin: **1.4 mg**

Niacin: **18 mg**

Vitamin B-6: **1.9 mg**

Vitamin B-12: **2.6 mcg**

Folate: **600 mcg**

Choline: 450 mg

Minerals

Calcium: **1,000 mg**

Copper: **1,000 mcg**

Iron: **27 mg**

Magnesium: **350 mg**

Potassium: 4,700 g

Selenium: **60 mcg**

Sodium: 1.5 g (Less than 2300)

Zinc: **11 mg**

Bold type= Recommended Daily Allowance (RDA) and Roman type= Adequate Intakes (AI) for pregnant females, ages 19–30 year

therapies during pregnancy. Therefore it is important to remind pregnant women that the safety of many herbal and botanical products during pregnancy has not been determined ADA (2009).

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Women's Knowledge of Prenatal Exercises

The present study aimed to explore antenatal women's knowledge of prenatal exercises. Objectives were set so that the aim could be fulfilled. These included the assessment of women's knowledge on the benefits of exercises during pregnancy, the evaluation of women's knowledge on posture, moving and handling during pregnancy and the identification of sources from where women acquire information on prenatal exercises. Ethical standards were strictly adhered to.

A descriptive, non-experimental, quantitative approach was chosen to conduct this research. A questionnaire specifically designed for the purpose of the study was distributed to 45 pregnant women (N=45) who satisfied the inclusion criteria by convenience sampling. A 100% response rate was obtained. Data was generated using both close-ended and open-ended questions. Close-ended responses were analysed manually using simple descriptive statistics and then inputted into a spreadsheet programme where they were converted into a series of charts. Open-ended questions were analysed using content analysis. Excerpts from participants and frequencies of themes were represented in tables to facilitate understanding.

Findings revealed that although many participants (n=39; 87%) had knowledge on prenatal exercises, more than half (n=26; 58%) did not exercise before becoming pregnant. A significant difference was observed during pregnancy where at this time more than half of the participants (n=27; 60%) exercised. Findings showed that many participants (n=25; 56%) exercised for 15 to 30 minutes a day, not in accordance with the recommendations

by the American College of Obstetricians and Gynecologists (ACOG), (2011) and the National Institute for Health and Clinical Excellence (NICE), (2010b). Those women who did not exercise during their pregnancy (n=18; 40%) identified barriers for their choice. These included tiredness, lack of time, work and lifestyle. Most women (n=40; 89%) thought that prenatal exercises would enhance their birthing experience. Pelvic floor exercises proved to be more popular amongst pregnant women when compared to abdominal exercises. Many participants (n=42; 93%) took care of their posture, moving and handling during pregnancy. A high percentage of participants (n=40; 89%) showed interest in wanting more information about prenatal exercises. Finally, participants reported many sources used to obtain information on exercises during pregnancy. These included relatives, books, friends and the doctor. The most mentioned sources of information were parentcraft classes (n=29; 34%) and the internet (n=18; 21%) while few participants (n=3; 4%) received information from the midwife at booking.

Recommendations for practice, management, education and further research were drawn based on the results of this study. These include recommendations regarding the role of the midwife as an educator, continuous professional development for midwives and a study aiming to explore father's knowledge of prenatal exercises as they are likely to influence pregnant women's choices/attitudes towards prenatal exercises.

Keywords: 'exercise', 'physical activity', 'pregnancy' and 'knowledge'

Annabelle Mamo

Going Home with the Newborn Baby: Mothers' Experiences

The aim of this study is to explore the experiences of first-time mothers in the first 8 weeks post discharge from hospital. In particular this study explores mother's feelings in her ability to care for the baby's physical needs, developing mother-baby relationship; and to explore the support systems useful to the mother during this period.

A qualitative approach was utilised using semi-structured face-to-face interviews to obtain data from 6 first-time mothers recruited by purposive sampling. Interviews were transcribed and translated into the English language. Thematic analysis as suggested by Braun and Clarke (2006) was used to analyse data. Findings revealed that motherhood brings with it a mixture of life-changing feelings, but still described as a positive experience. The major stressors were attributed to attending to the baby's physical needs and the challenges of being a "good" mother. Mothers demanded that

antenatal classes should be more focused on their needs. Their husband/partner, their own mother, close relatives, and midwives were all identified as strong and important support systems. It was concluded that all the above is a result of the lack of practical information given by the midwives to the mothers during the antenatal and postnatal period.

Recommendations for further research, practice and management; and education are proposed to help and support new families in this new and challenging experience. Conducting the same study with a larger sample size and over a longer period of time; needs-oriented antenatal classes and a more individualised postnatal care before discharge, and provision of the most recent and evidence-based advice to the mothers and her identified support individuals.

Jessica Zammit

Mothers' Experiences of an Assisted Vaginal Delivery

Each year, a significant number of mothers experience a vaginal delivery assisted by ventouse and/or forceps. Such an experience has the potential to negatively influence the mother's childbirth experience, which may affect her wellbeing and her future birth plans.

A small scale study was carried out to explore mothers' experiences of their vaginal delivery assisted by ventouse and/or forceps. The objectives explored were: mothers' feelings upon being told that they needed assistance with their vaginal delivery; their experiences of the delivery and of the immediate postnatal period. A qualitative approach was adopted, and semi-structured, face-to-face interviews were conducted with a purposive sample of seven postnatal mothers with experience of an assisted vaginal delivery. Data collected was analysed by thematic analysis (Braun & Clarke, 2006).

Analysis of the findings revealed three themes. The first theme is:

Mothers know but they (midwives and doctors) know better. Mothers are knowledgeable on operative deliveries, however in the presence of fear and concern they opt to rely on health care professionals for decision making such as the mode of birth. Fear, guilt feelings and relief emerged in the second theme. Mothers experience fear, concern for the baby and subsequent guilt feelings as a result of the trauma experienced by their neonate. However postnatally, mothers feel relieved. The third theme: The Experience, illustrates that the mothers overall childbirth experience is a complex one, shaped by the instrumental delivery, support, physical trauma and the transition to motherhood.

The small scale of the study was the main limitation of this research. Thus, a recommendation is to replicate the study on a larger scale so as to obtain a better understanding of mothers' experiences; increasing midwives knowledge and promoting improvement in care.

Jolene Camilleri

Postnatal Mothers' Experiences of Midwifery Support on Infant Care, in Hospital

The postnatal period brings about major changes in the lives of mothers. Thus the midwife's presence is significant to ease the transition to motherhood through support and education (Ball, 1989; Ball, 1994; World Health Organization (WHO), 2010; Nursing and Midwifery Council (NMC), 2012). The aim of this study was to explore mothers' experiences of midwifery support on infant care in hospital. The study's objectives explored mothers' experiences of midwives' support on infant-feeding and on information provided by midwives on baby bathing, nappy changing, cord care and infant's safety. A qualitative approach was adopted and self-designed, semi-structured, face-to-face interviews were conducted with a purposive sample of five postnatal mothers. All interviews were audio-recorded and data was transcribed verbatim and analysed using thematic analysis (Braun and Clarke, 2006). Three main themes were evolved. The first theme on information-giving showed that most mothers

received consistent information on infant care. However, some aspects of information-giving were insufficient, mainly cord care and infant's safety. The second theme illustrated the mothers' appreciation of the constant midwifery support provided on infant care. The third theme was Discharge home. All participants felt prepared to be discharged home, where they would have support from family members and community midwives.

It is recommended that midwives dedicate more time in providing individualised information and adapt the length of mother's hospital stay according to her needs. Enhancing communication amongst midwives so as to avoid repeating or missing aspects of care is another recommendation. The small sample size and time limitation are two main limitations of this study. A replication of the study but in a longitudinal approach would give a better insight of mothers' experiences of postnatal midwifery support.

Rachel Cutajar



Midwives' Perceptions on The Use of Complementary Therapies in Pregnancy

Complementary Therapies are composed of a broad range of health care practices, products and therapies. Such therapies are used across a wide spectrum of health conditions, but the use is particularly notable during pregnancy. Such therapies may act as a complement to the conventional midwifery care in pregnancy.

This study aimed to explore the midwives' perceptions on the use of complementary therapies during pregnancy. The objectives of the study were: to gain an insight of midwives' perceptions on the benefits of complementary therapies in pregnancy and to explore midwives' role on the use of such therapies. A quantitative study was carried out, using a self-designed questionnaire consisting of closed and open ended questions. A convenience sample of 50 midwives (N=50) working in one hospital maternity setting was recruited. An 80% (n=40) response rate was achieved. Data was analysed manually using descriptive statistics and content analysis. Ethical approval and necessary permissions were retrieved from all the respective authorities.

Findings of this study revealed that 39 of the participating midwives (n= 39; 97.5%) agreed that complementary therapies help in pregnancy

outcome. Thirty two of the participants, (n=32; 80%), approved that such therapies can help ease out certain symptoms of pregnancy such as anxiety, nausea and back pain. Thirty six of the participating midwives, (n=36; 90%), agreed that such therapies can reduce the need of pharmacological medicine intake in pregnancy. All of the participants found it hard to implement such therapies in their care, as they lack educational knowledge on complementary therapies. Yet, most of the participating midwives (n=35; 87.5%) found no objection in implementing complementary therapies, if they were well informed and educated on such therapies. Only two midwives exhibited resistance when it comes to biomedical opposition and undertook diverse strategies to guard themselves from conflict. Based on the results of this study, recommendations for practice, education and further research were drawn. A limitation of this study was its small scale. A longitudinal large- scale study or qualitative studies are recommended to explore in depth the women's perceptions of complementary therapies during pregnancy.

Keywords: 'complementary therapies', 'midwives' perceptions', 'maternity', 'pregnancy' and 'hospital midwifery'.

Isabella Aquilina

Midwives' Perceptions of a Physiological Birth

The aim of this small-scale study was to gain insight on midwives' perceptions of physiological birth, within a local obstetric setting. The objectives explored midwives' knowledge on physiological birth identified some facilitators and/or barriers to physiological birth within the hospital setting. A qualitative approach was used and face-to-face interviews were conducted with a sample population of six midwives recruited through purposive sampling according to the inclusion and exclusion criteria set by the researcher. A 100% response rate was achieved. Interviews were audio-recorded and transcribed verbatim for data analysis using Braun

and Clarke (2006) thematic analysis framework. All midwives defined physiological birth but experienced difficulties when they practiced in the obstetric-led unit in which they worked. The attitudes of doctors, midwives, the women and their partners were identified as facilitators and inhibitors of physiological birth. Education of mothers, midwives and other professionals was the key finding in promoting physiological birth. Recommendations for practice, education and further research were devised.

Keywords: physiological birth, midwife, midwife's role, barriers, facilitators, education, childbirth, medicalisation

Rebecca de' Conti Manduca

Midwives' Perceptions of Women's Choices in Childbirth

The concept of maternal informed choice is regarded as an increasingly fundamental aspect of intrapartum care provision as it is synonymous with maternal satisfaction, sense of control and empowerment during childbirth (Jomeen, 2012). The aim of this qualitative study was to explore midwives' perceptions of women's choices in childbirth. The study's objectives were to explore midwives' perceptions of women's choices in relation to birthing positions, nutritional intake and pain relief in childbirth.

A convenience sample of ten qualified midwives, having between 5-37 years of experience within a delivery suite setting, voluntarily participated in a self-designed, semi-structured, face-to-face, audiotaped interview. A 100% response rate was obtained. The data collected was transcribed verbatim and analysed using thematic analysis as described by Braun and Clarke (2006).

Four themes were identified from the midwives' accounts. These were: 'Is 'Choice' in Childbirth a Reality?', 'Maternal Awareness of Choice', 'Barriers to Choice' and 'Supporting Women's Choices: The Way Forward!'

The findings demonstrated that midwives felt that women were

generally well informed with regards to their options of birthing positions and pharmacological pain-relief methods. However there was perceived a lack of awareness with regards to nutritional intake and non-pharmacological-pain relief options. Although the majority of midwives claimed to be supportive of and advocates for women's choices in childbirth, the study unearthed a variety of barriers which were thought to contribute to minimising the reality of maternal intrapartum choices in practice. The establishment of a strong woman-midwife relationship was perceived to be the prime facilitator of women's choices in childbirth.

In view of these findings, the recommendations for practice and management, education and further research were proposed. These included the need for better quality education regarding sustainable ways to encourage maternal choice, the provision of woman-centred intrapartum care, which is supported by evidence-based knowledge, the establishment of stronger interprofessional relationships, conducting a similar study on a larger scale, and exploring maternal choice from the perspectives of childbearing women themselves.

Sylvana Attard

Postnatal Mothers' Experiences of Epidural Analgesia

Epidural analgesia, as discussed in this study, is defined as an injection of local analgesic that provides labour pain relief (Hamilton, 2009). The aim of this study was to gain insight into postnatal mothers' experiences of epidural analgesia use during labour. The study's main objectives were to explore mothers' reasons for choosing epidural analgesia, and to explore mothers' satisfaction with epidural analgesia during their labour. In view of these objectives, a qualitative research design was adopted and self-designed, semi-structured, face-to-face interviews were conducted with a purposive sample of 12 postnatal mothers. Participants were adult women (> 18 years old) who had used epidural analgesia during their labour, and subsequently delivered a healthy, full term neonate (>37 weeks gestation) by normal vaginal delivery. Mothers who met the eligibility criteria were approached and voluntarily accepted to participate yielding a 100% response rate. The interviews were audio-recorded, transcribed verbatim and analysed using thematic analysis as described by Braun and Clarke (2006).

The themes that emerged from the analysis included: 'Learning about

epidural analgesia', 'Rationale for using epidural analgesia' and 'Labouring with epidural analgesia'. The findings show that the participants all had some knowledge about epidural analgesia prior to its administration, whether it was from antenatal education classes, social contacts, health professionals and/or through the internet. The main rationale for receiving epidural analgesia during labour was for the alleviation of labour pain. With regards to satisfaction, the majority of the participants (>90%) were generally satisfied with their experience of using epidural analgesia during their labour. However, they also discussed ways in which the experience of labouring with epidural analgesia could be improved. In view of these findings, recommendations for practice and management, education and further research were proposed, including a recommendation for further studies on women who had received epidural analgesia during labour but delivered by instrumental or surgical means. One of the limitations of this study is that the interviewer was a novice researcher with limited interviewing experience.

Sabrina Borg

Mothers' experiences of rooming-in with their newborn in hospital

Rooming-in is when the mother and baby are cared for in the same room during the postpartum hospital stay. The aim of this study was to explore mothers' experiences of rooming-in. The objectives were to explore mothers' perception of the positive and negative aspects of rooming-in, and to explore mothers' experiences of support from midwives while rooming-in. A qualitative approach was adopted, and semi-structured, face-to-face interviews were conducted with a purposive sample of 12 mothers. Participants were Maltese mothers who had delivered by normal vaginal delivery, and were being cared for in the obstetric wards of the local general hospital with their healthy neonate. The response rate was 86%. Audio-recorded interviews were held on the second or third day postpartum in a quiet, private room. Interviews were transcribed verbatim and analysed using thematic content analysis as described by Parahoo (2006) and Braun and Clarke (2006). Ethical considerations were respected throughout. Themes identified were 'Coming to terms with a new reality', 'A challenging but valuable experience', 'Support from midwives' as crucial' and 'Rooming-

in is for the best'. The findings revealed that the early days of first-time motherhood were seen as a challenging period, requiring adaptation. Overall, rooming-in was perceived to be a positive practice. It was regarded to provide an opportunity for early mother-infant bonding, allowed the mother to watch closely over the child, and gave mothers a sense of self-confidence and self-sufficiency. This practice provided an opportunity for mothers to learn to care for the infant, and encouraged the inclusion of the father. Midwives' help and guidance was considered to be essential. Negative aspects identified were lack of rest following the delivery, and a tendency for mothers to prioritise their baby's needs over their own. The findings largely correlated to those in the literature, although novel aspects were also identified. In view of the findings, recommendations for practice, management, education and further research are proposed, including that mothers may be encouraged to have a period of rest following delivery, and the need for further research on the topic with sample of mothers who deliver by caesarean section.

Claire Borg

Maternal-Infant Attachment in Substance Misusing Mothers: Midwives' Views

Substance misuse in pregnancy can lead to severe adverse outcomes in the neonate. Infants born to substance misusing mothers are usually transferred to the Neonatal and Paediatric Intensive Care Unit (NPICU) soon after birth for monitoring and assessment of Neonatal Abstinence Syndrome (NAS). Admission to the NPICU and factors associated with maternal substance abuse may limit maternal-infant attachment. The aim of this study is to explore midwives' views on maternal-infant attachment in substance misusing mothers. The objectives of this study are to explore whether substance misusing mothers bond with their newborn baby, explore ways of how this is manifested during the baby's stay at the NPICU, explore the involvement of family members in bonding with the baby and finally explore midwives' interventions in promoting maternal-infant attachment.

A qualitative study using self-designed, semi-structured, face-to-face interviews is the method used to collect data from eight midwives working at the NPICU.

Midwives perceived that substance misusing mothers bond less and show less interest in interacting with their infant compared to non-substance misusing mothers. Mothers are more in denial rather than guilty and it is the fear of losing custody of their child which instigates them to show affection for their infant. Findings revealed that multiple factors hinder maternal-infant attachment; such factors include chaotic lifestyles, lack of family support, management of NAS and judgemental attitudes. Recommendations for practice, further research and education are proposed to enhance maternal-infant attachment in substance misusing mothers.

Lorita Zarb

First-time Fathers' Experiences of Attending the Birth of their Child

The aim of this study was to gain insight into first-time fathers' experiences of attending the birth of their child. The study's objectives were to explore the fathers' feelings on witnessing the birth of their child, and supporting their partners during childbirth. A qualitative research design was adopted to conduct the study through a self-designed, semi-structured interview schedule. Interviews were conducted face-to-face and via a purposive sample of seven first-time fathers. Participants who met the inclusion criteria were approached and accepted to participate voluntarily. The interviews were audio-recorded, transcribed verbatim and consecutively translated to the English language. Ethical considerations were strictly maintained. The findings of this study were analysed using thematic analysis as described by Braun and Clarke (2006). The resulting themes included fathers' perceptions, feelings and roles adopted during childbirth. The study revealed that childbirth helped fathers come to terms with reality which instilled poignant emotional feelings. Findings highlighted

how fears arose when witnessing their partners' pain. Participants struggled to conceal these feelings behind a calm exterior to be perceived as strong and assertive by their partners, and most importantly retain their masculinity. Participants exhibited a sense of pride for accomplishing their expected roles during birth, and emphasised how they strived to constantly encourage their partners. This implies that the midwife should become more sensitised to the fathers' fears during birth. Finally, most fathers explained that they felt included in the process of birth and declared that they were the midwife's 'helper'. The midwife was identified as a crucial figure that facilitated fathers' interaction with their child. Findings revealed that the midwife should better inform fathers regarding the expected pain levels during the process of birth. Hence, this study recommends the introduction of sessions within the Parentcraft Education Programme which are specifically organised for fathers.

Fiona Tabone

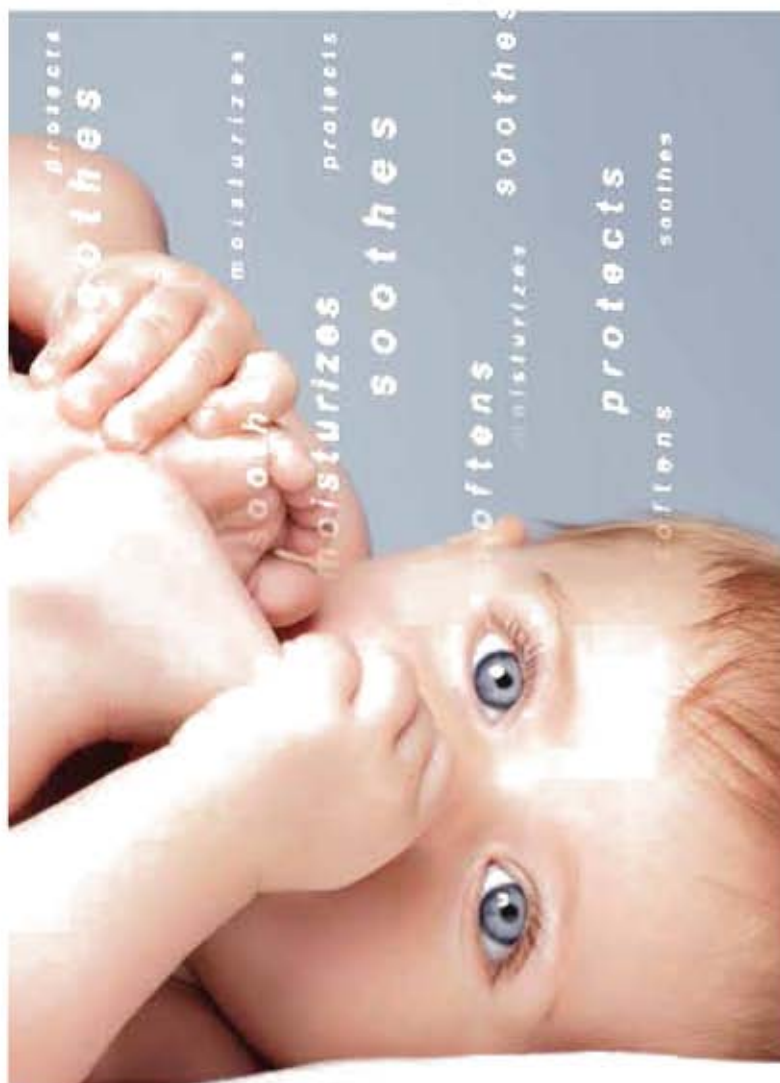


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- remove the nozzle from the bottle and clean with soapy water, rinse and wipe.



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