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to the 13th Schedule
for O&G procedures

Improving care through
high quality ultrasound
education & training



What
NEW
Fee Schedule?

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Final Amendments to the 13th Schedule for O&G procedures



Dr Ng Kwee Boon
OGSM Representative to MOH Fee Committee
(w.e.f Feb 2022)

So, the Kementerian Kesihatan Malaysia (KKM) has finally revived the long delayed review of the MMA Fees Schedule at the beginning of this year. Notices have been sent to all the different medical societies and stakeholders to submit and later discuss any amendments (the additions only) to the existing 13th Schedule. It is heart-warming that KKM still recognises our OGSM as the bona fide representative of our speciality and obtain our opinion on matters that affect our profession in Malaysia. This is a reputation that we must maintain, if not cultivate further. OGSM thankfully acknowledges receiving many useful and legitimate comments and suggestions from interested members prior to attending the meetings.

During the online meeting in February this year involving all disciplines, we were informed that this revision exercise began as far back as 2013/14 and has been slowly progressing until now. It did become evident that this revision was initiated by the Medical Insurance industry since their representatives were present and frequently consulted. The KKM team, helmed by Dr Hashinderjeet Singh, highlighted from the start that the mandate given to them (by "higher up") was merely to consider adding new procedures in our respective disciplines since the adoption of the 13th Fees Schedule into law. The KKM is "not allowed" to make any changes to the wordings or meanings of the procedures in the existing schedule, without further elaborating on the reasons.

Dr Hashinder then painstakingly went through the "Notes" (Regulations) attached to the Schedule, which sets the basis for working out our fees. It ranges from the definition of emergency and after office procedures to the most maligned definition (for us O&G practitioners) of bilateral procedures. The emphasis was on the wordings/descriptions of each operation in an attempt to avoid ambiguity in the interpretation (by the MCOs). Despite our vigorous protests

over the gross anomaly regarding our ovarian cystectomy being billed equally as unilateral or bilateral cysts, whether of the same pathology or different conditions and in contradiction of their Note 18 on bilateral procedures, the KKM refused to amend the Q4400 code stating that: 'It cannot be done!'

Later in April, OGSM held a separate online meeting with Dr Hashinder to try to reason with him on the need to apply consistency and fairness to the revised fees schedule. We tried to persuade the KKM to produce a legal document that will not be challenged and stand the test of time, maybe even become a reference document for other Medical Associations to adopt. However, Dr Hashinder repeated that it cannot be done! He then arranged for us to meet at the KKM office to only discuss the proposed new procedures of O&G that are not in the current schedule which may be acceptable to them.

In 2017, our past Presidents, Dr Tang Boon Nee and Dato' Dr Alex Mathews, had accomplished a great job in drafting a list of new O&G procedures to be included in the new Fees Schedule with several discussions at the Bahagian Amalan Perubatan of the KKM. We are grateful to them for their hard work. Therefore, on the 25th of May, we went to Putrajaya to finalise that list as well as to include several newer ones, as requested by members. As before, the KKM was represented by Dr Hashinder (he is truly a mountain of a man), ably supported by Drs Raja Amalina and Fatin Afifah. The first thing they pleaded with us was to not request any changes to existing operations since that cannot be done! Dr Hashinder assured us that appropriate changes can be made in future, but not now! Emphasis was on the detailed descriptions of each procedure we wanted to add.

At the end of a long session, we agreed on 60 new Obstetric and Gynaecological codes, which may not satisfy the purists among us but can also be considered generous concessions by KKM. Obviously, KKM (indirectly, the MCOs) prefer bundling all surgical and medical procedures. However, we managed to convince them that many operations are distinctly different from the technical and risk aspects. A more comprehensive fees schedule would encourage better compliance among us. Unfortunately, that list remains under the OSA or similar secrecy law and cannot be disclosed. However, it should be presented for gazette within the year, after which it will become public information.

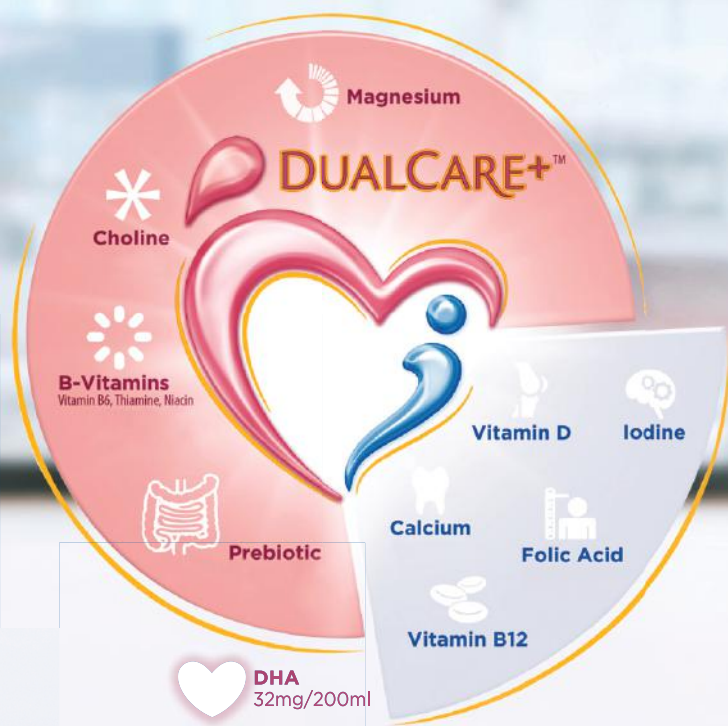
It is our hope that the future fees schedule will be readily embraced by all stakeholders in the healthcare industry, especially the patients, and not just the insurance companies/MCOs. In fact, I would suggest that OGSM instigates another review of the next schedule soon after this is passed in order to address the numerous anomalies affecting our procedure codes and to make it more precise and equitable for everyone.

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Improving care through high quality ultrasound education & training



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Regional Advisor, ISUOG Chair, Ultrasound Committee
Asia-Oceania Federation of O&G Maternal Fetal Medicine
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I vividly recalled attending an interview with a few senior members of the Maternal Fetal Medicine (MFM) fraternity for my subspeciality application more than half a decade ago now, in my alma mater, the National University of Malaysia (UKM). The late Dr Japaraj Robert jokingly asked “ Why in the world would you take up MFM? Don’t you know you will get all sorts of referrals and people might mistaken you for the department radiologist?” I shall not elaborate on the hilarious examples he gave, as our audience may not always see the funny side of things :)

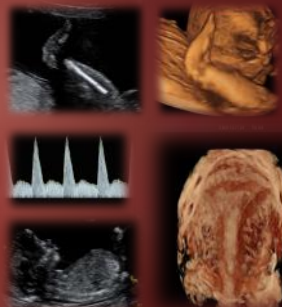
He was right and despite having spent much of my training studying, producing and examining images of the fetus, I realized that there is still much room for improvement when dealing with gynaecological imaging. A significant part of my training was with COGU+ subspecialists in Sydney and these were obstetricians of a different class when you put a probe in their hands. They made shear wave elastography, hysterosonography and presurgical diagnosis of deep infiltrating endometriosis (DIE) look rudimentary.

However, back in Malaysia, there is a lack of formal training for intermediate or advanced gynaecological ultrasound, save perhaps for IOTA* certification. There are several centres that organize regular intermediate to advanced ultrasound training and the Sarawak General Hospital (SGH) with the support of OGSM conducted an ISUOG[†]-approved ultrasound

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Appendix: RAG Members

Chair	Prof Liona POON
Co Chair	Prof Ritsuko Pooh
Hong Kong	Dr KY Leung
India	Prathima Radhakrishnan
India	Ashok Khurana
Indonesia	Dr Aditya Kusuma
Indonesia	Prof Johanes Mose
Japan	Dr Mayumi Tokunaka
Malaysia	Dr Hian Yan Dan Voon
Malaysia	Dr Rafaie Bin Amin
Philippines	Dr Gineth Panlilio
Philippines	Prof Walfrido Sumpaico
Singapore	Dr Tony Tan
South Korea	Ja Young Kwon
Taipei	Dr Steven Shaw
Thailand	Dr Sakita Moungmaithong
Thailand	Dr Nisarath Yamaphai
Vietnam	Dr Nhat-Thang Tran
Vietnam	Dr Linh Dinh



course in March 2022. Since then, an opportunity to further ultrasound education and training have arisen. ISUOG, under the leadership of Professor Liona Poon and Ritsuko Pooh have appointed a regional advisory group (RAG) to enhance collaboration within the Asia and Oceania region.

ISUOG, for those of you who may not be familiar with it, is an international professional organisation and charity with around 15,000 members in over 140 countries and aims to improve women's health and maternal outcomes through the provision, advancement and broadest dissemination of the highest quality education, standards and research information around ultrasound in obstetrics and gynecology. It delivers high-quality learning and disseminates research information and clinical guidance through its journal *Ultrasound in Obstetrics & Gynecology* and provides free educational materials such as practice guidelines (<https://www.isuog.org/clinical-resources/isuog-guidelines.html>) and online patient information leaflets aiming to help patients and their family members make more informed choices (<https://www.isuog.org/clinical-resources/patient-information-series.html>)

ISUOG also provides a free two-year membership for trainees beginning their careers in ultrasound for obstetrics and gynecology. Membership is facilitated through partner institutions, including SGH. ISUOG organizes an annual scientific congress and plans to hold the first dedicated ISUOG Asia International Symposium on 19-20th November 2022 and this will be open for registration soon.



Members of the RAG are also mooting the establishment of short term hands-on training program between their institutions facilitated by ISUOG and this will definitely open more doors for our Malaysian trainees and junior specialists. We look forward to exciting new collaborations and I do hope to hear from our OGSM members as well if you have any suggestions on how we can move education and training forwards.

Key

+COGU (Certificate of Obstetric & Gynaecological Ultrasound)

*IOTA (International Ovarian Tumour Analysis)

† ISUOG (International Society for Ultrasound in O&G)



The Female Warrior

By
 Dr Preetiba Rani Vijay
 O&G Specialist,
 Hospital Sungai Buloh

*One fine day, when I sat down to pray,
 Lights with angels came my way,
 Ask anything you may,
 It's time for you to dive away*

*I thought hard day and night,
 I want something with supreme might,
 A hand that can hold me ever so tight,
 After looking at my beautiful sight*

*I want love that is so tender,
 To that soul I will surrender,
 She will be my greatest defender,
 Fiery and strong from the female gender*

*Immediately I was sent,
 To a place with no vent,
 "Oh! what is this?" I lament,
 Little did I know this was a blessed event*

*Fear, hunger and loneliness,
 As I was surrounded by darkness,
 I became so powerless,
 Because I'm just a tiny foetus*

*From a distance I heard a sound,
 It's echoing all around,
 "Lup dup lup dup" like a rhythmic song,
 I tapped my tiny feet and danced along*

*Plenty of noise I could hear,
 "I love you & Congratulations my dear!"
 Who's saying that? I trembled in fear,
 It all sounded very near*

*"I'm a mother and I'm happy to be",
 I heard the gentle voice coming to me,
 All will be OK, you will see,
 Again and again it reassured me.*

*Then I knew I was in a womb,
 I'm naked with no costume,
 It's easy to go to the bathroom,
 And there is no need to groom!*

*I found a cable attached to my belly,
 "What is this?" I ask daily,
 It contained some sort of jelly,
 Swinging around with it was pretty jolly.*

*The cable brought me food,
 "Where is the source?" I pursued,
 Then I saw the cable was glued,
 To a powerhouse with a deep root*

*I started loving this new home of mine,
 Warm, cosy and perfectly fine,
 Lullaby and caresses I got every time,
 Oh, it feels so divine!*

*I can hear retching and vomiting,
 The voice says her head is spinning,
 It's because of the baby, I heard them saying,
 Her hands caressing me while smiling*

*The gentle voice soothed me always,
 Despite her having aches and sprains,
 How she craved for cookies and cakes,
 The baby wants it, she claims!*

Wherever she goes she brings me around,
At some places she gets discounts,
I waved at her during ultrasounds,
“That’s my baby!”, she proudly announced

Days and weeks passed by,
I was getting plenty of food supply,
My muscles were building like Popeye,
Ready to swim, kick and fly!

She never stopped thinking of me,
Everyone asked whether it’s a he or she,
“Does it matter?”, she answered with glee,
All she wants is a healthy baby

Kick, roll, turn and twist,
Sometimes I punch with my fist,
All my movements she carefully notice,
She charts it down without a miss

Swollen feet and bloating belly,
Constipation was a struggle daily,
She underwent changes physically,
But she was very strong mentally

Day and night she never stopped praying,
Purely for my health and wellbeing,
“Please be with me when I’m delivering”,
A warm voice said, “Of course my darling”

As I was growing bigger and bigger,
She was getting even larger,
My home was becoming smaller,
I can’t fit in here any longer!

My home started shaking one day,
The pressure pushed me to the doorway,
“Save me GOD!”, I started to pray,
Keep calm and look out for the pathway

I clung hard to the wall,
Curling myself into a ball,
“Let it go, you won’t fall”
“Something waiting for the best of all”

A soothing voice I heard inside me,
Telling me to be strong and steady,
What is all the mystery?
As the ride was becoming bumpy

I heard a voice groaning in agony,
As the pressure increased steadily,
I saw the door opening slowly,
As everything was in perfect harmony

The force was getting stronger and stronger,
She started moaning “I can’t bear any longer!”
The tunnel was getting wider and shorter,
As I was pushed down with tremendous pressure

Suddenly, I saw a very bright light,
I gushed out to see the magnificent sight,
My lungs which were so airtight,
Is now expanding with all its might!

I let out the loudest cry,
Wet and sticky, I opened my eyes,
A cloth was wrapped to make me dry,
Still, I felt like on ice.

Then came the voice again,
“All this is worth the pain”
She said half drained,
While blood was oozing out of her vein

She held me gently in her arm,
It felt so cosy and warm,
Peace engulfed and kept me calm,
I know I’m out of harm

“Whose voice is this?”, I was curious,
“Who took me out from the darkness?”
I opened my eyes and was speechless,
As I saw a face full of happiness

Her eyes gleamed with pride,
Filled with love ever so bright,
She caressed, kissed and hugged me tight,
I smiled and squealed in delight

“Let’s begin our journey”, she said
While gently caressing my little head,
“I’ll be with you, do not be afraid”
“For you will achieve something great!”

There she is from the female gender,
My superhero and a fighter,
To this soul I will surrender,
I will simply call her mother!

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“ Success doesn't come to you, you'll have to work hard for it.”



Dr Wong Xiu Sing
Member of Royal College of Obstetricians and Gynaecologists
Gazetting O&G Specialist
Hospital Sibü

I would like to express my sincere appreciation to OGSM for giving me the opportunity to share my experience of becoming a member of the Royal College of Obstetricians and Gynaecologists (RCOG). It all began in April 2014 when I first embarked on my journey to become a MO at Sibü Hospital.

Becoming a member of RCOG was never my dream since I truly enjoyed the routine of operating as a MO. I felt extremely comfortable working with a group of friends with the same interests and passions. I was, above all, grateful for having a brother working in the same field, although at another hospital.

It took significant courage for me to step out of my comfort zone, which has clearly expanded over time. The turning point came when I was surprised by my immediate reaction and consequent rejection of my brother's suggestion to attempt the MRCOG exam. I was caught in a dilemma, possibly from my lack of confidence.

However, I was very blessed to have an extremely supportive brother. "Sing, don't worry. I'll pay for you. Let's go to the exam together. There's one-week study leave!"

I finally decided to give it a try.

Obtaining a pass in Part 1 will motivate you to go for Part 2 and Part 3. Of course, nothing comes easy. With the support of my best friend in the department, my brother, senior colleagues, friends and of course, my Head of Department (Dr Marcus Kang), I was ready for the next round of preparation (Part 2) which took me exactly one year and a half. Those were the days when I actually took the time to read the guidelines and TOG articles and actively participate in question-and-answer sessions. Thank God, it was smooth sailing for me.

It was however a different story for Part 3. With limited experience and guidance, the three of us failed at

our first attempt of the MRCOG Part 3 at London in November 2019. We then created a WhatsApp group and signed up for three different online courses. The next round of struggle consisted of numerous virtual meetings, daily practice sessions and insightful discussions with our fellow friends who have passed their MRCOG Part 3.

Unfortunately, Covid hit us badly. Even though no exams were scheduled for more than two years, we continued to strive towards our goals. Good news eventually came with a virtual Osler exam conducted by RCOG. However, the first attempt at booking the exam ended in disappointment. Therefore, the struggle continued. We practiced day and night until we managed to secure our seats.

Finally, all our hard work had paid off. It was a double joy for our family since my brother and I managed to graduate as specialists together! Special thanks to IRC, SAMS and OGSM for organizing the mock exams. The utmost gratitude further goes to our seniors who were willing to have frequent virtual meetings with us just to ensure that we were on the right track. Thank God for all His blessings.

Never stop dreaming and believing in what you can achieve. I wish everyone the best of luck and look forward to more members of the Royal College of Obstetricians and Gynaecologists (RCOG). You all can do it!



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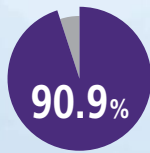
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vaccine effectiveness against pertussis disease in newborns based on a study in Spain (95% CI: 56.6, 98.1)^{1,5}

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- Maternal immunisation with Tdap is recommended by international and local guidelines such as WHO, CDC, MSIDC⁷⁻⁹; and in >30 countries globally¹⁰
- 1 Tdap dose per pregnancy
Vaccinate between 27 – 36 weeks of gestation^{1,7-9}



More than 269 million doses of Boostrix have been distributed worldwide over the past 20 years¹¹

References: 1. Booster Malaysia Prescribing Information, Version GDS10/IP11. 2. Sanofi Pasteur MSD Ltd. DTaP vaccine SmPC, 2018. [accessed January 2019]; available at www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PA2131-010-002_21022018164037.pdf. 3. Sanofi Pasteur MSD Ltd. DTaP/IPV vaccine SmPC, 2018. [accessed January 2019]; available at www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PA2131-006-001_18012018144214.pdf. 4. Perrett KP et al. Vaccine 2020;38:2095-2104. 5. Bellido-Blasco J, et al. Euro surveillance. 2017;22:1-7. 6. Vizzotti C, et al. Vaccine 2015;33:6413-6419. 7. World Health Organization. Pertussis vaccines: WHO position paper – August 2015. Wkly Epidemiol Rec 2015;90:433-460. 8. CDC. Available at: <https://www.cdc.gov/vaccines/schedules/hcp/imz/adult-conditions.html>. Last accessed: Mar 2021. 9. Malaysian Society of Infectious Disease and Chemotherapy (MSIDC). Guidelines for Adult Immunisation, 2020, 3rd edition. Retrieved from: <https://msidc.com.my>. 10. World Health Organisation (WHO). WHO vaccine-preventable diseases: monitoring system. 2020 global summary. Available at: https://apps.who.int/immunization_monitoring/globalsummary/schedules; Last accessed: May 2021. 11. GlaxoSmithKline. Data on File: DTP portfolio. DNG Number: 2021N465985_00.

Name of medicinal product: *Boostrix* Diphtheria, tetanus and pertussis (acellular, component) vaccine (adsorbed, reduced antigen(s) content). **Qualitative & quantitative composition:** 1 dose (0.5 mL) contains: Diphtheria toxoid not less than 2 International Units (IU) (2.5 Lf), Tetanus toxoid not less than 20 IU (5 Lf), *Bordetella Pertussis* Antigen: Pertussis toxoid 8 µg, Filamentous Haemagglutinin 8 µg, Pertactin 2.5 µg. **Indications:** is indicated for booster vaccination against diphtheria, tetanus and pertussis of individuals from the age of four years onwards. **Dosage and administration:** A single 0.5 mL dose of the vaccine is recommended. Boostrix can be given in accordance with the current local medical practices for booster vaccination with adult-type combined diphtheria-tetanus vaccine, when a booster against pertussis is desired. Boostrix may be administered to adolescents and adults with unknown vaccination status or incomplete vaccination against diphtheria, tetanus and pertussis as part of an immunisation series against diphtheria, tetanus and pertussis. Based on data in adults, two additional doses of a diphtheria and tetanus containing vaccine are recommended one and six months after the first dose to maximize the vaccine response against diphtheria and tetanus. Repeat vaccination against diphtheria, tetanus and pertussis should be performed at intervals as per official recommendations (generally 10 years). Boostrix can be used in the management of tetanus prone injuries in persons who have previously received a primary vaccination series of tetanus toxoid vaccine. Tetanus immunoglobulin should be administered concomitantly in accordance with official recommendations. 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Boostrix should not be administered to subjects who have experienced transient thrombocytopenia or neurological complications following an earlier immunisation against diphtheria and/or tetanus. **Warnings and Precautions:** If any of the following events are known to have occurred in temporal relation to receipt of pertussis-containing vaccine, the decision should be carefully considered: Temperature of $\geq 40.0^{\circ}\text{C}$ within 48 hours, not due to another identifiable cause; Collapse or shock-like state (hypotonic - hyporesponsive episode) within 48 hours of vaccination; persistent, inconsolable crying lasting ≥ 3 hours within 48 hours of vaccination; Convulsions with or without fever, occurring within 3 days of vaccination. In children with progressive neurological disorders, including infantile spasms, uncontrolled epilepsy or progressive encephalopathy, it is better to defer pertussis (Pa or Pw) immunization until the condition is corrected or stable. Boostrix should be administered with caution to subjects with thrombocytopenia or a bleeding disorder since bleeding may occur following an intramuscular administration to these subjects, should under no circumstances be administered intravenously. Extremely rare cases of collapse or shock-like state (hypotonic-hyporesponsive episode) and convulsions within 2 to 3 days of vaccination have been reported in DTPa and DTPa combination vaccines. **Interactions:** When considered necessary, Boostrix can be administered simultaneously with other vaccines or immunoglobulins, the products should always be administered at different sites. **Pregnancy and Lactation:** Pregnancy: The use of Boostrix may be considered during the third trimester of pregnancy. Safety data from a prospective observational study where Boostrix was administered to pregnant women during the third trimester (793 pregnancy outcomes) as well as data from post-marketing surveillance where pregnant women were exposed to Boostrix have shown no vaccine related adverse effect on pregnancy or on the health of the foetus/newborn child. Lactation :The safety of Boostrix when administered to breast-feeding women has not been evaluated. **Boostrix** should only be used during breast-feeding when the possible advantages outweigh the potential risks. **Adverse Reactions:** **Children from 4 to 9 years of age:** Very Common ($\geq 1/10$): irritability, somnolence, injection site reactions (including pain, redness and swelling), fatigue; Common (1/100 and $<1/10$): anorexia, headache, diarrhoea, vomiting, gastrointestinal disorders, fever $\geq 37.5^{\circ}\text{C}$ (including fever $> 39^{\circ}\text{C}$). **Adults, adolescents and children from the age of 10 years onwards:** Very Common ($\geq 1/10$): headache, injection site reactions (including pain, redness and swelling), fatigue, malaise; Common (1/100 and $<1/10$): dizziness, nausea, gastrointestinal disorders, fever $\geq 37.5^{\circ}\text{C}$, injection site reactions (such as injection site mass and injection site abscess sterile). **Overdose:** Adverse events following overdosage, when reported, were similar to those reported with normal vaccine administration. **Pharmacodynamics:** *Effectiveness in the protection against pertussis disease in infants born to women vaccinated during pregnancy:* Boostrix vaccine effectiveness (VE) was evaluated in three observational studies, in UK, Spain and Australia. The vaccine was used during the third trimester of pregnancy to protect infants below 3 months of age against pertussis disease, as part of a maternal vaccination programme. Please read the full prescribing information prior to administration, available from: GlaxoSmithKline Pharmaceutical Sdn Bhd (3277-U) Level 6, Quill 9, 112 Jalan Semangati, 46300 Petaling Jaya, Selangor Darul Ehsan, Malaysia. Abbreviated Prescribing Information Version 1.0 based on GDS10/IP11_09Aug2018. API created: 2nd April 2020.

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Genetic Causes of Female Infertility



Ms Sharmila Thevi Ponusamy

Embryologist, Sunfert International Fertility Centre, Bangsar South.
BSc Genetics (Hons) UKM.
Currently doing her MSc in Clinical Embryology, University of Leeds

Infertility is most often caused by a combination of male and female factors. However, it can be attributed to a sole female factor in up to a third of cases. Historically, a significant proportion of infertility has been categorized as being idiopathic. Recent advancements have indicated a more significant role of genetic aberrations as a cause of infertility in the female.

Turner syndrome (TS), 45,XO is the most prevalent genetic abnormality that causes infertility in females. TS causes hypogonadotropic hypogonadism which leads to amenorrhea and infertility in most females due to the under-expression of the X chromosome¹. Some individuals may have a mosaic turner karyotype, exhibiting genotypes such as 45, XO / 46, XX or 45, XO / 46, XY (in males). Approximately 5-7% of women with TS can conceive spontaneously but may have a higher miscarriage rate compared to 46, XX females². The ovarian failure in TS women is said to be due to erroneous meiosis which causes spontaneous apoptosis of the germ cells³.

Triple X syndrome occurs in women with a genotype of 47, XXX. This occurs in 1 out of 1000 female births. Trisomy X is an error mostly due to non-disjunction during maternal meiosis^{4,5}. Similar to Turner syndrome, Triple X Syndrome can also exist as a mosaic genotype. Premature ovarian insufficiency (POI) is present in most trisomy X females, causing infertility^{5,6}.

Swyer syndrome are females affected with a genotype 46, XY. These individuals have errors in the sex determination genes whereby most of them show deletion of SRY gene⁷. The SRY gene is a sex-determining gene on the Y chromosome that normally encodes for the Sex-determining Region Y protein (SRY), or Testis-Determining Factor (TDF). However in Swyer syndrome, due to this gene deletion, they lack the testes-determining factor. As a result, they develop Mullerian ducts and subsequently have ovaries, a uterus, fallopian tubes and female genitals. They are however amenorrhoeic due to streak gonads⁸. Females with this syndrome present with ovarian failure, high gonadotrophins and infertility⁷.



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Gene mutations and deletions

Premature ovarian failure (POF) is characterized by the loss of follicles before a woman reaches the age of 40 due to a lack of response to GnRH. There are two POF critical regions; POF 1 and POF 2 found on the X chromosome⁹. There are genes located in these regions that are said to be responsible for ovarian function such as BMP15, FMR1, and PGRMC1. BMP (Bone morphogenetic protein) 15 is located at Xp11.2 and encodes for oocyte-specific growth factor. Mutations on this gene are said to cause POF⁹.

PGRMC (Progesterone receptor membrane component) **1** which is located on Xq24 mediates anti-mitotic and anti-apoptotic activity of progesterone on ovarian and granulosa cells^{9,10}. It has been shown to be a candidate gene for POF and affects female fertility as shown in knockout mice and zebrafish studies¹¹.

Mutation of the **FMR1** gene located at Xq27.3 causes Fragile X syndrome where affected individuals have variations of phenotype^{12, 13}. Women with 55-200 CGG triplet repeats on the gene have a higher risk of developing Fragile X associated POF and diminished ovarian reserve^{13,14}. These women have trouble conceiving compared to normal women of similar age¹². The reduction in the FMR protein could result in a reduced follicular pool starting at a fetal stage, thereby leading to infertility¹².

Gene	Known function	Location	Phenotype
Androgen Receptor (AR)	Shown to be important in sex differentiation, expressed in granulosa cells	Xq12	Androgen insensitivity syndrome, Premature ovarian insufficiency
Forkhead Box O4 (FOXO4)	Shown to be expressed in granulosa cells of humans and mice and may be involved in ovarian development	X913.1	Premature ovarian insufficiency
Premature Ovarian Failure 1B (POF1B)	Encoded protein binds to actin filaments and may be involved in ovarian development	Xq21.2	Germ cell apoptosis and POF, amenorrhea
Dachshund family transcription factor 2 (DACH2)	Encoded protein involved in organogenesis and POF – can be inactivated by DNA methylation	Xq21.3	Premature ovarian insufficiency

Table 2: Shows the single-gene mutation in chromosome X that are shown to cause POF^{9,15}

Role of Assisted Reproduction Technology (ART) in improving the fertility outcomes for each condition

It is becoming increasingly evident that genetic aberrations in both males and females are a significant cause of infertility. Identifying such defects not only provides a clear explanation

for the infertility but may allude to a solution as well. IVF and PGT in patients with genetic defects such as Turner syndrome and Swyer syndrome, have proven to improve the pregnancy and live birth rate^{3,16}. Additionally, PGT has shown to be promising in preventing the inheritability of these genetic defects. In some circumstances, such as in women with Turner Syndrome, oocyte freezing or ovarian tissue cryopreservation might be of value as the egg number decrease rapidly in these women^{3,17}.

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Without protection,
85 in 100
women will get **pregnant**
 [for sexually active couples; within 1st year]

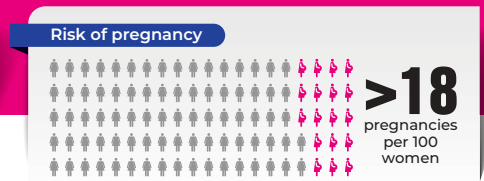
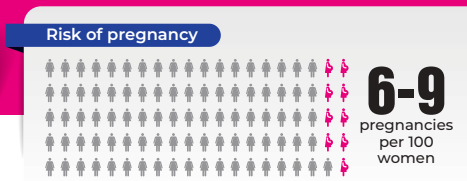
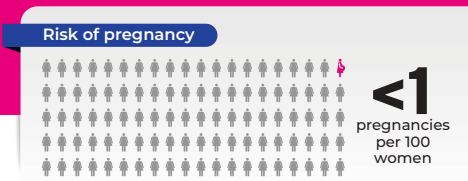


Efficacy of Contraception Methods • 1st year of typical use for common methods available in Asia

99% +

91% +

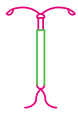
76% +



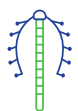
Long Acting Reversible Contraception (LARC)



Contraceptive Implant
99.95% effective
 Last up to 3–5 years depending on type



Hormonal Intrauterine Device [hormonal IUD]
99.8% effective
 Lasts up to 5 years



Copper Intrauterine Device [Cu-IUD]
99.2% effective
 Lasts up to 3–10 years depending on type

Permanent Contraception

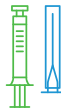


Male sterilisation [vasectomy]
99.85% effective
 Permanent



Female Tubal Ligation
99.5% effective
 Permanent

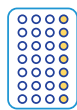
Short Acting Reversible Contraception (SARC)



Contraceptive Injection:
 Depot medroxyprogesterone acetate [DMPA]
94% effective
 Injection every 12 weeks

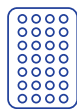


Contraceptive Vaginal Ring
91% effective
 New ring used every 4 weeks



Combined Oral Contraceptive Pill [the COC Pill]
91% effective
 Taken daily depending on pack

* For 28 days pack, there is no pill-free interval; for 21 days pack there is a 7 days pill-free interval



Progestogen-only Contraceptive Pill [POP]
91% effective
 Taken daily

Other Contraception Methods



Diaphragm
88% effective



Male Condom
82% effective



Female Condom
79% effective



Withdrawal Method
78% effective



Fertility Awareness based Method
76% effective
 Abstain from intercourse or use another method on fertile days.

Please consult your healthcare provider for more information on the contraceptive method most suitable for you

- Data is based on estimates of 1st year probabilities of contraceptive failure for methods of contraception in the United States. For most methods, these estimates were derived from the experience of women in the 1995 National Survey of Family Growth (NSFG) or the 1995 and 2002 NSFGs, so that the information pertains to nationally representative samples of users. For the other methods, estimates were based on evidence from surveys and clinical investigations.
- Typical use – real life use where mistakes can sometimes happen e.g. forgetting a pill, condom not used correctly
- Perfect use – when the rules are followed perfectly every time

An educational service provided by



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COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS, ACADEMY OF MEDICINE OF MALAYSIA: FUTURE DIRECTIONS


The Academy of Medicine of Malaysia, formed in 1966, embraces all disciplines of medicine with the motto of "Terus Maju" ('Progress Ahead'). The Obstetrics and Gynaecology discipline was initially incorporated as one of the Chapters in the Academy of Medicine. The Chapter had its first meeting on 12th September 1993, attended by 15 pioneer members. During the inaugural meeting, Dato' Dr R. S. McCoy was elected as Chairman of the Interim Committee. Dr P. Boopalan then took over as the Chairman of the Chapter in 1997 and he was followed by Dato' Dr Johan Thambu in 2005. The Chapter of the College of Obstetricians and Gynaecologists officially became the College of Obstetricians & Gynaecologists (COGAMM) in 1999.

Holistically, the COGAMM aims to be responsible for credentialing activities, consensus development and for quality assurance activities. Furthermore, COGAMM intends to champion the best in women's healthcare and to support doctors to achieve excellence in their practice of Obstetrics and Gynaecology. Constitutionally, the College objectives are to advance the art and science and promote scientific research in Obstetrics and Gynaecology; to promote and maintain the highest moral, ethical and professional standards in the practice of Obstetrics and Gynaecology; and to represent, express, and give effect to the views and opinions of its members. Finally, it aims to educate the public in preventive and promotive health in Obstetrics and Gynaecology.

Presently, the strength of the College stands at a total of 161 members out of whom 35 are Fellows. The Council 2020 to 2022 led by Professor Datuk Dr Siti Zawiah Omar has elevated the profile of the College and aligned it with the objectives of the Academy of Medicine of Malaysia. The new Council 2022-2024, elected on 25th June 2022, is looking at new platforms for furthering postgraduate training and strengthening sub-specialization training.

There have been several new developments that have significant impact on the training of specialists in O&G. This involves trainees in both the Masters' Programme as well as those in the parallel pathways. The launch of the new National Curriculum for postgraduate education in O&G has been well received. This curriculum has been designed and structured to fulfil the requirements of both pathways to attaining postgraduate O&G qualifications, having fulfilled the required four years of training.

The new generation of Council Members have slowly managed to make the College more relevant and visible. Council Members have been in regular communications to keep all members informed of developments in postgraduate training, professional development, and how all practitioners in O&G can contribute to improve women's health in Malaysia. The College will also be involved in the Fee Schedule Committee and in the development of new CPG and consensus statements.



For the past few years, there were many activities that have been carried out by the Council Members, although most part of the tenure was unfortunately bogged down by the Covid-19 pandemic. In 2021, during the early introduction of the Covid vaccination programme, the COGAMM organized a webinar entitled “Covid-19 in Pregnancy: Vaccine?” on 30th January 2021. This cleared the dispute between the safety and risk of the vaccination. The panel was comprised of both local and overseas experts. Following this successful webinar, we had a second session, but this time for primary care practitioners. The webinar was entitled “Covid-19 in Pregnancy: Updates for Primary Care”. Our third webinar was on “Fertility Treatment in Malaysia – Too Little Too Late?”. We wrapped up the year with a well-attended Public Webinar – “Sembang-Sembang Bersama Pakar: Covid-19 dan Kehamilan” on 5th. September 2021.

In 2022, we started off the year with a webinar on “Understanding Gestational Diabetes – Current Management Strategies”. Among the topics discussed were Burden of Disease and Strategies to Reduce GDM complications; Screening and Diagnosis of GDM; Medical Nutrition Therapy and Exercise – What should we be advising our patients?; Pharmacological Management of GDM and Foetal Surveillance and Delivery. The webinar was extremely well attended as there were close to 1,000 attendees who tuned in to listen to the webinar and certainly the Q&A session was both exciting and animated.

Our highlight of the year was MyO&G 2022 that was held on 12th and 13th March 2022. The theme “New Beginnings” was specially coined to mark the emergence of the College into a more prominent and distinctive role in the academic field. The Conference Chair was Professor Dr Mukhri Hamdan and Scientific Chair was Dr Premitha Damodoran. Initially planned for a physical event at Pullman Hotel Bangsar, Kuala Lumpur, the surge of Covid “Omicron” sadly converted the meeting into a virtual meeting, just one month before the actual event. Despite the last minute conversion into a virtual meeting, MYO&G 2022 turned out to be a complete success. There were 1,062 registrants for MYO&G 2022, of which 886 were delegates and the rest exhibitors and speakers. The total number logged in stood at 910 delegates with the highest traffic of 580 delegates during the Opening Ceremony. This event could not have taken place without the twenty-two sponsors who came on board at various levels to help fund the activity, provided speakers and helped disseminate information.

Moving forward, COGAMM will strive to ensure that efforts to improve the quality of O&G services is given utmost importance. In this area, it will collaborate to conduct courses for professional development as well as updating the skills of practitioners. This is a tall order and the various subcommittees in the College are committed to work with trainers to develop new strategies that will help learning in this direction. We wish the newly elected Council all the very best.

Professor Dr Mukhri Hamdan
Council member 2022 – 2024

Reference: ¹50th AMM Anniversary Book, ²COGAMM Annual Report

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the world has committed to **ELIMINATE** a cancer

As per World Health Organization,
CERVICAL CANCER
IS PREVENTABLE
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treatment¹



WHO proposed that the following targets must be **met by 2030** for countries to be on the path towards **Cervical Cancer Elimination**¹



Coverage of **HPV vaccination*** for girls by **age 15**
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Coverage of **screening** with a high performance test by age 35, and again by age 45



Coverage of **treatment for pre-cancerous lesions of the cervix**
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Cervical Cancer
is the **2nd** most common cancer in **Malaysian women** (aged 15-44 years old)²


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AGE INDICATION³



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Important Information about GARDASIL[®] 9

INDICATIONS GARDASIL[®] 9 is a vaccine indicated in girls and women from 9 through 45 years of age for the prevention of cervical, vulvar, vaginal, and anal cancer; premalignant genital lesions (cervical, vulvar and vaginal); premalignant anal lesions; HPV infections; cervical adenocarcinoma in situ (AIS); and external genital warts (condyloma acuminata) causally related to Human Papillomavirus (HPV) types 6, 11, 16, 18, 31, 33, 45, 52, and 58. GARDASIL[®] 9 is indicated in boys and men from 9 through 45 years of age for the prevention of premalignant lesions and HPV infections caused by HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58; anal cancer caused by HPV types 16, 18, 31, 33, 45, 52, and 58 and genital warts (condyloma acuminata) caused by HPV types 6 and 11. **DOSAGE AND ADMINISTRATION** GARDASIL[®] 9 should be administered intramuscularly as 3 separate 0.5-mL doses at month 0, 2 months after first dose, and 6 months after first dose. Alternatively, in individuals 9 through 14 years of age GARDASIL[®] 9 can be administered according to a 2-dose schedule; the second dose should be administered between 5 and 13 months after the first dose. If the second vaccine dose is administered earlier than 5 months after the first dose, a third dose should always be administered. **CONTRAINDICATIONS** GARDASIL[®] 9 is contraindicated in patients with hypersensitivity to either GARDASIL[®] 9 or GARDASIL[®] or any of the inactive ingredients in either vaccine. Individuals who develop symptoms indicative of hypersensitivity after receiving a dose of GARDASIL[®] 9 or GARDASIL[®] should not receive further doses of GARDASIL[®] 9. **PRECAUTIONS** As for any vaccine, vaccination with GARDASIL[®] 9 may not result in protection in all vaccine recipients. This vaccine is not intended to be used for treatment of active external genital lesions; cervical, vulvar, vaginal, or anal cancers; CIN, VIN, VaIN, or AIN. This vaccine will not protect against diseases that are not caused by HPV. As with all injectable vaccines, appropriate medical treatment should always be readily available in case of rare anaphylactic reactions following the administration of the vaccine. Syncope, sometimes associated with tonic-clonic movements and other seizure-like activity, has been reported following HPV vaccination. When syncope is associated with tonic-clonic movements, the activity is usually transient and typically responds to restoring cerebral perfusion by maintaining a supine or Trendelenburg position. Vaccinees should be carefully observed for approximately 15 minutes after administration of GARDASIL[®] 9. The decision to administer or delay vaccination because of a current or recent febrile illness depends largely on the severity of the symptoms and their etiology. Low-grade fever itself and mild upper respiratory infection are not generally contraindications to vaccination. Individuals with impaired immune responsiveness, whether due to the use of immunosuppressive therapy, a genetic defect, Human Immunodeficiency Virus (HIV) infection, or other causes, may have reduced antibody response to active immunization. This vaccine should be given with caution to individuals with thrombocytopenia or any coagulation disorder because bleeding may occur following an intramuscular administration in these individuals. **ADVERSE EVENTS** The most common (>10%) vaccine-related adverse experiences observed among recipients of GARDASIL[®] 9 were injection-site pain, swelling, erythema, and headache. And common (>1%) vaccine-related adverse experiences observed reported were pruritus, bruising, pyrexia, nausea, dizziness and fatigue. **Post-marketing reports:** The safety profile of GARDASIL[®] 9 and GARDASIL[®] are similar. The post-marketing adverse experience with GARDASIL[®] is relevant to GARDASIL[®] 9 since the vaccines are similar in composition and contain L1 HPV proteins of 4 of the same HPV types. **GARDASIL[®] 9** In addition to the adverse reactions reported in the clinical studies, the following adverse experiences have been spontaneously reported during post-approval use of GARDASIL[®] 9: **Nervous system disorders:** syncope sometimes accompanied by tonic-clonic movements. **Gastrointestinal disorders:** vomiting. **GARDASIL[®] 9** Additionally, the following post-marketing adverse experiences have been spontaneously reported for GARDASIL[®]: **Infections and infestations:** cellulitis. **Blood and lymphatic system disorders:** idiopathic thrombocytopenic purpura, lymphadenopathy. **Immune system disorders:** hypersensitivity reactions including anaphylactic/anaphylactoid reactions, bronchospasm, and urticaria. **Nervous system disorders:** acute disseminated encephalomyelitis, Guillain-Barré syndrome. **Musculoskeletal and connective tissue disorders:** arthralgia, myalgia. **General disorders and administration site conditions:** asthenia, chills, malaise. **Before prescribing GARDASIL[®] 9, please read the Prescribing Information.**

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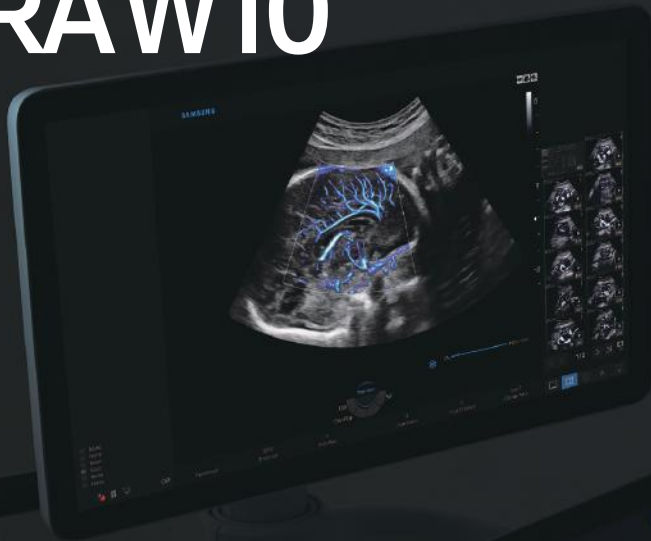
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for fast rendering speed

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