

Editorial

A century of academic obstetrics and gynaecology in Hong Kong: pioneering maternity and women's health

In Hong Kong, the formal academic discipline of obstetrics and gynaecology was established in 1925, exactly a hundred years ago, when Prof Richard Edwin Tottenham was appointed as the first Chairman of Midwifery at The University of Hong Kong (HKU). Over the past century, academic medicine has played a pivotal role in shaping remarkable transformations in healthcare, research, and development in obstetrics and gynaecology. HKU, and later The Chinese University of Hong Kong (CUHK), have been at the forefront of advancing maternal and women's health through education, research, and clinical innovation. It is essential to recognise how academic obstetrics and gynaecology has shaped Hong Kong's medical landscape and led our way in reducing maternal morbidity and mortality, improving perinatal care, and setting high-quality standards in women's health.

Maternity healthcare

Historical records indicated that Prof Tottenham performed the first Caesarean section in Tsan Yuk Hospital in June 1925. This exemplified that many procedures carried out today were first introduced by academic leaders. In the earlier years, maternal mortality was high. Prof Daphne Chun started obstetric audits in Tsan Yuk Hospital, setting in place the quality and safety that we nowadays pay more and more attention to. With this, Hong Kong excelled in lowering the maternal mortality rate, which attracted international attention.

The first prenatal diagnosis laboratory in Hong Kong was established in 1981 at Tsan Yuk Hospital, which has since played a leading role in promoting the development of prenatal diagnosis of common conditions. In the 1980s, our HKU academics introduced ultrasonographic screening for fetuses affected by alpha-thalassaemia major in place of invasive tests, as well as strategies to prevent vertical transmission of hepatitis B. In the early 2000s, non-invasive prenatal testing for Down syndrome and other chromosomal abnormalities was introduced by academics from CUHK. These examples of pioneering work improved obstetric care.

Gynaecological care

Minimally invasive surgery was a major breakthrough in gynaecological treatment. The first laparoscopic gynaecological procedure in Hong Kong was carried out by Prof Daphne Chun and Prof Ho-Kei Ma in the late 1960s. More recently, robotic surgery has been introduced into gynaecological applications in Hong Kong, mainly in cancer surgeries, by the two university units.

Research interest in gestational trophoblastic diseases began in the 1950s, led by HKU professors over several successions. This put Hong Kong in a renowned position in the international arena. Prof Hextan Ngan was involved in the writing of a number of guidelines on gestational trophoblastic diseases and gynaecological cancers for the International Federation of Gynecology and Obstetrics.

Reproductive health

Prof William Nixon founded the Hong Kong Eugenics League in 1936, succeeded by Prof Gordon King who re-established it as The Family Planning Association in 1951. The subsequent HKU professors continued to preside over the governance of the association, which contributes to the development of sexual and reproductive health in Hong Kong. Research work led by Prof Pak-Chung Ho, conducted both locally and in collaboration with the World Health Organization, have guided the development of medical abortion and emergency contraception.

The two universities were among the first to introduce in vitro fertilisation to Hong Kong, which revolutionised fertility treatment. They took the lead to expand the application of assisted reproduction technology for pre-implantation genetic testing and fertility preservation. In addition, our academics participated in the editorial work for the *Laboratory Manual for the Examination and Processing of Human Semen* published by the World Health Organization.

Research and development

In addition to steering clinical excellence, clinical materials at the university teaching hospitals make important contribution to supporting clinical studies as well as basic science and translational studies. Findings from the research studies can thus be translated into clinical applications to improve healthcare.

Professional leadership and knowledge exchange

Throughout the years, our academics have held key positions in professional bodies locally, regionally, and internationally. Prof Ho-Kei Ma founded the Hong Kong College of Obstetricians and Gynaecologists, which was among the first constituent specialty colleges of the Hong Kong Academy of Medicine, and established a formal system for training specialists and subspecialists in Hong Kong. Prof Allan Chang, the founding professor of obstetrics and gynaecology at CUHK, was intimately involved in the establishment of a conjoint examination between the Hong Kong and the UK colleges. Through international collaboration, the two university units have

bridged our academics with peers in other parts of the world to foster exchange of academic and clinical knowledge.

Conclusion

A century of academic obstetrics and gynaecology in Hong Kong has transformed women's healthcare from a rudimentary service to a world-class specialty. The contributions of the two university units and their affiliated hospitals have set the benchmarks in medical education, training, quality assurance, and innovation. As we look ahead, the next generation of academic specialists must continue this legacy and embrace the future with the same pioneering spirit that our predecessors have defined over the past 100 years. I am sure, with our academics, clinicians, and allied health staff working together closely, the next century will be just as transformative as the last.

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