LCQ16: Assisted reproduction services

â€‹Following is a question by the Hon Judy Chan and a written reply by the Secretary for Health, Professor Lo Chung-mau, in the Legislative Council today (December 18):

Question:

It has been reported that there has been an increasing number of people choosing to use assisted reproduction services in recent years, for example, last year over 20 000 frozen eggs were stored in the institutions holding licences related to assisted reproduction services issued by the Council on Human Reproductive Technology (licensed centres) (commonly known as "egg freezing"), representing an increase of nearly 70% compared to two years ago. In this connection, will the Government inform this Council:

(1) of the following information of each licensed centre at present: (i) the name of the institution, (ii) the type of institution (i.e. public and private), (iii) the type of licence, and (iv) the assisted reproduction services provided (set out in a table);

(2) whether it knows the number of persons who used frozen-thawed eggs in each of the past three years, together with a breakdown by type of licensed centres (i.e. public and private) in which the eggs were stored;

(3) whether it knows the number of patients who had retrieved frozen eggs stored in Hong Kong in the past three years; if it has not kept the relevant data, whether it has plans to compile statistics expeditiously;

(4) whether it has compiled statistics on the respective numbers of specialists in reproductive science serving in the public healthcare system and private healthcare institutions in each of the past five years;

(5) given the rising number of people using assisted reproduction services in recent years, whether the authorities have plans to increase the training opportunities for specialists in reproductive science in the public healthcare system; if so, of the details; if not, the reasons for that;

(6) given that during the debate on the Member's motion on "Policies on supporting assisted reproduction" in this Council on June 20 this year, the Secretary for Health indicated that, last year, only 50 patients used their frozen-thawed eggs and only seven eventually established an ongoing pregnancy, reflecting that egg freezing may not increase the fertility rate, but there are views that the growth in fertility brought about by the increase in egg freezing may not be reflected in the short term and, coupled with the fact that some people would retrieve frozen eggs for use outside Hong Kong, the figures on the use of frozen-thawed eggs locally may not reflect the full situation, whether it has studied how the increase in egg freezing in recent years will affect the fertility rate in the future; if so, of the details; if not, the reasons for that; and

(7) as there are views pointing out that, in recent years, the egg freezing service has become industrialised in various places of the world and outsiders can be attracted to use it, whether the authorities have plans to develop and promote in Hong Kong various types of assisted reproduction services including egg freezing?

Reply:

President,

In consultation with the Hospital Authority (HA), the consolidated reply to the question raised by the Hon Judy Chan is as follows:

The Government encourages the public to give birth in their best reproductive years and promotes fertility through an array of measures creating a conducive environment for childbearing, to alleviate the problem of ageing population. Couples facing medical difficulties in conceiving may use reproductive technology (RT) procedures to fulfil their wishes in childbearing. Unlike general medical procedures, RT procedures involve social, moral and ethical issues such as human life, family values, the rights of the service users and the welfare of the children born as a result of RT. Relevant policies, measures and matters must be fully considered and handled with caution.

Currently, RT procedures are regulated by the Human Reproductive Technology Ordinance (Cap. 561) (Ordinance). The Council on Human Reproductive Technology (CHRT) was established under the Ordinance with representatives from sectors such as medical, legal, social work, religious, philosophical or ethical education, psychology, and sociology to examine comprehensively and make decisions on various regulatory matters relating to RT. The Ordinance stipulates that healthcare institutions must hold licences issued by the CHRT to provide RT procedures. Currently, a total of 13 public and 23 private healthcare institutions have been licensed by the CHRT (including 18 artificial insemination by husband licences and 18 treatment licences). For details, please refer to Annex.

According to the Code of Practice on Reproductive Technology and Embryo Research (Code) made by the CHRT, the overall clinical responsibility for RT procedures should be held by a registered medical practitioner (RMP) with post-graduate qualifications recognised by the Hong Kong College of Obstetricians and Gynaecologists or the College of Surgeons of Hong Kong and recognised as an accredited specialist in Obstetrics and Gynaecology (O&G), Surgery or Reproductive Medicine (RM) under the Specialist Register kept by the Registrar of Medical Practitioners under the Medical Registration Ordinance (Cap. 161). According to the statistics of the CHRT, there are a total of 195 O&G, Surgery or RM specialists providing such services in licensed centres at present, with 107 and 88 in public and private licensed centres respectively. According to the information from the Hong Kong Academy of Medicine, it is estimated that about 500 RMPs hold the relevant post-graduate qualifications recognised by the Hong Kong College of Obstetricians and Gynaecologists (including O&G and RM), and 1 100 RMPs hold the relevant post-graduate qualifications recognised by the College of Surgeons of Hong

Kong.

RM is a subspecialty of O&G. Upon completion of specialist training in O&G, doctors may undergo subspecialty training in the training hospitals (i.e. Queen Mary Hospital – Kwong Wah Hospital Joint Training Centre and Prince of Wales Hospital) for two to three years, during which they are required to complete a specified number of procedures and assessments before they can apply for certification as a specialist in RM under the Specialist Register. Based on the current caseload, the HA can train four doctors to obtain specialist qualifications in RM every two to three years. Among the specialists currently providing services in the licensed centres, 14 are specialists in RM on the Specialist Register, with one of them providing assisted reproductive services in the public sector and the other 13 in the private sector. Although there is no requirement in the Code that RT procedures must be performed by specialists in RM, in the HA, more advanced RT procedures (e.g. in-vitro fertilisation and frozen embryo transfer) are performed by doctors who have completed or are currently undergoing specialist training in RM. In 2024, 11 doctors possess relevant post-graduate qualifications and four doctors are undergoing specialist training in the HA. The Government does not have the relevant figures for the private sector.

The Government respects individuals' rights in life planning and therefore under prevailing regulations the public may choose to receive gamete freezing services for non-medical reasons. However, when using oocyte cryopreservation services, the public should be aware that relevant procedures are invasive medical procedures that involve multiple hormonal injections for ovarian stimulation, conscious sedation for oocyte retrieval, and insertion of a needle through the top of the vagina to retrieve oocytes from the ovaries. As with other surgical procedures, the entire oocyte cryopreservation procedure may result in various complications, including those related to ovarian stimulation, sedation, and oocyte retrieval procedures. It is the responsibility of the RMPs performing the relevant procedures to explain in detail the risks involved to the service recipient undergoing the procedures to ensure informed consent.

Medically, oocyte cryopreservation cannot fully reverse the physiological limitations in terms of age in childbearing. As women age, the risks associated with pregnancy and delivery for both the fetus and the woman increase, while the success rate of pregnancy decreases. According to the statistics of the CHRT in 2023, the success rate of in-vitro fertilisation treatment with fresh embryos for women aged 26 to 30 in achieving an ongoing pregnancy was about 50 per cent; for women aged 40 to 45, the success rate was reduced to 8 per cent. The above shows that it is a natural phenomenon that women's fertility decreases significantly with age, and RT can only assist but not reverse this situation.

The statistics of the CHRT shows that the number of frozen oocytes stored in licensed centres has been on the rise in recent years. As of the end of 2023, 20 375 oocytes are stored in the licensed centres, with 5 983 oocytes newly stored within 2023. In the meantime, the total number of people who have exported frozen oocytes outside Hong Kong from licensed centres between 2021 and 2023 is 90. The number of people using fresh embryos created

from frozen oocytes in public and private licensed centres, ongoing pregnancies and live birth events in the same period are tabulated below:

Year	Number of people using fresh embryos created from frozen oocytes in public licensed centres	Number of people using fresh embryos created from frozen oocytes in private licensed centres	Number of ongoing pregnancies	Number of live birth events
2023	2	48	7	N/A (Note 1)
2022	6	55	7	5
2021	1	43	6	5

Note 1: Licensed centres are required to report the details concerning the outcome of pregnancy within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2023 is not yet available.

The above data shows that the utilisation rate of frozen oocytes is very low, and there is no indication that oocyte cryopreservation service for non-medical reasons can have a substantial impact on the fertility rate. International studies have also had similar findings. A recent systematic review (Note 2) covering more than 13 000 individuals who had frozen their oocytes for non-medical reasons in different countries and regions (including 27 relevant studies with a median follow-up time of 7 years since oocyte retrieval) showed that only about 10 per cent of them used their frozen oocytes, and among them, only less than one-third successfully gave birth.

Based on the above considerations and factors, from the health policy perspective, the Government does not encourage undergoing invasive medical procedures with associated risks, and procedures that might delay childbearing decisions and cause one to miss the best reproductive years without medical reasons. However, the Government is aware that there are calls for an extension of the maximum gamete storage period to allow greater flexibility in life planning. As the relevant policy involves medical, legal, ethical and moral considerations, the CHRT and its Ethics Committee will convene a meeting in the first quarter of 2025 to discuss the relevant issues. The CHRT will carefully consider the views of various parties from different aspects, before making appropriate recommendations to the Health Bureau. The Government will thoroughly consider the recommendations made by the CHRT before deciding on the way forward.

Note 2: Reference: Kirubarajan A, Patel P, Thangavelu N, Salim S, Sadeghi Y, Yeretsian T, Sierra S. Return rates and pregnancy outcomes after oocyte preservation for planned fertility delay: a systematic review and meta-analysis. Fertil Steril. 2024 Nov;122(5):902-917. doi:

10.1016/j.fertnstert.2024.06.025. Epub 2024 Jul 2. PMID: 38964588.