

Ethical decisions in light of potential Zika virus epidemic are 'personal', says Dr Christopher Ng

6 hours ago, Caren Andexer, Pearly Neo



Many expectant mothers are increasingly worried about the potential impact of the Zika virus on their pregnancies and newborns.

Pregnancy fears are taking hold of communities in the region even as the spread of the potentially teratogenic Zika virus remains under close monitoring. With the [second confirmed case](#) of a pregnant woman infected with the virus in Singapore, and cases also emerging in [Malaysia](#), it is important for healthcare professionals to consider possible preventive measures to reassure expectant and hopeful mothers as we face the ethical dilemma of termination amongst other issues.

The current outbreak is notorious for the rapid emergence of cases of microcephaly, a rare and incurable condition where infants are born with dangerously small heads. Microcephaly may lead to seizures, trouble breathing, eating, and speaking.

Although the Zika infection is usually mild and self-limiting with fever, rash, joint pain and conjunctivitis lasting from several days to a week, it may potentially cause serious complications including [Guillain-Barre Syndrome](#) which is a progressive symmetrical paralysis and loss of reflexes starting from the legs.

"The first concern pregnant mothers have is, definitely, microcephaly," says Dr Christopher Ng, an obstetrician and gynaecologist practicing at the GynaeMD Women's and Rejuvenation Clinic in Camden Medical Centre, Singapore. "Since the first local case last week, I've seen many patients who are extremely worried about this and insisted on testing even if they are asymptomatic."

Dr Ng explains that current MOH Singapore guidelines about Zika basically emphasise that prevention is the best course: sleep with the air-conditioning on, close all windows, and use mosquito nettings. Additionally, pregnant mothers who test positive are sent to government hospitals and

treated by maternal-fetal teams.

But when it comes to the tough questions, it is obvious that these are not answerable in quite so straightforward a manner.

Virus outbreak raises several ethical issues

Firstly, there are ethical questions related to prevention. Whilst it is undoubtedly important, the current recommended strategies focus on personal prevention of mosquito bites and environmental prevention with vector control. These may work in smaller, more developed countries like Singapore, but may not be very feasible, however, on the grand scale needed to prevent Zika transmission in other affected countries.

To compound the issue, given that the virus may cause significant problems including stillbirths as well as birth defects such as microcephaly, it is inevitable that the ethical dilemma of early termination has become a topic of consideration. The question of whether women with healthy pregnancies should even consider terminating their pregnancies raises many concerns, as experts state that microcephaly is something that develops later in pregnancy, and thus termination would be premature before 24 weeks.

Prenatal diagnosis and subsequent informed consent for abortion are difficult. A pregnant woman tested positive for Zika would essentially be placed in a waiting game with her pregnancy. The decision to wait-and-see naturally creates the emotional burden of all the risks of facing a compromised pregnancy. Additionally, for some patients, economic circumstances would also force them to make their decisions with inadequate information; thereby placing them in the worst of positions to meet those additional challenges.

Ultrasounds and amniocentesis can help parents make tough calls

In Singapore, there are techniques available that seek to provide the parents with as much information as possible before they are asked to make a decision. If a pregnant mother tests positive for Zika, a series of ultrasound scans will be recommended to measure the foetus' head size, and plotting this over a period of time will show whether or not microcephaly has occurred. An alternative method is amniocentesis, which involves removing amniotic fluid to test for the virus – but even this has its risks.

"Amniocentesis carries with it a risk of miscarriage, and the results are not always conclusive," explains Dr Ng. "So in that, parents will need to weigh their options too – does the need to know this way trump the ultimate risk? There are no guidelines currently, but usually the monthly ultrasound is suggested."

But all in all, Dr Ng calls the decision to terminate a 'personal' one.

"The guidelines are constantly evolving as we come to grips with the Zika outbreak," he says. "Here, just like finding out that a child has Down's syndrome, it is a personal decision for the parents to make."

It is worth noting, however, that recent numbers are not quite as terrifying as what many may expect. Dr Ng says that the probability of birthing an infant with microcephaly is actually around 1% to 10%, significantly lower than the numbers previously reported in Brazil. "There have also been reports of other confounding factors there," he adds.

Lack of reproductive rights for many women adds to the dilemma

In other Asian countries, some experts have argued that women have little choice over their pregnancies even if they are fully aware of and unwilling to take the Zika risk, as abortion and contraception are not widely available in the region. Thus, avoiding pregnancy is easier said than done, as in many of these countries, birth control methods are not readily available, affordable, or culturally acceptable.

While the field of public health ethics is not fully developed in Asia, the sudden outbreak of Zika poses several questions related to the role of national governments, trust in those governments, and the strength and preparedness of local healthcare systems especially in certain countries with limited access to contraception and a ban on abortions.

Currently, health advisories from neighbouring countries in Asia such as Korea and Taiwan include aggressive mosquito control, [travel postponement](#) for pregnant women and even that women should delay their pregnancies. Monica Roa, programs director of Women's Link Worldwide, an organisation advocating for the rights of women and girls, stated that this last recommendation is both naïve and ineffective.

Dr Ng is of a similar opinion. "What about women who are in their 40s and looking to conceive? How long are they expected to delay their pregnancies because of this, especially if it is here in the region to stay, just like dengue?" he says.

"Also, what about those of us who stay in the infected countries? It really is, as I said, a lot like dengue – it could become endemic to a country, but it doesn't mean that the residents should live in constant fear and paranoia for as long as the virus is around, or just not leave their homes for the entire period of pregnancy, as it just isn't feasible. Just take the proper precautions, use repellent, cover up and life has to go on, especially for a situation such as this where there really isn't a time limit we can put to it."

Support needed for those infected while vaccine hunt continues

There are also concerns related to Zika research in the quest to find a vaccine. Several companies are now working on developing potential vaccines for the virus but experts stipulate that a vaccine is likely three to ten years away. As such, discussions are also being raised on whether a drug or vaccine trial should include pregnant women in the research phase should these reach the testing phase.

Those affected will have a lifetime of needs. As Singapore and Malaysia begin to experience the spread of the virus, the crux of the decision lies in the informed consent and shared information between health care provider and patient.

While none of these ethical issues are new, as Ebola and other viruses have raised many of the same ethical challenges, one advantage this time is that the Zika virus has been recognised quickly. However, as control of the virus is still a long way off, its impact on our Asian countries is yet to be fully visible and many questions still remain.

"Recently, the Zika strain here in Singapore has been revealed to be of a different strain compared to the one in Brazil. What are the implications, and how does this affect microcephaly? Does it not come with this effect, or does it come with others? It's important to take note of these things before making any crucial decisions," says Dr Ng. **MIMS**