

IRDI Public Health Policy Dialogue Series No. 4: The Malaysian National Immunization Programme: Should childhood immunization be made compulsory by law?

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On 8th December 2019, a three-month-old baby in East Malaysia was infected by the polio virus, the first case in Malaysia after 27 years of being polio-free since 1992. The child had reportedly contracted the polio which was caused by circulating vaccine-derived poliovirus type 1 (cVDPV 1) due to being under-immunized with the polio vaccine.¹ cVDPV is a rare, circulating virus mutated from the weakened virus contained in the oral polio vaccine (OPV).² There is no cure to this disease and vaccination is the best way of prevention.

This episode has triggered anxiety among the public health professionals on how fragile our health security is from devastating vaccine preventable diseases such as polio. Besides, recent global outbreaks of vaccine-preventable diseases such as measles have served as a wake-up call to several countries including Malaysia to contemplate making vaccination compulsory by law and regulation.

Taking cognizance of this, the Institute for Research, Development and Innovation (IRDI) of the International Medical University (IMU) in collaboration with the Malaysian Public Health Physicians' Association (PPPKAM) had successfully organized the 4th Public Health Policy Roundtable Dialogue titled *Should childhood immunization be made compulsory by law? on 23rd January 2020 at the IMU Bukit Jalil campus.*

The objectives of this Policy Dialogue are to discuss on the implementation issues and challenges of a mandatory vaccination programme in Malaysia, learn the best practices in compulsory vaccination program

in other countries, and provide recommendations to the Ministry of Health Malaysia and the government on the way forward with regards to immunization programme and public health security in Malaysia.

The keynote speakers for the Roundtable Dialogue consisted of Professor Teng Cheong Lieng, professor of family medicine from IMU; Dr A'aishah binti Senin, Senior Head of Vaccine Preventable Disease of Disease Control Division under Ministry of Health Malaysia; as well as Dr Megat Mohamad Amirul Amzar bin Megat Hashim from Medical Mythbuster. Professor Teng delivered an insightful talk on the rationale of compulsory vaccination and its practices worldwide. Subsequently, Dr A'aishah deliberated on the current state, issues, and challenges of the National Immunization Programme (NIP). Lastly, Dr Megat narrated on the current situation of anti-vaccine movement in social media of Malaysia. The session was ensued with the drafting of memorandum of resolutions and recommendations for its implementation.

Vaccine hesitancy is the reluctance or refusal to vaccinate despite the availability of vaccines and it has been recognised as one of the top 10 threats to global health by the World Health Organization (WHO) in 2019.³ The reasons of rejecting immunization can be multifactorial, including religious, moral, personal or philosophical.^{3,4} Some of the key reasons identified by a vaccines advisory group to WHO include complacency, inconvenience in accessing vaccines, and lack of confidence.³

In Malaysia, the Malaysian NIP was introduced in the early 1950s by the Ministry of Health covering 12 childhood diseases, namely diphtheria, *Haemophilus influenzae* type B (HIB), hepatitis B,

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human papillomavirus (HPV), Japanese encephalitis (JE), measles, mumps, pertussis - whooping cough, poliomyelitis (polio), rubella, tetanus, and tuberculosis (TB). Under this programme, vaccines for all children under the age of 15 are fully subsidised by the federal government and provided at all government clinics across Malaysia.^{5,6}

In February 2019, the MOH Malaysia has proposed to mandate two vaccines as compulsory, namely the measles, mumps and rubella (MMR) as well as diphtheria vaccines as this could prevent six to seven types of diseases.⁷ Parents who refuse to get vaccination for their children will get sued for child neglect under Child Act 2001 which might land them in jail.⁸

Reportedly, the vaccination coverage of most childhood vaccines in Malaysia is between 94% and 98% each year which is considered good as it is above the needed levels of 92% to 95%.^{5,9} However, the number of parents refusing to get immunization for their children has tripled from 470 in 2013 to 1282 in 2015.⁹ Also, data from the National Health Morbidity Survey (NHMS-2016) revealed that a total of 4.5% of children did not complete all recommended primary immunizations by the age of 12 months with another 0.1% who did not receive any vaccination.⁴

Mandatory vaccination, as its name implies, is “a vaccination that every child must receive by law without the possibility for the parent to choose to accept the uptake or not, independent of whether a legal or economical implication exists for the refusal”.¹⁰ Broadly defined, it is the immunization requirements implemented at the individual level to control vaccine preventable diseases at the population level.¹¹

Mandatory immunization is a difficult policy issue as it creates a lot of controversies due to its ethical implications.¹² Mandatory vaccination may be perceived to be coercive in view of the penalty and financial and educational implications for the family. While having to cater to the need of herd immunity in the prevention of outbreaks of vaccine-preventable diseases, the authorities have to balance public health with individual liberty issues to take into the consideration of human rights of patient autonomy and conscientious objections.^{4,13} Perhaps this could be the last resort when persuasion and public education fail to encourage a significant minority of parents to vaccinate their children.

At the moment, very few countries have implemented mandatory childhood vaccination. In Singapore, two vaccines that are compulsory by law are diphtheria and measles.¹⁴ At the moment, very few countries have implemented mandatory childhood vaccination which include France, Italy, Singapore, United States, Europe, Washington, Germany, and Australia.¹⁵

The Roundtable Dialogue has recognised the following:

1. Demand for vaccination is a complex issue and needs a systems approach to address it. It is influenced by awareness levels of the population, socio-economic factors influencing access to services and level of trust of the health system. Increasing vaccination rates requires us to address the 3 Cs: Confidence, Complacency, Convenience.
2. Vaccination is one of the most cost-effective public health ways of reducing incidences of vaccine-preventable diseases and its consequences. In the last two centuries, vaccines have contributed towards eradication of smallpox, reduced global child mortality rates, and prevented countless birth

defects and lifelong disabilities, such as paralysis from polio.

3. Adequate immunization coverage of the population and other important components such as disease and environmental surveillance, health advocacy, early case detection, early treatment and epidemiology investigation are instrumental in the effective control of vaccine-preventable diseases.
4. Recent global outbreaks of vaccine-preventable diseases such as measles have led several countries to make vaccination compulsory by law and regulation.
5. Despite the overwhelming volume of evidence on the benefits of immunization, there remains widespread misconceptions, mistrust of information and deliberate misrepresentation about vaccine efficacy and safety. Vaccine hesitancy has been identified as one of the 10 global public health threats by the World Health Organization in 2019.
6. The anti-vaccine movement in Malaysia is using social media, public events, publications, collaborating with healthcare providers and registered NGOs. They are getting more organized, vocal, influential, and is a growing threat in the control of vaccine preventable diseases in Malaysia.
7. The government is responsible to communicate with the population about vaccine preventable diseases and its complications. The Malaysian National Immunisation Programme continue to face various challenges including the growing threat of anti-vaccine groups.
8. All children residing in Malaysia regardless of citizenship status have a right to be protected via immunisation.
9. The Fee Act 2015 presents obstacles and challenges in ensuring effective immunization coverage to vulnerable populations specifically migrants and undocumented communities.

With this, the Roundtable Dialogue has recommended the following resolutions:

1. The Government to enact relevant and enabling legislation for mandatory vaccination through a multi-agency approach.
2. The Government to subsidise vaccines in the National Immunization Programme for all children. No child should be left behind.
3. The public especially all parents and guardians to be informed and to ensure that their children are vaccinated according to the schedule in the National Immunization Programme.
4. The Government to review and amend the Fee Act 2015 as necessary.
5. The Government to take stern action using law, regulation and policies against the anti-vaccine movement.
6. The Government, private sector, NGOs and professional bodies to work together to create vaccine and vaccination literacy among the general public as a means to increase public confidence, trust and accountability towards reducing vaccine-preventable diseases.
7. The Government and the private sector to collaborate to ensure adequate vaccine coverage.
8. The Government to align government policies with health concerns at borders and areas with high population mobility in relevant parts of Malaysia.

9. The Government to increase resources to support the enforcement efforts of the Ministry of Health in the regulation of service delivery and compliance to Public Health Laws, to protect the safety of our children and the citizens.
10. The Government to set up excellent specialist epidemiology surveillance centres and upgrade the technology in its diagnostic public health laboratories in order to control and manage the threat of vaccine-preventable diseases.
10. Malaysian Women's Action for Tobacco Control and Health (MyWATCH)
11. Persatuan Kesihatan Environmen Malaysia (Malaysian Association of Environmental Health)
12. Malaysia Laryngectomee Association (MLA)
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7. IKRAMHealth
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9. Public Health Malaysia
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17. Malaysian Association for Adolescent Health (MAAH)
18. I-Medik
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20. Federation of Malaysian Consumer Association (FOMCA)
21. Galen Centre
22. Malaysian Paediatric Association (MPA)
23. MedTweetMY

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