**Question 1**

(1) I support (b) the amending of school closure policy by removal of the “naming and shaming” method and adding in other measures. (2) The EV71 vaccine should be considered as (b) optional one but still subsidized.

Hand Foot Mouth disease (HFMD) largely affects young children below 5 years old.1 Transmission of HFMD occurs due to direct contact with various body fluids or faeces of an infected person2. Thus, HFMD should not be taken lightly as it is highly contagious and can lead to deaths or brain damage.3

The government attempts to prevent the spread of HFMD through the closure of kindergartens and childcare centres for 10 days for those with an attack rate greater than 23% or more than 16 HFMD cases, and a transmission period of more than 24 days.4,5 It has been proved that school closure can reduce cases of HFMD6, and thus can help prevent the infection and spreading of HFMD in the school and neighbourhood or to children of the staff. As the incubation period of HFMD can range from 2 days to 2 weeks7, the closure period will likely to fully eradicate the spread of HFMD. Schools can also use this period of time to fully sterilise their equipment8, conduct trainings for staff as well as draw plans to prevent reoccurrences of transmissions, which will benefit the schools in the long-run as they become more vigilant. Hence, this policy should be retained as it is the most effective way to prevent the spread of HFMD, especially when kindergartens and preschools inevitably promotes the spread of the disease such as through the sharing of toys.9

While some do not agree to the closure of schools as parents may bring their children out into contact with more people, it is less likely to be in this case as the policy targets schools with a high incidence rate of HFMD. This will raise alert to caregivers of the remaining healthy children that there is a high possibility for the development of HFMD within the next few days during the period of school closure and they will thus minimise the outdoor contact of their children.

However, I feel that “naming and shaming” method is too extreme as it fully transfer the responsibility of the HFMD outbreaks to the preschools alone. This leads to the burden of negative reputation even though parents also have a shared responsibility in ensuring that their children are well. While the shaming method may induce schools to engage in practices that will reduce the spreading of HFMD, the same effect can be achieved with the implementation of compulsory daily screenings and regular clean-ups. Physical screening for symptoms of HFMD10 at school entrances can prevent children who are sick from entering the school to come into contact with other children. As the temperature of the children11 can also be included in the screening, other infectious diseases such as influenza can also be detected especially when parents may be too busy to notice.

The EV71 vaccine can reduce the number of serious cases of HFMD as HFMD resulted from EV-71 virus can occasionally lead to permanent paralysis or death due to higher incidence of neurologic involvement.12,13 A study also shows that most of the clinically diagnosed virus-positive HFMD patients (73.1%) are infected with the EV71 virus and fatal cases are often attributed to this virus.14 During the EV71-associated HFMD epidemic in 2006, cases which were hospitalized is more than twice as high as in CA16-associated epidemics in 2005.15 This shows the severity of EN71 infections and the potential pressure that it can have on healthcare facilities should an outbreak reoccur. Clinical trials on the vaccine has shown that it is highly effective in prevention, with “protective efficacies over 90% on EV71-associated HFMD and over 80% on other EV71-associated diseases”.16 Thus, the administration of the vaccine will likely prevent the spreading of HFMD in the population due to buffering effects.

However, I propose that the vaccine as an optional vaccine with partial subsidy due to its limiting effects. The EV71 vaccine do not protect children from other HFMD viruses17, which is a significant limiting factor as there is a variety of other viruses responsible for the development of HFMD. Partial subsidises will give incentive for parents to send their children for vaccination, especially when they know that their children is more susceptible to HFMD due to weaker immune system. Also, combined outlays and opportunity costs when a child is caught with HFMD can go up to $120018, showing that there is incentive for parents to vaccinate their children even though it is not compulsory.

In addition, it is highly likely that mandatory vaccination will lead to lowering of vigilance as parents and caregivers may not take as much precautionary measures as before due to false impressions that children are safe from HFMD. This is not the case as there are still types of HFMD which the vaccine do not cover. A relatively new vaccine also poses other underlying concerns on whether is there any rare allergy or side effects19 which was not found during the clinical trials, and the long-term impacts that it can have on the children. Other methods can also be used to predict the outbreak of HFMD as increases in temperature or decreases in the pressure and wind speed coincide with higher incidences of the disease.20 Thus, an alert can be issued by the Ministry of Health during the hotter months of the year to raise awareness. Hence, a subsidized subsidy will give parents a clear message that the vaccine is highly encouraged without the economic burden21 on the government to fully fund the vaccine, especially when the fatality rate of HFMD is only 0.08%.14

In conclusion, current policies to prevent the spreading and outbreak of disease is fairly sufficient. The EV71 vaccine should be made optional as HFMD is considered mild and the effective prevention of outbreak is proved to be possible due to greater vigilance and awareness in the population22.

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