Reconsideration Of Early Childhood Vaccination (an Epidemiological Study on Relationships Between Vaccination and Autism)

Abstrak :

It has been an existing trend in health services management to vaccinate children at the earliest age possible in order to protect the children better from various serious diseases. Diphtheria, Pertussis, and Tetanus (DPT) vaccine for instance, has been recommended to be provided at less than three months old baby, as for BCG vaccine is even recommended at earlier age, i.e. at birth. However, whether such a health technology is in fact beneficial for the children is still hypothetical. On the other hand, the provision of multiple vaccines to early childhood might even be less effective since the immune system of the children is not yet well developed. Moreover, the response of smaller children in neutralizing toxic materials exposed to them might also still be weak. Provision of vaccines to children means not only providing the children with active materials of the vaccine, but also at the same time exposing the children to toxic substances available within the vaccine. Most vaccines in fact contain heavy metals mercury for preservative purposes and it has been well recognized that mercury is toxicant to human body. Therefore, possible health risk of giving multiple vaccines to early childhood should have more medical concern due two consideration, i.e. less developed immune system and higher risk of intoxication as the ratio of toxic material concentration exposure and the body weight of children is relatively greater. Findings of an epidemiological study conducted in Airlangga University in 2002, entitled "Effect of Mercury containing Vaccine to the Prevalence of Autism", seem supporting such a concern. A case-control method has been used. A sample of 81 children under five who suffer from acquired autism has been compared to 81 children without autism. Variables related to autism such as age, pollution, delivery trauma, genetic endowment, and convulsion have been eliminated either by design or by statistical analysis. The result of the study clearly indicated that children with autism have been exposed higher level of mercury containing vaccines compared to those without autism. Odd Ratio was 9.69 with $p < .000$. Dose-response relationship analysis also confirm the result. Logistic regression analysis indicated that more frequencies of getting mercury containing vaccine is related to higher risk of getting autism. The regression showed that risk of getting autism with 6 vaccination or more during early childhood will be .09 if other confounding variables are excluded. As the conclusion, it is suggested to reconsider seriously the use of mercury containing vaccines in early childhood as the risk of getting side effect of such soft technology in health care system is relatively clear. More scientific evidence is yet to be required to support vaccination in earlier childhood.

Keyword :

early childhood, vaccination, autism, epidemiology

Daftar Pustaka :

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