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Letter to the Editor

MMRV vaccine safety



Kowalzik and colleagues [1] reviewed vaccines against measles, mumps, rubella and varicella (MMRV) including adverse event data [1] concluding that MMRV vaccine was safe and that MMRV and MMR vaccines had a similar safety profile. However, this simplistic conclusion is contrary to available evidence.

Although a vaccine may have a good safety profile, it can be misleading to declare that a vaccine “is safe” without explicitly weighing up the risks and benefits associated with its administration and providing this information in an interpretable form to vaccine recipients to permit an informed decision.

It is erroneous to indicate that the risk profiles of MMR & MMRV are “similar” as there is higher rate of fever in younger children receiving MMRV as the first dose of measles-containing vaccine [2]. Despite reference to the seminal work of Klein reporting higher rates of febrile convulsion with the combined MMRV vaccine when compared to MMR, no mention is made that the rate of this adverse event is greatly reduced when the MMRV vaccine is given as the second dose of measles containing vaccine in the second year of life. This evidence has informed vaccine policy in several developed countries including Australia [3] and Canada [4].

Post-licensure surveillance for adverse events following immunisation is critical to detect safety signals and to ensure both safety and community confidence. Vaxtracker was the first active surveillance system for post-licensure monitoring of Adverse Events Following Immunisation (AEFI) in Australia [5]. Following the introduction of the measles, mumps, rubella and varicella vaccine (MMRV) into the Australian National Immunisation Program for infants at 18-months of age (July 2013), we recruited parents of children up to the age of 10-years who received the MMRV vaccine from a General Practitioner between August 2013 and March 2014.

Among the 388 respondents enrolled, reactions recorded up to day 18 after vaccination included fever (12.6%), rash (7.7%), reaction at injection site (4.1%) and seizures (0.3%). These reactions

were consistent with the published literature from the United States [1] and provided reassurance about the Australian policy decision.

Monitoring vaccine safety and conducting systematic reviews of vaccine safety is critical to inform vaccine policy. We need to continue to ensure accuracy of reporting and clear communication of potential risks.

References

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