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The Relevancy of Paracetamol and Breastfeeding Post Infant Vaccination: A Systematic Review

By: [Suleiman, N](#) (Suleiman, Nurain)^[1,2]; [Shamsudin, SH](#) (Shamsudin, Siti Hadijah)^[2]; [Rus, RM](#) (Rus, Razman Mohd)^[3]; [Draman, S](#) (Draman, Samsul)^[3]; [Taib, MNA](#) (Taib, Mai Nurul Ashikin)^[4]

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Abstract

Background: Paracetamol may be used as an antipyretic agent for the treatment of fever, as well as an analgesic in the treatment of mild to moderate pain post-vaccination in infants. The use of paracetamol during fever may be or may not be recommended since it may alter the natural human body immune response, although it may reduce fever and fussiness. Objectives: The aims of this study are to describe the effectiveness of breastfeeding in reducing pain and paracetamol in reducing fever and pain post infant vaccination. Methods: Data sources and study selection was conducted by electronic searching of six databases. Manual reference checks of all articles on paracetamol and breastfeeding post infant vaccination published in the English language between 1978 and 2017. Two levels of screening were used on 9614 citations, which include screening of abstracts and titles followed by full text screening. The data synthesis were tabulated into study characteristics, quality, and effects. Results: Systematic review of breastfeeding included three studies from 9614 database searches found significant benefit from breastfeeding in pain scores and the duration of crying, as well as behavioural changes. None of the studies stated the detriment of breastfeeding before, during, and after immunization. Systematic review of paracetamol effectiveness included four studies from 1177 database searches found significant benefit from prophylaxis paracetamol in fever, one study found significant benefit from prophylaxis paracetamol in fussiness, and one study's results were found to be not significant. Two studies on evaluating the safety of prophylactic paracetamol in 2009 found that antibody responses to several antigens were significantly reduced, and the other study in 1988 found that antibody titres to DTP bacteria of placebo and PCM did not differ significantly. Conclusions: The relevancy of giving paracetamol post all types of vaccination may be questionable. Breastfeeding before, during, and after immunization are recommended for pain reduction and are proven effective. Further research is required in deciding if paracetamol is to be of rational use following infant immunization.

Keywords

Author Keywords: [paracetamol](#); [breastfeeding](#); [post](#); [childhood](#); [prophylactic](#); [immunization](#); [vaccination](#)

Author Information

Reprint Address: Suleiman, N (reprint author)

Johor State Hlth Dept, Pharmaceut Serv Div, Johor Baharu 81200, Johor, Malaysia.

Reprint Address: Suleiman, N (reprint author)

+ Int Islamic Univ Malaysia, Kulliyah Pharm, Kuantan 25710, Pahang, Malaysia.

Addresses:

[1] Johor State Hlth Dept, Pharmaceut Serv Div, Johor Baharu 81200, Johor, Malaysia

+ [2] Int Islamic Univ Malaysia, Kulliyah Pharm, Kuantan 25710, Pahang, Malaysia

+ [3] Int Islamic Univ Malaysia, Kulliyah Med, Kuantan 25710, Pahang, Malaysia

[4] Ara Damansara Med Ctr, Shah Alam 40150, Selangor, Malaysia

E-mail Addresses: nurain.suleiman@moh.gov.my; shadjah@iiumedu.my; razman@iium.edu.my; nurin@iium.edu.my;

dr.mai.nurulashikin@ramsaysimedarbyhealth.com

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