Table 1. Results of different studies about the role of vitamin A in childhood pneumonia

Author	Publication year	Age	Vitamin A dose	Result
Mahalanabis (13)	2004	2-24 m*	10000 µg retinol	Vitamin A had no significant beneficial effect in childhood pneumonia
Brown (14)	2004	1m-6 y**	High dose	Vitamin A had no significant effect in childhood pneumonia
Chang (8)	2007	<11y	50000-100000 IU	Vitamin A had no significant effect in childhood pneumonia
da Silva (11)	2005	6 m-5 y	___	Vitamin A level reduced the duration of pneumonia in children
Imdad (12)	2011	6-59 m	___	Vitamin A reduced mortality
Mathew (15)	2010	___	___	Vitamin A had no significant effect in childhood pneumonia
Ni (16)	2005	___	___	Vitamin A had no significant effect in childhood pneumonia mortality

*m: months; **y: year

studies confirmed that retinol levels were significantly higher after recovery from acute pneumonia compared to acute phase. But there were not significant association between serum retinol level and the clinical manifestations (11).

Vitamin A deficiency might happen due to low intake and impaired vitamin A absorption which occur very rare. Serum albumin might decrease during pneumonia due to development of acute phase response (4). Vitamin A supplementation might have protective impact on HIV positive children and pregnant women, and might reduce their morbidity and mortality in addition to positive effect on birth weight. But there are not enough evidence to support the efficacy of administered vitamin A supplementation in pregnant or lactating women in reduction of infant mortality and morbidity (17).

Conclusion

There are credible evidence about the impact of case management and recommendations of WHO in regard to antibiotic administration in childhood infection. Nevertheless, the results of randomized control trials do not reinforce the effect of vitamin A supplementation in childhood pneumonia treatment.

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Conflict of Interest

The authors declare no conflict of interest.

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