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If you love them, then protect them!

Have you been immunised against whooping cough?

Introduction:

Whooping cough also know as pertussis, is a highly contagious respiratory disease that is on the rise for New Zealand infants. This poster will be focusing on the question refined by PECOT model; "Would it be beneficial for parents to receive their pertussis immunisations reducing the likelihood of transmitting whooping cough to infants in New Zealand?" To answer this vital question, I have reviewed literature studies finding evidence that supports parents receiving their pertussis immunisation. I have included recommendations that the general practitioner (GP) clinical settings of New Zealand could utilise to reduce the prevalence of pertussis for young infants.

Clinical Issue:

Pertussis, is an acute and highly contagious respiratory disease, which is transmitted through sneezing, coughing, or directly by inhalation or by contact with the infectious particle, named Bordetella pertussis organism (Harris, Wagy, & Vardaxis, 2011). Signs and symptoms of pertussis depend on the age of the individual, but commonly include runny nose, sneezing, slight fever, restlessness, and irritability. Whooping cough can also lead to pneumonia, brain damage, convulsions and occasionally death (Ministry of Health, 2014).

There have been two epidemics of this acute respiratory disease in both 2000 where there were a total of 4140 notified cases, and between 2004 till 2005, there were more than 5000 notified cases (Ministry of Health, 2011).

It is known that up to 50 percent of pertussis reported cases in young infants have been transmitted to infants from their mother or from other close family member that are commonly asymptomatic (Hunter, 2013). The best protection against pertussis is to receive the Tdap vaccination.

Discussion:

From 2011 to date, there have been more than 11,200 notified cases of pertussis (Ministry of Health, 2014). It is important to note that not all cases are being notified within the New Zealand community, and the number of cases are far higher that what has been recorded (Hunter, 2013). This is mainly due to lower socio-economic families unable to afford to visit their GP. Two initiatives being utilised in New Zealand include providing free Tdap vaccinations to pregnant woman between 28-38 weeks gestation, and for family and whauna in the Capital and Coast DHB area that consist of an infant less than one year of age (Immunisation advisory centre, 2012a).

Although these initiatives are in place, they are not reaching all parents in the community, which is vital in reducing the prevalence of pertussis for New Zealand infants.

Immunisations for parents and grandparents is vital to help reduce the prevalence of whooping cough for infants of New Zealand.

Recommendations:

The two recommendations that follow would reduce the prevalence of pertussis for New Zealand infants, and would result in the likelihood of more parents and main carers in receiving their Tdap vaccinations. The recommendations include;

- The New Zealand government could make these Tdap vaccinations more cost affordable for families in the community, or free for low socioeconomic families.
- To provide a free Tdap vaccination to parents while they are visiting the pediatric/ maternity wards, or during the 2 week house visits (Camenga, et al., 2012).

References;

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Hunter, K. (2013, May). Helping prevent the spread of pertussis. *Kai Tiaki Nursing New Zealand, 19*(4), 26-29.

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PECOT Category	Information related to question	Explanation/ Rational
Population	New parents or main carers of young infants less than 12 months of age.	As babies less than 12 months of age are the most vulnerable to contracting pertussis from their parents or main carer.
Exposure/ Intervention	New parents or main carers receiving their pertussis vaccination before their baby is born/ or before being in contact with their baby.	As parents or main carers receiving their vaccinations before contact with their baby will reduce the prevalence of whooping cough.
Control/ Comparison	Compared to parents or main carers not having their pertussis vaccinations.	As parents or main carers not having their pertussis vaccinations will result in a higher prevalence of pertussis in infants.
Outcome	Whether it would it be more beneficial for parents or main carers to receive their pertussis immunisation, to reduce the prevalence of whooping cough in New Zealand.	Wanting to know if more parents or main carers received their pertussis vaccinations would reduce the prevalence of whooping cough in New Zealand infants.
Time	Not related for this question	

(Schneider, Whitehead, LoBiondo-Wood, & Haber, 2013).