

***Three Minute Article for Parents***

## Facts and myths about BCG vaccination

Priyantha J. Perera  [orcid.org/0000-0001-9127-0329](https://orcid.org/0000-0001-9127-0329)

*Sri Lanka Journal of Child Health*, 2018; **47**(2): 186

DOI: <http://dx.doi.org/10.4038/sljch.v47i2.8493>

(Key words: BCG vaccination, facts, myths)

BCG vaccine is administered to all newborn babies in Sri Lanka for protection against tuberculosis (TB). There are certain beliefs regarding BCG vaccine that have no scientific basis and are actually harmful. A study done by us on BCG vaccination proved many of these beliefs to be false.

One such belief is that the baby should not be bathed for a few days following BCG vaccination. In our study, we bathed every neonate daily. We found no harmful effects with regard to vaccine efficacy or side-effects. Neonates should be bathed everyday unless there is a definite reason not to do so. Skin and belly-button infection could occur when babies are not bathed regularly.

There is no truth that BCG should be given within 24 hours of birth. In countries with low prevalence of TB, BCG is administered during adolescence. In high prevalent countries, BCG is administered before a baby is sent home to ensure high vaccination coverage. It has nothing to do with effectiveness. BCG vaccine comes in multi dose vials. Opening of a vial is held back till an adequate number of recipients are collected to prevent vaccine wastage. However, no baby is discharged without BCG unless there is a reason to do so.

Our study proved that BCG vaccination does not cause fever. Fever is a serious symptom in a neonate. It requires urgent medical intervention. The erroneous belief that BCG may cause fever could delay seeking medical attention.

Some believe that BCG vaccination should be administered only in the morning. This could interfere with early discharge of mothers after delivery. We found that timing of vaccination had no effect on efficacy or side-effects.

BCG is given into the skin in the upper arm. For cosmetic reasons it is now given a little higher in the upper arm. Administration of BCG needs experience because the injection is difficult in a wriggly neonate. Correct technique is vital for immunity and to prevent adverse effects. About a week after vaccination a thickening appears at the site. Between two to eight weeks later a visible lump appears which later becomes a pustule and then a wound. It heals leaving a scar. The whole process takes around 6 to 14 weeks. Revaccination is considered only if there is no reaction after six months.

Presence of the scar is used as evidence of effective BCG vaccination. This is not always true. Some babies do not develop an ulcer or a scar but develop a lump that could be felt. There is also a phenomenon called 'vanishing BCG scar', where the scar disappears after some time. These babies do not need revaccination.

### Reference

Perera PJ, Ranathunga N, Samaranayake GB, Samaranayake R. Events following BCG vaccination during neonatal period and factors that might affect potency and side effects. *Journal of Vaccines & Immunization* 2013; **1**(1): 1-5.