

revealed to be more prevalent in developing countries. Other serotypes could also be isolated from invasive infection where other studies isolated type a (48%), f (14%) d (5%), c (2%)<sup>(26)</sup>. Furthermore, the association of non-b-capsular serotypes with invasive disease could be facilitated by the acquisition of virulence factors common to Hib such as capsule gene duplication and an IS1016-bex A deletion in the capsule gene cluster which may serve to stabilize capsule production<sup>(25)</sup>. In addition, infrequent recombination, event could happen between naturally transformable Hib and other serotype that may enhance the fitness and virulence of these serotypes<sup>(30)</sup>.

We can conclude from the current work that using of specific genetic marker namely P6 primer is important in molecular detection of both types of *H. influenzae* that isolated from different sites. Detection of capsule is valuable in differentiation of type-able from non-type-able one. Non-type-able *H. influenzae* (NTHi) is also an important cause of invasive and severe disease like upper and lower respiratory tract disease and eye infection. Using serotype specific gene is necessary among patient with meningitis since not only type b (Hib) can cause meningitis where other capsulated non b *H. influenzae* could also implicate.

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