

ABSTRACT

Backgrounds: Acute respiratory illness (ARI) is one of the leading causes of child mortality in South East Asia. Healthcare seeking behaviours of parent, especially mother is considered as one of significant determinants of severity. Inappropriate and/or delayed healthcare seeking behaviours by mother may lead to severe disease outcome and mortality. However, very few study have done to investigate association between severity of ARI and healthcare seeking behaviours in Asian countries.

Aim: To investigate how healthcare seeking behaviour affects severity of ARI. The study consisted of three objectives; (i) to determine the healthcare seeking behavior taken by mothers or guardian whose child had fever and cough in the community in Nha Trang, Vietnam, (ii) to determine the health seeking behavior taken by mothers or guardian whose child were hospitalised with fever and cough before coming to the hospital in Nha Trang, Vietnam, and (iii) to investigate the possible association between the health seeking behavior sought and the severity of illness.

Methods: A cross-sectional ARI health seeking behavior survey was conducted between September and November 2015 as part of census survey targeting children residing in 16 communes of Nha Trang city, Vietnam. To collect ARI healthcare seeking behavior from severe ARI cases, healthcare seeking behavior information and clinical-epidemiological information were collected from hospitalised ARI cases admitted to Khánh Hoa General Hospital which is

the only hospital in the study area. This hospital-based study was carried out between 22nd May and 7th July 2017. The hospitalised paediatric ARI surveillance is part of the ongoing population based ARI surveillance which was established in 2006 February. The inclusion criteria for the study was the following conditions 1) parent or primary caretaker of child aged less than five years, 2) those residing in one of 16 communes of Nha Trang city and 3) child who experienced respiratory symptoms admitted to paediatric department of Khánh Hoa General Hospital. A semi-structured interview was conducted by using the Health Care Utilization Survey form which was implemented for assessing mother's healthcare seeking behaviour. For assessing severity of illness, clinical information was obtained from Epidemiological-Clinical-Laboratory Form of the ongoing ARI surveillance study (Appendix3). All data was analysed using Stata version 13.0 (Stata Corp., College Station, TX, US).

Results: A total of 646 mothers were interviewed during the health seeking behavior community survey in 2015, and 90 hospitalised ARI cases were enrolled from the hospital in 2017. Among 90 hospitalised cases, 25% had pneumonia. Children whose mothers with lower educational background tended to have more severe symptoms of ARI at the admission. Younger children were more likely to need longer hospitalisation. Pharmacy was the most popular first choice before the admission. However, there was no association between choosing any particular first choice of healthcare seeking with number of pneumonia cases nor the duration of hospitalisation. Among hospitalised cases, 31.1% of mothers sought pharmacy for the first care, and in community setting 29.3% sought pharmacy and this was the second most

common choice among mothers. In both community and hospitalisation settings, mothers' educational background, wealth and child's residence area influenced first choice of healthcare seeking behaviour. Most of children were brought for care within two days from the onset.

Conclusion:

There was no significant difference between disease outcome and healthcare seeking behaviours taken by mother despite of severity of illness. First choice of healthcare seeking behaviour had no effect on the severity of hospitalised ARI.