



# AN EVALUATION OF THE PARENTAL BURDEN ASSOCIATED WITH INFANT HOSPITALIZATION FOR A LOWER RESPIRATORY TRACT INFECTION (LRTI) IN KOREA

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## Background and Objective

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- Lower respiratory tract infections (LRTIs) are a major cause of hospitalization in children<sup>1</sup>
- Respiratory syncytial virus (RSV) is the most prominent cause of LRTI hospitalizations in infants, particularly during the RSV season<sup>1</sup>
- In Korea, a study identified 297 of 965 (30.8%) nasopharyngeal aspirates collected from infants and children hospitalized with respiratory illness during April 2008-April 2010 as positive for RSV<sup>2</sup>
- The economic impact of infant hospitalizations for LRTI is substantial<sup>3</sup>; however, the socioeconomic burden it has on parents and caregivers is less understood
- The objective of this study was to determine the socioeconomic burden experienced by parents with infants hospitalized for LRTI/RSV in Korea

1. Nair et al. Lancet. 2010;375:1545–1555; 2. Baek et al. Arch Virol. 2012;157(6):1039–1050; 3. Palmer et al. Curr Med Res Opin 2011;27:403–412.

## Methods

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- Data was obtained from the Parent Burden Study: a prospective, observational, multinational study designed and implemented in an attempt to quantify the humanistic burden that infant RSV/LRTI-associated hospitalizations have on parents
- In Korea, the Parent Burden Study was conducted within Seoul National University Children's Hospital during the RSV season between October 2011 and May 2012
- The study population comprised parents with infants <1 year of age hospitalized for an RSV/LRTI; infants were: term, defined as  $\geq 37$  weeks' gestational age (wGA) at birth or preterm, defined as <37 wGA at birth, as recorded by the parents
- Direct healthcare resource utilization including length of hospitalization stay (LOS) and intensive care use (ICU) were obtained from medical chart reviews
- Indirect economic burden borne by parents was measured in parent surveys administered at the time infants were discharged from hospital
- Lost work productivity was assessed via the Work Productivity and Activity Impairment questionnaire that was specific to and validated for Caregivers of Children Hospitalized with Respiratory Illness (WPAI:CHRI). The WPAI:CHRI assessed:
  - Absenteeism, defined as time away from work
  - Presenteeism, defined as impaired productivity while at work
  - Overall work impairment, defined as the combined effects of absenteeism and presenteeism
  - Activity impairment, defined as impairment in activities performed outside work

## Results: Demographic and clinical characteristics of infants

- A total of 45 infants (34 term infants, 11 preterm infants), <1 year of age were included in the Parent Burden Study in Korea
- 64% of infants had a diagnosis of RSV confirmed by laboratory tests (antigen detection by direct immunofluorescent assay)
- Demographic and clinical characteristics of infants hospitalized for an LRTI in Korea are shown in Tables 1 and 2

**Table 1: Demographic characteristics of infants hospitalized for an LRTI in Korea**

	All Infants (n = 45)
Birth Age (weeks; mean, SD)	35.98 (4.293 )
Gender male (n, %)	24 (53.3)
Infant chronological age (months; mean, SD)	4.58 (3.646 )
Children who were breastfed (n, %)	34 (75.6)

**Table 2: Clinical characteristics of infants hospitalized for an LRTI in Korea**

	All Infants (n = 45)	Term Infants (n = 34)	Preterm Infants (n = 11)
Mean LOS (days)	5.63	5.38	6.39
ICU admission (%)	4.44	2.9	9.1
Required supplemental oxygen (%)	44.4	35.3	72.7

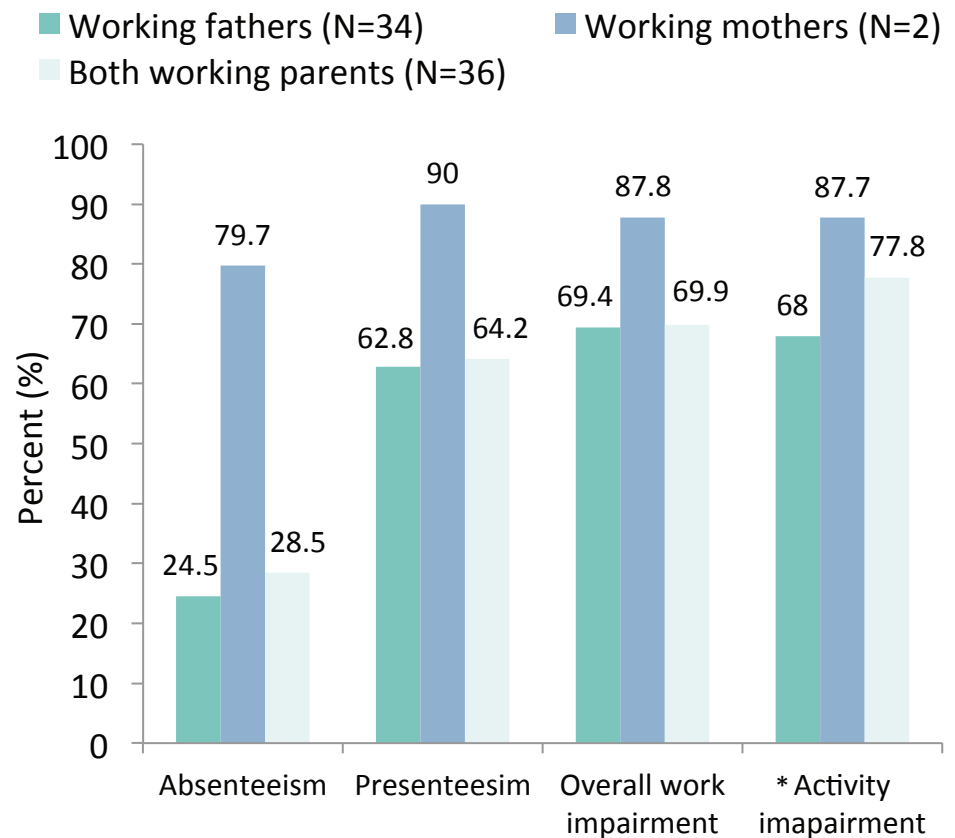
## Results: Lost work productivity

- A summary of employment status in parents of infants hospitalized for an LRTI in Korea is shown in Table 3, and WAPI:CHRI data are shown in Figure 1

**Table 3: Employment status in Parents of Infants Hospitalized for an LRTI in Korea**

	Fathers (n = 45)	Mothers (n = 45)
Employed (%)	75.6	4.4
Not employed (%)	24.4	71.2
Parental leave (%)	0.0	24.4

**Figure 1: WPAI:CHRI in Working Parents of Infants Hospitalized for an LRTI in Korea**



\* Activity impairment was measured in all parents

## Conclusion

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- This study illustrates the burden experienced by parents and caregivers in Korea whose infants were hospitalized for LRTI including RSV
- The economic impact on parents and caregivers warrants further investigation

## Contact information

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### Disclosures and Potential Conflict of Interests

- PV, SM, and KG are employees of AbbVie and possibly hold shares in AbbVie
- MH is an employee of Lorimer Enterprises Inc.; she provided project management support for the study as a paid consultant for AbbVie
- EHC served as study director at the Korean test center for the Parent Burden Study and is a consultant to AbbVie
- The study design, the analysis, and the financial support for this study comes from AbbVie
- AbbVie was involved in the evaluation of the data, the examination and approval of the presentation