## Bed Sharing Deaths In Infancy - Sids or Asphyxia?

## To the Editor:

The paper by Yoo et al. (1) draws attention to the significant numbers of unexpected infant deaths that are occurring in shared sleeping situations. It is now well-recognized that the more comprehensively cases of unexpected infant death are investigated, the greater is the number of cases where deaths are attributed to something other than sudden infant death syndrome (SIDS) (2, 3). However, although bed sharing deaths are still often universally attributed to SIDS (1, 4), the possibility of an asphyxial mechanism of death in some cases must be recognised (5, 6). In support of this, a recent study in South Australia demonstrated that the male to female ratio in infants who died alone was approximately 2:1, as is typical of SIDS deaths. This was significantly different to the sex ratio of infants who died in shared sleeping situation which approached unity (7). One explanation for this marked difference is that although females are less vulnerable to SIDS than males, this protection does not extend to situations where lethal asphyxia may occur; i.e. gender does not protect an infant from accidental suffocation, or so-called 'overlaying'. A more detailed description of the nature of shared sleeping arrangements in Korea from the authors would be a useful addition to their data, in addition to a comparison of the sex ratio of the alone and shared sleepers, to see if the usual SIDS male to female ratio is present, or not, in this population.

## REFERENCES

1. Yoo SH, Kim AJ, Kang SM, Lee HY, Seo JS, Kwon TJ, Yang KM. Sudden

infant death syndrome in Korea: a retrospective analysis of autopsy-diagnosed cases. I Korean Med Sci 2013: 28: 438-42.

- 2. Beal SM, Byard RW. Accidental death or sudden infant death syndrome? I Paediatr Child Health 1995: 31: 269-71.
- 3. Mitchell E, Krous HF, Donald T, Byard RW. An analysis of the usefulness of specific stages in the pathologic investigation of sudden infant death. Am J Forensic Med Pathol 2000; 21: 395-400.
- 4. Vennemann MM, Hense HW, Bajanowski T, Blair PS, Complojer C, Moon RY, Kiechl-Kohlendorfer U. Bed sharing and the risk of sudden infant death syndrome: can we resolve the debate? J Pediatr 2012; 160: 44-8 02
- 5. Byard RW. Is breast feeding in bed always a safe practice? J Paediatr Child Health 1998; 34: 418-9.
- 6. Byard RW. The triple risk model for shared sleeping. J Paediatr Child Health 2012; 48: 947-8.
- 7. Byard RW, Elliott J, Vink R. Infant gender, shared sleeping and sudden death. I Paediatr Child Health 2012; 48: 517-9.

Roger W. Byard, MD Discipline of Anatomy & Pathology, Level 3 Medical School North Building, The University of Adelaide, Frome Road, Adelaide 5005, Australia Tel: 618-8313-5341, Fax: 618-8313-4408 E-mail: roger.byard@sa.gov.au

## The Author Response:

We thank Dr. Byard for their interest in our paper and for sharing their view on sudden infant death syndrome. Among the 204 (57.5%) cases for which bed-sharing had been reported in our study, 62 (56.4%) of 110 male and 59 (62.8%) of 94 female cases had occurred in a bed-sharing situation. Thus, we agree that, in the possible asphyxia condition or so-called 'overlaying' female gender is not associated with the protection of unexpected infant death.

© 2013 The Korean Academy of Medical Sciences.

pISSN 1011-8934 This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/3.o) eISSN 1598-6357 which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.