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Population-specific life history tradeoffs in nocturnal breastfeeding

We thank Haig for clarifying his extension[1] of Blurton-Jones and DaCosta's evolutionary hypothesis[2] that infant night waking/suckling serves to suppress maternal ovulation and delay the production of a rival sibling. In support of their argument, Blurton-Jones and DaCosta noted that the optimal interbirth interval in the !Kung San (4 years) is consistent with reports from industrialized countries of a drop in night waking at about 3 years postpartum.

Subsequently, Haig[1] wrote that "Night waking increases in the second half of the first year of infant life…," and argued "…intergenerational conflict would have escalated at child ages at which mothers began to return to fertility and then have diminished as the benefit-to-cost ratio of maternal infertility declined." Also citing studies in industrialized countries, Haig[2] noted "[c]onsistent with this expectation, infant sleep becomes more fragmented [i.e., waking increases] after 6 months and then gradually consolidates."

In our longitudinal study of rural agropastoral Bolivians,[3] a different pattern was observed (Fig. 2[3]): nocturnal breastfeeding was at its highest and steady throughout the first year postpartum, declining thereafter. Hence, we concluded, contra to Haig's hypothesis, that in our study population, nocturnal nursing did *not* rise "in the second half of the first year of infant life" nor did it rise with increasing probability of a maternal ovulatory cycle (e.g., during the second year post-partum).

We reemphasize that "there is no reason to expect the specific sleeping and nursing behaviors observed in this rural Bolivian population to necessarily be common features of co-sleeping mothers and their nurslings in other populations."[3] Rather, it seems likely that such behaviors will vary with local ecology and cultural beliefs, and with life history trade-offs that are a consequence/reflection of population-specific mortality schedules.[4]

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