



## KEY POINT SUMMARY

### OBJECTIVES

The purpose of this study was to explore the association between NICU room type and parental practices and maternal health.

## The Single Patient Room in the NICU: Maternal and Family Effects

Pineda, R. G., Stransky, K. E., Rogers, C., Duncan, M. H., Smith, G. C., Neil, J., & Inder, T. 2012 | *Journal of Perinatology*. Volume 32, Issue 7, Pages 545-551

### Key Concepts/Context

The authors allude to the references in literature about the stress associated with being the parent of an infant in the Neonatal Intensive Care Unit (NICU). Indicating that the physical environment of a NICU may afford the possibility of alleviating such stress, the authors present the findings of this study which aimed to explore the relationship between the type of NICU room (single-patient versus open bay), parental practices and maternal health. The study found that although the Single Patient Room (SPR) contributes to increased parental visitation, parents in SPRs reported more stress.

### DESIGN IMPLICATIONS

This study indicated both open bays and single patient NICU room designs have different advantages.

Pending further studies, designers may consider both open bay units and single patient rooms in NICUs.

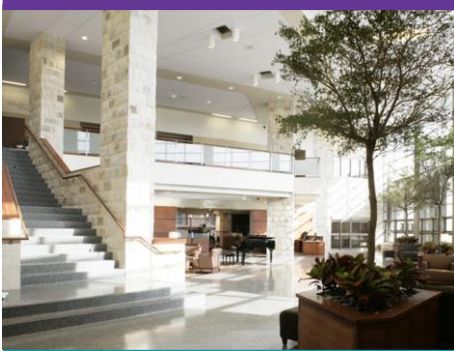
### Methods

This study took place within a longer three-year study examining the developmental progression of prematurely born infants. The study site was a level III NICU of a children's hospital with 38 open bay beds and 36 SPRs. Parents with infants who were not expected to survive or who had a congenital abnormality were not recruited. Parents were observed for the entire period of their hospitalization for the following activities: visitation and holding. Information pertaining to whether the infant was receiving breast milk was obtained from medical charts. After discharge, the primary caregiver/mother was administered a questionnaire to assess maternal health. The sample size was 81, with 39 infants in open bay beds and 42 in SPRs.

### Findings

The study found:

- Compared to parents with infants in the open bay beds, the parents of infants in SPRs had more hours of visitation in the first two weeks of life



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( $P=0.021$ ); weeks three and four ( $p=0.017$ ), and from week five till term equivalence ( $p=0.047$ ).

- Room type did not affect the amount of holding or when the infant was first held.
- Mothers of infants in the SPRs reported more NICU stress ( $p=0.04$ ).
- At discharge 26% of infants in SPRs and 30% in the open bay beds had received breast milk – this was not significant statistically ( $p=0.751$ ).

### Limitations

The authors identify the following as the limitations of this study:

- This was not a randomized trial. Room assignment was done to enable group homogeneity. Some inherent differences may not have been noticed.
- The sample size was small, making it difficult to observe changes in maternal health and holding practices and to examine specific sociodemographic groups.
- There was a lot of variation in nurse practice of documenting parent visitation and holding practices.

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