



Infant Safe Sleep and the VDSS Baby Box Program: Implementation at a Community Based Hospital

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Abstract

In 2016, the AAP published recommendations for infant safe sleep environment. Since that time, the Virginia Department of Social Services has developed a program to provide an inexpensive but appropriate sleep space for newborns up to 6 months of age. This information had not been introduced to our local hospital that resides in the area of the state with the highest incidence of Sudden Infant Death Syndrome. The study used a questionnaire to elicit caretaker responses to knowledge of safe sleep and the baby box program at discharge, both before and after implementing a quality improvement procedure involving written and verbal information. Results indicated that given time and reinforcement with multiple messaging, parents were able to recall safe sleep information and increase participation in the baby box program.

Introduction

Sudden Unexpected Infant Death (SUID) has been on a decline since the 1990s, especially due to a sharp decline in Sudden Infant Death Syndrome (SIDS) initiated by a raised national awareness from the "Safe to Sleep" campaign in the 1990s. However, the decreasing SIDS incidence has slowed since the early 2000s and infant death by Accidental Suffocation and Strangulation in Bed (ASSB) has increased [1]. Thus, the American Academy of Pediatrics issued updated recommendations for infant safe sleep in 2016 [2]. The Virginia Department of Social Services (VDSS) summarizes the safe sleep recommendations with their Safe Sleep campaign, "ALONE on his/her back,

but within the same room as their caregiver, APART from toys, blankets, pillows or other objects to avoid suffocation, and ALWAYS in a separate safe sleep space such as a crib or bassinet, a drug- and alcohol-free environment" [3]. Additionally, VDSS has partnered with the Baby Box Co to provide parents with a safe sleep space for their infant. The aim of this study was to measure improvement in caretaker knowledge of infant safe sleep and increase caretaker interest in the Baby Box program at our community-based hospital by providing information early in the hospitalization of the newborn and reinforcing that information at discharge.



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Methods

The pre-intervention (control) group was shown a video about infant safe sleep and then given a questionnaire at discharge assessing recall of “safe sleep”, the Baby Box initiative, and interest in the baby box. Intervention included education of staff and providers as well as provision of information to patients at admission. Patients in the intervention groups were asked two questions on admission to gauge initial knowledge and then provided with nursing input, a video, and a flyer with information. At discharge, those patients that received intervention completed a follow-up questionnaire assessing knowledge and interest in the Baby Box program. Each group one control and two intervention contained 20 participants and data was collected by the physician over the course of 6 months.

Results

Table 1: Caretaker Responses to Questionnaires.

Have you heard of “safe sleep”	Yes	80%	85%	100%
	No	20%	15%	0%
Have you heard of the VDSS “safe sleep” Program?	Yes	5%	95%	100%
	No	95%	5%	0%
Would you like to know more about the Baby box?	Yes	30%	45%	45%
	No	70%	55%	55%
Do you have a safe sleep space?	Yes	X	65%	100%
	No	X	35%	0%

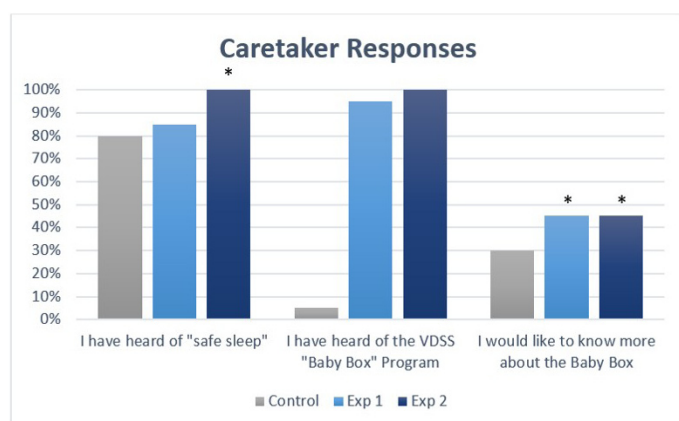


Figure 1: Caretaker Responses to Questionnaires.

Discussion

Those in the pre-intervention group displayed average comprehension and recall of the term ‘safe sleep’ after watching a video and given variable nurse input, however there was little parental knowledge of the VDSS Baby Box Program and thus introduction to the program at discharge limited time for the caretaker to consider participation. The results shown in (Table 1 and Figure 1) demonstrate a statistically significant increase in caretaker knowledge of safe sleep environment in the second intervention group (p= 0.0089) and increase in caretaker willingness to participate in the Baby Box program in both intervention groups (p= 0.07215). These results support that consistent information provided to caretakers in multiple modalities by different providers at repeated intervals are more effective in learning and recall. Weaknesses of this study include lack of follow up in an outpatient setting and a relatively small sample size representative of only one hospital.

Conclusion

Pre-intervention evaluation revealed a knowledge gap regarding safe sleep recommendations and the opportunity to obtain a Baby Box from the VDSS. Implementation of reinforced information to patients by health care providers at our community based hospital effectively closed the gap and improved patient knowledge.

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