

## Identifying Caregiver Knowledge Acquisition and Use of Blue Bulb Syringe

*Rebecca Stillwell Honors College, BSN Student UAH College of Nursing,  
Pamela O'Neal, RN, PhD, UAH College of Nursing*

### Introduction

- Patient education is an integral part of nursing
- Infant care often covered in childbirth and prenatal education classes, discharge instructions, public assistance programs, follow up appointments with health care providers (3,6,10)
- Content of classes has changed little, both in content and teaching methodology (6,12)
- Instructions or teaching of indications for use and procedural use for caregivers remains unclear (6,9)
- Caregivers (Parents) receive information and new skills about a variety of topics from numerous sources, using different formats and often with conflicting information (6,9,10)



### Nursing Significance

- No studies directly related to caregiver knowledge of bulb suctioning.
- Studies do show caregivers are willing to learn using a variety of techniques, including simulation demonstration and skill practice, when it comes to child care practices (4,6,9)
- Knowledge that caregivers (parents) have a skill increases the self-efficacy of parents (2,5,6,9,10,12)
- Studies indicate that even knowledge about simple feeding techniques and equipment safety have demonstrated to be important topics to parents (1,4,7)
- Nursing practice must identify topics and issues that are normally given less emphasis in parental education practice(4,9)
- Parents use technologically for knowledge acquisition than their historic counterparts.(8,12,13)
- Tradition, a preoccupation with change and the cost of change, as well as focus on illness rather than wellness will prevent further necessary study into the area of educating parents in the best practices of suctioning.



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### Methodology

- Original research developing scientific knowledge to improve evidence based practice about airway clearance of infants and children in the home setting.
- Describe how caregivers acquire knowledge about the use of suction devices to promote airway clearance.
- Describe how caregivers use suction devices to promote airway clearance
- Designed a mixed method study using quantitative methods including key demographic information and qualitative methods including a vignette of skill demonstration and a semi-structured interview.
- Vignette has been pilot tested and minor changes were made.
- After brief review of purpose and description of process participant will be presented with a vignette which asks participant for of a skill demonstration of using bulb suctioning by a caregiver. *"He/She does not have a fever, but today seems more congested. You have decided you need to suction him/her, walk me through how you usually do this."*
- Semi-structured interviews with target population on knowledge of **indications** for use (*"Tell me more about how you know when to suction."*), **procedural knowledge acquisition** (*"Please describe any instruction you have had on how to use the bulb syringe."*), **cleaning knowledge and practices** (*"What is your understanding of how to clean the bulb syringe?"*), and **storage practices** (*"What is your understanding on how long you can keep a bulb syringe for use?"*)
- Analyze data; establish validity, modify instrument if needed

### Conclusion

- During first few years of life, children are susceptible to multiple colds and upper respiratory illnesses yearly due to immunity status resulting in millions of dollars spent on medical visits and medications
- Few pharmacological treatments or effective home care treatments available to parents to minimize occurrence of sequelae illness like otitis media, sinusitis and bronchiolitis which can lead to negative outcomes such as hospitalization and even death
- Use of the bulb syringe is one of the home care treatments available to parents
- Literature does not show if caregivers know how to recognize indications and procedures for use of suction, as well as proper disinfecting and storage practices of bulbs

