



## ABSTRACT

There are multiple studies that explore the prevention and management of traumatic dental injuries, but very little pertaining to the foundational knowledge that school nurses possess to identify and care for these injuries. The purpose of this study is to assess the knowledge that school nurses in North Carolina possess to effectively care for dental trauma.

## INTRODUCTION

It has been reported that “25% of all school children experience dental trauma and 33% of adults have experienced trauma to the permanent dentition, with a majority of injuries occurring before age nineteen.”<sup>1</sup> Additionally, it has been estimated that approximately 80% of elementary school students will visit a school nurse for injury-related complaints over a 2-year period.<sup>2,3</sup> It is important that school nurses be able to recognize, provide immediate treatment and refer dental injuries so that optimal outcomes can be achieved.

## MATERIALS & METHODS

A survey was distributed to school nurses by the School Nurse Association of North Carolina (SNANC) via email and posted to the internal forum for members. The survey obtained demographic information and assessed the level of knowledge to appropriately identify and care for four dental trauma cases.

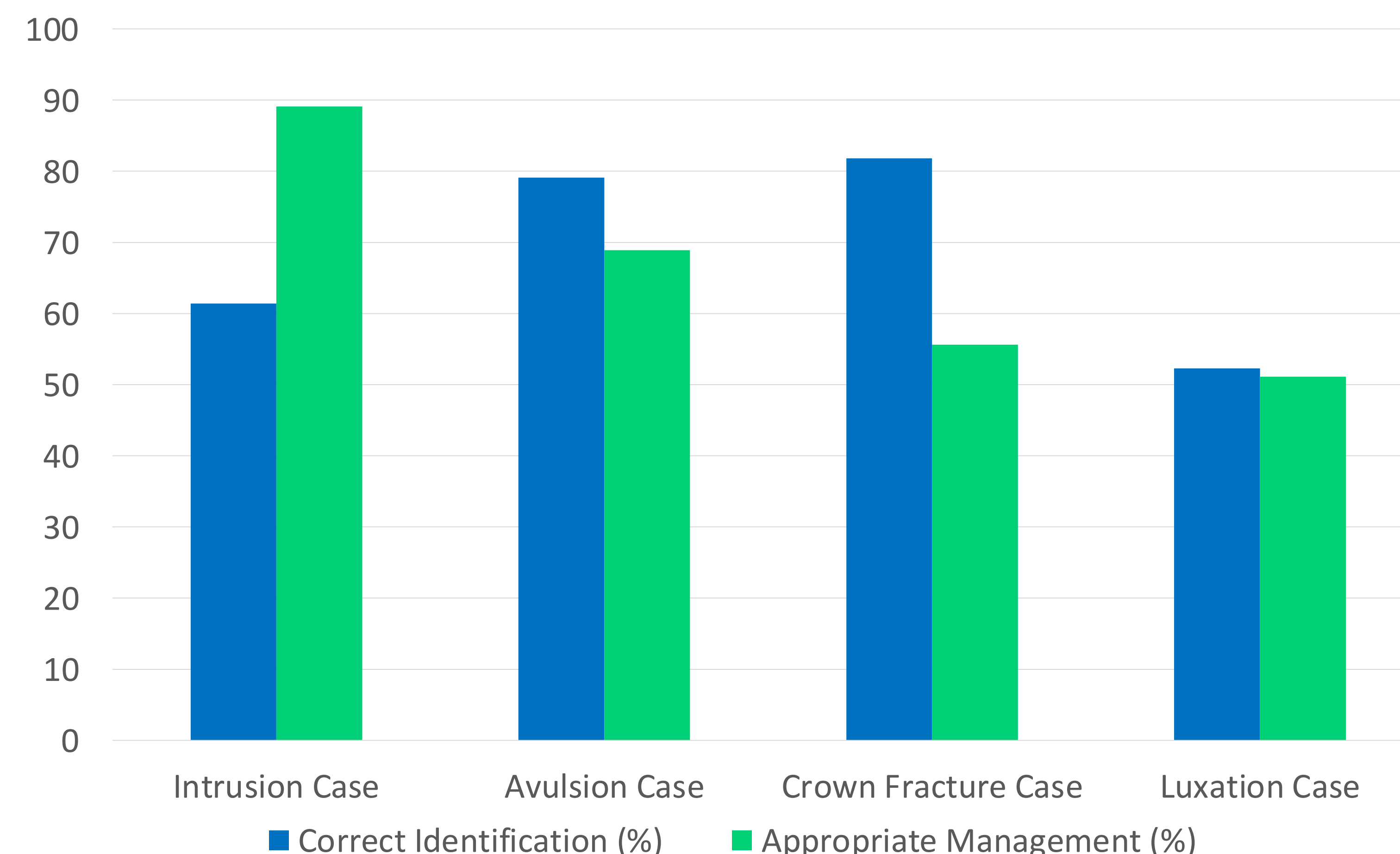
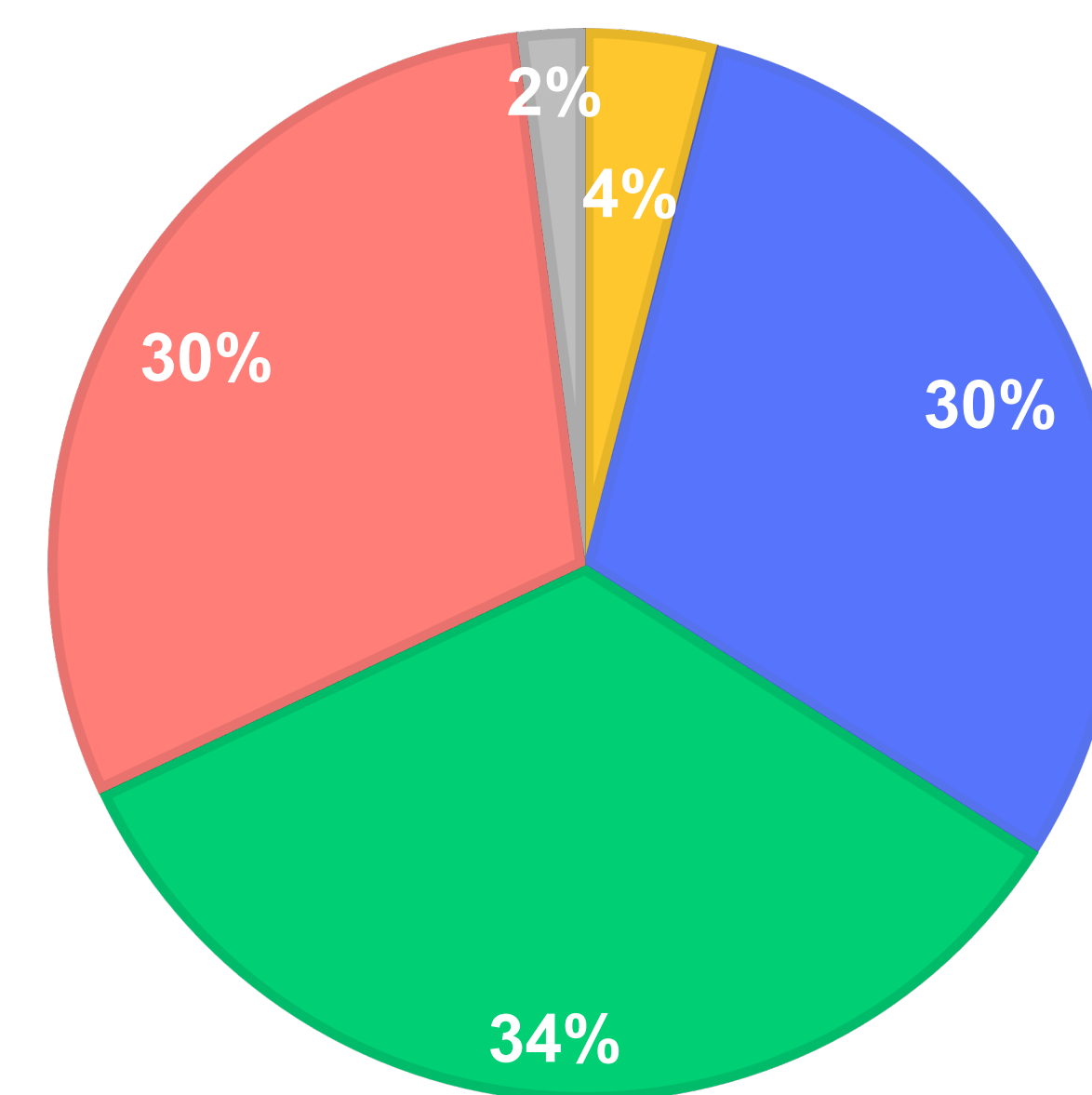
## RESULTS

A total of 59 surveys were initiated, 13 were incomplete and 46 were complete.

School Nurse Demographics					
<b>Age</b>	<b>20-35</b>	<b>36-50</b>	<b>51-65</b>	<b>&gt; 65</b>	
	8.7%	40.4%	49.1%	1.8%	
<b>Years of experience</b>	<b>0-5</b>	<b>6-10</b>	<b>11-15</b>	<b>&gt; 15</b>	
	45.6%	15.8%	8.8%	29.8%	
<b>Highest education level</b>	<b>Associate's</b>	<b>Bachelor's</b>	<b>Master's</b>	<b>Other</b>	
	5.3%	66.7%	19.3%	8.7%	
<b>Primary age group</b>	<b>Elementary school</b>	<b>Middle school</b>	<b>High school</b>	<b>College</b>	<b>Other</b>
	47.4%	7.0%	19.3%	0%	26.3%

CONFIDENCE LEVEL FOR TREATING DENTAL INJURIES

Strongly Agree Agree Neither Agree Nor Disagree Disagree Strongly Disagree



## DISCUSSION

The current study revealed that school nurses identified over 50% of traumatic dental injuries and their management correctly. The dental trauma with the prognosis that depends the most on timely treatment is an avulsion. However, only 53.3% of school nurses knew that reimplantation within the hour would lead to the best prognosis. 68.9% understood that immediate reimplantation should be attempted if possible. 100% of nurses responded that both milk and Hank's Balanced Salt Solution are suitable options to store the tooth in if reimplantation was not an option.

Due to the importance of timely treatment, it would be beneficial for school nurses to receive more information on this subject either through continuing education courses or through distribution resources that are currently available.

## CONCLUSION

1. A combined average of 68.65% of the traumatic dental injuries were correctly identified and a combined average of 66.18% were appropriately managed.
2. A gap in this knowledge still exists and a collaborative effort is needed to make information on dental trauma more readily available to school nurses.

## REFERENCES

1. Glendor, U. "Epidemiology of traumatic dental injuries – a 12 year review of the literature." Dent Traumatol, Dec 2008; 24(6): 603-11.
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3. Scala, C, et al. "Causes and outcomes of pediatric injuries occurring at school." J School Health 1997; 67: 384-389.
4. K. Tucker, et al. "Athletic trainers' knowledge related to athletic-related dental trauma." Poster presentation.