

Pre-participation Dental Screening Examinations: *Athletes' Misconceptions Concerning Restorative Needs*



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INTRODUCTION

- Many physicians and athletic trainers cite the lack of a standardized preparticipation physical evaluation form.
- Pre-participation dental screenings examinations do not appear as a component of preparticipation physical evaluation forms.
- Athlete's oral health is more at risk than non-athletes. Poor oral health can limit a players training time and competition time.
- A major league baseball organization (MLBO) was innovative by incorporating pre-participation dental screening examinations as part of their spring training physicals among their minor league professional baseball players (MLPBP's).

OBJECTIVES

- To assess the minor league professional baseball players' self-awareness of their need for restorative treatment.
- To determine the clinical need for their restorative treatment.

EXPERIMENTAL METHODS

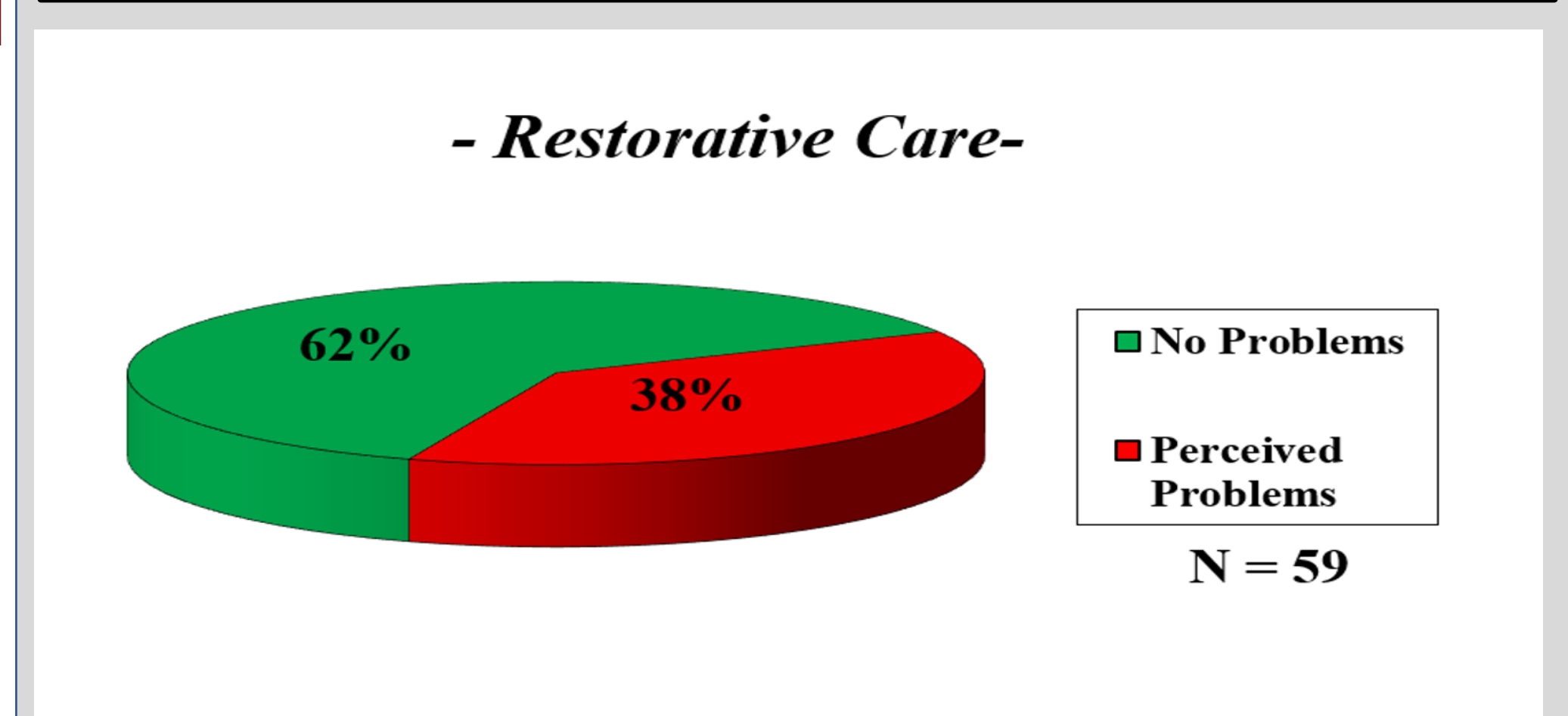
- Prior to the dental screening, each minor league professional baseball player was asked to complete a one-question survey anonymously and voluntarily.
- The question in this survey was: **"Do you have any cavities, lost fillings, broken fillings, or broken teeth?"**
- A dentist performed the dental screening examination in the athletic training room utilizing:
 - High intensity light
 - Disposable mouth mirrors
 - Tongue blades
 - 2 x2 gauzes
 - Dental examination gloves

American Dental Association Caries Classification System.

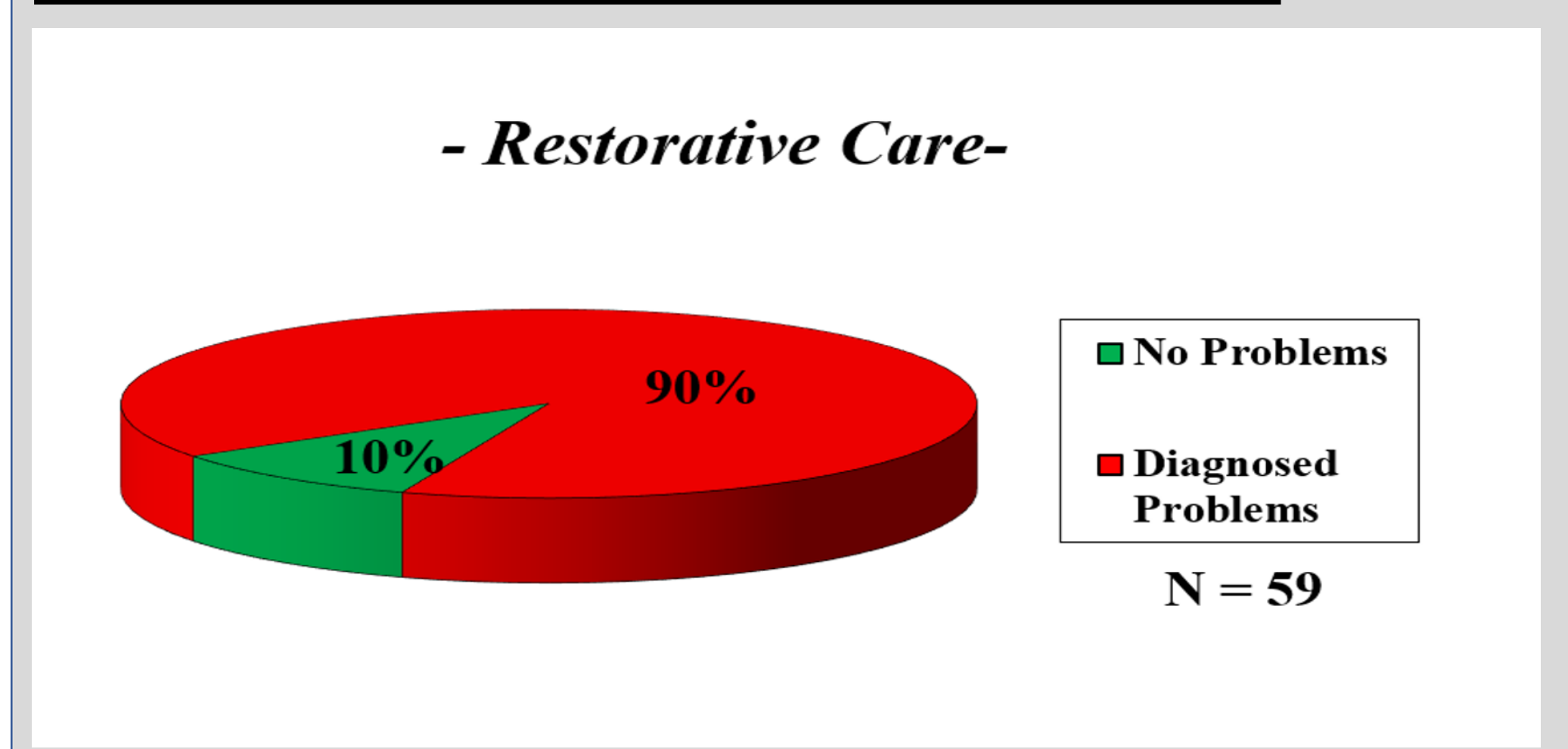
	Sound	Initial	Moderate	Advanced
Clinical Presentation	No clinically detectable lesion. Dental hard tissue appears normal in color, translucency, and gloss.	Earliest clinically detectable lesion compatible with mild demineralization. Lesion limited to enamel or to shallow demineralization of cementum/dentin. Mildest forms are detectable only after drying. When established and active, lesions may be white or brown and enamel has lost its normal gloss.	Visible signs of enamel breakdown or signs the dentin is moderately demineralized.	Enamel is fully cavitated and dentin is exposed. Dentin lesion is deeply/severely demineralized.
Other Labels	No surface change or adequately restored	Visually noncavitated	Established, early cavitated, shallow cavitation, microcavitation	Spread/disseminated, late cavitated, deep cavitation
Infected Dentin	None	Unlikely	Possible	Present
Appearance of Occlusal Surfaces (Pit and Fissure)¹	ICDAS 0	ICDAS 1 ICDAS 2	ICDAS 3 ICDAS 4	ICDAS 5 ICDAS 6
Accessible Smooth Surfaces, including Cervical and Root²				

ICDAS – International Caries Detection and Assessment System.

Survey Results of Player Awareness of Dental Problems



Results of Direct Clinical Visual Examinations



RESULTS

- ❖ The dental screening examinations revealed that ninety percent of the players had: (1) carious lesions (2) lost restorations (3) fractured restorations, and/ or (4) broken teeth.
- ❖ Thus, sixty-two percent of the minor league professional baseball players were not aware of their oral health restorative needs.

LIMITATIONS

A limitation of this research study was the relatively small sample size of the MLPBPs examined. This is due to the considerable difficulty of an individual researcher attaining the permission to work with more than one franchise.

CONCLUSIONS

- Dental screening examinations are an important component of spring training physicals.
- The majority of these professional baseball players were unaware of their restorative dental needs.

FUTURE CONSIDERATIONS

- ❖ Within an ideal preparticipation physical evaluation, a dental screening examination should be included.
- ❖ While preparticipation examinations are notable, the development of a preparticipation standardized dental screening form is paramount.

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