

Dental Practice-Based Research Network
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DPBRN 5: Reasons for replacement or repair of dental restorations

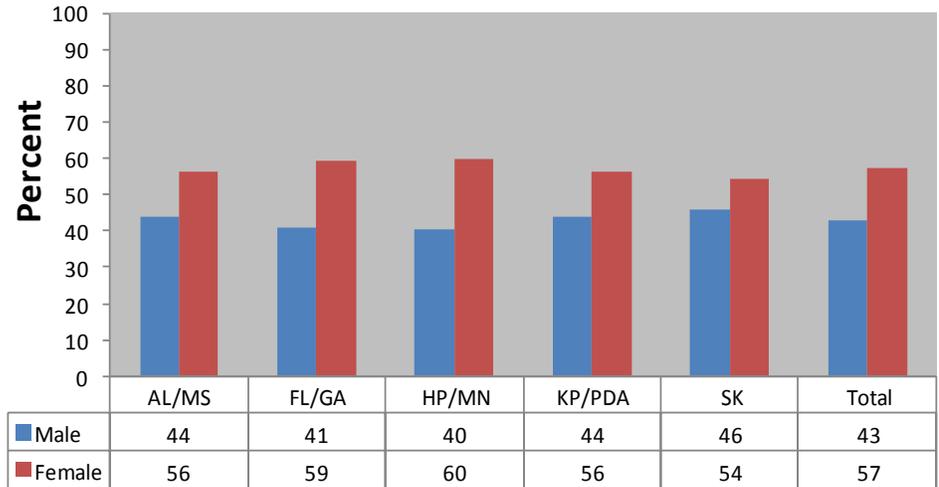
Summary of Overall Results - Graphs

Date Prepared: June 20, 2011

1. Patient Gender

- a Male
- b Female

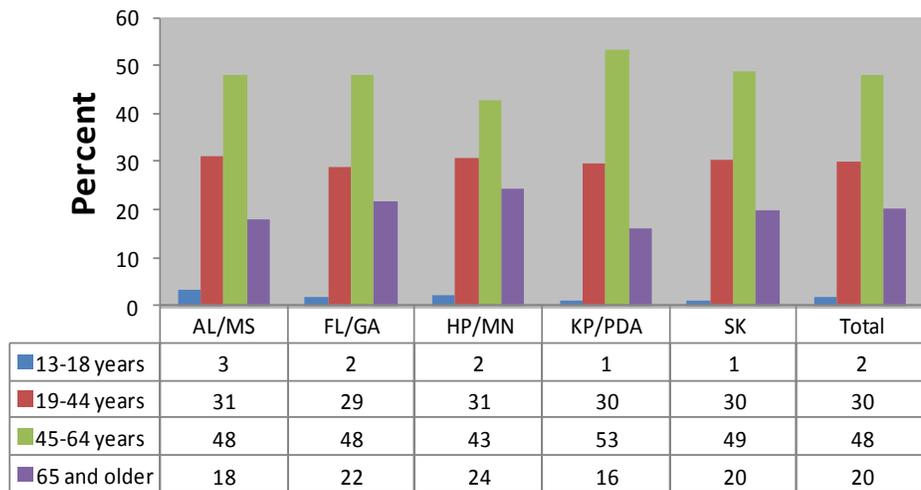
Question 1: Gender



- About 43% of the patients were male.

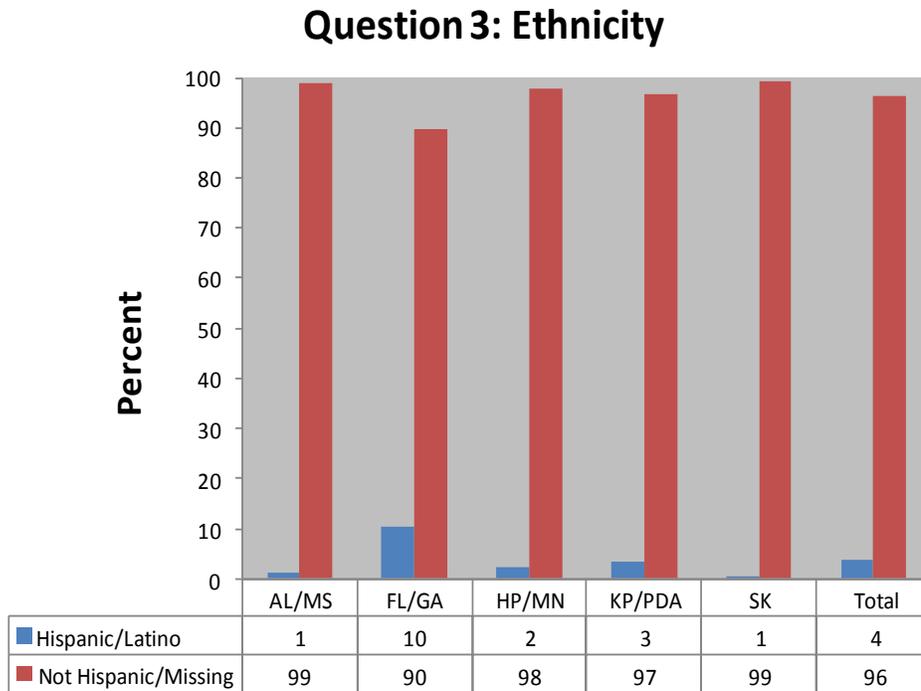
2. Patient age in years: Mean age was 51.5 ± 16 years (range: 13 to 102).

Question 2: Age



3. Patient Ethnicity

- a Hispanic or Latino
- b Not Hispanic or Latino

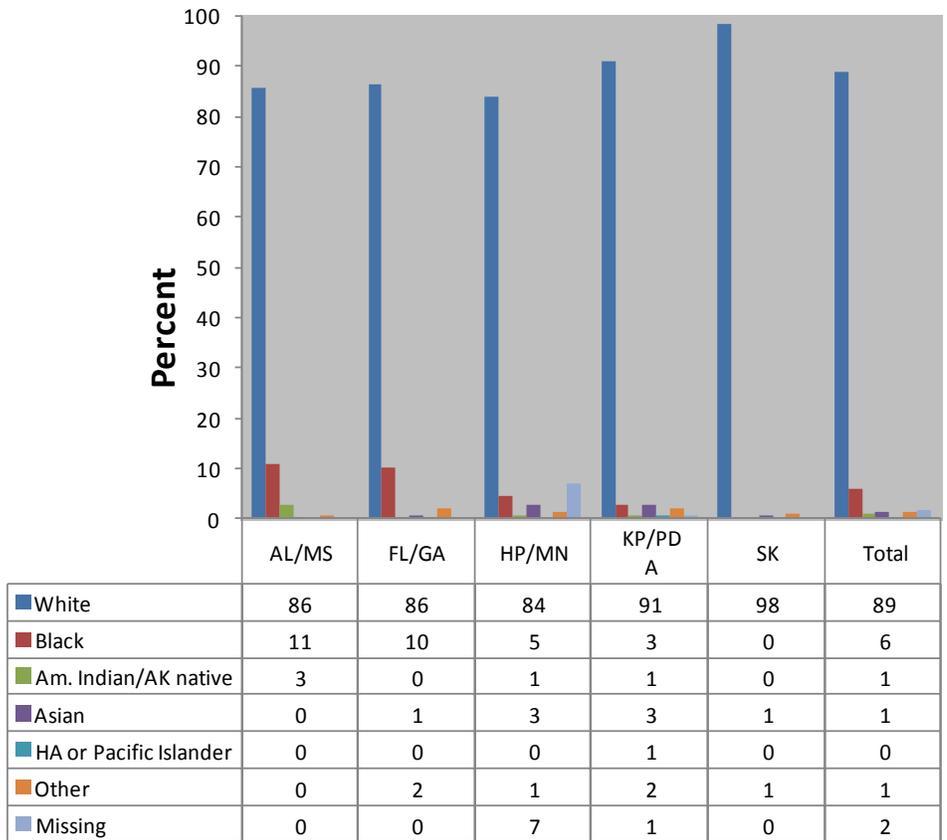


- About 4% of patients were of Hispanic/Latino ethnicity; higher in FL/GA, 10%.

4. Patient Race

- a White
- b Black or African-American
- c American Indian or Alaska Native
- d Asian
- e Native Hawaiian or Other Pacific Islander
- f Other (please specify)

Question 4: Race

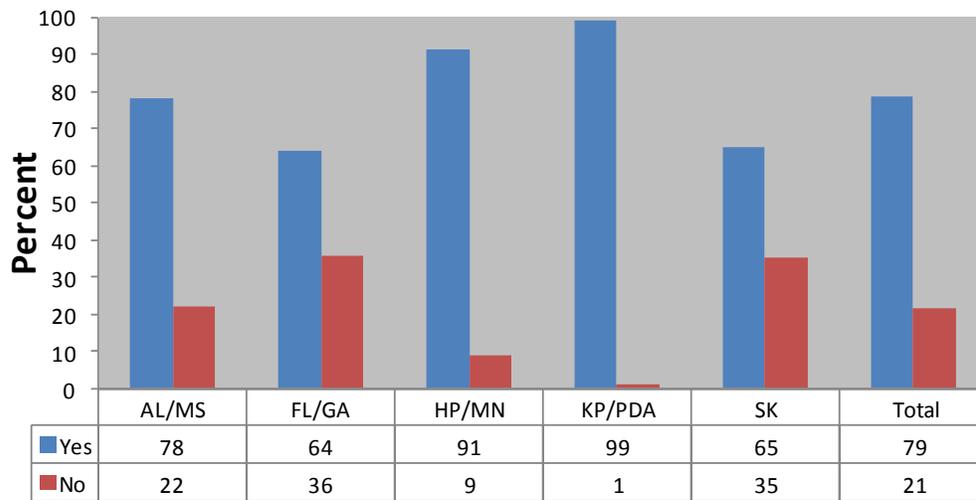


- About 89% of the patients were White and 6% were Black/African-American; differed by region with SK being 98% White and FL/GA, AL/MS being 10–11% African-American.
- Overall, 79% of the patients had some type of dental insurance, ranged from 64% (FL/GA) to 99% (KP/PDA).

5. Does the patient have any dental insurance or third party coverage?

- a Yes
- b No

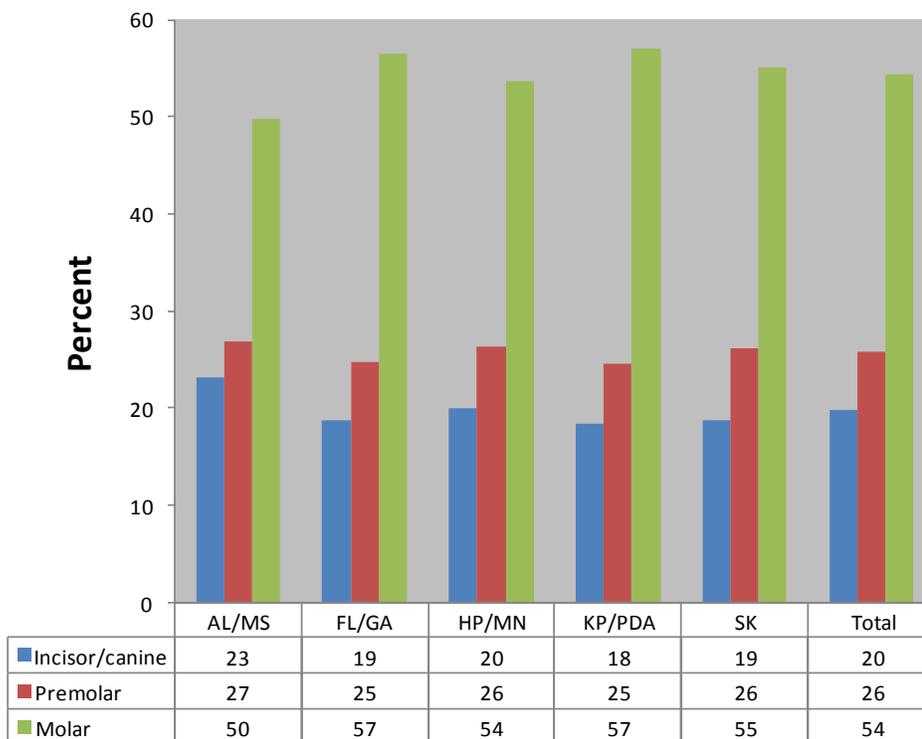
Question 5: Insurance



- Overall, 79% of the patients had some type of dental insurance, ranged from 64% (FL/GA) to 99% (KP/PDA).

6. Which tooth was treated **today**?
 (Not included in individual reports.)

Tooth Position

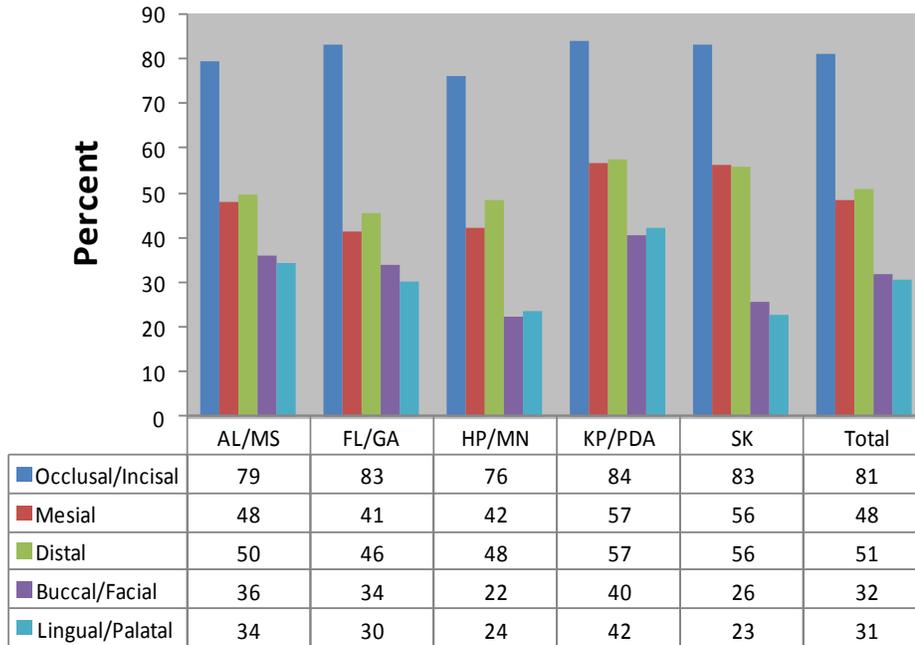


- Overall, about 20% of the restorations were on incisors/canines, 26% were on premolars, and 54% on molars.

7. **Before** your treatment today, which tooth surface(s) did the restoration include? (Mark all that apply)

- a Occlusal or Incisal
- b Mesial
- c Distal
- d Buccal or Facial
- e Lingual or Palatal

Question 7: Tooth Surface (Before Treatment)

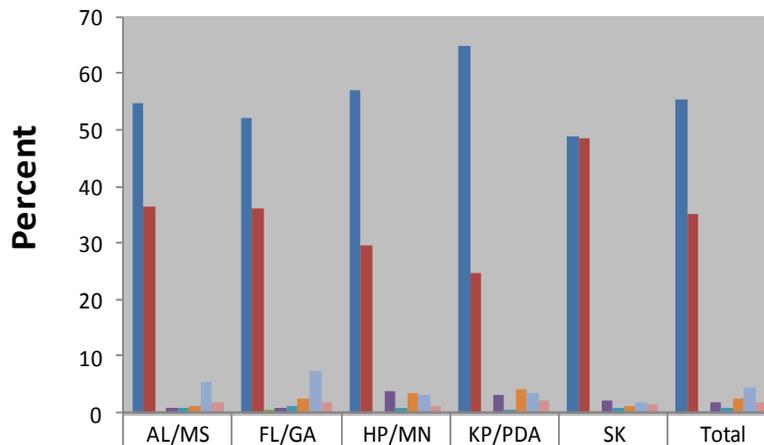


- 81% of tooth surfaces which were occlusal or incisal before today's treatment.
- 48% were mesial, ranged from 41% (FL/GA) to 57% (KP/PDA).
- 51% were distal with SK and KP/PDA being higher at 56% and 57%, respectively.
- 32% were buccal or facial, ranged from 22% (HP/MN) to 40% (KP/PDA).
- 31% were lingual or palatal, ranged from 23% (SK) to 42% (KP/PDA).

8. What material was in the restoration **before** you repaired or replaced it today? (Mark all that apply)

- a Amalgam
- b Composite resin directly placed, including compomer
- c Indirect composite resin
- d Glass ionomer, resin-modified glass ionomer
- e Ceramic or porcelain
- f Cast gold or any other cast metallic restoration
- g Combined metal/ceramic restoration
- h Unknown

Question 8: Material before Treatment

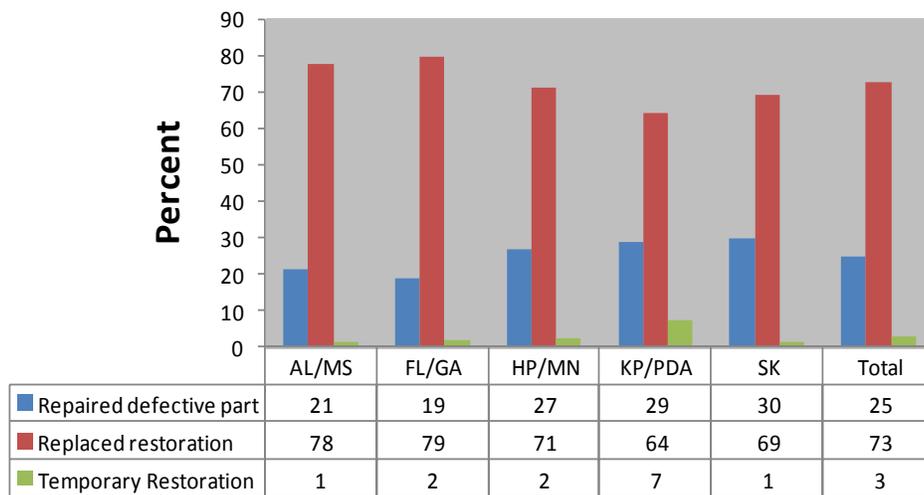


- The most common material found in the restoration before treatment was amalgam at 55%, ranged from 49% (SK) to 65% (KP/PDA).

9. What treatment did you do on this tooth today?

- a Repaired a defective part of the restoration
- b Replaced the entire restoration
- c Placed a temporary restoration

Question 9: Treatment Today

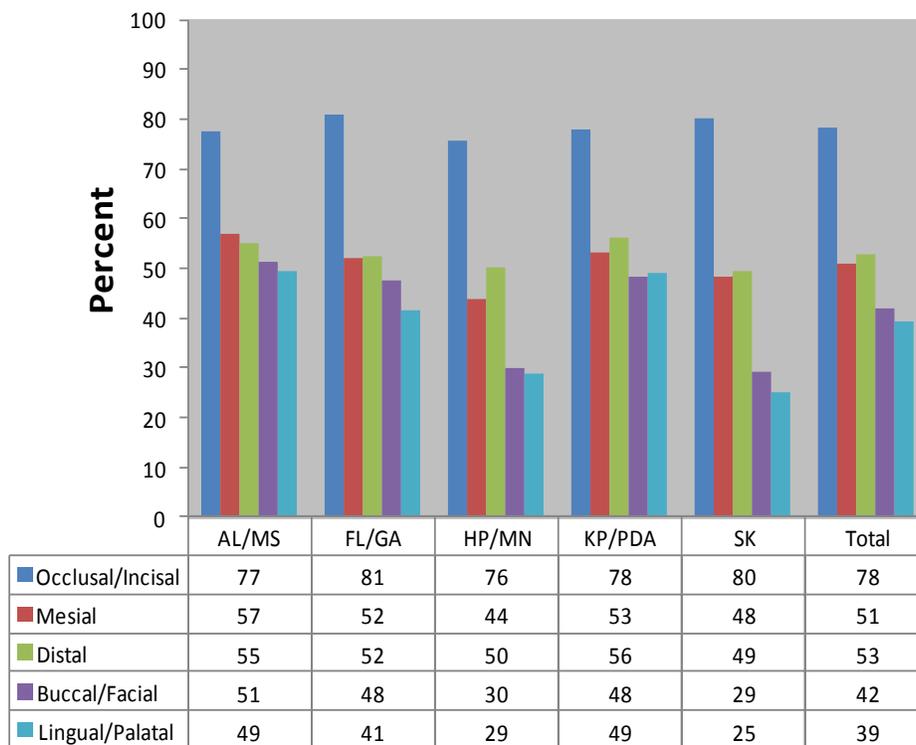


- 73% of the patients received entire restorations, ranged from 64% (KP/PDA) to 79% (FL/GA).

10. Which restoration or tooth surface(s) did you repair or replace **today**? (Mark all that apply)

- a Occlusal or Incisal
- b Mesial
- c Distal
- d Buccal or Facial
- e Lingual or Palatal

Question 10: Tooth Surface Repaired Today

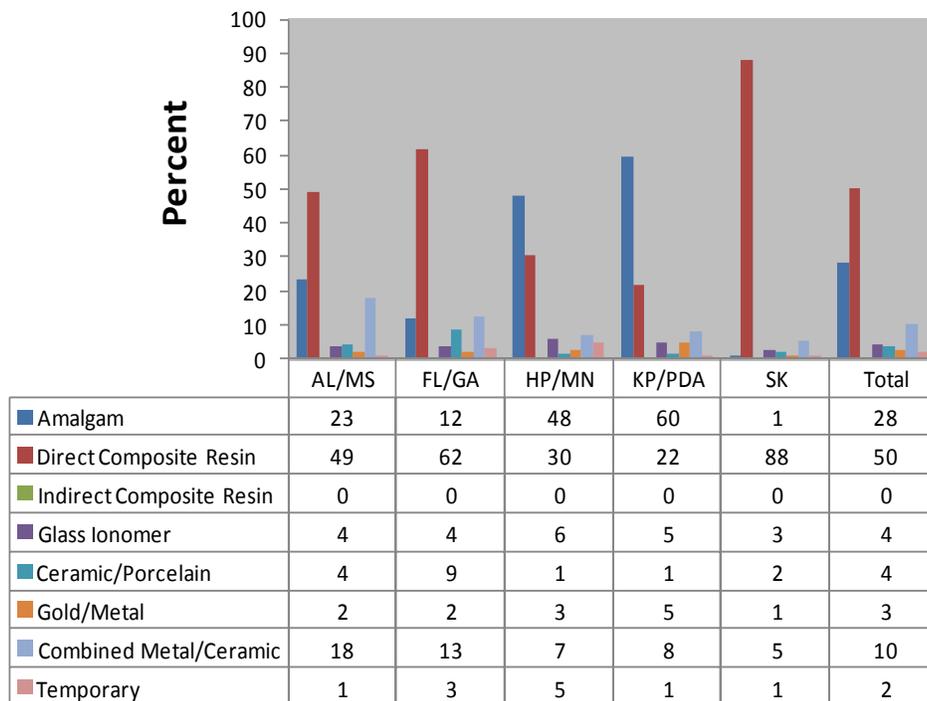


- 78% involved occlusal or incisal.
- 52% involved mesial, ranged from 44% (HP/MN) to 57% (AL/MS).
- 53% involved distal tooth surfaces.
- 42% involved buccal or facial, ranged from 29% (SK) to 51% (AL/MS).
- 39% involved lingual or palatal, ranged from 25% (SK) to 49% (AL/MS and KP/PDA).

11. What material did you use for the restoration or repair **today**? (Mark all that apply)

- a Amalgam
- b Composite resin directly placed, including compomer
- c Indirect composite resin
- d Glass ionomer, resin-modified glass ionomer
- f Cast gold or any other cast metallic restoration
- g Combined metal/ceramic restoration
- h Temporary restorative material

Question 11: Material Used Today

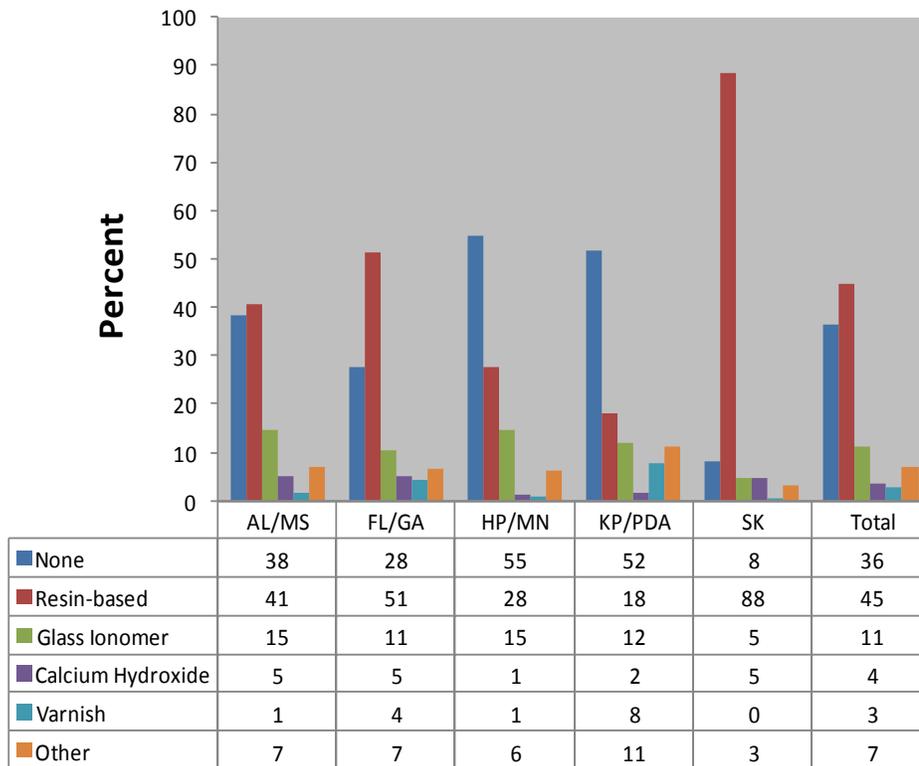


- Composite resin directly placed was the most common material used in today's treatment at 50%, ranged from 22% (KP/PDA) to 88% (SK).
- Amalgam was used in 28%, ranged from 1% (SK) to 60% (KP/PDA).
- 10% of treatments used a combined metal and ceramic restoration, ranged from 5% (SK) to 18% (AL/MS).

12. Did you use a base, lining or bonding material to place or repair the restoration today?
(Mark all that apply)

- a None
- b Resin-based bonding material
- c Glass ionomer, resin-modified glass ionomer
- d Calcium hydroxide-based cement/liner
- e Varnish (e.g. Copalite)
- f Other

Question 12: Base, Lining or Bonding Material

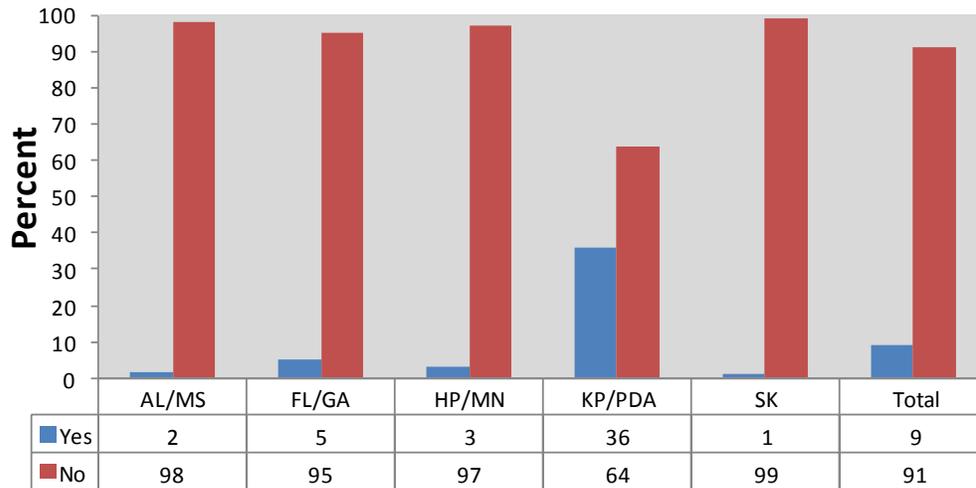


- 36% used no type of base, lining, or bonding material, ranged from 8% (SK) to 55% (HP/MN).
- The most common type of material used was resin-based, about 45% of all restorations, ranged from 28% (HP/MN) to 88% (SK).
- Varnish and calcium hydroxide-based cement/liner were used infrequently, each in less than 4% of restorations.

13. Did you use a rubber dam during the restorative procedure?

- a Yes
- b No

Question 13: Rubber Dam

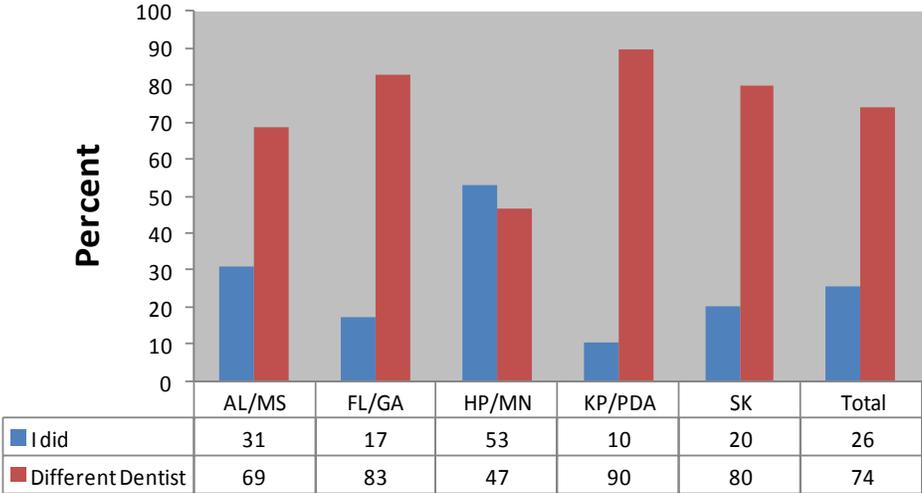


- Overall, 9% of restorative procedures used a rubber dam, notably higher in KP/PDA at 36%.

14. Did you, or a different dentist, place the original restoration that was replaced or repaired today?

- a I did the original restoration
- b A different dentist did the original restoration

Question 14: Who Performed Original Restoration

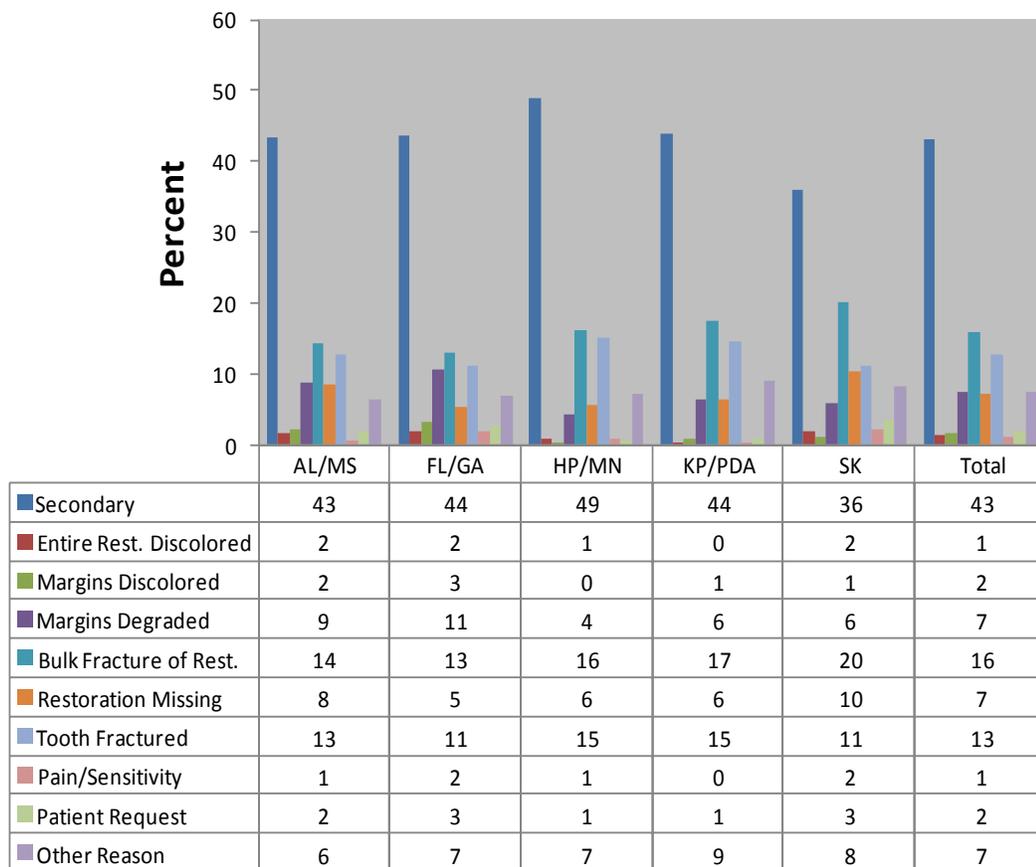


- 74% of the restorations were done by other dentists, ranged from 47% (HP/MN) to 90% (KP/PDA).

15. What was the **main** reason for repair or replacement of the restoration today? (**Choose only one**)

- a Secondary/recurrent caries
- b Entire restoration was discolored
- c Restoration margins were discolored
- d Restoration margins were degraded or ditched
- e Bulk fracture of restoration
- f Restoration was missing
- g Tooth was fractured
- h Pain or sensitivity
- i Patient request
- j Other reason

Question 15: Reason for Restoration

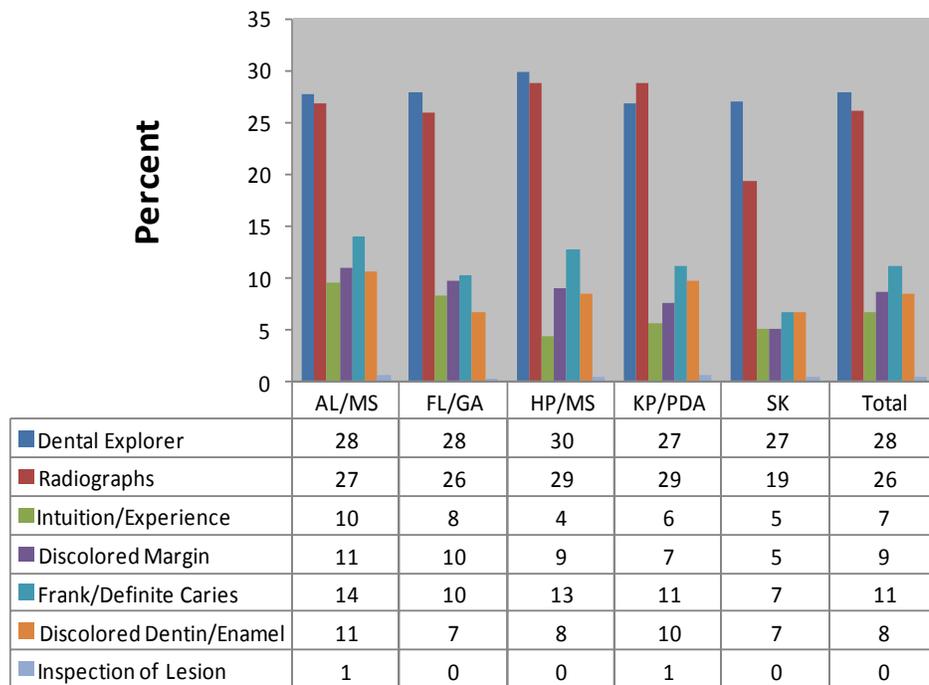


- The most common reason for repair or replacement of the restoration was a secondary/recurrent caries at 43%, ranged from 36% (SK) to 49% (HP/MN).

16. What technique or observation led you to the diagnosis of secondary caries? (Mark all that apply)

- a Probing with a dental explorer
- b Radiographs
- c Intuition or experience based on clinical appearance
- d Discolored margin of the restoration
- e Frank or definite caries cavitation
- f Presence of soft, discolored dentin or enamel
- g An exploratory preparation to inspect the lesion

Question 16: Technique used for Diagnosis

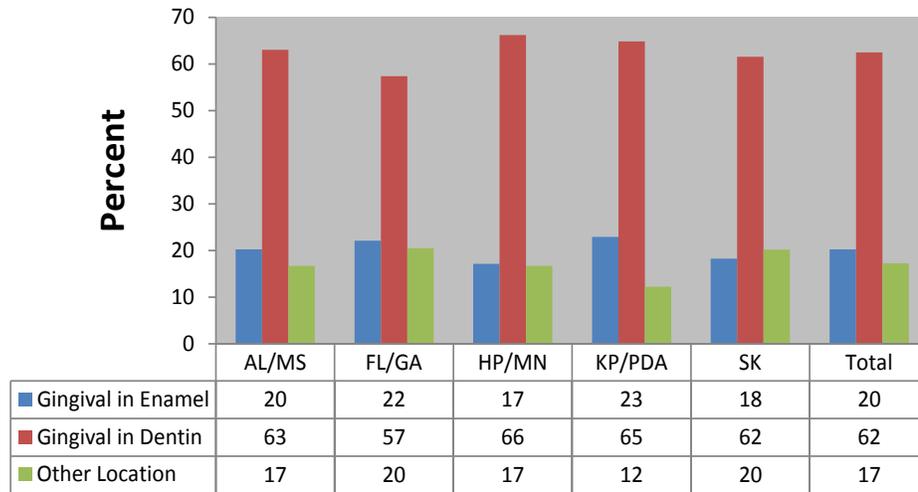


- The most common diagnostic techniques for secondary caries were the dental explorer at 28% and radiographs at 26%, and the least common was inspection of the lesion at 0.4%.
- These were similar across regions.

17. Where was the clinically diagnosed secondary caries relative to the existing restoration?
(Choose only one)

- a Gingival/apical to the restoration in enamel
- b Gingival/apical to the restoration in dentin or cementum
- c Other location

Question 17: Location of Secondary Caries



- The most common location of the restoration was gingival/apical to the restoration in dentin or cementum at 62%.