

Pre- and Postdoctoral Dental Student Attitudes about Electronic Patient Education Information and Utilization

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Background

- Effective patient education improves health literacy, patient satisfaction, and treatment outcomes
- Research suggests that written patient education information (PEI) with verbal instructions enhances patient comprehension and retention
- Studies show that over 80% of patients read written PEI, with more than 90% retaining information two weeks later
- PEI delivered by providers has been shown to increase patient engagement
- Providing printed materials help bridge communication gaps, improves adherence, and supports shared decision-making

Purpose

To assess pre- and postdoctoral dental students’ perception and utilization of electronic health record (EHR)-embedded patient education information (PEI) at the College of Dental Medicine (CDM).

Methods

An anonymous online survey was distributed to 3rd and 4th year predoctoral students and postdoctoral students (n=75) at CDM. The survey assessed familiarity of EHR-embedded PEI (content and location), recall of PEI-related training, students’ attitudes, perceived quality and utilization of PEI as well as barriers to use.

Table 1. Demographics

Category	Group	Percentage
Gender (n=55)	Female	60%
	Male	40%
Age (n=73)	21-30 years	85%
	31-40 years	14%
	Over 40 years	1%
Role (n=73)	Dental students	67%
	Postdoc students	33%
Student year (n=49)	3rd year dental students	61%
	4th year dental students	39%
Postdoctoral Program (n=24)	Pediatr Dent	33%
	Orthodontics	25%
	Endodontics	17%
	Oral Pathology	25%

Findings

Perceived Importance and Benefits of PEI Materials

- 94% of respondents believe patient education is “very important” (Figure 1), with no significant differences by gender, age, role or program
- 93% believed that patients would benefit from written materials, with 49% stating "a lot" and 44% stating "somewhat” with no differences between groups (Figure 2)
- 65% report patients at least "sometimes" request written materials; residents (79%) were more likely than students (58%) to report requests

Figure 1. Perceived importance of PEI by role (n = 72)

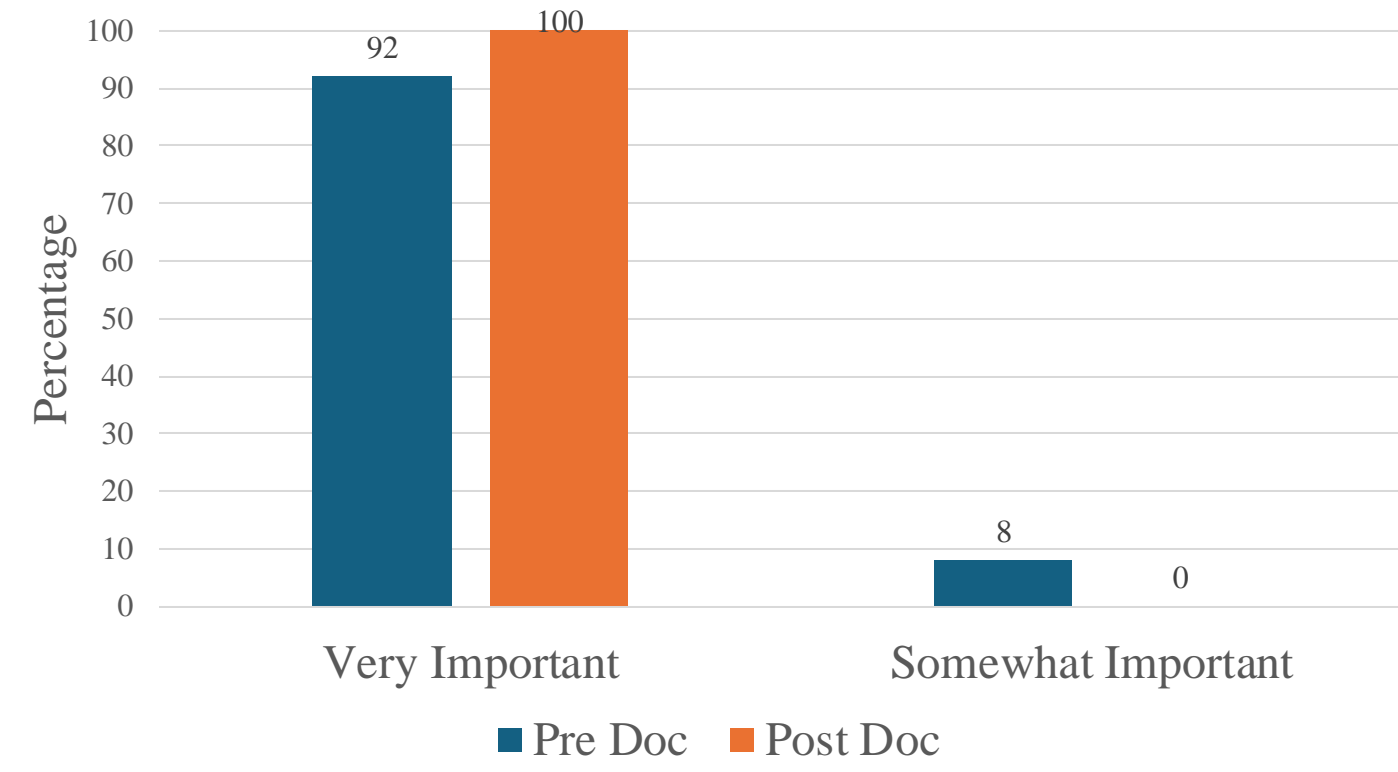
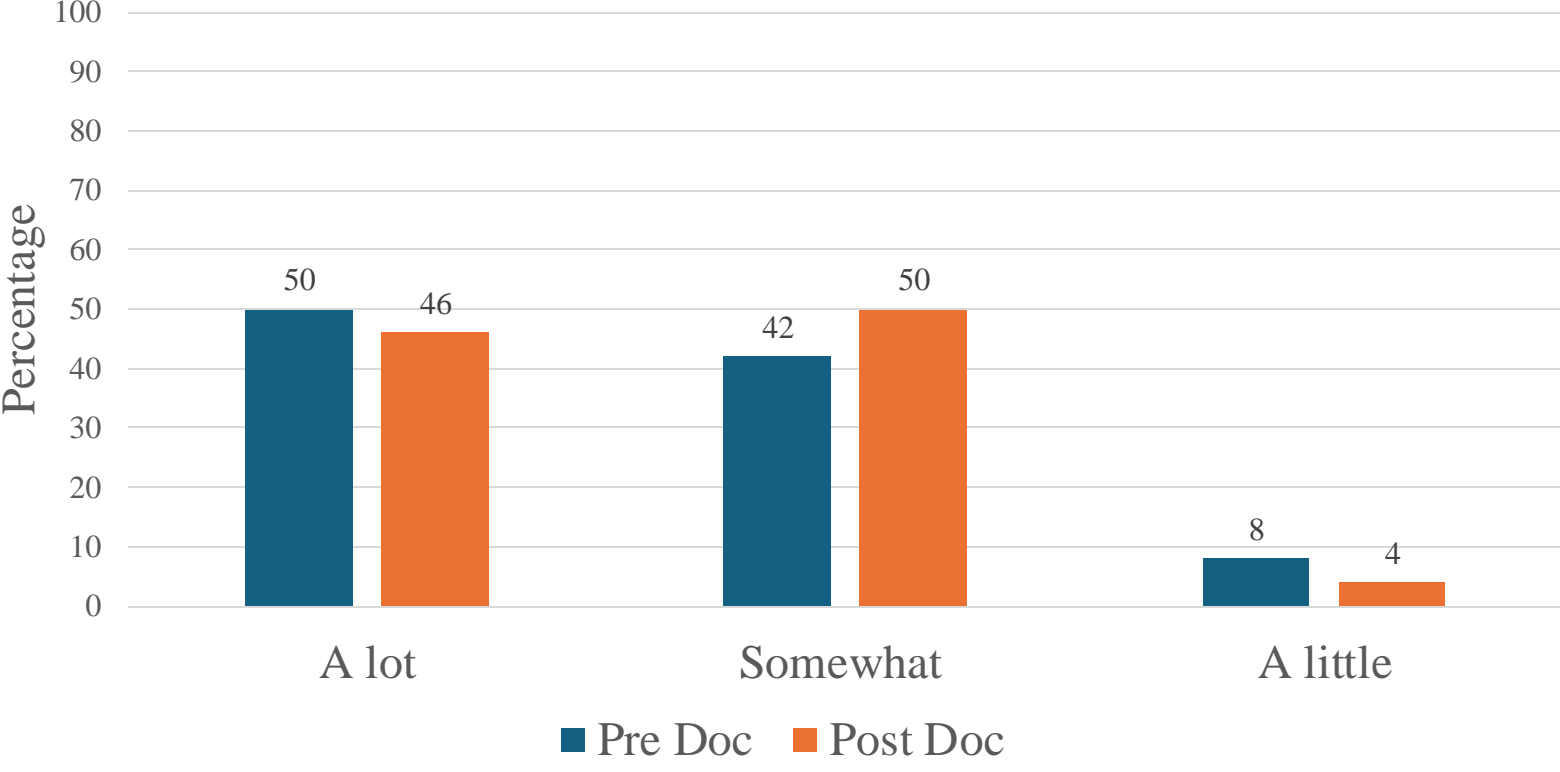


Figure 2. Perceived patient benefit of PEI by role (n = 72)



Awareness & Utilization of PEI Materials

- Most respondents (71%) were unaware that the EHR provides PEI materials (Table 2)
- Among those aware, only 17% knew where to access them within the system (Table 3)
 - 15% of predocs and 22% of postdocs correctly identified the wrap-up tab
- 89% (n=62) did not recall this component of their EHR training
- Among the few respondents who have ever provided a patient with written PEI, all were postdoctoral students (27%) (Figure 3)

Table 2.

Did you know that Epic provides patient informational/educational material on various dental topics, including dental caries, tobacco cessation, nutrition, periodontal disease and more? (n=70)

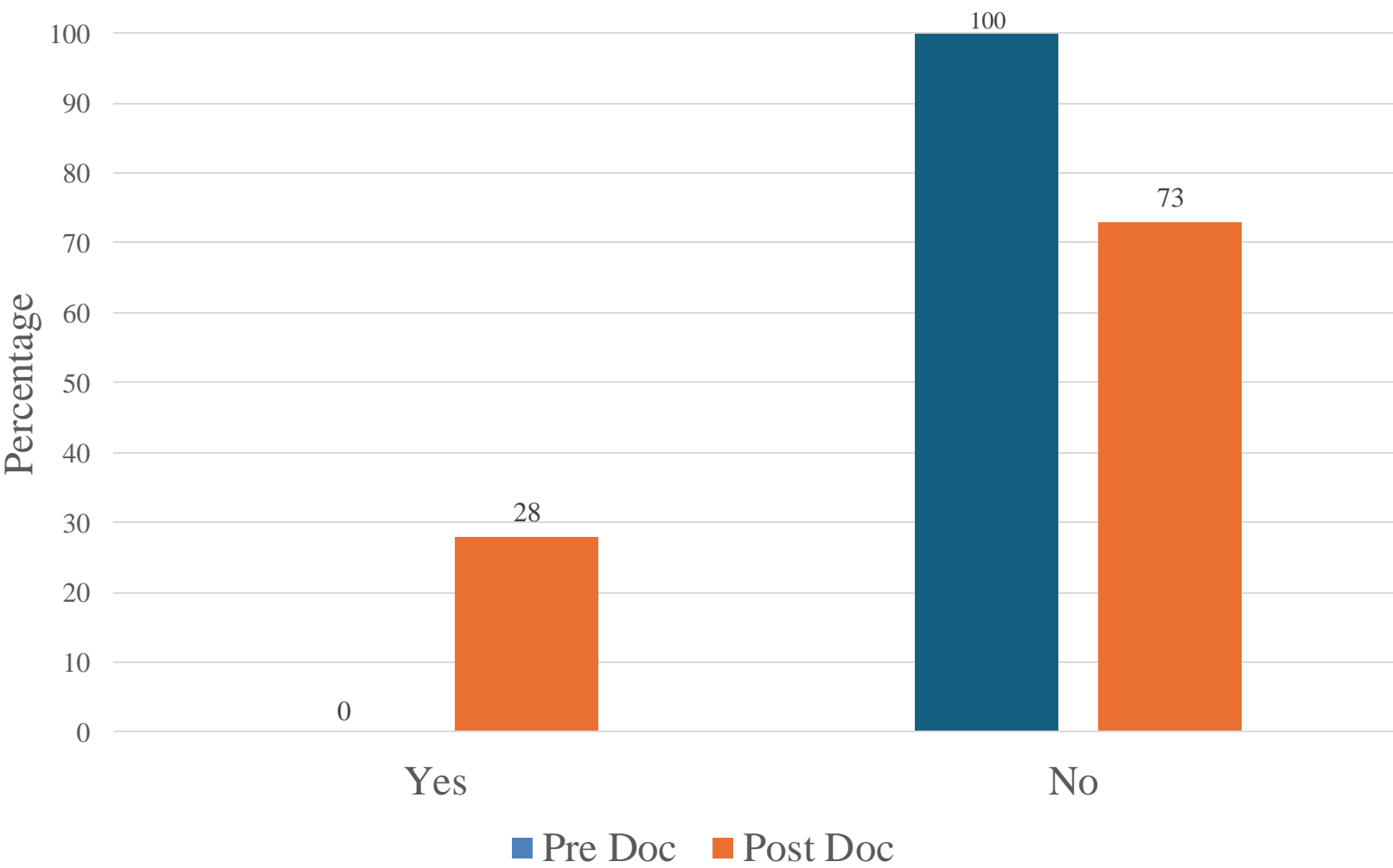
	n (%)
No	50 (71)
Yes	20 (29)

Table 3.

Where can you access patient informational/educational material in Epic? (n=70)

	n (%)
Wrap-Up Tab	12 (17)
Visit Data, Orders, Treatment Plan, Don’t Know	58 (83)

Figure 3. Percent utilization of PEI by role (n = 67)



Findings (continued)

Figure 5. Frequently cited barriers to providing written materials

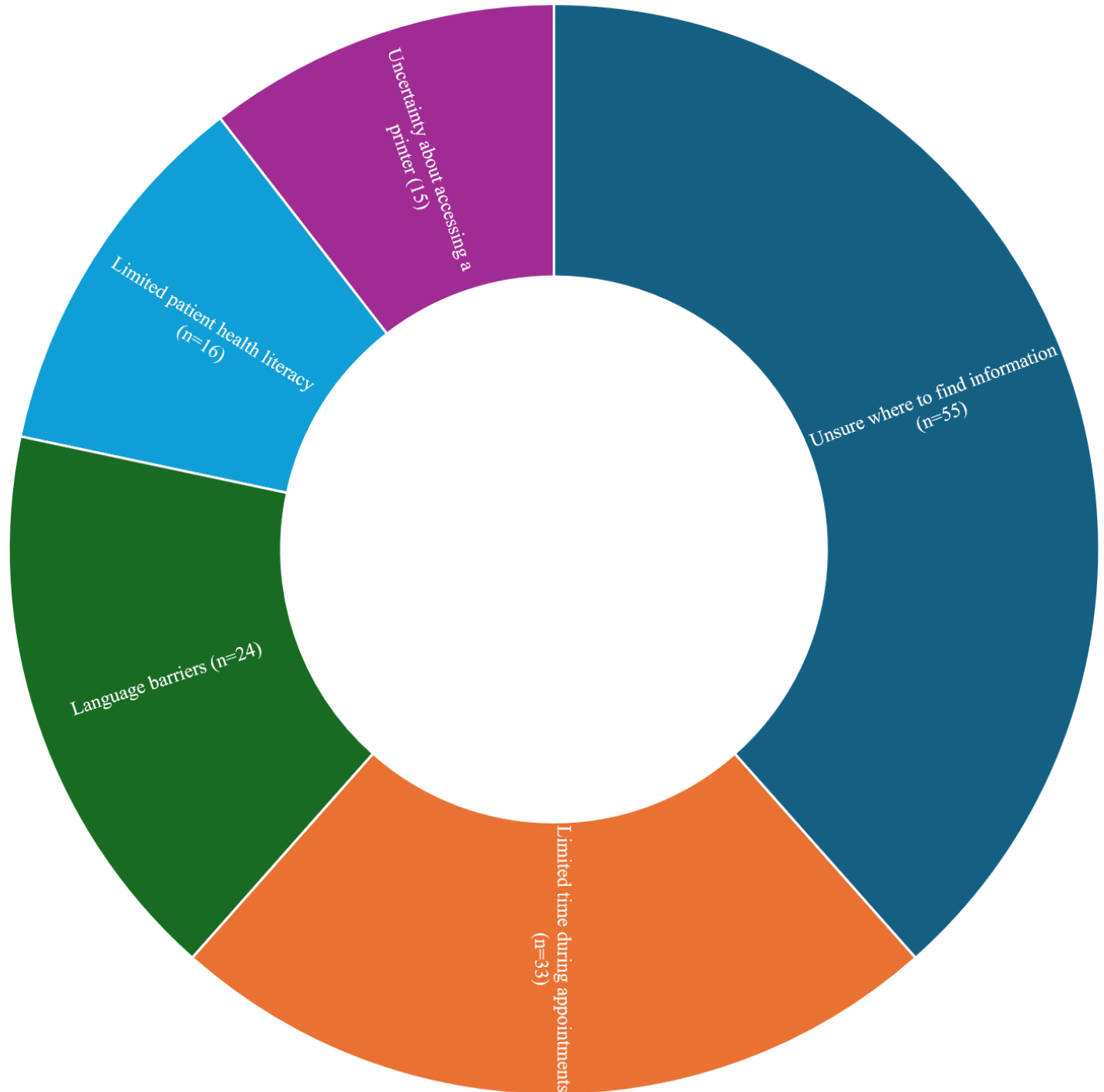


Figure 6. Frequently proposed interventions to improve utilization



Limitations

- Findings are limited by the small sample size and low response rate from various specialties, reducing the generalizability of the findings
- Response bias and single-institution setting also affects broader applicability

Conclusions

- Despite recognizing the importance and benefits of patient education, few trainees utilize EHR-embedded resources due to lack of awareness and limited recall of training
- Postdoctoral students are more likely than predoctoral students to provide materials, suggesting experience may influence utilization
- Key barriers cited, including lack of awareness, time constraints, and difficulty accessing materials, suggest that efforts to enhance utilization should focus on improving education, accessibility, and workflow integration
- Structural interventions such as in-EHR reminders, training reinforcement and periodic retraining, and faculty engagement may improve adoption