

Dentist-patient communication techniques used in the United States: The results of a national survey

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ADA American Dental Association®

American Dental Association Mission

The ADA is the professional association of dentists that fosters the success of a diverse membership and advances the oral health of the public.

Acknowledgments

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Background

“...the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate oral health decisions.” *

* American Dental Association. *2006 Transactions*. Chicago: ADA; 2006:316.

Background

“The ability to access, understand, appraise and communicate information to engage with the demands of health contexts to promote health.” *

or

“fit” between health literacy level of patient and demands of the health care system

* Rootman I, Ronson B. Literacy and health research in Canada: Where have we been and where should we go? *Can J Public Health*. 2005;96(Suppl 2):S62-77.

Background

- Mismatch between patients' health literacy skills and informational demands by health provider/system
- Many patients have difficulty understanding and using health information
 - Patients forget up to 80% of what physicians tell them as soon as they leave the office
 - Nearly 50% of what they do remember is incorrect *

* Pfizer. Help your patients succeed: Tips for improving communication with your patients. <http://www.pfizerhealthliteracy.com/physicians-providers/TipsForProviders.aspx>

Background

- Limited health literacy results in lower health knowledge, poor adherence, fewer preventive services, poor health outcomes, increased costs
- Limited health literacy is a potential barrier to effective prevention, diagnosis and treatment of oral disease *
- Clear, accurate and effective communication is an essential skill for dental practice **

* American Dental Association. *2006 Transactions*. Chicago: ADA; 2006:317.

** American Dental Association. *2008 Transactions*. Chicago: ADA; 2008:454.

Background

- Little is known about communication techniques used by dentists or dental team members to meet the needs of patients with limited health literacy
- *Health Literacy in Dentistry Strategic Action Plan* *
 - “Conduct ongoing surveys of...dentists and dental team members...to monitor health literacy related knowledge, attitudes and behaviors.”
 - “Promote methods to improve communication and patient understanding in dental practice.”

* American Dental Association. *Health Literacy in Dentistry Strategic Action Plan*. 2009. Chicago, IL: ADA.

Study Purpose

- Determine techniques used by dentists and dental team members to ensure effective patient communication and understanding
- Identify the variation in routine use of these techniques according to factors that might be targeted with interventions

Focus on Dentists

Study Design

- Random sample of U.S. dentists (general, specialists) selected from the ADA master file (n=179,594)
- Packets with questionnaires for dentists, hygienists and assistants mailed to sampled dentists
- Dentists distributed questionnaires to staff
- 2 mail, 1 telephone follow-ups
- Managed by the ADA Survey Center

Questionnaire

- 86 item, self-completed questionnaire
- 18 communication items, 5-point Likert scale
- 5 domains based on AMA Recommendations *
- 4 Understandable language (n=5)
- 4 Patient-friendly materials (n=4)
- 4 Patient friendly environment (n=2)
- 4 Teach Back method (n=2)
- 4 Help understanding (n=5)
- Pilot tested at 2007 ADA annual session (n=188)

* Schwartzberg JG, Cowett A, VanGeest J, Wolf MS. Communication techniques for patients with low health literacy: a survey of physicians, nurses, and pharmacists. *Am J Health Behav.* 2007;31(Suppl 1):S96-S104.

Predictor Variables

1. Provider characteristics (age, race/ethnicity, sex, US born/trained)
2. Practice characteristics (patient characteristics, specialty, primary occupation, setting)
3. Health literacy awareness
4. Training in communication techniques

Predictor Variables

5. Barriers to patient understanding (none, lack of time, awkward, can't simplify language any more, patient language, patient non-adherence)
6. Practice-level change
7. Outcome expectancy (18-item scale: low, medium, high)

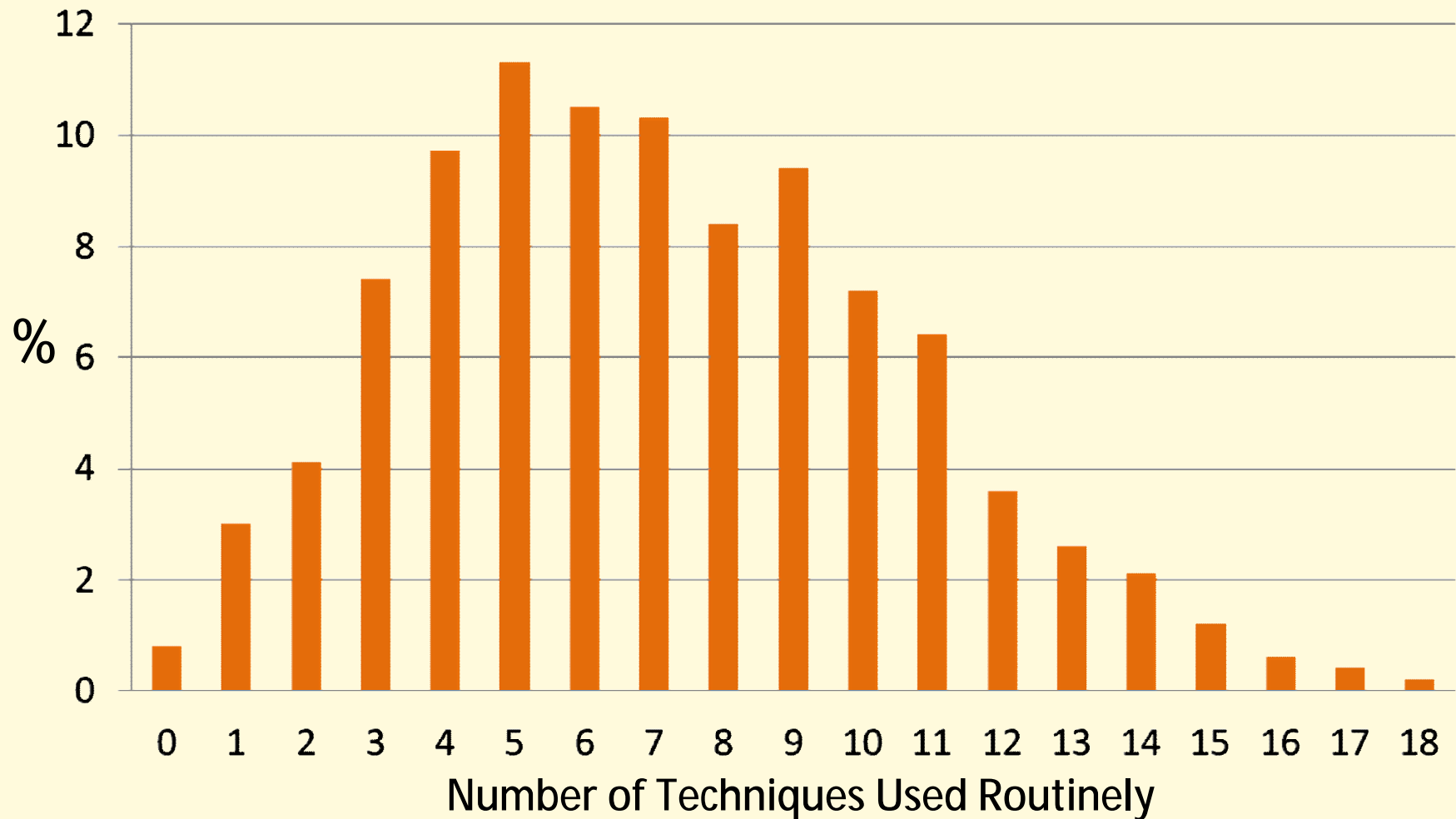
Analysis Methods

- Count of routine use of techniques
(e.g., “most of time” & “always” vs. “never”, “rarely”, “occasionally”)
- Descriptive analysis of complete sample
- Comparison of mean number of techniques used routinely by predictor variables (ANOVA)
- Confirmation of association of predictor variables with number of techniques used routinely with regression analysis (OLS)

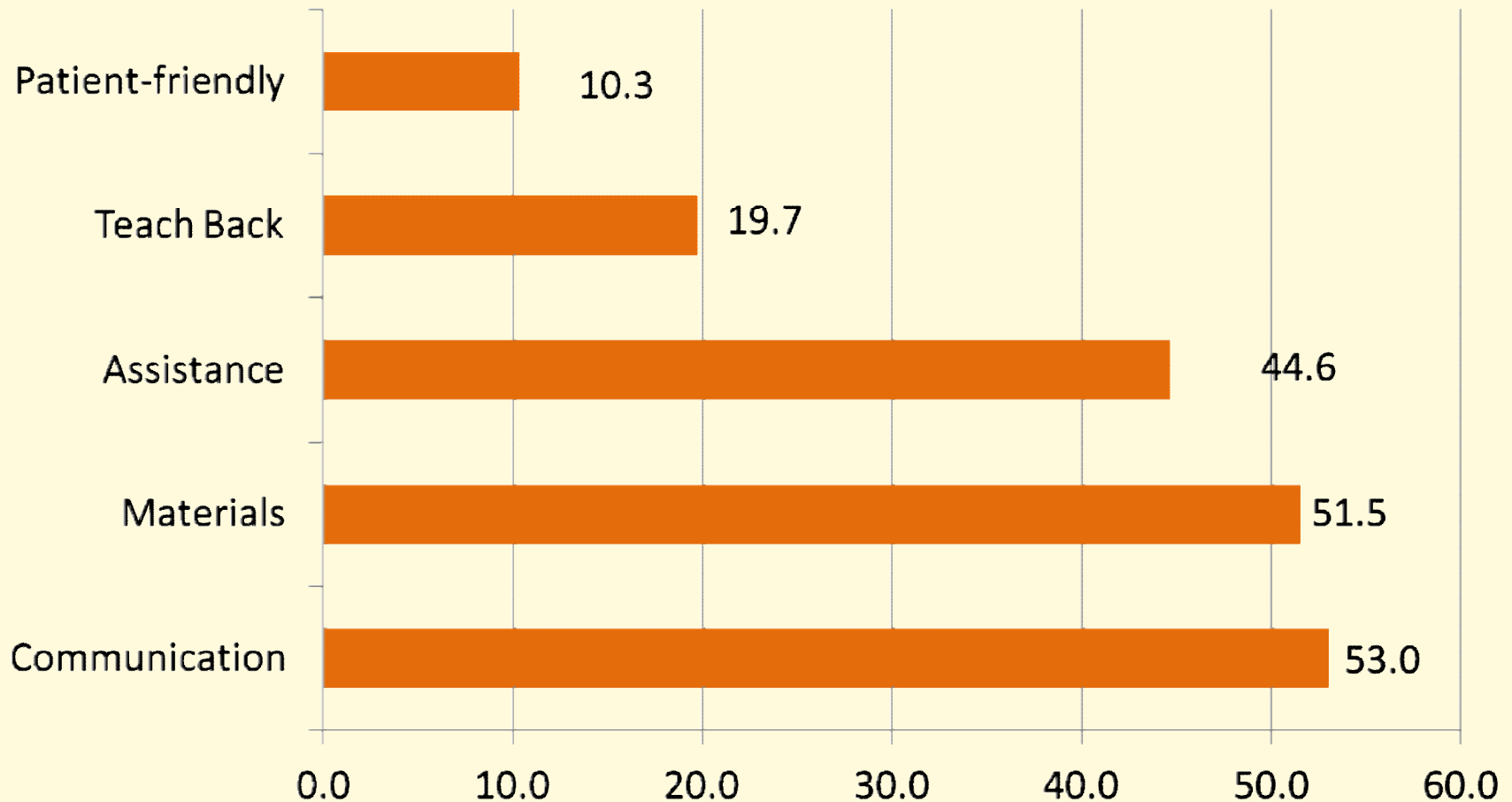
Sample Response Rates

Questionnaires distributed	6,300
Questionnaires not delivered	292
Effective sample size	6,008
Questionnaires returned	2,010
Response rate	33.4%
Analysis sample size (exclude students/dentists not in practice)	1,994
Questionnaires with non-missing items	87.1%

Percent Dentists Using Each Technique



Percent of Techniques Used Routinely



Patient-friendly

Technique	% Used Routinely
Ask patients how they learn best	4.9
Refer patients to Internet	11.1
Use interpreter	15.3

Teach Back

Technique	% Used Routinely
Ask patient to repeat information or instructions	16.0
Ask patient to tell you what they will do at home to follow instructions	23.5

Assistance

Technique	% Used Routinely
Underline key points in printed materials	31.5
Follow-up by phone to check understanding	35.1
Read instructions out loud	48.1
Ask staff follow-up post-care instructions	53.3
Write or print out instructions	54.5

Materials

Technique	% Used Routinely
Use Video or DVD	15.8
Hand out printed materials	65.9
Use models or x-rays to explain	73.1

Communication

Technique	% Used Routinely
Present only 2 or 3 concepts at a time	29.8
Ask family member or friend to participate	34.3
Draw or use pictures	42.5
Speak slowly	67.8
Use simple language	90.6

Provider Characteristics and Differences in Mean Number of Techniques Used

Variable	Category	% Difference	P-value
Age (vs. 26-35 yrs)	36-45 yrs	21.5	<.001
	46-55 yrs	11.9	
	56-65 yrs	4.4	
	>65 yrs	6.6	
Race (vs. White)	African American	23.0	<.001
	Hispanic	13.4	
	Asian	17.3	
	Other	35.9	
Sex	Female vs. male*	9.4	.001
Country of birth	Outside U.S. vs. inside	26.0	<.001

* Not significant in OLS regression analysis

Practice Characteristics and Differences in Mean Number of Techniques Used

Specialty	Sample Size	Mean No. Techniques
Oral surgery	38	9.6
Public health/pathology	5*	9.4
Periodontics	52	9.1
Endodontics	37	8.1
Orthodontics	87	7.4
General dentistry	1330	6.9
Prosthodontics	22	6.7
Pediatric dentistry	45	6.3

* Small sample size does not provide accurate estimate.

Literacy Variables and Differences in Mean Number of Techniques Used Routinely

Variable	Comparison	% Difference	P-value
Awareness	Yes vs. no	13.7	<.001
Training	Yes vs. no	18.2	<.001
Outcome expectancy (vs. low)	Medium High	24.0 55.7	<.001
Barriers *	Yes vs. no	-9.4	<.001
Practice-level change	Yes vs. no	39.1	<.001

* "Lack of time" and "belief that can't provide information anymore simply" were barriers found to be significant in OLS regression.

Limitations

1. Validity of the assessment of communication by survey respondents is unknown
2. Information is self-reported by dentists and thus might suffer from reporting biases
3. Non-response bias could have influenced findings and conclusions
4. Absence of information on the quality of communication techniques used by the sampled dentists

Conclusions

1. Number of communication techniques used routinely varies greatly among dentists
2. Routine use of techniques was similar to physicians, nurses and pharmacists for 10 of 14 techniques examined in both studies *
3. Ideal number of techniques that should be used in dentistry is not known

* Schwartzberg JG, Cowett A, VanGeest J, Wolf MS. Communication techniques for patients with low health literacy: a survey of physicians, nurses, and pharmacists. *Am J Health Behav.* 2007;31(Suppl 1): S96-S104.

Conclusions

4. Low use of techniques most commonly recommended by health literacy experts
5. Two-thirds of dentists use fewer than 4 of the 7 listed techniques

Recommendations

1. Encourage the education and training of current and future dentists and dental team members about health literacy, including principles of effective communication and the use of plain language in dental practice
2. Conduct ongoing surveys of various populations (public, dentists and dental team members, science writers, dental school faculty), over time, to longitudinally monitor changes in health literacy related knowledge, attitudes and behaviors

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