Objective:

To gather information on the materials and methods employed in root canal treatment by dentists in Turkey.

Methods:

A questionnaire was distributed to 1,527 dentists who attended the Turkish Dental Association Congress. Respondents were asked to choose one or more suitable answers for the questions. Data was gathered for demographic and professional information regarding stages, materials, and methods commonly used in endodontic therapy. The collected data was analyzed using the statistical package SPSS. Descriptive statistics were given as frequencies (n) and percent (%). Chi-square (2) test was used to investigate the influence of gender and the years of professional activity for the materials and techniques employed.

Results:
The response rate was 49%. A total of 97% of respondents were working in a general dental practice. Of respondents, 44% were using an agent containing arsenic or aldehyde. Only 5.1% of the respondents preferred the rubber dam isolation method. Sodium hypochlorite was the most popular choice (73%) as a root canal irrigation solution. Calcium hydroxide was the most commonly used medicament (53%). Most of the practitioners (77%) preferred radiographs for working-length determination. Root canal preparation done solely with K-Files or in combination with other instruments was preferred by 73.1% of the respondents. Ni-Ti hand or rotary files were used by 79.7% of the practitioners. Polymer based root canal sealers were the sealers most frequently chosen (48.4%). The majority of the respondents (66.2%) preferred cold lateral condensation as an obturation technique. Gender affected the preference of intracanal medicament, periapical radiographs for working-length determination, root canal instrument, root canal sealers, and root canal obturation technique (P<.05). Years of professional experience affected the preference of devitalizing agents, irrigation solutions, intracanal medicament, root canal instrument, root canal sealer, and root canal obturation technique (P<.05).

Conclusions:
It is clear that a number of dentists, irrespective of the time elapsed since their graduation, relied on techniques, and used products and materials that are currently favoured by expert opinion. Unfortunately, it was noted that some practitioners are still using arsenic- and aldehyde-containing devitalizing agents, and most did not use rubber dam as an isolation method.