LESS IS MORE

Patient Preference in the Decision to Place Implantable Cardioverter-Defibrillators

Randomized controlled trials demonstrate that implantable cardioverter-defibrillators (ICDs) reduce mortality in certain patients with symptomatic heart failure and no history of sudden cardiac death (SCD). This trial evidence has led to guidelines recommending placement of an ICD for primary SCD prevention in patients with heart failure meeting specific criteria. More patients are receiving ICD therapy as indications for this therapy have expanded. However, ICDs are associated with important risks, including short-term procedural complications, the potential for worse quality of life if shocked, and increased hospitalization rates. Not surprisingly, patient preferences around ICD therapy vary. Patients who are older, have multiple comorbidities, or live with a higher burden of daily symptoms may see a trade-off between sudden cardiac death and living longer. In some cases, a patient’s decision to forgo ICD therapy may create a conflict between the physician’s desire to do good (beneficence) and the patient’s preference (autonomy). We conducted a study to determine how physicians weigh patient preferences and the evidence of mortality benefit in their decision to recommend an ICD for primary prevention to potentially eligible patients.

Methods. We sent a web-based, cross-sectional, anonymous survey to a random national sample of 9969 physician members of the American College of Cardiology (ACC). Complete details of the survey and procedures have been discussed previously. We asked: “To what extent does each of the following factors affect your recommendations regarding an ICD for primary prevention of sudden cardiac death?” To minimize social desirability bias in responses, we included both mortality benefits and patient preferences with 12 other factors that might influence the decision. Responses were scored on a 5-point Likert scale from “not at all” (scored 0) to “a great deal” (scored 4). We also assessed physician attitudes toward ICDs by asking whether they agreed or disagreed with a series of statements using a 5-point Likert scale (“strongly disagree” to “strongly agree”). Physicians were grouped into those who rated patient preferences less important than estimated mortality benefits (“mortality benefit” group) and those who rated patient preferences at least as important as estimated mortality benefits (“patient preference” group). Pearson χ² test was used to evaluate the differences in attitudes toward ICD therapy between the 2 groups.

Results. A total of 1210 physicians responded to the survey (12% response rate); 1124 responses were analyzed after exclusions (pediatricians, physicians with no recent ICD experience, and non-US physicians). Demographics of responders were similar to those of nonresponders, but responders were more likely to practice in an academic setting (32.0% vs 21.4%; P < .001) and have board certification in electrophysiology (12.3% vs 4.3%; P < .001).

Mortality benefit data mattered “a great deal” in recommendations for an ICD for 962 of the respondents (85.9%); none reported that mortality benefit data mattered “very little” or “not at all.” Fewer than half of respondents (423 [37.7%]) thought that patient preferences mattered “a great deal,” and 138 (12.3%) responded that patient preferences mattered “very little” or “not at all.” Mortality benefit data were given a higher importance rating than patient preferences by 628 of respondents (56%). The group rating mortality benefit data higher than patient preferences generally had more positive attitudes toward ICDs (Table).

Comment. Despite the increasing focus on shared decision making and patient-centered care, over half of the respondents in this survey rated patient preferences lower than expected mortality benefits, and a considerable minority indicated that patient preference mattered “very little” or “not at all” in decision making around primary prevention ICD therapy. Physicians who rated patient preference as less important also had more favorable attitudes toward ICDs. These results illustrate 2 important points. First, they support previous qualitative findings that clear guidelines backed by strong evidence may compel physicians to adopt a beneficent or even paternalistic approach to decision making and “do the right thing,” which can take precedence over patient preferences. Second, more favorable attitudes regarding ICD therapy are associated with assigning less importance to patient preferences. Although this cross-sectional survey cannot determine cause and effect, it may be that the more convinced a physician is of the benefits of an intervention, the less important patient preferences become in decision making.

The response rate of 12% raises concerns about nonresponse bias. However, ACC members are a relatively homogeneous group, and to our knowledge, this sample of 1210 responders is the largest physician survey ever conducted regarding attitudes and recommendations toward ICDs.

Social norms promoted by guidelines may be a double-edged sword. On the one hand, they promote the consistent application of evidence-based therapies. On the other hand, they may also promote unilateral decision making that diminishes the importance of patient preferences, as suggested in this study. To minimize this ef-
Table. Comparison Between Attitudes of Physicians Rating Patient Preferences Lower Than Mortality Benefit Data (Mortality Benefit Group) and Those Rating Patient Preferences Equal to or Higher Than Mortality Benefit Data (Patient Preference Group)

<table>
<thead>
<tr>
<th>Attitudes (Neutral, Agree, or Strongly Agree)</th>
<th>All Respondents</th>
<th>Mortality Benefit Group</th>
<th>Patient Preference Group</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>An ICD will make this patient live longer</td>
<td>95.2</td>
<td>96.3</td>
<td>93.8</td>
<td>.04</td>
</tr>
<tr>
<td>An ICD will improve the patient’s quality of life</td>
<td>39.7</td>
<td>40.4</td>
<td>38.7</td>
<td>.55</td>
</tr>
<tr>
<td>An ICD will decrease the patient’s quality of life</td>
<td>53.4</td>
<td>48.4</td>
<td>59.8</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>I’m concerned that the financial costs of ICDs are not worth their benefit in patients like this</td>
<td>29.7</td>
<td>24.4</td>
<td>36.4</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>I feel obligated to recommend an ICD to all patients who meet the guidelines</td>
<td>77.9</td>
<td>80.4</td>
<td>74.7</td>
<td>.02</td>
</tr>
</tbody>
</table>

Abbreviation: ICD, implantable cardioverter-defibrillator.

4Scenario: “You are seeing a 60-year-old patient with ischemic heart failure and New York Heart Association Class III symptoms (shortness of breath with minimal activity). The patient’s left ventricular ejection fraction is 30%, and there is no prior history of life-threatening arrhythmias. Evidence shows that an ICD for primary prevention would reduce mortality. The patient’s insurance will cover the ICD, and the procedure is readily available in your community.”

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