Advance Directives and Communication Skills of Prehospital Physicians Involved in the Care of Cardiovascular Patients

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Abstract

Advance directives (AD) were developed to respect patient autonomy. However, very few patients have AD, even in cases when major cardiovascular surgery is to follow. To understand the reasons behind the low prevalence of AD and to help decision making when patients are incompetent, it is necessary to focus on the impact of prehospital practitioners, who may contribute to an increase in AD by discussing them with patients. The purpose of this study was to investigate self-rated communication skills and the attitudes of physicians potentially involved in the care of cardiovascular patients toward AD. Self-administered questionnaires were sent to general practitioners, cardiologists, internists, and intensivists, including the Quality of Communication Score, divided into a General Communication score (QOCgen 6 items) and an End-of-life Communication score (QOeol 7 items), as well as questions regarding opinions and practices in terms of AD. One hundred sixty-four responses were received. QOCgen (mean (±SD)): 9.0/10 (1.0); QOeol: 7.2/10 (1.7). General practitioners most frequently start discussions about AD (74/149 [47%]) [...]
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One hundred sixty-four responses were received. QOCgen (mean ±SD): 9.0/10 (1.0); QOCeol: 7.2/10 (1.7). General practitioners most frequently start discussions about AD (74/149 [47%]) and are more prone to designate their own specialty (30/49 [61%], P < 0.0001). Overall, only 57/159 (36%) physicians designated their own specialty; 130/158 (82%) physicians ask potential cardiovascular patients if they have AD and 61/118 (52%) physicians who care for cardiovascular patients talk about AD with some of them.

The characteristics of physicians who do not talk about AD with patients were those who did not personally have AD and those who work in private practices. One hundred thirty-three (83%) physicians rated the systematic mention of patients’ AD in the correspondence between physicians as good, while 114 (71%) at the patients’ first registration in the private practice.

Prehospital physicians rated their communication skills as good, whereas end-of-life communication was rated much lower. Only half of those surveyed speak about AD with cardiovascular patients. The majority would prefer that physicians of another specialty, most frequently general practitioners, initiate conversation about AD. In order to increase prehospital AD incidence, efforts must be centered on improving practitioners’ communication skills regarding death, by providing trainings to allow physicians to feel more at ease when speaking about end-of-life issues.

INTRODUCTION

Advance directives (AD) were developed to respect patient autonomy in the prospect of care for incompetent patients. The principle of patient autonomy changed the physician–patient relationship. While the historical paternalistic model depends on the good will and knowledge of the practitioner, who seeks the welfare of patients considered too vulnerable to do so because of their illness, the shared decision-making model acknowledges differences between patients, in terms of needs and desires. It thus requires a new form of communication between the physician and the patient. Improving communication with the family also contributes to improving patient care and family satisfaction.

Even though this type of relationship is widely recognized as the best practice, certain pitfalls in achieving physician–patient dialogue have been identified. Little room for physician–patient discussions due to time constraints, as well as financial and organizational barriers have been reported. Physicians tend to underestimate patient needs for information and overestimate patient understanding and awareness of their prognosis. Discrepancies between patient self-reported and physician diagnoses serve to illustrate the communication difficulties which exist in a basic therapeutic relationship. Moreover, culture is an influencing factor which modifies patient expectations and preferences, this must be taken into consideration when discussing advance care planning. While having a primary care physician is associated with a greater likelihood of having AD, it has also been reported that not all patients with AD have informed their doctors about the existence of the latter. In literature, internists and primary care physicians are often cited as central in advance care planning processes.

Since many patients and their family members are unfamiliar with the medical setting, information and help in the writing of AD should be provided. With regard to surgery, literature mentions that the discussion of possible postoperative complications and a prolonged intensive care unit stay is necessary to allow for meticulous informed consent. This process must be well documented. Nevertheless, the number of patients AD for whom surgery is planned is low—around 20%. More generally in...
Quality of Communication score (QOC).32 Opinions about AD
Several questions allowed comments and are used to illus-
trate data were asked for at the end of the questionnaire.
while,31 were also compared to the communication scores and
patients in writing AD and the reasons why, reported else-
where.'33 The discrepancy between the theoretical usefulness
reported in literature and the lack of AD in practice lead to
the present study. The opinions of prehospital practitioners
involved in care of patients before major cardiovascular surgery
is of particular interest. Indeed, heart surgery is perceived as
a vital operation, despite a low mortality rate between 2% and
5%.28 Thus, physicians involved in the care of cardiovascular
patients may have the opportunity to discuss these topics
proactively.23,29,30 This study investigates physician self-
rated communication skills, their opinions, as well as the
prevalence of discussions about AD in practice with patients
in a preoperative setting, prior to major cardiovascular surgery.
The results are expected to offer new insight and solutions by
encouraging communication among physicians of different
specialties, as well as between physicians, patients, and
families.

METHODS

General practitioners (GP), internists, cardiologists, and
intensivists in Geneva, Switzerland, were enrolled in the
study. In April 2009, they were sent a letter explaining the
study, an anonymous questionnaire and a prepaid return
envelope. A code allowed the sending of reminders (after
2 months, up to 6 months). Methods regarding the develop-
ment of the questionnaire are described elsewhere.31 Demo-
graphic data were asked for at the end of the questionnaire.
Several questions allowed comments and are used to illus-
trate the results.

Communication skills were explored using the validated
Quality of Communication score (QOC).32 Opinions about AD
communication were investigated by means of the following
questions: “In theory, would you ask potential cardiovascular
patient about AD?”, “Who should start a discussion about AD
with cardiovascular patients?”, and “Who should help write
AD?” The prevalence of discussions about AD in practice was
evaluated by means of the proportion of overall patients and
cardiovascular patients with whom physicians talked about
AD. The usefulness of AD, the wish to help cardiovascular
patients if they have AD, 101 (64%) would ask who the holder is.
returned questionnaires clearly stated that, “this is not the role
of a specialist,” while others expressed that this role belongs to
other physicians (2.8 ± 2.4 vs 5.6 ± 2.8, P < 0.001).

Table 3 describes physician opinions on who should start a
discussion about AD with cardiovascular patients and help them
write AD, as well as the percentages of physicians who design-
ated their own medical specialty. Cardiologists tended to
recommend family members as those who should start the dis-
cussion regarding AD (6/18 [33%] vs 11/140 [8%], OR 5.86
[1.84–18.66], P < 0.01), more so than other specialties. The
scores of QOC of those who designated their own medical
specialty to help write AD were higher when compared to others
(7.7 ± 1.6 vs 7.0 ± 1.7, P < 0.05). Some comments on the
returned questionnaires clearly stated that, “this is not the role of
a specialist,” “this role belongs to cardiologists or anesthesi-
ologists.”

In theory, 130/158 (82%) physicians would ask potential
cardiovascular patients if they have AD, 101 (64%) would ask
for a copy for the medical record, 81 (51%) would ask if the AD
are still accurate, and 78 (49%) would ask who the holder is.
None of these opinions correlated with demographic data or
with communication scores.

Table 4 explores the prevalence of physicians’ discussions
about AD in practice: the number of physicians who talked
about AD to all and specifically cardiovascular patients, as well
as the number of physicians who were involved in treating
cardiovascular patients during the previous year. Physicians
who did not meet cardiovascular patients did not answer
differently from the others. Out of the 143/159 (90%) physicians
who talked about AD with some of their overall patients, 127/
159 (80%) met cardiovascular patients, of whom 61/118 (52%)
talked about AD. Physicians who talked about AD with more
than 10% of their patients or with more than 5 of their

Ethical Approval

The protocol was approved by the Geneva University
Hospitals Ethics Committee (NAC 09-001) on November 23,
2009. A returned questionnaire validated the informed consent of
the participant.

Statistical Analysis

StatView for Windows version 5.0.1® (SAS Institute, Inc.,
Cary, NC) and Stata Statistical Software, Release 8.0® (Stata
Corporation, College Station, TX) were used. Univariate
analyses were performed to identify factors associated with
data regarding physicians’ opinions and practice.

Data were compared using univariate logistic regression
(categorical variables) and Fisher or Chi-squared tests as
suitable. Results are expressed as proportions, odds ratios
(OR), with 95% confidence intervals (CIs), and P values as
(ni/ni [%] vs nj/nj [%], OR [95% CI] P).

Results of the QOC are expressed for all items and the 2
subscores as mean (±SD). The 2 subscores were compared
using a linear regression and significant differences were com-
pared with other results using the unpaired T-test or ANOVA.

RESULTS

Out of 409 questionnaires sent, 172 were returned (42%) and
164 filled out completely (40%). The personal and pro-
fessional characteristics of those who responded were divided
into medical specialties as described in Table 1.

The self-rated QOC score, divided into the General Com-
unication subscore (QOCgen) and the End-of-life Communi-
cation subscore (QOCeol), are reported in Table 2. The QOCgen
was generally rated higher (better communication) than the
QOCeol (P < 0.001). The linear regression between the 2 sub-
scores was low (r2 = 0.17).

Physician rated QOCgen was higher when they had experi-
enced a severe illness themselves (mean ± SD: 9.3 ± 0.7 vs
8.9 ± 1.1, P = 0.03). No demographic characteristic was associ-
ated with the communication scores. Cardiologists rated their
ability to talk about what dying might be (item 10) significantly
worse than other physicians (2.8 ± 2.4 vs 5.6 ± 2.8, P < 0.001).

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159 (80%) met cardiovascular patients, of whom 61/118 (52%)
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TABLE 1. Physicians’ Personal and Professional Characteristics Divided into Medical Specialties

<table>
<thead>
<tr>
<th></th>
<th>Internists, n (%)/&lt;sup&gt;2015&lt;/sup&gt;</th>
<th>GP,&lt;sup&gt;2015&lt;/sup&gt;</th>
<th>Cardiologists, n (%)/&lt;sup&gt;2015&lt;/sup&gt;</th>
<th>Intensivists, n (%)/&lt;sup&gt;2015&lt;/sup&gt;</th>
<th>GPs, n (%)/&lt;sup&gt;2015&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40 y old</td>
<td>115/147 (78)</td>
<td>73/45 (45)</td>
<td>50/131 (39)</td>
<td>18/12 (13)</td>
</tr>
<tr>
<td>Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French-speaking Switzerland</td>
<td>116/145 (78)</td>
<td>34/48 (71)</td>
<td>30/67 (45)</td>
<td>19/30 (63)</td>
<td>6/12 (13)</td>
</tr>
<tr>
<td>German-speaking Switzerland</td>
<td>7/14 (5)</td>
<td>2/4 (50)</td>
<td>2/10 (20)</td>
<td>4/14 (21)</td>
<td>12/22 (55)</td>
</tr>
<tr>
<td>Has children</td>
<td>Yes</td>
<td>134/155 (86)</td>
<td>59/69 (86)</td>
<td>44/47 (94)</td>
<td>15/14 (100)</td>
</tr>
<tr>
<td>Religion</td>
<td>Christian</td>
<td>100/155 (65)</td>
<td>43/69 (62)</td>
<td>32/48 (67)</td>
<td>11/16 (69)</td>
</tr>
<tr>
<td>Religion is important</td>
<td>Yes</td>
<td>101/152 (66)</td>
<td>47/67 (70)</td>
<td>31/46 (67)</td>
<td>11/17 (65)</td>
</tr>
<tr>
<td>Type of practice</td>
<td>Private (vs public)</td>
<td>121/164 (74)</td>
<td>61/73 (83)</td>
<td>46/59 (80)</td>
<td>14/18 (78)</td>
</tr>
<tr>
<td>Location of medical school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>117/157 (76)</td>
<td>61/73 (83)</td>
<td>46/59 (80)</td>
<td>14/18 (78)</td>
<td>14/18 (78)</td>
</tr>
<tr>
<td>Has their own advance directives</td>
<td>18/156 (12)</td>
<td>2/69 (3)</td>
<td>11/48 (23)</td>
<td>3/17 (18)</td>
<td>2/21 (10)</td>
</tr>
</tbody>
</table>

cardiovascular patients in the previous year were significantly more often working in public practices (20/44 [45%] vs 21/115 [18%], OR 3.70 [1.76–7.75], P < 0.001 and 8/14 [57%] vs 25/104 [24%], OR 4.21 [1.33–13.31], P = 0.02, respectively). The QOCeol was rated higher by physicians who talked with more than 5 cardiovascular patients (8.0 ± 1.7 vs 7.0 ± 1.6, P < 0.001). There was no correlation with the QOCgen scores.

In the restricted group of the 127 physicians who met cardiovascular patients, physicians who said they did not talk about AD with them tended not to have personal AD (48/99 [48%] vs 11/14 [79%], OR 0.26 [0.07–0.98], P < 0.05), worked less often in public practices (11/57 [19%] vs 22/61 [36%], OR 0.42 [0.18–0.98], P < 0.05) and tended less to ask potential cardiovascular patients if they have AD (41/57 [72%] vs 54/61 [89%], OR 0.33 [0.13–0.88], P = 0.04). No other demographic data correlated with this result, the communication scores neither.

Amidst the 127 physicians, lack of interest regarding AD was associated to poorer QOCeol. Indeed, the physicians who did not think that AD were useful, those who did not personally want to help cardiovascular patients write AD, and those who would not ask potential cardiovascular patients if they have AD, had lower QOCeol scores (mean ± SD: 6.4 ± 1.7 vs 7.4 ± 1.7, P = 0.02; 6.0 ± 1.9 vs 7.60 ± 1.75, P < 0.001; and 6.3 ± 1.4 vs 7.4 ± 1.7, P < 0.001, respectively). Among the physicians who did not personally want to help cardiovascular patients write AD, those who stated that they had not given enough thought to AD and those who said that they lacked training had lower QOCeol scores (5.5 ± 1.9 vs 7.4 ± 1.0, P = 0.01 and 5.2 ± 2.2 vs 6.9 ± 1.3, P = 0.03, respectively). None of these opinions was significantly associated with the QOCgen score.

Table 5 summarizes physician views on propositions regarding how communication and implementation of AD may be improved in a medical setting. Physicians working in public practice manifested a preference for the mention of AD in the correspondence between colleagues (33/41 [80%] vs 75/119 [63%], OR 2.42 [1.03–5.70], P = 0.04). Some relevant comments illustrated that, “Several patients were seriously shocked and destabilized when on arrival in a hospital service they were asked straightforwardly if they wanted to be resuscitated etc., whereas they came to be looked after.” “Several patients were hurt to have to fill AD at their entry to the hospital. They felt at once threatened, independently of the severity of their disorder. It was felt as a kind of legal cover so that the physicians would not be prosecuted.”

**DISCUSSION**

The physicians involved in the study rated their general communication skills (QOCgen) as high, while evaluating their end-of-life communication skills (QOCeol) as lower. The personal experience of a severe illness was associated with a lower QOCgen score, which suggests that this may favor the development of communication skills. Cardiologists rated their QOCeol as lower when compared to other specialties, especially when discussing death. This finding is surprising since they are in the front line of care for patients with cardiovascular diseases, that are among the leading causes of death worldwide (WHO).<sup>34</sup>

The majority of physicians in this study selected a doctor as the person who should start a discussion with a cardiovascular patient about AD. This converges with literature that says that the role of the physician is to support and help translate patient preferences into clinical care.<sup>14,35,36</sup> The GP, who were the most keen to designate their own medical specialty to start...
<table>
<thead>
<tr>
<th>Item</th>
<th>All Physicians, n/ntot (%) = 164 (100)</th>
<th>Internists, 73/163 (45)</th>
<th>GP, 50/163 (31)</th>
<th>Cardiologists, 18/163 (12)</th>
<th>Intensivists, 22/163 (13)</th>
<th>P (Overall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To use words that the patient can understand</td>
<td>8.5 (1.5)</td>
<td>8.8 (1.4)</td>
<td>8.5 (1.6)</td>
<td>8.4 (1.7)</td>
<td>8.0 (1.2)</td>
<td>0.371</td>
</tr>
<tr>
<td>2. To look the patient in the eye</td>
<td>8.8 (1.7)</td>
<td>8.8 (1.7)</td>
<td>8.5 (1.9)</td>
<td>8.4 (2.3)</td>
<td>9.2 (0.9)</td>
<td>0.242</td>
</tr>
<tr>
<td>3. To answer all the patient’s questions about the illness and treatment</td>
<td>8.7 (1.6)</td>
<td>8.8 (1.5)</td>
<td>8.5 (1.8)</td>
<td>8.6 (1.6)</td>
<td>8.8 (1.1)</td>
<td>0.144</td>
</tr>
<tr>
<td>4. To listen to what the patient has to say</td>
<td>9.3 (1.0)</td>
<td>9.3 (0.9)</td>
<td>9.3 (1.1)</td>
<td>9.4 (1.0)</td>
<td>9.0 (1.0)</td>
<td>0.250</td>
</tr>
<tr>
<td>5. To care about the patient as a person</td>
<td>9.3 (1.4)</td>
<td>9.4 (0.9)</td>
<td>9.0 (2.0)</td>
<td>9.4 (0.7)</td>
<td>9.2 (0.9)</td>
<td>0.281</td>
</tr>
<tr>
<td>6. To give the patient your full attention</td>
<td>9.2 (1.3)</td>
<td>9.2 (1.1)</td>
<td>9.3 (1.7)</td>
<td>9.6 (0.6)</td>
<td>9.0 (1.0)</td>
<td>0.209</td>
</tr>
<tr>
<td><strong>General communication score</strong> (QOCgen—mean of items 1–6)</td>
<td>9.0 (1.0)</td>
<td>9.1 (0.9)</td>
<td>8.8 (1.2)</td>
<td>9.0 (1.0)</td>
<td>8.9 (0.9)</td>
<td>0.207</td>
</tr>
<tr>
<td>7. To talk with the patient about his/her feelings concerning the possibility that he/she might get sicker</td>
<td>8.2 (1.8)</td>
<td>8.1 (1.8)</td>
<td>8.4 (1.8)</td>
<td>8.6 (1.5)</td>
<td>7.6 (1.9)</td>
<td>0.344</td>
</tr>
<tr>
<td>8. To talk to the patient about the details concerning the possibility that he/she might get sicker</td>
<td>7.6 (2.2)</td>
<td>7.6 (2.2)</td>
<td>7.6 (2.4)</td>
<td>7.9 (1.8)</td>
<td>7.9 (2.1)</td>
<td>0.085</td>
</tr>
<tr>
<td>9. To talk to the patient about how long he/she might have to live</td>
<td>6.2 (2.6)</td>
<td>6.3 (2.5)</td>
<td>6.3 (2.5)</td>
<td>5.1 (3.5)</td>
<td>6.6 (2.5)</td>
<td>0.329</td>
</tr>
<tr>
<td>10. To talk to the patient about what dying might be like</td>
<td>5.3 (3.0)</td>
<td>5.6 (2.9)</td>
<td>6.0 (2.6)</td>
<td>2.8 (2.4)</td>
<td>4.9 (3.0)</td>
<td>0.954</td>
</tr>
<tr>
<td>11. To involve the patient in the decisions about the treatments that he/she wants if he/she gets too sick to speak for him/herself</td>
<td>8.1 (2.1)</td>
<td>8.1 (2.3)</td>
<td>8.3 (1.6)</td>
<td>7.4 (2.7)</td>
<td>8.0 (1.9)</td>
<td>0.204</td>
</tr>
<tr>
<td>12. To respect the things in the patient’s life that are important to him/her</td>
<td>8.1 (1.9)</td>
<td>8.2 (2.0)</td>
<td>8.3 (1.8)</td>
<td>7.3 (2.0)</td>
<td>7.7 (1.7)</td>
<td>0.388</td>
</tr>
<tr>
<td>13. To ask about the patient’s spiritual or religious beliefs</td>
<td>7.1 (2.8)</td>
<td>6.9 (3.2)</td>
<td>7.6 (2.4)</td>
<td>6.5 (2.9)</td>
<td>7.2 (2.0)</td>
<td>0.254</td>
</tr>
<tr>
<td><strong>End-of-life communication score</strong> (QOCeol—mean of items 7–13)</td>
<td>7.2 (1.7)</td>
<td>7.3 (1.8)</td>
<td>7.5 (1.6)</td>
<td>6.6 (1.6)</td>
<td>7.2 (1.6)</td>
<td>0.301</td>
</tr>
</tbody>
</table>

GP = general practitioners, SD = standard deviation.
TABLE 3. Physicians' Opinion on Who Should Start a Discussion and Help Write Advance Directives (AD), Their Concordance, and the Self-Designated Medical Specialty

<table>
<thead>
<tr>
<th>The Designated Person Who Should Start a Discussion About AD, $n_{tot} = 159^\dagger$ (%)</th>
<th>The Designated Person Who Should Help Write AD, $n_{tot} = 162^\ddagger$ n (%)</th>
<th>Concordance $^\ddagger$, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>85 (53)</td>
</tr>
<tr>
<td>GP</td>
<td>74 (47)</td>
<td>57 (35)</td>
</tr>
<tr>
<td>Cardiologists</td>
<td>42 (26)</td>
<td>22 (14)</td>
</tr>
<tr>
<td>Internists</td>
<td>30 (19)</td>
<td>20 (12)</td>
</tr>
<tr>
<td>Intensivists</td>
<td>3 (2)</td>
<td>4 (2)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members</td>
<td>17 (11)</td>
<td>57 (35)</td>
</tr>
<tr>
<td>Other $^\ddagger$</td>
<td>18 (11)</td>
<td>26 (16)</td>
</tr>
<tr>
<td>Patient</td>
<td>9 (6)</td>
<td>/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Designated Medical Specialties (Discussion About AD)</th>
<th>Self-Designated Medical Specialties (Help Write AD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/n$_{tot}$ (%)</td>
<td>P $^\ddagger$</td>
</tr>
<tr>
<td>Total</td>
<td>57/159 (36)</td>
</tr>
<tr>
<td>GP</td>
<td>30/49 (61)</td>
</tr>
<tr>
<td>Cardiologists</td>
<td>3/18 (17)</td>
</tr>
<tr>
<td>Internists</td>
<td>24/69 (35)</td>
</tr>
<tr>
<td>Intensivists</td>
<td>0/22 (0)</td>
</tr>
</tbody>
</table>

| n/n$_{tot}$ (%)                                           | P $^\ddagger$                                       |
| Total                                                     | 46/162 (29)                                         | <0.001 |
| GP                                                        | 24/50 (48)                                          | <0.001 |
| Cardiologists                                             | 3/18 (17)                                           | 0.36   |
| Internists                                                | 18/71 (25)                                          | 0.53   |
| Intensivists                                              | 1/22 (5)                                            | 0.02   |

GP = general practitioners, / = non applicable.
$^\dagger$ The total number varies because of missing data.
$^\ddagger$ Percentages do not sum up to 100%, because more than 1 answer may have been chosen by some physicians.
$^\ddagger$ Concordance of responses between “start a discussion about” and “help write” AD.
$^\ddagger$ Home care nurses, social workers, religious leaders, or other medical specialties.
$^\ddagger$ Chi$^2$: “self-designated specialty” vs other, Total: Multiple Chi$^2$ for independency (all variables).
the discussion, were more often chosen as the best specialty by all physicians, as previously reported.\textsuperscript{13,37} It is remarkable that cardiologists were designated as the second most apt, while they were the least keen to do so and tended to think that a family member would be the best person. In contrast to literature which proposes nurses as key persons in increasing the number of AD,\textsuperscript{38,39} they were not often referred to in this study.\textsuperscript{13,17} The most frequently designated persons to help patients write AD were GP, as often as family members. Also, most physicians recognized discussions regarding AD between patients and their relatives as important. This attitude is in line with an effective family-centered approach.\textsuperscript{30,35} Furthermore, primary care physicians have recently been encouraged to incorporate discussion and facilitation of AD in their regular patient check-ups.\textsuperscript{40} They should routinely ask the patient or the patient’s family about any possible wishes concerning the end of the patient’s life.\textsuperscript{41} Improved prehospital communication is paramount to prevent patient shock upon hospital admission, when they are required to discuss AD, and to improve the comprehension of patients’ wishes.\textsuperscript{42} This could increase the incidence of AD and hence, help hospital physicians when making decisions, while providing at the same time the desired intensity of care to both patients and families.\textsuperscript{35} Thus, every medical specialty should feel concerned by providing information on AD\textsuperscript{13,17} and real communication among physicians is needed in order to provide patients with information and help. According to a majority of those who responded, it would be helpful to systematically ask patients if they have AD by means of a registration questionnaire at a first consultation and to routinely state AD information in letters between colleague physicians.

If a majority of physicians were to ask potential cardiovascular patients if they have AD, only a minority would raise concrete questions (about accuracy, a copy for the medical record, etc.) to get useful information in case patients lose their competency. In practice, as many as 10\% of those who responded did not talk about AD with their patients, a figure even higher when considering cardiovascular patients, at almost 50\%.\textsuperscript{43,44} These results indicate that there is a huge gap between the opinion on AD and the efforts put toward their implementation. In another study, physicians’ personal and professional

\begin{table}
\centering
\caption{Number of Physicians Who Talked About Advance Directives (AD) to All and Cardiovascular Patients, and Who Were Involved in Treating Cardiovascular Patients the Previous Year}
\begin{tabular}{|l|c|c|c|c|c|}
\hline
Number of physicians who usually talk about AD with & All Physicians & Internists & GP & Cardiologists & Intensivists & \( P \) (Overall) \\
\hline
0\% of their overall patients & 16 (10) & 10 (14) & 2 (4) & 2 (13) & 1 (5) & 0.0133 \\
\hline
\leq 10\% of their overall patients & 99 (62) & 47 (65) & 35 (71) & 9 (60) & 8 (36) & \\
\hline
> 10\% of their overall patients & 44 (28) & 15 (21) & 12 (24) & 4 (26) & 13 (59) & \\
\hline
\hline
During the previous year, number of physicians who took care of & All Physicians & Internists & GP & Cardiologists & Intensivists & \( P \) (Overall) \\
\hline
0 cardiovascular patients & 32 (20) & 20 (28) & 10 (20) & 1 (6) & 0 (0) & <0.0001 \\
\hline
<5 cardiovascular patients & 81 (51) & 38 (53) & 36 (73) & 6 (35) & 1 (5) & \\
\hline
>5 cardiovascular patients & 46 (29) & 14 (19) & 3 (6) & 10 (59) & 19 (95) & \\
\hline
\hline
During the previous year, number of physicians who talked about AD & All Physicians & Internists & GP & Cardiologists & Intensivists & \( P \) (Overall) \\
\hline
0 cardiovascular patients & 57 (48) & 28 (57) & 18 (51) & 5 (33) & 6 (32) & 0.0354 \\
\hline
<5 cardiovascular patients & 47 (40) & 17 (35) & 16 (48) & 7 (47) & 7 (37) & \\
\hline
>5 cardiovascular patients & 14 (12) & 4 (8) & 1 (3) & 3 (20) & 6 (32) & \\
\hline
\end{tabular}
\end{table}

\( \text{GP} = \) general practitioners.\textsuperscript{*} The total number varies because of missing data.

\begin{table}
\centering
\caption{Physicians’ Views on How Implementation of AD Could Be Improved in a Medical Setting}
\begin{tabular}{|l|c|}
\hline
True, Somewhat True, & n/n\textsubscript{tot} \textsuperscript{*} (\%) \\
\hline
Discussions between patients and relatives should occur in order to write AD & 133/156 (83) \\
\hline
To indicate the existence of AD on the registration questionnaire at a first medical consultation would help raise patients’ awareness of AD & 114/156 (71) \\
\hline
Information on AD (existence, etc.) should be provided on the letters physicians send to each other about their patients & 108/155 (68) \\
\hline
\end{tabular}
\end{table}

\textsuperscript{*} The total number varies because of missing data.
experience with advance care planning contributed to increase the low number of discussions occurring with patients. In the present study, having AD and working in public practices were associated with discussing AD with cardiovascular patients. Moreover, physicians who rated their QOCoel lower felt less comfortable with speaking about AD and providing help. They acknowledged, “not having thought enough about AD” and “lacking training” to speak about AD as reasons. Discomfort with discussing AD was a clear barrier identified in literature. Effective communication requires specialized skills and attitudes. Carr propose to use others’ deaths as a starting point for discussions about AD. While bioethicists and physicians propose algorithms to help advance care planning, others think that this concerns education: citizens’ about illnesses and death, and physicians’ about developing comfort and skills when dealing with AD, whether at medical school or by means of postgraduate trainings, with special attention paid to private practice practitioners. Primary care physicians have recently been proposed to educate patients and their family members. Politics should encourage patients to seek medical advice. Rendering AD visible for the many patients and certain health professionals who are still unaware of what they are is utterly needed.

LIMITATIONS

The low response rate and the fact this is a single-centered study are limitations which are described elsewhere. The QOCoel score has been developed for patients to rate their physicians. Since no specific tool existed for physicians, this score was adapted. As the questionnaire was self-rated, the results could be biased. Indeed, patients and relatives gave their physician lower scores in literature. Also, the French version of the questionnaire was translated from the English version, according to internationally recognized guidelines that involve a forward/backward translation process and cognitive debriefing. Furthermore, depending on the rate of activity, the physician may meet a different number of cardiovascular patients. In addition, the study was led in 2009 and the relevance of the findings could be limited. However, no public debate or important intervention took place in the meantime and the physicians’ population has not changed significantly. Finally, even though the study focused on a population of cardiovascular patients, as the physicians who did not have such patients did not answer differently from others, the conclusions drawn could also be applied to other types of patients.

CONCLUSION

Prehospital physicians rated their communication skills as good, whereas end-of-life communication was rated much lower, and only half speak about AD with their cardiovascular patients. Physicians’ characteristics associated with poor communication in advance care planning were being a cardiologist, working in private practice, having no personal AD, and lacking interest, training, or thought about AD. Physicians, whether specialists or GP, were designated to discuss about and help patients with AD; the family members could help too. Ways to increase prehospital incidence of AD and thus help physicians at the time of decisions, would be to fill the gap between the theoretical interest for AD and the practical implementation. Specific trainings at medical school and/or at postgraduate level regarding end-of-life issues may allow physicians to feel more at ease when speaking with patients and their families about death and AD in particular. Simple improvements such as systematic mention of information on patient AD in correspondence between practitioners and in the registration questionnaire at the first meeting in private practices have been proposed. Also, taking information about AD accuracy, the contact person and a copy for the medical record should be a routine process. Further research on the practical implementation of such measures is needed.

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