Revista Bioética
Print version ISSN 1983-8042 | On-line version ISSN 1983-8034

Rev. Bioét. vol.30 no.3 Brasília Jul./Sep. 2022

# Advance directive of will: knowledge and use by resident physicians

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## Abstract

Care planning based on advance directives is vital to preserve the autonomy and dignity of patients. In view of this, this study sought to verify the level of knowledge of medical residents of Curitiba, Paraná, Brazil, about them and their use in clinical practice. The feeling of these professionals regarding their knowledge and safety about the instrument was also evaluated. A quantitative and cross-sectional research was carried out by applying a structured questionnaire on a digital platform with a final sample of 45 participants. The results indicate that the knowledge of these professionals about the concept and legal aspects of advance directives is insufficient.

**Keywords:** Advance directives. Medical staff, hospital. Bioethics. Physicians.

## Resumo

**Diretivas antecipadas de vontade: conhecimento e utilização por médicos residentes**

O planejamento de cuidados baseado em diretivas antecipadas de vontade é vital para preservar a autonomia e dignidade dos pacientes. Em vista disso, buscou-se verificar o nível de conhecimento dos médicos residentes de Curitiba/PR a respeito delas e de seu uso na prática clínica. Além disso, avaliou-se o sentimento desses profissionais em relação ao conhecimento e segurança que têm acerca desse instrumento. Foi realizada uma pesquisa de caráter quantitativo e transversal por meio de aplicação de questionário estruturado em plataforma digital com amostra final de 45 participantes. Os resultados indicaram que o conhecimento desses profissionais acerca do conceito e dos aspectos jurídicos das diretivas antecipadas é insuficiente.

**Palavras-chave:** Diretivas antecipadas. Corpo clínico hospitalar. Bioética. Médicos.

## Resumen

**Directivas anticipadas de voluntad: conocimiento y uso por los médicos residentes**

La planificación de cuidados con base en las directivas anticipadas de voluntad es vital para la preservación de la autonomía y dignidad de los pacientes. Ante esto, se pretende evaluar el nivel de conocimiento de los médicos residentes de Curitiba,Paraná, Brasil, sobre el tema y su uso en la práctica clínica. También se estimó el sentimiento que tienen estos profesionales sobre el conocimiento y confianza en este instrumento. Se realizó una investigación cuantitativa y transversal a partir de un cuestionario estructurado aplicado a una muestra final de 45 participantes en una plataforma digital. Los resultados indican que son insuficientes los conocimientos de estos profesionales sobre el concepto y los aspectos legales de las directivas anticipadas.

**Palabras clave:** Directivas anticipadas. Cuerpo médico de hospitales. Bioética. Médicos.

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The authors declare no conflict of interest.
**Approval CEP-PUCPR 4921326**

Advance directives (AD) are a group of documents via which individuals can express their will regarding their healthcare in the event of loss of capacity to express themselves at a future time. They consist of two types of documents: living wills and the health care proxy or durable power of attorney [1].

The first makes it possible to deliberate in advance about care, treatment, and procedures that are desirable or not in the event of a serious illness that lies beyond curative possibilities. The second is the document to appoint a proxy who has the role of replacing the individual in making decisions about their treatments [1].

Brazil has, so far, no specific federal legislation on ADs, and state laws (from São Paulo, Paraná, and Minas Gerais) ensuring the right to refuse painful or extraordinary health treatments fail to directly address the context of patients' inability to manifest themselves at the time of the intervention [2].

The first regulation on the subject in the country was a resolution from the Brazilian Federal Council of Medicine (CFM) 1,995/2012 3, which states the conditions which should guide medical conduct in situations in which patients are unable to manifest their autonomy.

The CFM resolution defines AD, in its first article, as: *a set of wishes previously and expressly manifested by patients on the care and treatment they either want or not to receive at the moment they are unable to freely and autonomously express their will, taking for AD the concept of living will*. Even so, it places the possibility of designating a healthcare proxy in the sequence of the same article: *if patients have designated a representative for this purpose, their information must be taken into consideration by the physician* [3].

Although the resolution has only a normative function, authors argue that, even in the absence of specific legislation, such resolution is supported by the Brazilian Federal Constitution by promoting the right to decide on one's own death and human dignity [4].

The increase in life expectancy, as well as the prevalence of oncological or chronic diseases culminates in the increase of the number of people at the end of life. ADs are understood as a way to preserve the rights, autonomy, and dignity of individuals who are in this situation [5].

Medical residents, despite often being responsible for discussing patients' care planning, are inadequately prepared for this [6]. Regarding AD, evidence suggests it is insufficient for residents to approach this content only during medical training [7].

Considering the relevance of AD for of healthcare providers clinical decision-making, as well as the role of resident physicians in directly assisting patients in end-of-life situations, this study aims to assess the level of knowledge of physicians participating in medical residency programs in the municipality of Curitiba, in the state of Paraná, regarding AD and its use in clinical practice. As a secondary aim, we sought to evaluate the presence or absence of feelings of discomfort in resident physicians regarding their knowledge on AD and confidence in adopting such instrument in clinical practice.

## Method

To achieve the established aims, a quantitative, exploratory, and cross-sectional research we conducted by applying a structured questionnaire on a digital platform. Healthcare providers who were enrolled in medical residency programs at the time of this study were invited to participate via virtual social networks, regardless of their intended area of practice. Thus, recruitment was initially performed by convenience sampling and subsequent recruitment was performed by the snowball sampling technique, in which additional participants were indicated by enrolled volunteers [8].

As inclusion criteria were defined: healthcare providers enrolled and working in a medical residency program at hospitals in Curitiba, Paraná who were aged over 18 years and had answered all questions of the questionnaire. No exclusion criteria were determined.

Data were collected using the Google Forms platform from August 21 to September 29, 2021, via an electronic structured questionnaire developed by the researchers in this study.

The questionnaire had three parts. The first was composed of nine questions whose purpose

was establishing the sociodemographic characterization of the sample and assessing participants' level of previous knowledge of on AD. In its second section, a fictitious clinical case was offered, followed by eight questions covering concepts and ethical-legal aspects which were aimed at assessing participants' degree of familiarity and knowledge regarding AD.

The clinical case referred to a situation in which a male individual, diagnosed with metastatic lung cancer, arrived at an emergency room with a decreased level of consciousness and respiratory failure. His wife had presented an AD expressing the individual's desire to not undergo orotracheal intubation, mechanical ventilation, and other invasive measures.

The third step contained four questions about participants' perceptions regarding ADs. The total time to complete the questionnaire was about six minutes. In the second and third stages of the questionnaire, the answers had a five-point Likert scale with the following options: 5) totally agree; 4) partially agree; 3) neither agree nor disagree; 2) partially disagree; and 1) totally disagree.

Data were collected and stored in a Microsoft Excel spreadsheet and quantitative variables were described by mean, standard deviation, minimum, and maximum. Categorical variables were described by frequencies and percentages and the Fisher's exact test was used to evaluate the association between two categorical variables. A $p<0.05$ value indicated statistical significance. Data were analyzed using the Stata/SE v.14.1 software (StataCorpLP, USA).

Informed consent forms were provided to all participants and their reading and consent were required to doing the questionnaire.

## Results

### *Sample profile*

After applying our inclusion criteria, we obtained a sample with 45 participants, consisting mostly of female medical residents with a mean age of 29 years and one to three years of training who attended the first (R1), second (R2) or third (R3) year of residency in a clinical specialty.

Regarding specialties, we divided participants into groups: we grouped those attending clinical medicine or subspecialties into "Clinics;" those attending pediatrics or subspecialties, into "Pediatrics;" those attending family and community medicine, into "FCM;" those attending general surgery, orthopedics or subspecialties, into "Surgical;" and those attending another direct entry specialty, such as dermatology, infectiology, and occupational medicine, into "Other."

Table 1 details participants' sociodemographic profile. Most participants had some experience in palliative care (n=29; 64.4%) and previous contact with the topic of AD (n=39; 86.7%). However, most participants (n=27; 60%) had never had direct contact with patients' ADs during their medical practice.

**Table 1.** Participants' sociodemographic profile

| Variable | Classification | n | % |
|---|---|---|---|
| Age group | 24 to 29 | 28 | 62.2% |
| | 30 to 43 | 17 | 37.8% |
| Gender | Female | 29 | 64.4% |
| | Male | 16 | 35.6% |
| Time of training | 1 to 3 | 25 | 55.6% |
| | 4 or more | 20 | 44.4% |

continues...



 http://dx.doi.org/10.1590/1983-80422022303553EN

**Table 1.** Continuation

| Variable | Classification | n | % |
|---|---|---|---|
| Medical specialty | Clinics | 17 | 37.8% |
| | Pediatrics | 16 | 35.6% |
| | FCM | 5 | 11.1% |
| | Surgical | 4 | 8.9% |
| | Others | 3 | 6.7% |
| Year of medical residency | R1[a] | 13 | 28.9% |
| | R2[b] | 11 | 24.4% |
| | R3[c] | 11 | 24.4% |
| | R4[d] | 8 | 17.8% |
| | R5[e] | 2 | 4.4% |

*FCM: family and community medicine; R1[a]: first year of residency; R2[b]: second year of residency; R3[c]: third year of residency; R4[d]: fourth year of residency; and R5[e]: fifth year of residency*

### *Global assessment: level of knowledge about AD and its application*

Table 2 describes the success or failure rate for each question in the second part of our questionnaire, in which we assessed professionals' degree of knowledge and familiarity regarding AD. In the first question, 80% of participants marked the right answer; in the second, 88.9%; in the third, 80%; and in the fourth, 75.5%. In the fifth question, correct answers dropped to 53.3%. In the sixth question, 93.3% of the participants got the correct answer, in the seventh question, 91.1%, in the eighth question, only 57.8% of participants marked the correct option.

**Table 2.** Success or failure rates for each question belonging to the second stage of the questionnaire

| Variable | Answer | n | % |
|---|---|---|---|
| 1. The document brought by the patient's wife containing his decisions regarding invasive treatments can be considered an AD, even if it is not registered at the notary. | Totally disagree | 3 | 6.7% |
| | Partially Disagree | 5 | 11.1% |
| | Neither agree nor disagree | 1 | 2.2% |
| | Partially Agree | 12 | 26.7% |
| | Totally Agree | 24 | 53.3% |
| **Hit 1 (answer: "agree")** | No | 9 | 20.0% |
| | Yes | 36 | 80.0% |
| 2. The document brought by the patient's wife must influence the decision-making of the physician who is taking care of this patient in emergency care regarding his treatment. | Totally Disagree | 3 | 6.7% |
| | Partially Disagree | 2 | 4.4% |
| | Neither agree nor disagree | 0 | 0.0% |
| | Partially Agree | 17 | 37.8% |
| | Totally Agree | 23 | 51.1% |
| **Hit 2 (answer: "agree")** | No | 5 | 11.1% |
| | Yes | 40 | 88.9% |

continues...

**Table 2.** Continuation

| Variable | Answer | n | % |
|---|---|---|---|
| 3. The document brought by the patient's wife carries less weight than the doctor's opinion in the decision-making process. | Totally Disagree | 18 | 40.0% |
| | Partially Disagree | 18 | 40.0% |
| | Neither agree nor disagree | 1 | 2.2% |
| | Partially Agree | 4 | 8.9% |
| | Totally Agree | 4 | 8.9% |
| **Hit 3 (answer: "disagree")** | No | 9 | 20.0% |
| | Yes | 36 | 80.0% |
| 4. The document brought by the patient's wife carries more weight than the family's opinion in the decision-making process. | Totally Disagree | 3 | 6.7% |
| | Partially Disagree | 5 | 11.1% |
| | Neither agree nor disagree | 3 | 6.7% |
| | Partially Agree | 15 | 33.3% |
| | Totally Agree | 19 | 42.2% |
| **Hit 4 (answer "agree")** | No | 11 | 24.4% |
| | Yes | 34 | 75.6% |
| 5. Suppose the physician caring for this patient in emergency care respected the patient's expressed wishes by refraining from instituting invasive measures and prioritizing comfort measures and he dies within a few days. Even if the family alleges that the physician abbreviated the patient's life, the physician cannot be held liable in court. | Totally Disagree | 8 | 17.8% |
| | Partially Disagree | 4 | 8.9% |
| | Neither agree nor disagree | 9 | 20.0% |
| | Partially Agree | 9 | 20.0% |
| | Totally Agree | 15 | 33.3% |
| **Hit 5 (answer "agree")** | No | 21 | 46.7% |
| | Yes | 24 | 53.3% |
| 6. Suppose the patient arrived at emergency care still conscious, able to make decisions, and in possession of his AD. In this case, the decision already described in the document prevails, and it is unnecessary for the physician to talk to the patient about invasive measures in the current care. | Totally Disagree | 38 | 84.4% |
| | Partially Disagree | 4 | 8.9% |
| | Neither agree nor disagree | 2 | 4.4% |
| | Partially Agree | 0 | 0.0% |
| | Totally Agree | 1 | 2.2% |
| **Hit 6 (answer "disagree")** | No | 3 | 6.7% |
| | Yes | 42 | 93.3% |
| 7. Suppose that the patient arrives at emergency care conscious and capable of making decisions and asks the physician to abbreviate his life by using medication in a lethal dose, having written this wish in the document he carries with him. Even if it is written in the document, the physician can be prosecuted if he fulfills the patient's request. | Totally Disagree | 4 | 8.9% |
| | Partially Disagree | 0 | 0.0% |
| | Neither agree nor disagree | 0 | 0.0% |
| | Partially Agree | 1 | 2.2% |
| | Totally Agree | 40 | 88.9% |
| **Hit 7 (answer "agree")** | No | 4 | 8.9% |
| | Yes | 41 | 91.1% |
| 8. Although Brazil has no specific legislation for ADs in Brazil, they are regulated by CFM Resolution 1,995/2012 and are in line with the respect for the dignity of the person, provided for in the 1988 Federal Constitution. | Totally Disagree | 1 | 2.2% |
| | Partially Disagree | 0 | 0.0% |
| | Neither agree nor disagree | 18 | 40.0% |
| | Partially Agree | 1 | 2.2% |
| | Totally Agree | 25 | 55.6% |
| **Hit 8 (answer "agree")** | No | 19 | 42.2% |
| | Yes | 26 | 57.8% |

*AD: advance directives*

Research

### *Association between knowledge levels and sample profile*

We found no statistically significant association between participants' profile (sociodemographic characteristics and type of education) and accuracy rate in the second part of the questionnaire. To evaluate the association with year of residency in progress, we grouped the participants who were in their first and second year (n=24) and those who were in their third, fourth or fifth year (N=21 since the sample was heterogeneous).

On question 8, participants in the second group had a percentage of correct answers almost twice as high as those in the first group ($p$=0.006). Still regarding this question, when we tested the hypothesis that participants who claimed to have previous contact with ADs during medical practice showed more correct answers, with a significant result ($p$=0.06).

Regarding the association between right answers and experience in palliative care, the group that claimed to have experience in the area showed a significantly higher percentage of correct answers (93.1%) in question 1 than the group with no experience (56.3%), with a $p$=0.006.

### *Evaluation: confidence in the use of ADs*

In the scenario section of the questionnaire, most participants (n=33; 75.6%) reported feeling comfortable using an AD in making decisions for patients with incurable diseases in advanced stage. However, most (n=34; 75.5%) being uncomfortable with their knowledge of ADs at the time of the survey. Moreover, most (n=29; 64.5%) claimed feeling uncomfortable (from a legal standpoint) with using the instrument in making decisions. Almost all participants (n=44; 97.8%) asserted that they would like their medical residency programs to address the subject of AD.

### *Association: level of knowledge about AD and confidence in its use*

Participants who felt comfortable with making decisions regarding patients showing advanced incurable diseases had a 85.3% success rate (n=29) on question 3, when compared to 50% (n=4), with a $p$=0.049 for those who felt uncomfortable. Similarly, on question 4, participants who said they were comfortable using the instrument had a 85.3% success rate (n=29), as opposed to 37.5% (n=3; $p$=0.011) for those who felt uncomfortable.

In the association between feeling discomfort with current knowledge on AD and the success rate in question 8 (second part of the questionnaire), participants who claimed feeling comfortable had a 90% success rate (n=9), whereas 47.1% (n=16) said they were uncomfortable ($p$=0.027). Similarly, participants who felt comfortable with the legal backing for AD use had a significantly higher success rate on question 8 (n=13; 81.3%) than those who felt uncomfortable with it (n=13; 44.8%), with a $p$=0.027.

## Discussion

In the international literature, even in the first two countries to legislate on AD in the world, there is evidence of lack of knowledge, lack of confidence, and low use of the instrument by resident physicians [1,9,10]. In a study conducted in a hospital in New York (United States), Oriakhi and collaborators [9] observed that only a minority of residents had sufficient knowledge on AD and most had low rates of discussion about them with their patients.

The results of these studies strengthen those found in this study, which suggest that residents' understanding involving their specific knowledge on AD was unsatisfactory, especially on issues related to the legal responsibility of physicians who use ADs in clinical decision-making and to its regulation in Brazil.

A qualitative study conducted in Melbourne, Australia, with medical residents and assistants found the need for ethical and legal educational support to increase the knowledge and confidence of these professionals on AD [10]. It is noteworthy that most participants of that survey worked in some clinical area and had more than five years of experience+ Almost all reported previous contact with ADs in their clinical practice, unlike this sample, composed mostly of less experienced physicians with little previous contact with such instrument.

In the Brazilian scenario, Chehuen Neto and collaborators [11] evaluated the general knowledge of healthcare providers who worked in a hospital

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environment, specifically about living will. This research showed that a minority of the interviewees knew about the living wills, and most were unaware of CFM Resolution 1,995/2012 [3], reinforcing the lack of knowledge on the subject even within Brazilian hospitals [11].

Most of participants' sociodemographic characteristics (age, gender, time of training, and specialty in course) had no association with their degree of knowledge on ADs, a result which may be related to the size of our study sample. However, some characteristics related to medical training showed an association with volunteers' success rate: time of experience within a medical specialty, experience in palliative care, and previous contact with an AD.

Participants who had been in a specialty training for longer and those who had contact with an AD prior to this study had better knowledge on the legal aspects and CFM regulations involving AD. Moreover, participants with more experience in palliative care had greater knowledge of the definition of the document.

Considering that the chance of contact with a patient's AD is directly proportional to their time of specialization and experience in palliative care, it is evident that the greater exposure to the subject implies greater knowledge of it. A way to provide physicians with better competence to accurately handle this type of tool is to implement training programs on AD and care planning in general during medical training [12].

In assessing participants' confidence in using ADs, our results were conflicting. It was evident that a large part of the sample felt comfortable using ADs in making decisions for patients with advanced incurable diseases. However, many reported feelings of discomfort regarding their level of knowledge and legal backing at the time of the survey.

A literature review published in 2019 found that a significant portion of physicians have an interest in preserving their patients' autonomy. However, there are some variables which influence adherence to ADs: lack of physicians' knowledge and experience in the use of ADs, paternalism, difficulty in establishing a patient prognosis, legal concerns, family influence, and cultural and religious factors [13].

Burkle and collaborators [14] pointed out that physicians' adherence to the instrument is a specific situation and that, in rapidly reversible conditions, these professionals believe that their opinion supersedes instructions previously specified by patients. A qualitative study carried out with eight physicians in the municipality of Curitiba, also evinced the presence of moral discomfort in adopting AD in case of prognostic uncertainty, as well as situations of discomfort related to the lack of knowledge about the instrument [15].

Therefore, the insecurity related to the lack of knowledge on conceptual and legal aspects of AD may ultimately affect the adherence of healthcare providers to the instrument, even if they feel comfortable in respecting patient's autonomy. Similarly, decision-making at advanced stages of a chronic disease may justify healthcare providers' decreased sense of moral discomfort in using an instrument that guarantees the patient's wishes not to be subjected to invasive therapeutic procedures. This was the fictitious clinical case offered in our questionnaire, which may not occur in situations of prognostic uncertainty and potential reversibility.

When assessing the association between levels of knowledge and confidence in using the instrument, we found that participants with greater knowledge on the practical application of AD feel more comfortable with its use when facing the case of patients with advanced incurable diseases.

Therefore, we infer that resident physicians with better training on AD, an instrument which follows the surrogate decision model called "pure autonomy," better understand the need to respect patient's autonomy, an important ethical principle which should be sought in doctor-patient relationships, which is often paternalistic on the part of healthcare providers [15,16]. These findings bring to light a relation that may be bidirectional: education on ADs may also be useful in bioethically training healthcare providers.

Moreover, participants with greater knowledge on legal aspects involving AD declared less discomfort regarding their knowledge about the instrument and the legal backing for its use. This corroborates evidence that residents' stress levels are inversely proportional to their degree of confidence and competence in discussing




http://dx.doi.org/10.1590/1983-80422022303553EN

care planning with end-of-life patients and that confidence regarding ethical and legal support is indispensable for physicians to accept patients' AD [6,17].

These results suggest that resident physicians could feel more secure and better adhere to AD if they had a more adequate training regarding the instrument and its regulations.

Another convergent point between our findings and the preexisting literature was the receptiveness of residents regarding the approach to AD during medical training. In this study, almost all participants expressed the desire that the subject be addressed during medical residency.

Similarly, Colbert and collaborators [7], in a survey involving residents of general practice and family medicine from two American institutions concluded that most of their participants agreed with the need to implement educational measures on the subject throughout their medical training, even in a heterogeneous sample regarding experience in the use of ADs.

In general, this study was able to highlight the need to approach the topic throughout medical training, rather than being restricted to undergraduate studies. As this is a study conducted regionally, the limited number of participants may interfere with the generalization of its results.

However, this study found a similar reality to that in other national and international studies, which leads us to believe that our results portrays the current situation regarding the topic of AD in the assessed population. Future studies with national coverage may be useful to better characterize the issue and include this topic in the educational training of healthcare providers beyond undergraduate studies.

## Final considerations

We concluded that the level of knowledge of physicians residing in Curitiba/PR on AD and their use in clinical practice is insufficient. Moreover, we noticed that these professionals feel comfortable using the instrument in clinical decision-making with patients suffering from incurable diseases in advanced stages. This indicates a desire to respect patients' autonomy. However, they feel uncomfortable regarding the conceptual and legal knowledge they have on the subject. Nevertheless, participants who showed the highest rate of correct answers had greater prior contact with the topic of AD and greater confidence and comfort in their use, which reflects the need for teaching about AD and their bioethical aspects throughout their medical training.

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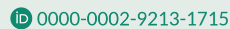
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**Participation of the authors**

Luisa Saemi Murasse and Uiara Raiana Vargas de Castro Oliveira Ribeiro conceived the study. Luisa Saemi Murasse performed the data collection and analysis and wrote the article. Uiara Raiana Vargas de Castro Oliveira Ribeiro contributed to the writing and final review of the article.

**Received:** 3.9.2022

**Revised:** 8.11.2022

**Approved:** 9.2.2022

Research

## Appendix

**Research Instrument – Questionnaire**

1. Age
2. Gender (  ) Male (  ) Female (  ) Other
3. Graduation year
4. What your medical specialty course?
5. What year of residency are you in? (  ) R1 (  ) R2 (  ) R3 (  ) R4 (  ) R5
6. Do you have any experience in palliative care? (  ) Yes (  ) No
7. Have you ever heard of advance directives? (  ) Yes (  ) No
8. Have you had contact, at any time in your medical practice, with a patient's advance directive? (  ) Yes (  ) No

**Clinical case**

Male patient, 40 years old, married, with two children, previously healthy and without addictions. He was recently diagnosed with metastatic lung cancer with no possibility of curative treatment. Some years ago, he lost his father to esophageal cancer, which rapidly progressed, with the need for orotracheal intubation (OTI), prolonged stay in an intensive care unit (ICU), multiple attempts of antibiotic therapy for ventilator-associated pneumonia, and death, after deciding, in a meeting with family members, to not receive cardiopulmonary resuscitation (CPR) in case of cardiac arrest (CA).

As he reported to his oncologist that the experience with his father was traumatic and that he would not like to be treated in the same way, he was instructed to write a document in which he reported his preferences about his care in case he developed a condition that affected his ability to make decisions. This patient developed sepsis of pulmonary focus six months after the diagnosis and was taken by his wife to emergency care (EC) with decreased level of consciousness and frank respiratory failure. His wife brings the patients' document, which had been previously written and signed by him, in which he expresses the wish not to receive OTI, CPR in case of CA, or ICU admission in case of clinical worsening. The document was not notarized.

The following sentences are based on the clinical case above. Please mark the option which best reflects your level of agreement about them (totally agree; partially agree; neither agree nor disagree; partially disagree; totally disagree)

1. The document brought by the patient's wife, containing the patient's decisions regarding invasive treatments can be considered an advanced directive, even if it is not registered at the notary.
2. The document brought by the patient's wife must influence the decision-making of the physician who is taking care of this patient in EC regarding his treatment.
3. The document brought by the patient's wife carries less weight than the doctor's opinion in the decision-making process.
4. The document brought by the patient's wife carries more weight than the family's opinion in the decision-making process.
5. Suppose the physician attending this patient in EC respected the patient's expressed wishes by not instituting invasive measures and prioritizing comfort measures and he dies within a few days. Even if the family alleges that the physician abbreviated the patient's life, the physician cannot be held liable in court.



 http://dx.doi.org/10.1590/1983-80422022303553EN

6. Suppose the patient arrived at EC still conscious, able to make decisions, and in possession of the AD. In this case, the decision already described in the document prevails and it is not necessary for the physician to talk to the patient about invasive measures in the current care.
7. Suppose that the patient arrives at EC conscious and capable of making decisions and asks the physician to abbreviate his life by using a medication in a lethal dose, having written this wish in the document he carries with him. Even if it is written in the document, the physician can be prosecuted if they fulfill the patient's request.
8. Although Brazil has no specific legislation for ADs, they are regulated by CFM Resolution number 1,995/2012 and are in line with the respect for the dignity of the person, provided for in the 1988 Federal Constitution.

The following sentences concern your perceptions regarding ADs. Please mark the option which best reflects your level of agreement with them (totally agree; partially agree; neither agree nor disagree; partially disagree; totally disagree).

1. I am comfortable using ADs in making decisions for patients with advanced incurable diseases.
2. I am comfortable with the knowledge I currently have on ADs.
3. I am comfortable, from a legal standpoint, to use an AD to make decisions.
4. I would like the topic of ADs to be addressed during my residency program

Research