

# Truth Disclosure in the Age of Technologized Medicine

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## Abstract

Truth disclosure refers to informing the patients and their families on the truth about the diagnosis and everything linked to the disease itself (prognosis, evolution, treatment). This study aims to reveal the medical students' opinion on truth disclosure. We selected a lot of 305 medical students, from the Faculty of Medicine, “Vasile Goldis” Western University of Arad, Romania. They were given a short questionnaire containing questions on how much they agree or not with patient truth disclosure. Most students agree with truth disclosure, but there are also a category of students, mainly from non-EU countries who do not agree with truth disclosure, as well as students who agree with truth disclosure only in special circumstances.

## Keywords

Diagnosis; patient; communication; truth disclosure; doctor-patient relationship.

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## **I. Introduction**

Patients are always linked to doctors and diagnoses. Diseases usually change the patient's life, either temporarily or definitively. Dramatic changes mostly occur in oncological cases. An oncological patient, mostly because of the decline of his quality of life, feels that there may be a pathological reason for his altered condition. In this situation, whether the patient is admitted or not into hospital, truth disclosure comes into question. The idea of truth disclosure refers to informing the patient and the family on the truth about the diagnosis and everything linked to the disease itself: prognosis, evolution, treatment.

There have been various approaches to this issue overtime. In the paternalistic era, that is until the early 20<sup>th</sup> century, the doctor was the decision-maker and truth disclosure was considered unnecessary if the patient was thought to be incapable of understanding the information [1]. Nevertheless, starting with the 20<sup>th</sup> century, medical ethics introduced and focused on the notion of patient autonomy: the patient decides [2]. However, this type of decision-making process is also closely related to the doctor himself, as the doctor is the one who informs the patient on all alternatives before any decision can be made [3]. This process is supported by a new and modern doctor-patient relationship in which the patient has more independence and which assumes that the patient is almost always able to choose between the available medical options. Laws and regulations support the patient right to know the truth. The European Charter of Patients' Rights [4] (Rome, 2002) underlines the right to continuous information for the patient, as well as the right to free choice. Moreover, the WMA Declaration of Lisbon on the rights of the patient, revised in 2015 [5], gives the patient the right to receive all information recorded in any of his/her medical records, and to be fully informed on his/her health state, including the medical facts about his/her condition.

However, future medicine is already envisioned as high technology medicine, in which the doctor plays either an insignificant role or no role at all [6]. In the proximal future, the patient might be diagnosed by an intelligent computer and might receive the diagnosis and treatment by mail. In these cases, truth disclosure is a technological intervention where the benefits of communication are missing [7, 8].

Misunderstandings during the informative process can become the cause of suboptimal communication between patient and doctor. They are also a common justification for partial or even false disclosure of the diagnosis and prognosis.

Until the 1990s, doctors usually withheld the truth from cancer patients in order to give them hope. Surveys conducted around the year 1990 showed that less than 50% of cancer patients were accurately informed on their diagnoses (Africa, France, Hungary, Italy, Japan, Panama, Portugal, and Spain). [9]

Analyzing the doctor-patient communication around the world, researchers demonstrated that most patients seek complete diagnostic information. However, surveys conducted in the Mediterranean

countries showed levels of awareness which hardly reached 50%, while only 40% of the Norwegian patients seem to be informed on their prognosis [10]. Concerning the situation in the USA, Hlubocky et al. discussed patients enrolled in trials for cancer, showing that only 52% reported having had a prognosis discussion with their physician, while 45% denied having received any information at all [11]. A 2018 Jordanian study showed that 37 physicians usually withheld the diagnosis of “serious illness” from patients. Non-disclosure was primarily motivated by request from the patient’s family [12].

In a study published in 2017 by Erer et al. on Turkish cancer patients, conducted in 2005, 86.5% of participants believed that patients have the right to know the truth and be correctly informed on the treatment; 76.9% believed that physicians must disclose the truth to patients [13].

Data from Chinese physicians and surveys among their cancer patients showed five reasons for poor truth disclosure: lack of awareness of patients’ right to knowledge, cultural influences, insufficient medical resources and training, the families’ financial concerns, and the need to protect doctors from violence [14].

“The Patients’ rights in the European Union; Mapping eXercise: final report – Study (2017)” [15] lists countries which have laws for patient’s rights. The document also includes countries which rule the patient’s right to not be informed on the disease. Therefore, countries such as France, Germany, Hungary, the United Kingdom, and Romania have distinctive Patient Laws, whereas countries such as Italy, Tunis, Algeria, Morocco do not have any specific laws, only regulations concerning patients’ rights. Romania has Law 46 of 2003 and Law 95 of 2006 [16] which regulate the patient’s rights to consent and complete information.

Informed consent is now a legal and deontological requirement. Patients expect and receive more complete information and are progressively involved more in their medical care. Modern medicine involves telemedicine, clinical healthcare from distance, telemedical devices to support in-home care, E-health, healthcare practice supported by electronic processes, and cybermedicine, that exclude direct human to human interaction. Nevertheless, medical studies are still traditional everywhere, preparing future doctors to actually face patients and successfully communicate with them. In the followings, we

present the outcomes of a study based on this particular fact of the doctor-to-be learning how to face future patients.

## **II. Objectives**

This paper aims to present medical students' opinions on truth disclosure. Truth disclosure was defined as information given to the patient concerning his diagnosis and its implications (prognosis, evolution of disease, treatment). Modern medicine involves both doctor and patient in the decision-making process on diagnosis procedures and treatment, thus a proper communication of medical data represents the basis for an optimal patient management. This study was carried out with the premise that medical practice should begin with accurate information and principles on the patients' rights, including truth disclosure which is a mandatory requirement.

## **III. Material and methods**

We selected a lot of 305 medical students, undergraduates in the 5<sup>th</sup> (23%) and 6<sup>th</sup> year (77%) of study, from the Faculty of Medicine, "Vasile Goldiș" Western University of Arad (Romania). All students enrolled in the 5<sup>th</sup> and 6<sup>th</sup> years of study were invited to participate in the study, but only part of them accepted to fulfil the questionnaire. The subjects were male (51%) and female (49%), aged between 21 and 45. 122 subjects were Romanian and the international students were as following: 67 from Italy, 32 from Israel, 27 from Morocco, 27 from Tunis, 15 from France, 8 from Algeria, 3 from Germany, 2 from Nigeria, 1 from the USA, and 1 from Ghana. A short questionnaire was applied to all voluntary participants before one of their weekly course. The questionnaire included some demographic information on age, gender, and country of origin. The participants was asked two questions: "As far as you know, are there laws in force or regulations on truth disclosure to patients in Romania or other EU countries?" and "Do you agree with truth disclosure to patients?" The latter question had three possible answers: "yes, always," "yes, only in certain situations," or "no." Moreover, the students were asked to write which should be the conditions to truth disclosure, if any. The resulting data was introduced in a Microsoft Excel database and thus statistic results were obtained.

IV. Results

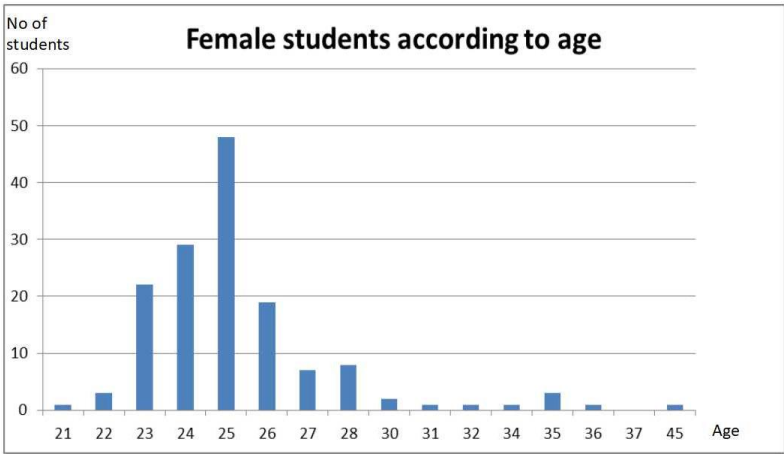


Fig. 1.a. Responders according to gender and age

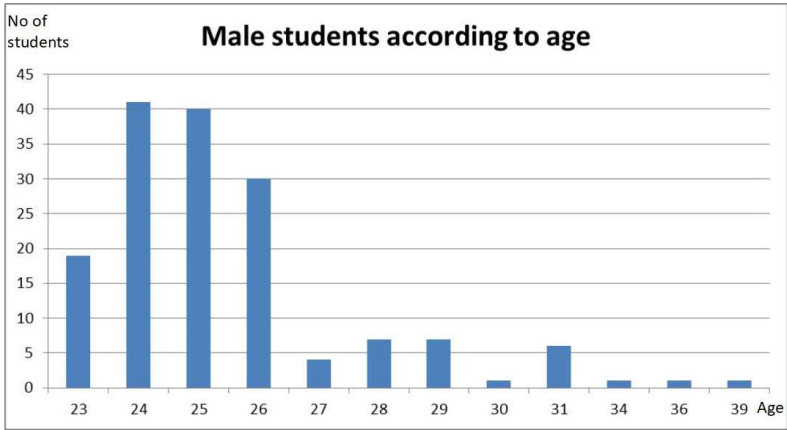
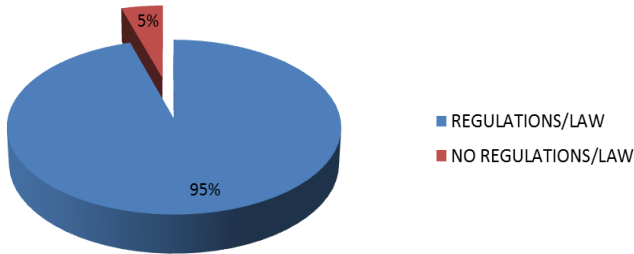


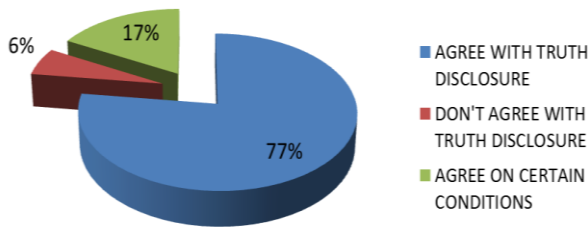
Fig. 1.b. Responders according to gender and age

Most responders were aged between 23 and 26 (Fig.1.a and 1.b).



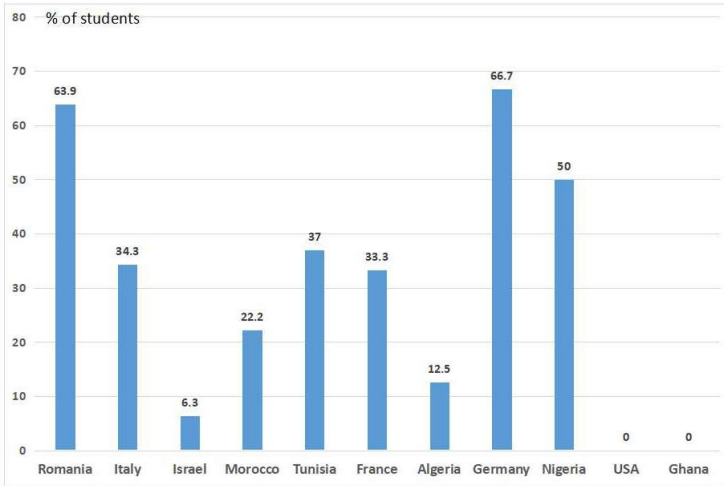
**Fig. 2. The responders' knowledge on existing regulations/laws on truth disclosure**

95% of students were aware of the existence of regulations/laws regarding patients' rights in Romania and other countries (especially EU countries). Still, 5% responded that there are no such regulations in Romania or other EU countries (Fig. 2).



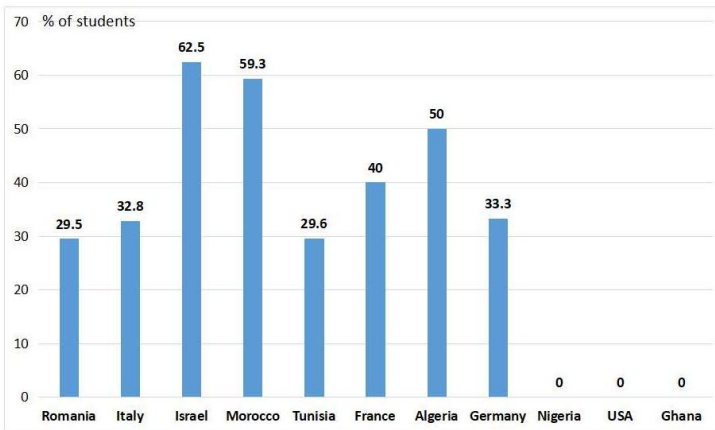
**Fig. 3. The responders' opinion on truth disclosure**

Most of responders agreed with truth disclosure to any patient, anytime. 17% of students emphasized that certain conditions should be fulfilled before telling the truth to the patient, which will be presented below. A smaller percentage, although not to be neglected, was that of responders who do not agree with truth disclosure to patients (Fig. 3).



**Fig. 4. Percentage of female students who agree with truth disclosure, according to country of origin**

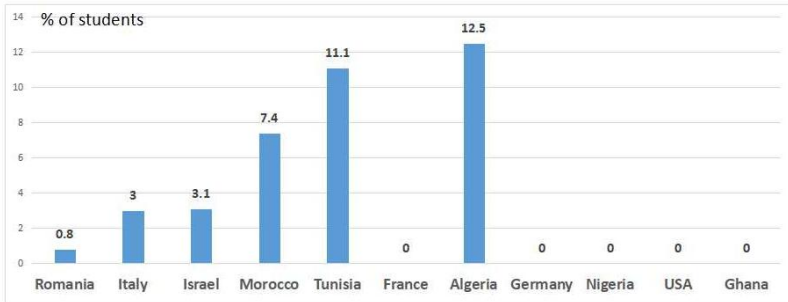
The results show that the highest percentages of female students who agree with patient truth disclosure are from Germany and Romania (Fig. 4).



**Fig. 5. Percentage of male students who agree with truth disclosure, according to country of origin**

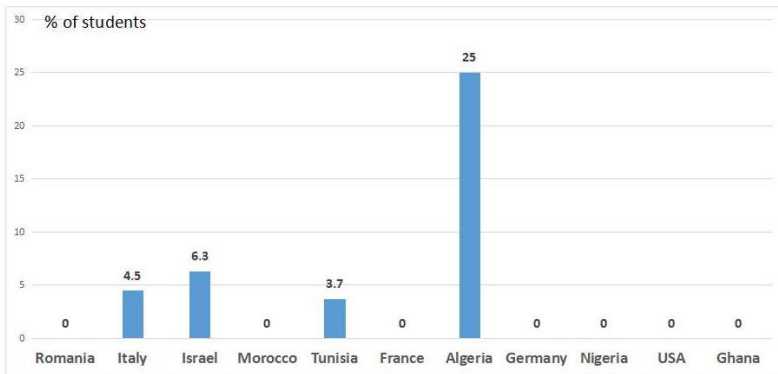


The highest percentages of male students who accept truth disclosure are from Israel and Morocco. A high percentage is also represented by students from Algeria and France (Fig. 5).



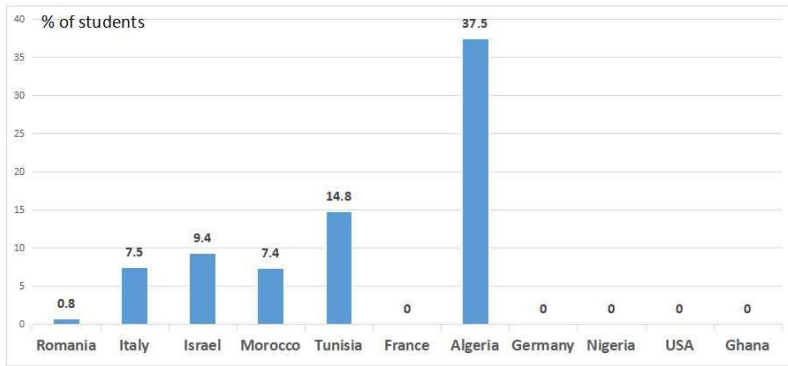
**Fig. 6. Percentage of female students who do not agree with truth disclosure, according to country of origin**

Female students coming from Algeria, Tunis, Morocco, and Israel represent the highest percentages in the category which does not agree with patient truth disclosure (Fig. 6).



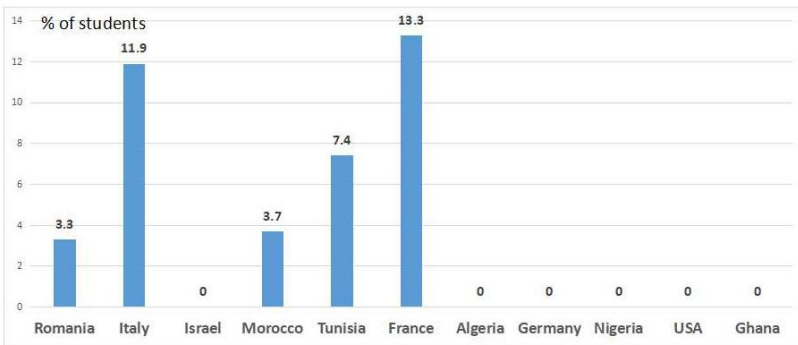
**Fig. 7. Percentage of male students who do not agree with truth disclosure, according to country of origin**

Male students who did not agree with truth disclosure come mostly from Algeria, Israel, and Italy (Fig. 7).



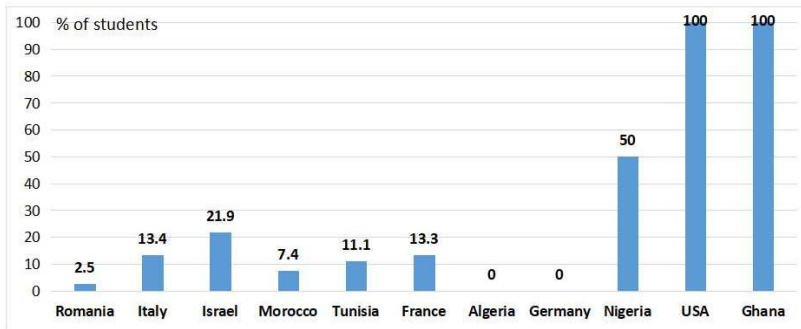
**Fig. 8. Percentage of students (male and female) who do not agree with truth disclosure, according to country of origin**

The statistics of the total number of students / country (male and female students) shows that the highest percentages of students which do not agree with truth disclosure belong to Algeria, Tunis, and Israel (Fig. 8).



**Fig. 9. Percentage of female students who agree with truth disclosure only in certain situations, according to country of origin**

The highest percentage of female students who accept patient truth disclosure only in certain situations belong to students coming from France and Italy (Fig. 9). The conditions they suggested are listed below.



**Fig. 10. Percentage of male students who agree with truth disclosure only in certain situations, according to country of origin**

The highest percentages of male students agreeing with truth disclosure only in certain situations belonged to the USA, Ghana, and Nigeria (Fig. 10)

The conditions outlined by the students following the question on whether they agree or not with patient truth disclosure are as following:

- the patient must be in the best psychological conditions in order to accept the diagnosis;
- special attention must be paid to the psychologically fragile patient;
- the patient must be emotionally and mentally capable of accepting the diagnosis;
- the patient is not a psychiatric patient;
- doctors should communicate only the information that the patient wants to know;
- only if the patient wants to know the diagnosis;
- the information should not be disclosed to patients diagnosed with depression; in this case, the patient's family is informed;
- only if the patient can accept the diagnosis;
- only if the patient is not in the terminal phase; in this case, the family has to be informed;
- only if the patient does not have an increased emotional instability.

## V. Discussion

The results showed a difference of opinion on truth disclosure which mostly varied according to the country of origin. The subjects included mostly students from Romania, and there were some countries represented by only one or a few students. The students from the EU mostly accepted patient truth disclosure. Nevertheless, not all responders agreed with truth disclosure, which is an interesting find, as patient autonomy and bioethical information is given and highlighted to the medical students in our University. Most of the EU countries have specific laws regarding patients' rights, thus students from countries which do not have such regulations (Alger, Tunis, Morocco) showed the highest percentages in the category of responders who did not agree with truth disclosure.

Regarding the acceptance of truth disclosure on certain conditions, the highest percentages belonged to female students from Europe (France and Italy) and to male students (including the student from the USA). In Europe and the USA, the communication with the patient is of highest importance: the laws in force regarding patients' rights are generally known by patients, thus doctors need to inform their patients properly. Most of the students knew about the existence of these regulations on truth disclosure – also because in our university patients' rights is taught from the second year, including the patients' right to information, the right of the patient to decide to not be informed, or to the right to choose a different person to be informed instead. Among Romanian doctors, there are still professionals who believe that the information on diagnosis (especially if oncologic) is a too heavy burden for the patient and thus the potential psychological consequences could dramatically alter the patients' quality of life. Communicating the truth to an oncological patient requires experience, time, and sometimes the help of a psychologist. The students listed realistic reasons which could challenge the doctor in truth disclosure. Of these, the psychological ones are the most frequently encountered and the physician must take them into consideration. All these issues must be part of the complex education given to all medical students.

## VI. Conclusions

Students in the final undergraduate years, as future doctors, have partially settled their medical principles. The new generation of doctors

appear to be divided into future doctors who agree with truth disclosure, and future doctors who still favour medical paternalism. Most of the students who did not agree with truth disclosure were from Alger, Tunis, Morocco, as some of these countries do not have any special laws for patients' rights. Thus medical bioethical education is important in today's universities because it clarifies the aspects related to legacy and helps the student think in ethical terms.

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