

ETHICAL DILEMMAS IN TREATING ELDERLY PATIENTS AT RISK OF POLYPRAGMASY AND POLYPHARMACY

*Vasile Cepoi**, *Ioana Dana Alexa**,
*Adina Carmen Ilie**, *Ovidiu Alexa**

Abstract

In this study we focused on the ethical dilemmas that confront physicians while approaching therapeutical management of elderly patients, especially those exposed to polypragmasy and iatrogeny. We explore the main universal ethical principles such as autonomy, beneficence, non-maleficence, justice and equity and the challenges the medical team faces while trying to reconcile them with several particular aspects characteristic to elderly patients such as: fragility, disability, comorbidity, cognitive and functional impairment, and a greater risk of polypharmacy, polypragmasy, and iatrogeny. Building a strong physician – patient relationship based on mutual trust and respect is the key to understanding the needs and desires of the elderly, which may be completely different from other age groups, and their possibilities to adhere to medical recommendations. Multidisciplinary teams, representing professionals from diverse disciplines coordinated by the general practitioner and/or the geriatrician should help solving difficult ethical dilemmas.

Keywords: *ethics in geriatrics, palliative care, polypragmasy, iatrogeny*

Corresponding author : Ioana Dana Alexa - ioana.b.alex@gmail.com

*UMF „Gr.T.Popa” Iași, România

Introduction

The worldwide demographic trend is population ageing. This shift in the distribution of world's population towards old and very old ages induces new transformation of health and social systems so that the newly created requirements may be met. A longer life means the increase of fragility, disability, comorbidity, cognitive and functional impairment, therefore increasing the need for care. All these features are associated with a greater risk of polypharmacy, polypragmasy, and iatrogenesis .

It is extremely challenging to establish a good medical approach in elderly patients, which means taking into consideration the physiological changes induced by aging itself, the feature of getting the informed consent and preserving the confidentiality of medical actions, the determination of the capacity of decision, establishing a plan of treatment without depriving them of therapeutic options and, at the same time, keeping them away from polypragmasy, of the transfer of decisional capacity, of the recommendations of home care or institutionalization, of the need of palliative care (1,2).

Clinical ethics consists in the identification, analysis and settlement of moral problems arising from caring (3). The main universal ethical principles used as guidelines in caring and treating the elderly persons are the following: autonomy, beneficence, non-maleficence, justice and equity. The principle of autonomy refers to the right of any individual to control their life. The principle of beneficence refers to the duty of doing what is the best for each patient, while the

principle of non-maleficence refers to the duty of the physician to do no harm. The principle of justice and equity refers to the duty of treating each individual equitably, depending on the needs. To these basic principles one may also add the principle of confidentiality of the medical actions, the informed consent and the informed refusal, veracity and privacy. In caring an elderly person, the clinician frequently confronts ethical dilemmas resulted from the apparent antithesis of two or more of these principles (4).

The most frequent ethical dilemmas in geriatrics

Ensuring the principle of autonomy

The ethical principle of autonomy underlies the initiation of the informed consent. In order for the elderly patient to be autonomous in decision-making, they must be very well informed in respect of the disease and the treatment options. This entails:

1) The assessment of the cognitive capacity and of the presence of serious depression in order to determine the capacity of judgment on the manner they control their life, observing the right to autonomy. More than a half of the patients with mild-moderate dementia may have their decisional capacity impaired, patients with serious dementia have a universal decisional incompetence, and 20-25% of the patients with serious depression have their decisional capacity seriously affected (5,6).

There is no well-established algorithm to determine the decisional capacity but a thorough Comprehensive Geriatric Assessment

(CGA) should determine the degree of cognitive impairment and the presence of depression and if any psychological and/or psychiatric help is needed. Those with serious dementia shall be considered with no decisional capacity, which shall be exercised by the family or by the legal representative. Subsequently, in the case of all elderly people, including those with mild and moderate cognitive impairment and those with depression, the four main aspects concerning determination of the decisional capacity should be assessed: the patient's capacity to express a preference for treatment/diagnosis without changing it at every assessment, the understanding of the relevant information, of the medical situation/impairment and its consequences or treatment's consequences, and the understanding of the treatment/diagnosis options, as well as the provision of reasonable explanations for their choice (7). The level of the decision-making capacity must be accordingly with the importance of the risks and benefits of the decision (8). The elderly patient with dementia may express their will in respect of, for example, the performance of a minimum invasive diagnostic procedure, but in the event of a diagnostic or therapeutic procedure with high risk of complications or even death, the burden of the decision should not be let solely onto the patient.

2) Building a physician – patient relationship based on mutual trust and respect so that the patient is convinced that his doctor's care observes the principles of beneficence and non-maleficence, as well as justice and equity. Such a relationship is built with patience and in a significantly larger

lapse of time than in the other categories of age, due to the physiological and psychological limitations of the elderly people: decrease of the auditory and visual capacity, reticence in making changes in the daily routine, the lack of trust in the “wonders” of medicine, the lack of trust in the equity of the sanitary and social systems, the fear of the unknown, of the physician, of the hospital, the decreased capacity of adaptation, the decrease of access to information systems (9).

Therefore, CGA will be able to determine the capacity of elderly persons in exercising their right to autonomy; for those who have different degrees of cognitive impairment, the following dilemma occurs – is our patient able to make the correct decision related to his/her lifestyle? Under these conditions, does the informed consent truly respect the patient's will? Elderly persons with cognitive impairment must have the support of the family and/or of the closest person the patient trusts to exercise and take over their rights to autonomy. This person should be named when no cognitive problem could be suspected, so that there is no further suspicion related to decision-making.

On the other hand, the principle of autonomy also underlies this principle of ensuring the confidentiality of the medical action. Being autonomous means to control personal data. And ensuring confidentiality is the basis of the physician – patient relationship, which should be built on mutual trust and collaboration. However, this principle may be breached when the patients, through their decisions and actions, hurt themselves, neglect themselves, or their behaviour exposes

the others to risks (10).

Ensuring the principle of justice and equity

When observing all ethical principles, the elderly should not be treated differently than adult patients. Therefore, observing the fact that any patient, including the elderly, must be treated equitably depending on the necessities, age should not be a criterion in choosing an option of diagnosis, treatment or care. Still, there are several features to take into account:

1) The access to clinical trials is dramatically limited for very old persons so that most of the studies do not include patients over 75 or 80 years old, although this age category becomes more and more numerous. Also, the access is limited for the elderly with comorbidities – that is the majority of the patients in this contingent – due to the suspicion that the normal results would not be reliable due to the increased risk of complications, side effects, repeated hospital admissions, which may result in the end of the trial and even death. Very strict regulations applied to pharmaceutical trials limit the participation of the elderly because of the assumed risk of polypharmacy and iatrogenesis.

2) The access to medical services is limited for the elderly patients, as they confront with difficulties in using the means of communication with the physician (telephone, email), transportation, current financial problems. Also, the medical system and the nursing network do not come to support the elderly by home visits, ensuring prescriptions, and

psychological support (11).

Ensuring principles of beneficence and non-maleficence – acquiring the best treatment

Establishing a good therapeutic management for our elderly patient is a big challenge as it must take into consideration some particular issues characteristic to old age:

1) The physiological decline inevitable to ageing: the free water decreases, the ratio of the adipose tissue increases, changes of the hepatic and kidney metabolism occur, and changes in drug elimination. All these changes influence the pharmacokinetics and pharmacodynamics of drugs, resulting in the increase of incidence of side effects, of their toxicity, even at reduced doses. There could be mild cognitive impairment, so complicated schemes and polypharmacy should be avoided.

2) The presence of several comorbidities, with numerous and various interclinical examinations with the elaboration of numerous and various therapeutic schemes (polypharmacy) is at risk, most of the times, to increase the risk and number of negative side effects.

The trend in establishing medical treatment is to observe the recommendations from the guidelines, but there are few guidelines specially adapted to the needs of the elderly, and in most of the cases we have just several recommendations, letting the decisional process at the choice of the prescribing physician. The ethical dilemma is: do we treat according to the recommendations of the guidelines or do we adapt medication according

to the particular needs and possibilities of our patient? It is important to remember that the elderly have frequently not one, but several comorbidities, therefore the average treatment scheme of a living at home patient contains 4-5 different type of drugs, and up to 8-10 in the case of an institutionalized patient. The increasing number of studies report that 13% of the elderly taking 5 or more different drugs/day present side effects requiring medical intervention (2); also, they have an increased risk of non-compliance, side effects, falls, hospitalization, institutionalization and even death. According to the results of several large studies (ADVANCE, ACCORD) therapy in elderly patients does not have to be aggressive, but adapted depending on age, comorbidities, expected life quality and psychological profile (12).

3) The medical adherence is an important aspect in establishing the therapy of the elderly. It is crucial to correctly assess the availability of the patient in following the medical indications and avoid severe diets or prescribing drugs that might worsen the depression or quality of life.

Ethical problems derive from the fact that the elderly are insufficiently involved in decision-making in respect of determining the therapeutic scheme, thus becoming part of the multidisciplinary team, managed by a geriatrician or/and by the family physician. They must actively participate, together with the patient, in the determination of a realistic therapeutic scheme, based in particular on the patient's desires, continuously assessing the risk/benefit ratio of medical recommendations. Another ethical dilemma in

determining the treatment for an elderly person occurs when in order to simplify the treatment scheme, we need to choose – from the total of drugs correctly prescribed, according to the guidelines – only the most important ones, with low risk of side effects. How do we choose? Do we have the right to choose? There are several tools created for this purpose: Beers criteria, START/STOP criteria, The GerontoNet ADR Risk Score, Inappropriate Prescribing in the Elderly Tool (IPET).

4) Ensuring the optimal surgical treatment in the elderly involves the crossing of multiple dilemmas and ethical principles. British surgeons asked if they would do a surgical intervention to a patient with dementia and intestinal volvulus, answered no in 65% of cases (13) crossing the ethical dilemma between the observance of two principles: beneficence and non-maleficence. In elective surgery, we also meet ethical dilemmas such as the one of autonomy, beneficence, non-maleficence and informed consent. An example is the significant cognitive impairment occurring in the elderly after having a hip arthroplasty (14). Therefore, we observe the beneficence principle, recommending them the hip arthroplasty when necessary, which shall increase their life quality, even the degree of independence, but on the other hand, except for the secondary risks of the surgical intervention, the patient also presents the risk of cognitive impairment, which is irreversible. Do we observe the non-maleficence principle? In such situations, the principles of autonomy and informed consent play the main roles. Therefore, most of the ethical dilemmas concerning the ethics of

treatment and care in the elderly find their solution in the discussions between physician and patient.

Palliative care

When dealing with an irreversible, severe evolution of co-morbidities, one has to take into consideration the type of care that meets the needs and expectations of the patient, and to avoid measures which actually extend the pain instead of healing, without improving the life quality. In these situations one has to continuously take into account the desire of the elderly patient (the right to autonomy) to receive palliative care, in order to ensure a better life quality till the final end.

An important aspect that needs to be discussed with our patient is related to the measures of intensive therapy and resuscitation; they need to be informed in order to express their opinions before their condition worsens and before being under the impossibility to express their opinions (15). In the decisional process, the patient has an essential role, but the family may also be involved, or even the priest, and the decision should not to be taken immediately, but after a prior analysis. The medical team should provide all the necessary information, both to the patient and the family, and to make them aware that if they do not use the measures of intensive therapy or the forms of resuscitation they are not entitled to a lower-quality medical care. The decision made in the first instance is rarely the final one, the process being a dynamic one, based on consecutive decisions (16, 17).

Conclusions

The treatment and care of the elderly shall be customized according to their needs and desires, by observing the ethical principles. Therefore, the elderly have the right to participate in making all the decisions related to the medical action, being necessary a permanent assessment of the decisional capacity by the attending physician, with the participation, when necessary, of the psychiatrist or even of the local authorities. We shall focus on the life quality according to their expectations, and a multidisciplinary team (consisting of a kinesitherapist, dietician, psychologist, pharmacist, social assistant, volunteers, nurse and geriatrician who shall coordinate the entire team) will be required to achieve this purpose, and to apply the therapeutic plan. The team shall have multiple roles, namely: to put into practice and help the accomplishment of objectives, to check and coordinate the support of the family and/or volunteers, to notice the non-adherence and to identify the reasons, to actively participate in the updating of the therapeutic scheme to maintain the quality of life. Therefore, the care shall be ensured by the medical and social services, a customized person-centered care being necessary and ensured after a complex planning by a multidisciplinary team.

Elderly patients have the right to a correct, customized therapeutic (pharmacological and non-pharmacological) scheme, centered on their needs, life quality and hope, avoiding polymedication and polypragmasy and fighting non-compliance by their continuous involvement in the decisional process. They have to express the psychological

and financial adherence to the treatment, as it will last a long period and requires a permanent collaboration with the multidisciplinary team to increase and preserve their adherence to treatment.

They have the right to be protected by the society against

exploitations, self-neglect or self-injury, at the same time observing the right to autonomy. In the end, when the other measures of treatment are no longer efficient, they have the right to a respectable death, according to their expressed desires.

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