Medicine of the Person Prague, 23-26 July 2003

How are decisions taken? Dr Ralf Hinrichs

I am sure you will all have had the same experience as myself: on the way to the supermarket, I realise that I am too hungry to think logically about my food needs for the next few days. Everything looks so mouth-watering and tempting but no price is low enough to quieten my enormous hunger. This is a situation where deciding what and how much to buy is dictated entirely by what my stomach is telling me. When I arrive back home, I realise that I have bought enough to feed a regiment.

Let me give another example: the sky is very grey and I have to decide whether or not to take an umbrella when I go out. If I do decide to take one and it does rain, then my decision was right and I stay dry. If the clouds clear, and the sun comes out, then the umbrella is useless, and I might be asked why I am carrying an umbrella around when it isn't raining. I end by forgetting it on the train and have either to go to the lost property office or buy another one.

These examples illustrate how our road through life is 'paved' with decisions. We are forced constantly to weigh up the various choices and their possible consequences and all the relevant factors. We have to make decisions in all fields of life, from humdrum decisions as in my examples, to the choice of a partner or a profession. The complexities of the decision-making process and its many aspects may make us lose sight of the general picture, and this is why I want to look more closely at some of the many grounds on which we base our decisions, and then use them as a background when I go on to talk about the ethical principles which underlie decisions in medical practice.

What do we know about decisions?

Taking decisions is an activity which involves thinking and weighing up pros and cons, and finding a balance, with a particular goal in mind. Men have for centuries been concerned with the question of what we should take into consideration when making a decision and the origins of scientific research relating to the decision-making process. The philosophical basis is to be found in the Utilitarianism founded by Jeremy Bentham (1748-1832), which maintains that actions can be judged only as a function of their consequences: actions which produce optimal results are morally justified. But the economic basis of research on decision-making has as its principle that while, by choosing to buy certain things, the consumer is acting for his own personal gain, he is also supporting the economy, which is to everyone's benefit (Adam Smith, 1723-1790). The mathematical roots of this research are found first in the probability theory developed in the work of Jacob Bernouilli (1654-1705) and Pierre Simon de Laplace (1749-1829), particularly in their reflections on games of chance. But it was only in the middle of the 20th century that research on decision-making moved on to a scientific base. Today, it is in the field of economics that decisions play a vital role, as

evidenced by the award of several Nobel prizes for work on decision theory, in particular with regard to games. Psychologists see decisions as a specific cognitive function, a directed process subject to certain rules. In most cases there is a choice of possibilities. Options are considered consciously and assessed as a function of the desire they give rise to. Several cognitive functions are required in the making of a decision. When a patient has to chose whether he wants to undergo an operation, he <u>hears</u> the information given by the doctor, he <u>remembers</u> what he has heard about similar cases and <u>considers</u> the possible consequences of his decision.

All decisions require not only information but also motivation. The person deciding must himself want to find a solution, and one which is in accordance with his own ideas. No motivation, no decision. Also, decisions frequently depend on emotions, which may already be present independently, or may arise from the consequences of the action, as, for example, when we are pleased at the result after we have finished cleaning out the cellar.

These reflections seem mysterious and unfathomable if our starting point is the anatomical and biochemical base of the knowledge in our brains. Karl Jaspers said that the transformation of a desire into action is the only time when magic becomes real, when a spiritual reality is changed directly into a physical or psychological reality. But what is the link between the spirit and the brain?

Freedom of will and reflection

Freedom of will is an accepted concept in practice but it becomes elusive as soon as we try to understand it. When seen in terms of cells, hormones, electrical impulses, our will is affected by a large number of factors, such as family, our role in society and other facets of socialisation. Deciding between several alternatives does not mean the predominance of the strongest motivation or the uncertain outcome of a play of blind forces, but is rather the assertion of a motivation which has come through a process of internal reflection and assessment. According to Berlin philosopher, Peter Bieri, there are degrees of freedom of will. Will is all the more free when it is accompanied by broad reflection and less free if the reflection is inappropriate. Repeated awkward behaviour is equivalent to a lack of reflection. The breadth of our conscious and unconscious reflection forms our character, which determines our behaviour in the future. Character as the centre of our personality may be considered as "frozen will". It includes a reflection on the past. In spite of all this reflection, the question arises: would more intense reflection give us a greater degree of freedom in making decisions? Is it possible to arrive at a decision spontaneously, without reflection?

Will and the laws of nature

According to the laws of nature as understood until now, causality was the dominant element, every event having a cause. Seen in this way, free will does not exist, because every decision goes back to a cause. Even the recent understanding of quantum physics cannot help us to deal with the question of freedom of will. It is impossible, for example, to predict the moment of disintegration of a radioactive atom. Disintegration seems to happen for no

apparent reason but can itself trigger a reaction. Going back to freedom of will, this means that while a decision may emerge for no apparent reason, it is never really freely made. Our behaviour would be characterised by our goodwill. In everyday terms, this would lead to behaviour which would sometimes be one thing, sometimes another.

Will and theology

Will in a theological context is entirely different. The concept of responsibility before God presupposes truly free will, because we cannot be held responsible for that which chemical and physical laws are used as an excuse for, whether seen as referring back to the principle of causality or pure chance. How then can we perceive will against this background of rather contradictory experiences?

The brain is in constant activity and associations come to the surface just like bubbles in a glass of sparkling water. The choice of thoughts which penetrate our consciousness is a balance between openness and significant order. If unconsidered action is to be avoided, a person's habits and routine can only be loosened gently. According to this model for any plan of action, will – just like a bubble in sparkling water – might unconsciously check if the action is allowable from all possible points of view. Will would have a right of veto. This function seems to be located in the prefrontal cortex, but its precise anatomical structure is not known.

Ethical principles of decisions taken by doctor and patient

If we take the example of whether or not to take an umbrella, in the light of a vague concept of free will before and after, the decision concerns no-one but the actor. The umbrella itself has no influence on the will of the person taking the action. In interpersonal relations though, we find have to go beyond individual decisions, which are often in opposition, to arrive at a common solution. If no compromise can be found, one of the propositions is imposed, as there is no alternative available. The doctor-patient contact is a particular type of human relationship. It may in some cases be a relationship between two equal partners going down the same road, but this is often not the case, for a variety of reasons.

Decisions in medicine essentially follow from the ethical principles of social assistance, personal decision-making, justice and social cohesion. The principle behind assistance includes giving both the giving of help and doing no harm. The principle of help in the sense of the English "beneficence", requires availability to give that help and a commitment to care, both of which are born out of a subjective moral thought assessed in different ways. The principle of avoiding harming others (*primum non nocere*) refers to bodily, spiritual and social damage. It demands a critical assessment of the risk involved in any diagnostic or therapeutic process. The principle of personal decision-making means that the patient has the right to say what may be done with his body. This takes the form of the patient's agreement to a therapy after receiving information ("informed consent"). Justice and social cohesion are principles which enable us to share the means at our disposal in an equitable manner.

Economic pressures mean that these principles will become more and more the subject of argument.

These several principles never operate together without conflict. In everyday clinical practice, the relationship between the patient's right to make his own decision and the doctor's duty of care is a tense one. This raises the question of the ethical justification for paternalism, a concept borrowed from statist philosophy which means "fatherly care". Its function in medicine is the use of an act which seems in the best interests of the patient, without and possibly even against the patient's will. "Self-determination" and paternalism are only one facet of the doctor-patient relationship and because they are moral in nature, they are ambivalent. The ethical problem of paternalism lies both in the failure to take into account the patient's right to decide for himself and the doctor's uncertainty about what is the best for the patient.

A good doctor, in his concern for his patient, will resist the temptation to on the one hand act as a paternalist guardian, and on the other, allow the patient excessive autonomy. He will have the sensitivity to allow the patient enough free space, while not leaving him completely alone. This distance is seen in respect for a patient's decision based on adequate information. Meetings with the patient should be marked by sincerity, mutual will to find the truth, benevolence and two-way listening. The special nature of doctor-patient meetings relies on confidence. Medical confidentiality offers a protection without which confidence would not be possible. Confidence may however be endangered by a particularly paternalistic attitude which means the doctor's explanations may not provide the whole truth: this may be the result of well-meant wish to protect the patient. Confidence is also threatened if the meeting is nothing more than the purely objective provision of information, imparted without care, owing to inadequate understanding of patient autonomy. By doing nothing more than giving objective information delivered without sensitivity, the doctor is using respect for the patient's autonomy as an excuse not to shoulder his own share of the responsibility.

For Christians, after all these contradictory considerations on the psychological, biochemical and ethical aspects of a choice between different courses of action, from taking an umbrella to reaching a decision with a patient, the spiritual dimension becomes very important. Luckily, most decisions are taken unconsciously. We cannot imagine having to consider for ourselves all the possibilities for all our actions, even the most ordinary.

We regularly ask that God's will be done, when we say the Our Father, a last resort which is as worrying as it is reassuring. If we dare to hope for the help of God in our quest for the right choice, the matter of knowing how everything is sorted out in our heads plays a secondary role and gives us strength and reassurance that we are not alone when there are difficult decisions to be taken..

Translation: Pat Wimberley