SOCIAL RELATIONS IN THE "HIGH PLACE" OF TECHNOLOGY

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Abstract: *During the last years, Intensive Care Unit (ICU) has recorded a massive progress in knowledge and operating possibilities, especially thanks to the techno-scientific innovations concerning biomedical technologies. The reflections expressed in this paper are the result of an interdisciplinary qualitative survey, which involved, through the creation of focus groups, about 50 health operators, doctors and nurses, working in six Italian intensive care units. The partakers have been asked to express their personal point of view concerning end-of-life decisions. The original aspect of this narrative is a critique to the image of medical technology as being able to take successfully part in any situation and doctors' narratives aimed at rediscovering the importance of social relations.*

Key words: *Narrative medicine, Intensive Care Unit, Technology, Social relations, End-of-life decisions making.*

1. Introduction

It is a common notion that techno-scientific medical knowledge has currently gained an unprecedented therapeutic efficacy. In the last years we have witnessed a faster and faster advancement in both pharmacologic research and the use of techno-instruments in medicine. This has greatly improved the success of therapeutic interventions, explaining the present widespread trust in expert systems as well.

In spite of the plurality of icons about such a recent development in medicine, Intensive Care Unit is the real place, which evokes, more than any other, the salvific power of new technologies [4].

2. In the Beginning of our Research

When I entered into an Intensive Care Unit for the first time – in order to carry out a qualitative research on end-of-life-decisions, on a sample of six Italian ICUs

(4 North, 1 Centre, 1 South) with two colleagues of mine, a health psychologist and a philosopher – I was really surprised to see a so high presence of techno-equipment surrounding the patients' bed.

In each Intensive Care Unit, three focus groups were organized, where the participants were asked to express their personal point of view concerning end-of-life decisions related to a specific topic of discussion: the action and the impact of technology in the medical practices, the success and the failure in the end-of-life decisions, the image of ICU seen as a context of relations and interactions. Through the textual analysis of the accounts, we have tried to underline, among the single discussions, the most meaningful critical polarization of the communicative knowledge [2-5].

2.1. The "High Place" of Technology

The big light displays, the racks in pots that continuously control the parameters and the

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large use of any sort of high-tech made me imagine to have come to the most advanced frontier of medical science. In other words, I was in a place where medicine seemed to focus the very modern idea of therapeutic intervention: illness is a natural process that hits the body.

Crossing the threshold of Intensive Care Unit – after a careful wearing ritual to avoid any sort of outside contamination within the ICU aseptic environment – I felt I was entering the "high place" of technology.

In the last thirty years, the developments in the techno-scientific field provided new opportunities of intervention to care workers: from the replacement or support of vital functions (such as artificial breathing devices, the cardiac pump or the kidney emunctory) passing through the inhibition of consciousness by extended sedation, to the diagnose of the brain death in despite of the beating heart using well-defined neurological principles and rendering possible, this way, organ transplants [6].

2.2. The Starting Hypothesis

In the beginning of our research, I was firmly convinced that care workers engaged in ICUs were culturally influenced by a kind of magic and salvific idea of their profession.

I believed that there was no remarkable difference between common sense and medical knowledge with reference to such an issue; I believed that both of these sorts of knowledge shared an idea of technology as a powerful, omnipotent expert system able to solve even more controversial issues included those concerning end-of-life conditions.

3. The End-of-Life Decisions

The end-of-life decisions concern more precisely admissions and discharges to/from ICUs and the limitation of intensive treatments.

To be clear, the limitations of treatment deal with those cases in which the

monitoring or the treatment have become inappropriate: they are heavy in excess because of the presence of irreversible case histories, the failed response to the medical treatment, or the explicit patient's revocation of a previous consent or even the achievement of a therapeutic limit that was agreed before [1].

3.1. Technical Equipments and Human Frailty

The firm belief in the resolving power of technology and protocols as in decisions about admission, discharge and limitation of intensive treatments, was perhaps also due to the sharp contrast between technical equipments and the evidence of human frailty exposed in naked bodies depending on technological devices to stay alive and often unconscious, in a coma due to ongoing clinical pathologies or to pharmacological treatments in order to satisfy therapeutic needs.

3.2. Types of Patients

Taking into account the framework we have described, we can argue that there are two types of patients entering the Intensive Care Unit: those who experience an acute organ shortage and who are defined by doctors as *critical patients* (corresponding to 70% of total admissions) and those, labelled as *monitored patients*, who can seriously risk to die because of possible complications. Although about half of them become critical patients, they are commonly soon discharged.

4. Meaningful Narratives in the Medical Practice

I was convinced that the meaningful narratives of about sixty care workers (doctors and medical attendants) – we met during our focus groups (we organized three focus groups in each Intensive Care Unit and, thus, a total of eighteen meetings) – could be interpreted following the narrative structure of a doctor's narration. He has been working in Intensive Care Unit for few

years and I will call him with a fictitious name – Dr. Antonio Porta – in order to encourage the personalization in the present account:

What about the presence of a sort of ghost, who is neither the sick person nor the other human beings but a ethereal presence that does not exist and is able to unplug the machine?... What I would like to say is that we are maybe afraid to act in first person. We cannot even claim that a friend of ours unplug the machine instead of us because this would be a way to shift the blame to him. However, would be right or wrong, if there was something – neither us nor the patient – that removes our responsibility to decide?... How would be possible to cope with the problem if there was a third person – not us – that is willing to do that and is able to intervene in what we can define as a "aseptic way" without religious, moral scruples and what have you? What would we do? Would we tell to this third aseptic, ethereal person: "Don't move! I must decide!"? Or would we leave the decision to its destiny? This is what I was thinking about. (Focus Group Beta I)

4.1. Technology as Third Neutral Actor

In this reflection, what clearly emerges, in my opinion, is the concept of technology as a *third neutral actor* within the process of treatment. More precisely, I find that the foregoing reflection remands to an idea of technology that we can define as a *universalistic standardization*, i.e. based on the absolute certainty to be able to clearly divide the quantitative cognizable aspects which can be controlled – such as, for instance, the numerical indicators – from the interferences which can be caused by the peculiarities and the idiosyncrasies of biographic, relational and cultural aspects. The desire of removing the pain prevails and the limit tends to become a removal of the anthropological and social dimension of the disease.

In other words, it seems that social relations could be put aside since they cannot be understood according to parameters of verifiable predictability that is they cannot be read using what we can define as a *semiotics of the evidence* (Evidence Based Medicine) of objective facts that can be grasped by an omniscient mind in their pretended absolute transparency. In this ideological perspective, calculation and quantification are assumed as regulating principles to read the disease: a quantifiable knowledge of facts would allow us to foresee and control causes and effects of future events. Planning as well as *formal and rational organization of time and space* would be normative rules useful to reduce reality to decipherable and predictable *quantitative schemas* and to drastically simplify the cultural, religious variety and the different values that each patient expresses.

Briefly, the idea of a standardization of medical practice determines the removal of contingent, occasional and chaotic aspects of such a practice which are considered to be marginal. This ousting of biographic or cultural peculiarities and idiosyncrasies of ordinary life would increase even more the trust in abstract systems and particularly in expert systems: that is the *third neutral actor*.

4.2. Initial Hypothesis was Wrong: a Disenchanted Relation with Technology?

Attending the "high place" of technology and the care workers who daily work there, I have realized that my initial hypothesis was wrong.

In Intensive Care Unit you don't only experience, indeed, the power of science and technology but also their limits, since you clearly perceive that it is too often very difficult to establish a relation with the patient and her relatives due to the high death rate. One out of six patients dies in Intensive Care Unit.

Doctors and nurses must deal with death, the limits of their intervening capacity, the disappointment and pain of patient's relatives, who painfully experience the failure of medical technology on their own.

In our analysis of what emerged in the discussion groups we have noticed a neat mismatch between common sense and the emerging most meaningful cultural attitudes within the medical practice. The narratives of the participants in the research reveal, indeed, a disenchanted (a disillusioned) relation with technology. Such a relation could sometimes be ironic, but it is often clearly bothered by technology. I believe that the very new aspect you can find in these narratives is linked to the fact that doctors and nurses are working out an adverse criticism to the dominant image presenting technology and medical science able to intervene successfully in any situation and solve it; they highlight, in turn, the difficult rediscovery of the social dimension of treatment which can not be eliminated.

After Dr. Porta's aloud reflection on the possible benefit of the presence of a third neutral, aseptic ethereal actor, most of his colleagues reacted producing a general buzz and a squawk in the background that was interrupted by Dr. Giorgia Rizzo's statement:

We can say thus that we are no more concerned with this issue... We should follow the example of Ponzio Pilatus in order to be concerned anymore or, in alternative, we could not escape from being involved in the issue (Focus Group Beta I)

Suddenly, the sarcastic words of another colleague, Paolo Lombardi, followed, raising a hold laugh due also to the presence of nurses:

Or, in alternative, you wait to shift change (Focus Group Beta I)

Dr. Lombardi's crushing remark highlights that in spite of its objective parameters, the protocol can be strategically unheard by the medical practice, according to different sorts of situation. The problem at stake in social interactions among doctors and nurses in Intensive Care Unit – that is also in the true heart of the debate within sociology – concerns the crisis of the very idea of objective, universal standardization in a context where it seems to have become a moral imperative.

The introduction of sophisticated equipment and the pharmacological innovation have produced an ability – which was impossible before – forecasting and controlling the new biological, physiological and social conditions experienced within the Intensive Care Unit. To be sure, it is a condition in which a human being is linked to technical equipment in an indissoluble way: life depends on the equipment. Following this, the very point at stake here is that the medical staff is concerned with approximations and failures of such an equipment, being responsible, at the same time, for the treatment in a context that can not be isolated, aseptic, and neutral since it is always part of organizational situations where a great number of interweaved day-to-day professional interactions are involved [3].

Paradoxically, the more technology asserts itself and gets stronger as therapeutic action, the more this produces new relational and social horizons, as well as, new tensions which demand re-thinking the traditional mechanistic conception of the body and the illness, the very basis of the present development of medical techno-science. Following this, the myth of the objectivity of techno-science - that excludes perspectives, values, aspirations, and sufferings of the observer (the doctor) from the analysis of the patient's situation, refusing to point out the inter-subjective nature of what happens between doctors, the patient and her relatives - is thrown into crisis [8].

5. Rediscovering the Importance of Social Relations

Doctors' narratives witness a high presence of meaningful contents aimed at rediscovering the importance of social relations and are characterized by four main narrative themes, closely interweaved:
- the relation with patient's relatives should be cared more and more;
- the understanding of the organizational nature of the treatment;
- the instrumental acting of expert knowledge;
- a criticism – that can be more or less consciously expressed – to the idea of an omnipotent doctor, who has the power to save.

In this regard, it is worth mentioning here Dr. Mario Colombo's story. He has been working in Intensive Care Unit for more than twenty-five years; he was involved in accepting a child due to the moral pressure applied by a young medical practitioner under the eyes of the same child's relatives:

The child was lost by then and these other doctors started with the usual discourse: "But if…because if…if he rides out this phase, if he shouldn't have, if…if…it could occur that…". Such a discourse took place between a doctor who was there and me. There was no wall, but a big window that divided us from the corridor where the child's parents were standing "outside" in front of us following the dialogue between the onco-hematologist and me as they had followed a tennis match. At a certain point my colleague told me: "Well! I absolutely don't want to force through a decision – you know – make a decision for yourself whether accept the child". I looked at the parents, who had before moved their heads from side to side, but, at that point, kept still on me, looking at me…so I decided to accept the child here (in Intensive Care Unit) and he died straight after. And it was my flop, since I told to the parents: "Remember that the child come in there – in Intensive Care Unit – but the very fact to be attached to a life-support system doesn't give him the chance to survive". I tried to explain them that the child didn't breathe anymore and we wanted to make him die without suffering: "We want to send him to sleep. This way, he does not suffer but this phase can last only few hours". In other words, the child doesn't come in there to give you hope that there still is something to do, but he comes in there to die without pain.". By the way, this kind of decisions is also taken according to a certain background. I was obliged to do something I was aware it was wrongful, because the child didn't suffer since he was in a coma. However, there were two parents staring at me and making me feel the weight of deciding…I was put in a difficult position and I could decide in the wrong way only. (Focus Group Delta II)

In Mario Colombo's story, there are multiple reasons at the very basis of the critical situation he describes: the pressure exercised by the parents, the instrumental behaviour of the colleague, the context of the communicative interaction (the big window), the critical conditions of the patient and mainly the young age of the dying person.

However, a very problematic aspect characterizing the interactive dynamics, described in the story, is closely linked to the relational nature of the treatment. It refers, more precisely, to the fact that beyond what medical indicators announced – according to the resuscitator – a sure prognosis for death, the pressure exercised by the medical practitioner under the eyes of the same parents make the doctor feel bounded: such a pressure is so binding for him that he had no choice but to accept the child in Intensive Care Unit.

Consequently, technical, expert medical knowledge, concerning resuscitation practices, risks to become a device that other medical practitioners can use

regardless the objective technical knowledge, involved in order to solve relational problems. The specialist division of the treatment − which makes the patient get lost in a network of wards, sections and units − overdraws the relational ambivalence whenever it is possible an instrumental use of specialist knowledge.

In the end, although there was no hope to save the patient, Dr. Colombo decided to accept him and, that is why, he perceives his choice to be unjust. He took his decision according to relational parameters that took into account the parents' point of view, acknowledging that technical knowledge is part of interactive dynamics, that can push clinical parameters and quantitative indicators into the background.

6. Conclusion

We can state, in conclusion, that the stories, we have previously mentioned, point out how doctors, who work in Intensive Care Unit perceive the relation doctor-technology-patient not only according to the clinical dimension of the disease, which is a kind of objective diagnosis and prognosis, but also considering the subjective interplay that takes part in the final decision process [7]. The relatives and patients' pressing aspirations to the power of technological equipment, as well as, the risk of an instrumental use of specialist knowledge by other care providers, makes it difficult for the doctor in Intensive Care Unit to communicate the uselessness of an eventual admission to Intensive Care Unit. Such a difficulty – which can sometimes occurs in using technical parameters to legitimate a clinical decision – facilitates to recognize that quantitative indicators are to be understood as part of interactive social contexts, which can encourage (or not) specific interpretations and operative decisions.

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