

Alberto Ardisson

L'uso delle tecnologie in sanità. Il punto di vista del paziente cronico. [The use of technology in healthcare. The point of view of the chronic patient], Milano, Angeli, 2018, pp. 206

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As *Tecnoscienza's* readers will know, the theme of the relationship between technology and health has been an important issue for a long time. The theme is characterized by its breadth and the many implications that health has in daily life. We have become increasingly aware of this relationship during the Covid-19 pandemic that has transformed everything: work, relationships, well-being, economy, international relations, even the wars active around the globe.

Alberto Ardisson explores the relationship between health and technology, as well as an array of connected complexities, observed in the pre-Covid-19 period. He focuses particularly on the choices of patients with respect to the search for information about their health through the Internet. The topic has become relevant in recent years to understand how people's awareness changes in relation to the possibility of exploring their own health thanks to blogs, peer groups, second opinions, tips about medicinal drugs, informal chat about health and much more.

The book is divided into two parts.

The first part focuses on an analysis of Internet access and citizens'/patients' health information. The second part describes the results of research conducted online on a variety of Facebook groups attended by chronic patients and concerning specific diseases.

In the first part, the book acknowledges the importance of the Internet for the contemporary era and defines a series of opportunities and complexities that this exposure to digital information can assume for patients suffering from chronic pathologies.

This massive exposure to the Internet is impressive for its rapid development and for the potential it can offer to citizens/patients, but at the same time it also defines a progressive loss of organizational boundaries as well as those between public and private life. This description is followed by a presentation of some theoretical lines of enquiry that the author considers central for analysing the context of digital health.

The author introduces a review of sociological theorizations that allow him to grasp/study technological development in relation to the role of citizens/patients. He distinguishes between the techno-supportive approaches whose points of synthesis can be found in the label of "patient empowerment", and the conflict-symbolist approaches whose gaze focuses on the limits of the rationalist approach.

The first branch of approaches is defined in relation to "techno-euphoric" analysis that emphasize the triggering role of technology in developing patients' knowledge and ability to take care of their health needs. The goal of economic savings and (estimated) improvement in the quality of health services certainly stand out among these approaches. Thus, the reference to the "empowerment" becomes a *passaportout* that will help patients to increasingly improve their knowledge and their ability to interact competently and appropriately with their own bodies. This is even more true with respect to the ability to manage one's own health needs starting from the vast amounts of health data that are increasingly available and shareable.

The other areas of approaches include interactionist, culturalist and constructivist views exploring new complexities for health and well-being. Among these, the author includes the contributions of critical sociology, specifically the socio-material approach that connotes Science and Technologies Studies (STS). Through a quote from Lupton (2014, 610) it is recalled how "technologies are defined as material actors in relation to human actors whose outcome results in a plurality of assemblages between humans and technologies for an infinite combination of material and non-material, of human and non-human" (p. 32). A brief section seeks to reiterate the role of this approach in understanding technology-patient interactions in healthcare. It has been crucial in recent years to recognize the processes of co-construction of technologies in healthcare by reclaiming the temporariness of the balances that this relationship manifests. The reference to STS goes so far as to include the latest labels by Lupton (2017) that focus on the definition of "affective atmosphere", an expression that wants to emphasize the intimate value that can be generated in this relationship. Or even referring to other Lupton's works the author recalls the pervasiveness of human-non-human interaction that now seems to unite many experiences through various types of wearables.

Another window on critical approaches is reserved for the concept of bio-politics that defines the weight of political power to every aspect of human life, recalling in it the pervasiveness of market logics in every social sphere. This approach indicates how the stimulus and marketing policies aimed at the proper management of one's own health should be considered as an extension of the influence of neoliberalism that pushes patients to consider themselves customers and to become entrepreneurs of their own health.

In addition, the book includes among these approaches a reference to the "surveillance society" by which attention is directed to the increasing penetration into daily life of the technologies and practices needed to record, probe, monitor, and discipline people's behaviour.

A final section of approaches to the study of digitisation is reserved for interactionist perspectives that draw their inspiration from Goffman's

work. This view, the author reminds us, is very useful to recall the complexity that is generated between the standardisation processes of centralised and unifying procedures of digitisation systems compared to the specificity of individuals, their clinical histories, and their representation of the state of well-being and illness.

At the end of this review of approaches, Ardissonne proposes an "integrated" approach aimed at grasping the multifaceted viewpoints required when dealing with a complex issue such as digitisation in health care. He promises to draw on these points of view in the research to follow.

The research presented relies on a survey conducted with over 2,000 patients/citizens in Italy. The research aim was to offer at least three different layers of analysis: the socio-demographic characteristics of these users; the trust they place in the apps aimed at the Facebook group's chronic diseases; and, finally, the intent of those who turn to the Internet to find information related to their particular health condition.

The results of the survey help us to understand how the Internet is a "particular" gateway. The data shows that more educated people look more carefully at the sites of medical societies, while less educated people look more widely at generic sites. The more educated show a greater interest in being involved in decisions about their own health. Age seems to influence mainly the demand for "second opinions" and more generally to be more active in these types of groups. With regard to the gender of the respondents, the research confirms that it is women who want more comprehensive information and prefer the websites of scientific societies, while men choose their own sources quite indifferently. The research then develops through a series of elaborations proposing and/or recovering a series of labels also discussed in the literature. For example, it highlights how lurkers are mainly the most educated and the youngest in these thematic groups.

Among the results, it is worth mentioning the confirmation that the use of specific apps for one's own chronic pathology – more prevalent for males and younger people – allows patients/citizens better autonomy from the dominance of specialists.

Thus, the work developed in this book can be very useful in understanding some of the complexities of the relationship between the web and the search for data related to one's own health by chronic patients, as well as by family members who turn to the network to understand more about the illnesses of their relatives/friends.

The main path of exploration of the book is consistent and allows the author to summarize approaches with a theoretical framework developed in recent years concerning digitalization in healthcare. The book is also characterised by being a tool for exploring the theme and a series of related phenomena that are also characteristic of the Italian scene. Finally, among the merits of the book we can certainly include the research, which involved a large group of patients/citizens, representing members of about

190 Facebook groups.

Turning to the less successful parts of the book, we can first of all mention the book's title: *The use of technology in healthcare*. One of the risks the reader might encounter is to expect coverage of the vast presence of information technology in healthcare, which is of great interest in the field of medical informatics, sociological, and sociotechnical approaches. In this book, however, the idea is to explore the more specific phenomenology of people who search for health information on the web and who, because they are chronic patients, are interested in becoming more informed through the experience of peer groups in order to share information to improve their health conditions. Similarly, the extensive review of approaches to these issues presented in the first part seems only partially to provide the specificity of interest that then emerges in the subsequent research. On closer inspection, it is precisely the focus on technology and the different ways of studying it that could perhaps have been better focused.

At some point, the author argues that, “[c]onsequently, the technological tools of e-Health and m-Health can be qualified as objects produced in precise social, and therefore historical and geographical, contexts, incorporating cultures, needs, aspirations, choices, meanings, policies, constraints and potentials, merits and defects present in those societies. In this way, we can study technologies by first considering their different natures” (p. 41, my translation). This statement, among others, seems oriented to restore a kind of static and non-processual idea of these technologies. As recently recalled by Magaudda and Neresini (2020), the STS approach requires considering technology, science, and the relationship with users as a system of unstable equilibrium. For this reason, Ardisson's work should have considered, especially in the research chapters, getting closer to the contexts in which the online data was accessed, the trajectories of use of this data, which strategies and networks contributed to the production of data in the different communities observed, what caught the attention of group members, and the reasons for this interest.

The symbolic side of such access is well-documented by the research and analysis carried out, but for instance on the point of how technology enters the care processes, imposing its rules and constraints, cannot be solved only by identifying who uses apps or wearables.

STS studies, among others, have shown in recent years that the contexts of health service delivery generate a multiplicity of interpretations and different ways of using technologies (Crabu 2016). In Italy, for example, the telemonitoring service for cardiology chronicity is differentiated region by region and very often integrated by private remote monitoring and sometimes relying on general practitioners. The latter are included among the figures of reference in the survey but without defining a specific section on them to understand, for example, how their role enters into the management of chronicity and the management of information related to chronicity.

At the same time, the inclusion of technology in care processes asks us to take note of the need to recognise the agency of technologies and the political dimension of their existence among us in a plurality of “political” arenas that are far from stable and homogeneous.

Despite these aspects, it is important to acknowledge the book's efforts in exploring the topic in a very broad manner and it has the merit of adding interesting descriptions to the search for health data on the Internet by chronic patients. The digitization processes in healthcare in Italy are still in their infancy. Hopefully, the contributions of those exploring these topics will increase. At the same time, we hope that awareness will increase about how STS sensitivity can provide interesting research questions to understand these emerging phenomena.

References

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Barbara Czarniawska and Tor Hernes (eds.)

Actor-Network Theory and Organizing (2nd edition), Lund, Studentlitteratur, 2020, pp. 392

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This second edition of *Actor-Network Theory and Organizing* has been updated from the original version fifteen years previously. The book comprises a variety of chapters that draw from Actor-Network Theory (ANT) ideas and tenets, situated in organizational learning and Science and Technology Studies. There are sixteen chapters, most of which describe research in the field from many different countries including Sweden, Central America, Denmark, Norway, Italy, Poland, Finland, the US and the UK. Further added to this richness of sources is the variety of settings. There are examples from engineering to healthcare, which create