

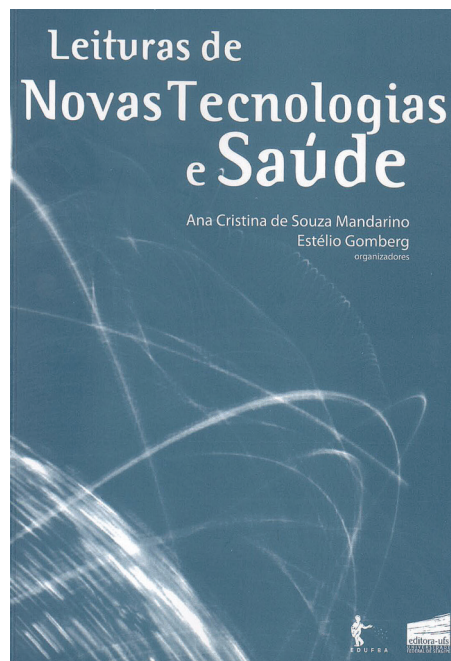
Book review

## Leituras de novas tecnologias e saúde

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The increasing development of new technologies related to health has brought many challenges, starting from its application up to issues regarding availability and the consequent access, going even through important matters affecting the management, as well as considerations of legal and ethical nature. Facing this new panorama, the need for a space that provides self-analysis arises. This is the context that leads to the emergence of Health Technology Assessment (HTA), bringing together a set of information that can - based on previously established criteria – help on the management of innovation, especially when it comes down to the implementation of public policies. The need for constant reflection on cases involving a range of activities

related to several health aspects, and somehow on people's lives, becomes evident at the moment when these aspects no longer have a "magical" appeal and start to assume a scientific connotation. It's important to remember that Medicine originated in a context of magical and "sacred" practices according to the characteristics of civilizations throughout history. However, the fact that its origin recalls the empirical practices does not mean that, back then, there weren't any quests for causes and explanations for the emergence of injuries and illnesses that did not originate from activities related to survival. Perhaps, the main difference between searching for explanations for the phenomena involving the lives of people from the early days and people today, is that

in ancient times they searched for explanation in nature and in the mystic character attributed to these phenomena, while at present the explanation is given by science and its subsequent verification. The gradual journey of scientific advance, in force until the nineteenth century was, beyond a shadow of a doubt, replaced by a galloping pace towards new discoveries and inventions which, on the other hand, keep on motivating new discoveries and developments in regard to health knowledge. Therefore, society calls for relevant innovations to health care, which often turns out to be almost a requirement, even in situations where only a small puff of innovation comes up over the horizon of science.

The last century was able to bring so many new health technologies that, in certain segments, changes occurred at the pace of real leaps. This range of choices is made up of not only development of new drugs and vaccines, but the emergence of numerous diagnostic tests, image exams and surgical techniques, resulting in new treatment protocols, among others. An important emphasis is given to the advance of molecular biology, which is responsible for a revolution in health care. Yet, its scope and application possibilities still represent a vast field to be explored. Undoubtedly, all this progress often comes more rapidly than society's ability to understand and absorb them and, in some cases, even from the scientific community. Van Rensselear Potter called *dangerous knowledge* the kind of knowledge that comes even before the knowledge the human being has to have in order to manage or absorb new knowledge. Anyway, facing the existence of an enormous range of advances in science today, it is notorious a certain challenge - and the need - for a space for reflection on new technologies. This space has always existed, but now it comes into the scientific methodology view with its own structure based on unified and liable criteria to be applied generally. Today, HTA can be regarded as a tool which is capable of leading to understanding, procedure, implementation, management and access to new technologies in order to be used in the most suitable ways within a social standpoint based on inclusion and equity.

The book edited by Ana Cristina de Souza Mandarino and Estélio Gomberg comes up with an in-depth and objective reflection on the Evaluation of New Technologies in Health, especially concerning their impact on society. This is a compilation written by scholars and professionals in the health field, experts on the topic, as well as on its application in national reality. The book is divided into 11 chapters, situating the management policy of new technologies within the ethical issues that permeate them, going through crucial thinking on issues affecting the need of new technologies, aspects

of information and dissemination, as well as education and regulatory systems. Although having no claim to exhaust the theme, the book covers a very wide variety of subjects, which provides support for those who are beginning the study on the topic, and also for those already conducting activities on this segment.

Written by Itajaí Oliveira de Albuquerque and Suzanne Jacob Serruya, the first chapter provides an overview of management policy of technologies in Brazil, emphasizing the strategies and guidelines of the Ministry of Health, and focusing on management. The authors point out that *the pressure for technological incorporation led managers to develop strategies to regulate the flow of health technology from the adoption of methodologies that provide the best scientific evidence as a basis for evaluating the effectiveness and the inherent impact on the budget financial balance of health systems* (p.13). In addition to conceptual clarity, the chapter situates the reader on the topic of HTA and its repercussions within the so-called Unified Health System (*Sistema Único de Saúde - SUS*). The item *Institutionalization of Health Technology Assessment* is very enlightening on the criteria of HTA and how it is situated within the government policy. The book highlights the pertinence of the authors' conclusion about the risks for users, as well as compromising the effectiveness of the health system when the incorporation is not systematic and the inappropriate use of technologies. They also emphasize the complexity to define the adaptation and the obsolescence criteria for new technologies.

The second chapter - written by Emerson Elias and Laura Campbell Merhy Macruz Feuerwerker - conveys a major revision on the historical process of health care, specifically the so-called medicalization of existence and of the individual and collective life. The skillful authors study health labor relations, focusing and questioning the organization of the latter in relation to technological advances and care production. The authors advocate the creation of opportunities to clarify the different ways of understanding the experienced reality and of conceiving health practices. According to them, *those opportunities occur when the formation of collective spaces for reflection on the work process is promoted, so that different actors become acquainted with all the work that is developed and, therefore, establish an agreement on what is good about the work of this corporate* (p.48). This chapter certainly contributes to the appraisal on the production of care and its relational processes involving the various actors in the health scene. Besides being reflective, the chapter stimulates critical thinking about a process that, somehow, in some institutions is already established, and it would certainly

require analysis as it is proposed by the authors.

In the chapter entitled *'Alienation, innovation and organizational routine: thesis and hypothesis*, Edmundo Gallo examines organizational management issues from the premise that organizational projects between public and private relationship, as well as state and society relationship, are concerned to respond to social demands for enhanced efficiency and effectiveness of public management. Discussing the organizational innovation, the author inquires the "so-called" innovative management technologies, drawing attention to the fact that many of them result in conservative modernization processes. The author points out ways to produce *emancipatory* organizational innovations through a comprehensive revision of the literature presented by ten pieces of thesis which articulate the different categories, such as Emancipation, Autonomy, Accountability, Governance and Territoriality and even Reproduction and Production Projects and Pacts. The assumptions made at the end of the chapter lead us to understanding the author's intention to explore the categories by linking the theoretical systems to management, and yet, subsidizing the construction of a critical view, breaking up with the alienation and encouraging the possibility of effective innovation.

In the fourth chapter, Marlene Braz points out the changes that occurred due to man's disconnection from religious realms, making science a representation of the objective laws of what is written off as real and also bringing up the discussion about the not always visible border between the so-called pure and applied sciences. The author asserts that *the modern science was forged in a context of changes which were not only scientific and intellectual but also social, economic and cultural. Its birth was closely linked to the mental structure of that age, to the possibility of understanding the reality and to the change of world conception* (p.82). These changes and their impact on society are analyzed by the author under the prism of ethics, according to different theoretical proposition.

In the chapter entitled *"Between the diminutive and superlative: the technologies at the service of information in scientific diffusion"*, Maria Cristina Soares Guimarães nurtures the reader with information on the production and dissemination of health knowledge by presenting a real graph with its intricate connections and possibilities. However, the author does not dwell only on illustrations, but she goes much further, presenting a reflection on the problem of communication and knowledge availability, i.e., the issue concerning knowledge access and "commodification", which results in denial as a commonweal. Besides the technological panorama pertinent to scientific information, Maria Cristina

talks about its implementation through the concept of translation, now in evidence, however, referring to a known problem, i.e., knowledge underutilization generated through research in health. The chapter presents an important reflection on not only access to scientific information, but also on how information spreads throughout the process.

Following the theme on strategies for science communication, Ana Cristina de Souza Mandarin and Estélio Gomberg present the Virtual Health Library (VHL), emphasizing the scientific dissemination by electronic means. The authors emphasize throughout their text the importance of democratizing information flow and how the VHL contributes to this proposal, through the construction, processing, dissemination and exchange of various sources of technical and scientific information in electronic format, meeting the demands and needs of different organizations and professionals in health. One of the innovations brought by the VHL in modes of information via electronic means previously existing is the fact that the VHL weaves a support network on scientific and technical communication. Another important point to emphasize is that this VHL directs its actions to the general public, providing information in accessible language. However, although the contribution of using the Internet in disseminating scientific information is undeniable, the authors do not fail to express concern about the digital exclusion framework in many developing countries. And still, they point out as one of the positive features of the VHL the establishment of a virtual space that promotes cooperative actions of several actors who make up an outline of common property and public domain. They stress that *the main contribution of the VHL-MOH is to indicate the conceptual and operational improvement of the collective management model of knowledge and information in the virtual space and the challenges of promoting democracy, the equity as to the access to information and up-to-date knowledge in the process involving health* (p.148).

The authors Maria Ligia Rangel-S, Gabriela Rocha and Marcelo Lamego sign the seventh chapter of the book, which is about a project called *Net-Escola de Saúde Coletiva*. The authors emphasize the constant concern of the historical concentration of knowledge in the academic field and the efforts that have been made in order to create space to enable a comprehensive manner to all involved in the health scene. These efforts also aim to assist in the training of the SUS management processes, and increase access of several social groups to health knowledge and information by using virtual resources and their facilities. This is the context in which the *Net-Escola de Saúde Coletiva* project

is developed, associated to the *Federal University of Bahia* and the *Secretaria de Gestão do Trabalho e da Educação na Saúde*, of the Ministry of Health, which aims to facilitate the democratization of information and knowledge to managers, professionals, counselors and citizens in public and collective health fields. The portal framework allows different approaches, combining the processes of information management with distance education through miscellaneous media and learning spaces.

According to the approach of new technologies with regard to information and health education, the chapter *The New Information Technologies, Education and Health Communication*, Celina Maria Modena and Virginia Torres Schall brings up a reflection of extreme importance, that is, the communication issue when it comes to health information and education. The authors query the ways of communication by which information is disseminated, drawing our attention to *thinking of the new communication and information technologies and not let them think of us* (p.178). They also bring out the fact that the technological upgrades should not be implanted in education without first verifying the standards by which this communication will occur. And yet, they refer to the role of new technologies in relation to the SUS, highlighting the technical hitches for it to appropriate these devices and the resulting application in order to meet the social demand for health information.

The authors Luciana Garritano Barone, Rita Martorelli, Claudia Marcia S. Barros, Marcia and Carlos Costa Pina sign the chapter: *Update on Health Education by Videoconferencing System: overcoming distances and bringing Paulo Freire and the new technologies together*. For the authors, the reshape of the educational spaces is linked to the dissemination and to use of new communication and information technologies, because of its capacity to promote functional change. In this context, the chapter presents a discussion about the development experience of the Update Health and Education Course via video conference, hosted by the Departamento Nacional do Serviço Social do Comércio (SESC/DN) to educators in the organization, from October to December 2006. The considerations of the authors indicate that there are positive facts that contribute to courses completion through this modality, counting on mediators and facilitators' assistance who contribute to the smooth flow of activities.

Nevertheless, the use of videoconferencing technology, for example, seems not to affect the proposal of sharing knowledge. This is, without a shred of doubt, an adaptation to new technologies available to achieve the final results of the same old teaching methods. In the second last chapter, entitled *New Health Technologies and Sex/Gender Normative Systems*, the authors Marcia Aran and Marilena C.D.V. Corrêa mooted the discussion on the existing dualities in modern western thinking. The authors' consideration on the use of male / female categories respectively associated with the nature and culture as well as on the path which captures the role of women - before seen as something imperfect in the eyes of men and fated to submission - is very opportune and it is assumed with absolute ownership. The link between gender issues and the technology was built by the authors through a historical chapter which has become very solid and attractive to the reader, bringing information in a fairly pleasant way. The contribution of cross-sectional views and the possible conjugations with technology is evident in the assumption by the authors, especially when they address issues which affect gender and transsexualism standards and the new reproductive technologies by presenting a discussion under the sociocultural approach in a consistent way, and not only using a biological and pathological shape, as it often happens. Undoubtedly, there is also a criticism regarding a "biomedicalized" bioethics of how this field was built in Brazil. At last, Luna Naarah examines the ethics issues in stem cell research by deporting a reflection on the experimental research and clinical experiments. The counterpoint between humans and nonhumans as research subjects proposed by the author discusses a very complex and controversial topic. Full of casuistry and testimonials, the text combines in an exemplary way the parallelism between the two research approaches, focusing from the reality of each one to the translation. Incontestable, the book in question is undeniably relevant, bringing front-line ideas on several themes that permeate the new technologies and their consequent evaluation. The variety of themes helps to further enhance the book and make its reading indispensable to every professional who handles this issue. The information in this book, both in quantitative and qualitative scope, allows readers to update themselves, besides enriching their views and pertinent considerations.