The Role of Communication in Cancer Control in Times of Fake News: Technical and Ethical Use of New Technologies in Disclosing Information to the Public about the Disease

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O Papel da Comunicação no Controle do Câncer em Tempos de Fake News: Uso Técnico e Ético das Novas Tecnologias na Transmissão de Informações ao Público sobre a Doença

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INTRODUCTION

At the time this essay is prepared, the novel information technologies appear to give credit to those who criticized the idea – present at least since mid-XIX century – that its development and popularization would bring the different¹ together, at the same time that they put under scrutiny those who strongly emphasized the benefits of communication discoveries as the Internet², which would allow the "freedom of the speech" for whom did not have their mediatic podiums, ensuring this way the rising of the "collective consciousness" that would lead the social intelligence to a higher level.

The extremely polarized environment across the current nearly entire Western democracy shows that something did not exactly worked as the "integrated" (first hour defenders of the new technologies) have suggested.

In a kind of hasty way and much endorsement from entrepreneurs of the area, the Social Communication professional was deemed irrelevant, remarkably someone who should work with more objective information (*objectivity* understood here as narrative method and not "impartiality", a discussion academically overcome): the journalist. Anyone started to be able to produce content, which almost arbitrarily is coined as "information" or "news". However, abundant material recently disclosed in different areas of knowledge as Sociology³, Communication⁴ and Mathematics⁵, among others, showed that, once again, the eternal promise of overcoming discourse barriers *among* and *within* national communities failed to be confirmed. Far from that.

The unprecedented increase of enunciative possibilities encouraged political movements that go from the 1990's with Chiapas in Mexico to the attack to the American Capitol organized in the social medias and in the *dark web* – and here, for a question of the theme circumscription, it will not be restricted to the obvious ideological distinctions between the two movements. These are mere on-spot examples illustrating the gigantic difficulty of producing meaning through communication, but mainly of "journalistic character" about the great socially conspicuous themes. Profoundly embedded in this clash, the theme of cancer, the second disease that kills most in Brazil is the ultimate concern in the discussion proposed herein. The appeal, therefore, is to provoke the discussion of how this "freedom of speech"² inserts itself in the theme of fake news.

DEVELOPMENT

SIGNS OF WARNING AND DISCOURSE DEBATES

All these communicational technological changes affected the Brazilian society that has been expressing explicitly in quantitative researches, year after year, its difficulties in telling apart fake from true news. This would soon affect the trustworthiness of the information public and private organs provide to the citizen⁶. The warnings given were not systematized and tackled consistently, perhaps because the extent of the damage was unable to be foreseen at the same moment the specific public became cognizant of them or not. Somewhat, it was clear that even the information disclosed by organs with solid and historical reputation would be challenged, regardless of the factual rationale. It was a matter of time.

A relevant discourse-like example– *discourse* here understood within Foucault's sense, that is, as a goal of power in itself⁷ – is the anti-vaccine campaign which has

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created roots in the digital social media. The Oswaldo Cruz Foundation, for instance, produced an exploratory analysis which observed 13.5% of adherence in the most shared Facebook, Twitter, Pinterest and Reddit links on fake news about vaccines. On the other hand, the same analysis shows that the concern with veracity creates more commitment when fact checking agencies are summoned, to credit only a recent tool in times of post-truth⁸

Clearly, the own society spontaneous actions alone while searching for reliable information is hardly satisfactory. This affirmation as many could believe in a first moment is less obvious. The increasing use of the social media, specially the closed networks WhatsApp and more recently, Telegram in Brazil exposed the country to what is called digital functional illiteracy. Put in other words, it is the ability of knowing how to use the functionalities of an online digital tool for the end-user, but not interacting critically with it, waiving great part of the social-political interpretation of the technology.

This necessity of critical interaction goes beyond a merely instrumental relation. Overcoming the simple instrumentality would restrict the immersion into the technological fetishism (for instance, I think it is true because it came from a media platform my peers handle) which provokes concrete damages to public health, an indirect outcome of the ceaseless marketing which praises the wonders of the progress of "media for all" carried out by the Big Techs.

But it is unlikely that this setting changes in the short-term. Roughly speaking, children of different social layers would be granted access to schools which effectively worked with digital education ensuring the development of technical and critical skills increasingly urgent for the practice of contemporaneous citizenship, creating, at the start, "technological alphabetization" of teachers and students⁹. This continued education should extend at the least into high school.

NEW SKILLS FOR THE SAME ETHICAL COMMITMENT

As the critical education about the digital – which would qualify the public debate including the health theme – even if already in development would not bring the expected results in the short term to mitigate false information that infect the Internet, mainly in the social medias, it is necessary to look for more viable alternatives in this moment. For this, but not only, the role of the Social Communication professional either academically or corporate, gains relevance. And so, it is assumed that what is being on the spot are communication professionals of public and private organisms who handle the health theme aware of the constitutionally expected involvement of its activity with the social, humanistic and civilizational development. The activity of Social Communication is, most of all, an ethic commitment without which the statute of the truth (the one which resists to the counterproof of the contradictory) loses meaning with disastrous consequences for the social field as it is been seen regarding the disclosure of scientific information.

An example of this disaster is revealed by Marcos and Bertolli Filho¹⁰, who designed a worrying picture about the fake news the Ministry of Health detected on the transmission of information of themes pertinent to the Ministry. About cancer, among the "news" detected and disavowed – unfortunately without assessing the impact of the lie in contrast with the correction by science – there are: herbs against cancer; a certain hospital found "the cure" or the use of a specific device provokes cancer in some part of the body etc.

Despite being important, it is clear that the institutional websites of the health public organs and of isolated initiatives from private companies which plan to stimulate the population active and informed search fall short of the contemporaneous communicational challenges in fighting the fake news. Obviously, the use of fake news having health information as victims is not a Brazilian particularity or making cancer its exclusive motive as the bizarre narratives around the coronavirus disease 2019 – COVID-19 in the United States with strong political hues as Chen et al³ show.

Exactly because of this, it is advocated that the new discourse confrontation presupposes the requalification of the skills of the Social Communication professional. It calls for in-depth, technical required dialogue with other areas of knowledge, basically those more relatable to the novel communication technologies. The fight for narratives about cancer demands expedited construction of this new professional which, in the Brazilian case, do not appear to encounter the solution only in the market or in university Communication courses alone.

For instance, if, from one side, research in cancer starts to discover the potentialities of the big data in the population studies about the disease in Brazil¹¹, on the other, the communication professionals are trying to tackle the profound modifications the computerization (not only online) of the production, circulation, distribution and consumption of information provoked, mainly those associated with journalistic routines (or transmission of information in journalistic format) and at the spur of the moment, having to live with the language of Artificial Intelligence (AI)¹². However, its use in the main vehicles of production of world news does happen only in different intensity and forms. In Brazil, there is still a certain misconception of the actual impact of AI in the communication process as a whole from the management to the producer of informative content as Araújo¹³ started to demonstrate¹³.

A NEW COMMUNICATOR

For these tools to be utilized in proactive communication of relevant information in the policy of cancer control, it will be required to correct huge gaps either theoretical or practical that the technological development opened in the field of Communication: what has been learned until yesterday is still relevant, but is not enough for tomorrow.

Increasingly it will be required from communication professionals the ability to challenge the algorithms that help or fully substitute the decision taking of many professional categories, from Justice to Health¹³. More than providing responses, it is necessary to be technically prepared to formulate more accurate questions: why the use of black box algorithms (through which the machine takes decisions, scores, selects but hides the criteria of its decision models from public scrutiny) is being stimulated in the systems of recommendations of information? Do these algorithms have taken us, as in other cases, to bubbles of information about cancer in the social medias? If the answer is yes, how could this be avoided in communication? The capacity of constructing discourses in programming language¹⁴ would help in the counternarrative to fake news about cancer? In the activity of categorization, can an algorithm stigmatize someone with cancer in the process of conveying or not an information?

The endeavor towards these new practical and analytical skills ("new" as demands for communication professionals) requires for a start the involvement of universities, public organs and traditional and alternative media firms which, in a first moment, will need to bring together programmers, data scientists and statisticians and Communication professionals/students to fill in these gaps as is happening in the United States¹⁴⁻¹⁷.

This movement needs to be encouraged at least until the novel communicator amidst the ethics and technical crisis of the field is ready as professional category for the different markets as occurs in Health, who need urgently new possibilities to investigate, translate and exhibit data measurable or not. As advocated elsewhere¹⁸, these professionals will need still a solid capacity of understanding, socially critic of the use of new communication technologies in this world swarming with data, which explains the power of the Big Techs.

All this is built up amidst criticism – both fair and unfair – launched against the concentrated market of the Brazilian media from one side, which, among other things, facilitates the appearance of conspiratorial theories against health; on the other, the relative inability of this same market in reaching more different segments of an extremely tattered social fabric. How this would not affect cancer related information which have these vehicles as their main partners in promoting health?

CONCLUSION

The first step, it is believed, is to acknowledge the transformations that eventually lead to the fact that inaccuracies and lies fight and most of the times win the debates with science and with the accountable social communication, journalistic or not. Secondly, is to assume that misinformation actions with the most different agendas confront with more science and technical qualification.

Obviously, it does not preclude the necessity of rethinking the legal models which stir long established interests. But as of now, it is certain that a novel communication professional needs to be in the feasible horizon.

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The author participated of all the phases of the manuscript and approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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