

## Digital inclusion and health counselors: a policy for the reduction of social inequalities in Brazil

Inclusão digital e conselheiros de saúde:  
uma política para a redução da desigualdade social no Brasil

Ilara Hämmerli Sozzi de Moraes<sup>1</sup>

Luciana Veiga<sup>2</sup>

Miguel Murat Vasconcelos<sup>3</sup>

Silvia Regina Fontoura Rangel dos Santos<sup>4</sup>

**Abstract** *Inequalities in health conditions remain even twenty years after the implementation of Unified Health System (SUS). This condition burdens social movements exerting social control on the health care area with a continuous fight. In this struggle, the accumulation of political power is related to an increase in the capacity to acquire knowledge and information. This study aims at fathoming the inequality surrounding the digital inclusion of Health Counselors (HC) of different regions within the country. We have adopted the qualitative survey method, which employs the Focal Groups technique, with HC representing managers, services providers, workers and users, all from national, state and municipal levels. Four aspects were examined, comprising reading and writing habits; Internet utilization; the use of health indicators; and the role of information in the Council-State-Society relation. Results have evidenced the need to broaden the foundations of digital inclusion initiatives in the health care area, and to overcome the cross-sector challenge of linking them to politics and education. By using benchmarks of educational philosophy, we were able to outline a theoretical-analytical matrix as a contribution to understanding the complexity involved in fostering digital inclusion in the health care area.*

**Key words** *Information in the health care area, Digital inclusion, Health counselors, Information technologies, Education in the health care area*

**Resumo** *Após vinte anos do SUS, a desigualdade nas condições de saúde da população permanece como uma realidade, impondo aos movimentos sociais que exercem o controle social sobre a saúde uma contínua luta. Nesse embate, o acúmulo de força política está relacionado ao aumento da capacidade de apropriação de conhecimento e informação. Conhecer dimensões da desigualdade na inclusão digital de conselheiros de saúde (CS) de diferentes regiões do país é o objetivo desse trabalho. O método adotado foi a pesquisa qualitativa, por meio da técnica de grupos focais com CS representantes dos gestores, dos prestadores, dos trabalhadores e dos usuários, atuantes na esfera nacional, estadual ou municipal. Foram trabalhadas quatro dimensões, abrangendo: o hábito de leitura e de redigir textos; o uso da Internet; o uso de indicadores de saúde e o papel da informação na relação Conselho-Estado-Sociedade. Os resultados indicaram a necessidade de se ampliar a fundamentação das ações de inclusão digital em saúde, articulando-a, então, à política e à educação, enquanto desafio intersetorial. Utilizando referenciais da filosofia da educação, delineia-se matriz teórico-analítica como contribuição ao entendimento da complexidade que envolve promover a inclusão digital na Saúde.*

**Palavras-chave** *Informação em saúde, Inclusão digital, Conselheiros de saúde, Tecnologias de informação, Educação em saúde*

<sup>1</sup> Departamento de Ciências Sociais, Escola Nacional de Saúde Pública Sergio Arouca, Fiocruz. Rua Leopoldo Bulhões 1.480/9º andar, Mangueiras. 21041-210 Rio de Janeiro RJ. ilara@ensp.fiocruz.br  
<sup>2</sup> Departamento de Ciências Sociais, Universidade Federal do Paraná.  
<sup>3</sup> Departamento de Administração e Planejamento em Saúde, Escola Nacional de Saúde Pública Sergio Arouca, Fiocruz.  
<sup>4</sup> Escola Nacional de Saúde Pública Sergio Arouca, Fiocruz.

***There are men who struggle for a day,  
and they are good.  
There are men who struggle for a year,  
and they are better.  
There are men who struggle for many years,  
and they are even better.  
But there are those who struggle for their entire  
lives: they are the indispensable ones.***

Bertolt Brecht

## Introduction

The struggle for better health care conditions is a historical fight of the Brazilian society that is characterized by victories and defeats. Among the victories, one can highlight the Federal Constitution of 1988, and its Articles 6 and 196 to 200; the Organic Law of Health (Law 8080/90), which instituted the Unified Health System (SUS); Law 8142/90, which provides for community participation in the administration of SUS; and, more recently National Health Council Resolution 333/2003, which provides for the structuring of Health Councils.

Twenty years later, however, inequalities in health care conditions of the population<sup>1,2</sup> continue to be a reality, burdening social movements of this area with a continuous fight for its interests. The correlation of powers resulting from this struggle underlies the political pact built in Brazil, as an agreement resulting from the dynamics of political powers, their intensity and penetration in political, social, economic, scientific, technological, cultural, mediatic, artistic and other relations, and in the definition of public policies, among which we can mention the Health Care Policy.

In these struggles for interests, “power” and “knowledge” (which includes knowledge and information) are two sides of the same coin<sup>3</sup>. The accumulation of political power is increasingly related to an increase in the capacity of acquiring knowledge and information, which ultimately generates greater argumentation capacity in the forums where the right to participate has been attained. Therefore, granting players “access to information” is not enough to foster a democratic discussion in the health care area. It is especially necessary to enable appropriation of information potentialities inherent to a certain message, of its significance for the specific struggle that will be undertaken, of its pertinence and relevance to the intended goal. In current societies, this includes usage of information and communication tech-

nologies (ICT) in this process, which is the core of contemporary discussions, both due to its knowledge democratization abilities and to its sheer importance for the world economy.

With the intention of increasing knowledge on how this issue is expressed within the Health Care area in Brazil after twenty years of SUS, this paper analyzes the processes of access/acquisition/utilization of information and information technologies in health care (ITH) in the social control exerted by Health Counselors. The purpose of this study is to contribute to the outlining of a theoretical-analytical matrix, which may contribute to the elaboration of proposals for digital inclusion initiatives beyond the mechanical usage of computers in the Internet.

We work with the assumptions that having access to data and to ITH is essential, albeit not enough to face the still existing inequalities in the health care area. This includes the unequal digital inclusion of segments of the Brazilian society directly involved in defining health care policies: managers, service providers, workers, and users participating in Health Councils<sup>4</sup>.

Digital inclusion in the health care area, therefore, implies the ‘informational inclusion in health’, which is defined, according to Moraes and Gómez<sup>5</sup>: (i) by the guarantee to the universal right to access information collected by the State about the society – a transparent State in its many devices; (ii) by the understanding of the significance/meaning of data made available and their limitations, resulting from methods employed in their production and dissemination; (iii) by the appropriation of data that reveal the conditioning and determining factors of the health care situation as experienced by citizens; and (iv) by the establishment of mechanisms for the direct participation of Health Counselors (HC) in the process of defining the Public Policy on Information and Information Technologies in the Health Care Area.

This understanding imbricates ‘digital inclusion’, politics and education, hence extracting subsidies for overcoming the unequal digital inclusion of Health Counselors. Results point toward the need to increase the basis of digital inclusion initiatives in the health care area, interrelated in a cross-sector challenge. We have used benchmarks originating from educational philosophy as guidelines to outline a theoretical-analytical matrix, presented as a contribution to the understanding of the complexity involved in fostering digital inclusion in Health Care, with a special focus on Health Counselors.

## Methodology

We have employed the Focus Group technique to produce a qualitative survey. Four meetings with focus groups were carried out in July 2008, with Health Counselors from the three government levels. Fifteen participants attended each meeting. Table 1 describes each group's profile.

Meetings had an average duration of 8 hours. The agenda consisted of a discussion mediated by a specialist (modeler), based on a predefined script. Activities in small groups were also proposed in order to motivate participants during meetings.

The works focused on four approaches, organized to: identify information and Internet usage habits among Counselors; assess text elaboration and reading and Internet usage resources mastered by Counselors; gain information on resources available to Counselors regarding the employment of social control; assess their understanding of social and health indicators; the degree of acquisition by the social control; and to know – by identifying the counselors' outlook on the Citizen-Health Council-State relationship – their opinion regarding the role of information and ITH in overcoming the identified problems.

Two analytical breaks were adopted when analyzing results: the first grouped Counselors according to segments (users, managers, service providers or health care workers); the second considered their sphere of activity (municipal, state or national). The Health Council's geographic region was also taken into consideration.

## Results

### Concerning reading habits and Internet usage

The first evidence is the existence of unequal access and use of information and the Internet among the segments represented in the Health

Councils. Reading habits and Internet usage tend to vary depending on: 1) Background and social, economic and political insertion in the community where the Counselor lives, and the segment / entity represented by them; 2) Opportunities to access computational tools and connectivity, conditioned by their insertion in the Council. This inequality increases when one considers HC representing users against other segments.

Verification of greater access among managers, service providers and health care worker representatives from the Counselors' group is because managers and service providers have access to printed newspapers and broadband Internet in their workplaces; such resources are usually available to representatives of workers in their unions / associations.

A significant amount of Counselors from the users segment reports they have no access to daily printed newspapers or to the Internet, either at home or at work. These Counselors often only use the Internet when visiting the Councils. This evidence – an expression of the inequality of digital inclusion – has serious results on the exercise of democracy in social participation forums.

HC from the country's Northern region report highly difficult access. That region has greater difficulties concerning access to communication technologies, caused by an uneven physical distribution of the telecommunications network. Interests of telecommunication companies have concentrated network installations in urban areas with highest per capita income. Regional inequalities are one of the challenges faced by the current health care policy in its interrelation with the telecommunications sector. Distinct social and environmental panoramas require different approaches to the implementation of a digital inclusion policy in the health care area, which necessarily involves cross-sector initiatives.

The analytical limit based on government levels points towards different interests resulting from the various roles within the Council. Those in the National Council seem to be utterly involved in the issues and in the environment of 'power interrelations' in the country's capital. They propose and negotiate items from SUS's political and financial national agenda without ever losing the focus of their representation. Therefore, the search for information and ICT usage focus on decisions by the national Legislative and Executive powers.

In the other end, in terms of ICT access mechanisms are the components of Municipal Councils, close to users and policy execution issues. This segment is the most committed to achieving inter-

**Table 1.** Focal Groups Compositional Profile.

Identification	Counselors' level of activity	Segments Represented
Focal Group 01	Municipal	Managers
Focal Group 02	State	Service Providers
Focal Group 03	National	Workers
Focal Group 04	Three levels	Users

personal communication with users and to participating in the discussions and meetings of the Councils. They face the challenge of controlling mayors' actions, which lack transparency in many cases, and face clashes on a nearly daily basis. Reports by Focal Groups (FG) participants show that users' representatives depend on managers to gain access to media, such as printed newspapers and the Internet.

Counselors showed interest in acquiring ways required to gain Internet access in order to develop and practice this ability, considered strategic for social control functions. Statements conveying the idea that "information is power" were frequently mentioned during the discussions. This assertion reinforces the HC idea that the managers' main control method is having access to information on their actions, and unveiling their actual significance. Reading regional newspapers and accessing institutional sites are thus highlighted as strategic.

Moreira *et al.*'s<sup>6</sup> examination of 209 Health Care Councils in all 224 Brazilian municipalities with more than 100,000 inhabitants demonstrated that 67% (126) of the Councils have computers, and 59.67% (108) have Internet access. These relatively positive numbers may indicate a discrepancy against reports in focal groups with impaired access. A deeper analysis of these facts, however, confirms that having access to media (computers and connectivity) per se not necessarily fosters social inclusion; Counselors are not empowered until they gain access to health care information.

It should be highlighted that the reading habit itself is shaped by the everyday lives of individuals, historically determined by Public Policies and by the existing economic and social system. There is a relationship between everyday actions and the more structural dimension of the societies where individuals live. Cultural aspects are utterly important in the shaping of attitudes as a whole, and especially those related to politics. One should ponder that providing Counselors with access to information does not necessarily create in them a thirst for knowledge, making them full representatives of the Kantian 'will to know', or citizens who will become owners of the meaning/sense of information in and for the exercise of social control.

Counselors usually demonstrated active reading habits, reading what they received and specific information needed to form their opinions and to deliberate in their forums. Representatives of users with impairments usually stand out in this regard, such as active readers of websites, clippings and printed materials, but are restricted, though, to their specific disease, showing little interest for in-

formation on other subjects. This report confirms surveys carried out by Labra<sup>7</sup>, Moreira *et al.*<sup>6</sup> with Escorel<sup>8</sup>, which highlight the sense of 'fragmentation' in issues that comprise the struggles and claims of the Health Councils, hampering agreements on general/universal issues.

This evidence was questioned at the very moment it appeared in the FG by other Counselors who strongly advocated a broader and more harmonious attitude within the social movement, and the adoption of a broader range of interests. They highlighted that a more general search for information facilitates the negotiation, lending greater efficiency and quality to decisions. Although not explicitly stated, one can infer from this discussion the perception of the complexity surrounding health care problems, their interdependence and cross-sectoriality, and that only a comprehensive alliance will be able to tackle their challenges.

Those who already use the Internet in their roles as representatives related that the most visited and useful websites are: Ministry of Health, DATASUS, Canal Saúde (Health Channel), Transparência Brasil (Transparency Brazil), IBGE, National Health Council, Secom/Planalto, Ministry of Education and Planning.

Once obstacles to access are overcome, one notices that several Counselors use the Internet to: a) read the latest news; b) send and receive e-mail; c) participate in discussion groups that share common interests; d) search for useful information for the exercise of social control, including articles and specialized magazines related to the interests of their roles. Reports show that there seems to be a gradual increase in the habit of reading electronically.

An immediate and careful analysis of this trend is needed for a clear understanding of its meaning. Is this progress due to a change in information usage habits, as a result of an increased desire to know, which represents the appearance of a new culture of broad critical use of information and its production contexts, or does it simply express the 'successful' results of the growth of the ICT market, without implying the development of a critical standpoint concerning new 'commodities'?

There is evidence that the position of representatives in their social context and in the Council conditions the various sources and interests that shape search habits, and the use of information and the Internet. Information search and usage habits (which include reading newspapers, books, watching movies, TV, and surfing the Internet, among others), adopted while practicing their Health Counselor roles, are an expression of their social, political and economic inclusion. That is,

inequalities within the sphere of Health Counselors reflect inequalities in the Brazilian society, resulting from exclusion processes. Here we refer not only to digital exclusion, but also to the constitution of information search and usage habits in its various forms.

**Use of Information and Communication Technologies (ICT) and of written language in the interaction with partners in social participation**

Following the description of information and Internet access and usage habits some challenges were reported, such as the lack of electricity in some cities of *Amazônica Legal*. Another challenge concerns those cases where the municipal secretariats and the Councils have computers and electricity but, due to political issues, access by other Counselors is controlled and - in several cases - hindered by managers.

In addition to technological and political challenges, we also perceived cultural ones, where Counselors showed varying degrees concerning the ability to read electronic texts, showing preference towards pages with more pictures and less text. There were complaints regarding loading times, as pages became heavy and slow due to connection quality and speed. Everyone is in a hurry, justifiable by certain 'pragmatism' - partially due to a videoclip culture.

Not all focal group participants were at ease with written language during the proposed exercises. There was an explicit "natural selection" among Counselors regarding "taking the leadership" during text elaboration exercises. This is proof of the inequalities existing within the Health Councils themselves. Simple words were employed in the execution of tasks, with no technical terms or acronyms. Sentences were direct and easy to read and understand.

Two dimensions are especially important in this context of technological, political and cultural obstacles, which must be overcome prior to the appearance of practices of full information access and usage in the exercise of social control.

**Access-related obstacles:**

- . Shortcomings in the electricity supply of certain areas;
- . Quantitative and qualitative inequalities in the distribution of the connectivity infrastructure throughout the country;
- . Some Internet tools only available in English;
- . Existence of a "culture of opacity" in the gov-

ernment civil society relations, with little incorporation of governmental actions into the public scene;

- . Political tensions between the 'manager' and 'user' segments, subjecting the local Health Council to the manager's willingness to allow access to the Internet.

**Usage/appropriation-related obstacles:**

- . Comprehension is hindered by the existence of technical-level terms in many institutional websites;
- . Unfamiliarity with the potentialities of ICT concerning the exercise of social control;
- . Historical inequality in the institutionalized processes of education/qualification;
- . Lack of democratization within the contexts of information production and dissemination concerning the health care area and its limitations, which contributes to an even more difficult understanding of its significance;
- . Unfamiliarity with the resources available for the search of information that can be used as a basis for the discussions, which could bring about greater balance regarding the ability to reason in Health Councils' meetings;
- . Lack of inclusion of the "Information and information technologies in the health care area" item in the Health Councils' discussion agenda has denied this forum the right to participate in the definition of the future orientation of its public policy adopted by health care institutions and services.

Analysis of the last item confirms studies undertaken by Moraes<sup>4</sup> and Moraes and González<sup>5</sup>. This allows us to state that such 'absence' is not casual. It offers evidence of the tension between dominating and dominated knowledges. The digital inclusion of historically marginalized sectors implies the implementation of dialogical forums tailored to the perception Counselors have of the world, especially those in the users segment. Therefore, one must get rid of the opinion that the digital inclusion is limited to access to what has been established by other "perceptions of the world". Such perceptions subject the user to occupying the role of a spectator of something where they do not see themselves, something towards which they feel no identification - something from which they are alienated. SUS users' "perception" of the world needs to be incorporated in the definitions of Public Information Policies and ITH - the driving force in the construction of new knowledges. Counselors must play the roles of subjects of their own knowledge, and dialogue with technical knowledges.

### **Contribution provided by Information, Information Technologies in the Health Care Area (ITH), and usage of health care indicators in the exercise of social control**

According to participants, attention given to social control aims at strengthening SUS, focusing on its policies: universal and equitable across its various dimensions. They share the conviction that SUS will only be able to provide high-quality services by means of social control, with the coordinated efforts of managers, service providers, professionals, and users.

Counselors assume the responsibility of protecting SUS – an expression of their citizen-minded attitude – focusing on attaining its effectiveness while on their civic path: “SUS should provide all with good, respectful assistance. Everyone should be able to solve their problems without having to wait for days, months, years [...]” - They highlight it is essential to overcome the intense struggle resulting from political, technological and cultural obstacles in order to continuously increase their ability to participate in discussion forums and in negotiations for political and ethical agreements that occur within the Health Counselors’ sphere.

Generally speaking, HC report having difficulties dealing with social and health care indicators. They state that analyzing numbers is not an easy task. Quite often, numbers need to be decoded, as the main sources of indicators tend to present them without any comments or explanations that could help interpret and employ them in daily social control tasks. That is, even though Counselors acknowledge the importance of health indicators in their roles, they still seldom use them. They highlight their deep interest in and the relevance of understanding global information, social indexes and health indicators.

### **The role of information and of ITH in the Health Council-State-Society relation**

By examining FG participants’ reports, one can infer that they live under daily tension. On the one hand, elected managers defend the ideals of liberal democracy (also defended by some health managers), where the idea of having Councils is fully expendable in the face of political representation. On the other hand, we have the ideals of participative democracy (general opinion defended by users’ representatives), where the ‘success’ of democracy is not ascribed to the representation system alone; it is expanded to a direct activity in State decisions.

In practical terms, on the one hand, we have an

administration that is certain of its legitimacy in governing, as it has successfully emerged from suffrage; on the other hand, there are the Health Counselors, especially the representatives of users and health care professionals, attempting to participate in the decisions, control and monitor governmental actions. According to them, by ignoring the background, the foundations, and the prerogatives of Councils, managers tend to treat Counselors with negligence and contempt, thus impairing the exercise of social control. They are denied access to budgetary information and accounting, in addition to facing difficulties in the access to the means of communication.

In the discussions carried out in the focal groups, counselors identified the following issues as generating clashes: i) “Professional of HC”, referring to the low turnover rates and the renovation of members in the Councils, which includes managers that remain “forever” in their positions; ii) Clientelism – Counselors involved in assisting individual demands, in order to accumulate political capital in the community, thus qualifying for elective positions in the future; iii) Disentailment of the Counselor from the entity or community they represent; iv) Omission of strategic information for the Council as a whole, favoring only “allied Counselors”; and v) Lack of respect in relations with “humbler” Counselors.

The strategy of depriving Health Counselors of their functions was often mentioned in the discussions, with reports that “the managers and their assistants ‘make fun’ of the lack of knowledge regarding specific issues”. Managers disregard comments made by individuals, stating that they “have no competence”. A speech full of technicalities is used as a counter-argument for a civic action defending the Health Care sector and questioning the attitudes adopted by public health care policies. This is an old strategy!

At the end of this discussion, one needs to highlight the ‘pride in being a Counselor’: the achievement of a new social status. A superficial analysis could bring about a feeling of ‘achieving a better lifestyle’, but careful analysis of the speech clearly demonstrates an idea of ‘perenniality in the role of Health Counselor’, imbricating the option for a civic and participative life: an expression of their “attitude towards life”. In other words, once one understands the political and social significance of the direct exercise of participative democracy – by working in the Health Councils - they will forever be participative citizens, the subjects of the construction of a new civic culture in the country. Their participation in Health Councils derives from a

militant attitude, especially among users' representatives, who emphasize their responsibility and compromise towards acting in favor of the health of others, of their neighbors, of the population.

"When I remember the place where I was born and the fact that now I am here, it becomes clearer to me that I need to be the voice of others who have not managed to be here. I shall never forget this. They need me to work, so that everyone can receive respectful assistance". (Users' segment, State Council, group 2)

To "presently" be a counselor is not a casual, accidental occurrence; it is a choice made within the construction of their own citizenship, where the exercise of social control represents a critical, participative, cooperative and interdependent attitude.

This is the meaning of Bertold Brecht's quotation in the beginning of this article: Counselors regard their activity as the struggle of an entire lifetime. One can also observe that this perception oscillates between a feeling of empowerment and of having achieved their dignity, and moments of powerlessness, weariness and disenchantment towards their struggle. In both extremities, they highlight the importance of both gaining access to information and health indicators in order to broaden their bases for discussion, which are used in the establishment of a political-ethical pact for a healthy and equitable society; and of exercising their right to have their voices heard, to leave the shadows, to stop to be a dumb invisible.

It was mentioned that the experience acquired during the militancy period increases the capacity of Counselors to struggle:

"Efficient leaders are not built overnight. By attempting to create high turnover rates in representations, one contributes to the weakening of popular segments in negotiation forums. SUS is very complex. When the Counselor starts to understand it a little better, they are asked to leave! I have witnessed a talk between managers, and another talk between professors / scientists discussing the nomination of their representatives, and they defended that the main decision criterion was that they must have been representatives before, since they understand how everything works. Why is this criterion invalid for users?" (Users' segment, State Counselor, Group 2)

## Discussion

The analysis of these dimensions of the process of access / appropriation / use of information and ITH within the sphere of Health Councils reveals

the uneven situation among their segments, evidencing the limitations resulting therefrom for collective deliberation processes, which imply symmetric capacities regarding the ability to critically analyze and discuss. Effectively overcoming this inequality is strategic for the progress of the exercise of social control, and for the very project of a democratic country that Brazil intends to build.

It has been observed that the main obstacles to the access/appropriation/use of information and ITH are found among users' representatives, especially those originating in popular sectors, such as residents' and community associations.

Such results reinforce the conviction that a public policy focusing on the digital inclusion of HC cannot be limited to access to tools (computer / connectivity and site development), nor to training on how to use these tools. It is, therefore, a *sine qua non* condition that the provision of tools and training on how to use them be associated with educational processes concerning the significance and context of the information production and dissemination in the health care area and of information technologies in the health care area. On the other hand, one should emphasize the importance of Counselors in the very definition of the Information Policy and ITH, as they are historical subjects in this process, as opposed to the political target-object model.

This scenario binds up politics and education within the analytical model of digital inclusion in the health care area. In order to understand this interrelation, it was necessary to outline and use a theoretical-analytical matrix, based on distinct philosophical approaches that refer back to the thoughts of Plato and Aristotle in the construction of the western philosophical tradition. Therefore, far from constituting an eclectic approach to the outlining of the theoretical-analytical matrix (as defined by Victor Cousin, 1792-1867), the complexity of issues resulting from the analysis of results has determined the non-exhaustive identification of philosophical contributions, having as a common factor the dialog with the classical thought, in an effort towards increasing the understanding of the politics-education-digital inclusion triad: a contemporary challenge par excellence.

The interrelation between politics and education has been stated since Plato<sup>9</sup>, and exists to this day. His entire work, especially *The Republic*, develops the political vision of fair cities. In order to create a perfect society – the goal of Plato's philosophy – it is necessary to educate its members. In this manner, the primacy of politics becomes the primacy of truth, science and knowledge. It is con-

cerned with the unfolding of knowledge as something dynamic, where education must be based on an *episteme* (science), and overcome the unstable sphere of opinion (*doxa*), and politics must become an action enlightened by truth, in such a way that true knowledge is unable to disregard ideas as its true base. In Plato's work, we can find the genesis of the interrelation between politics and education. The guiding thread of the outline of the theoretical-analytical matrix is here anchored, by providing the necessary grounds for the understanding that digital inclusion processes in the health care area concern a political challenge that should link health care *praxis* and educational *praxis*, within the very context of growth of the ICTs.

In the platonic tradition, learning is an active task. It implies the student must have a desire to learn; it becomes an investigation, where the teacher's role is not to transfer knowledge, but to guide the student towards the discovery of knowledge that, according to Saint Augustine<sup>10</sup> - one of the most influent philosophers of Platonism in the middle ages - involves knowing the meaning of words (message/information).

In what way is the investigation of knowledge built, which involves knowing the meaning of the contents of messages? Reflecting on this issue points towards the need to link Locke's<sup>11</sup> philosophy to the theoretical-analytical matrix. Contrary to idealism, this thinker states that knowledge is born out of reflection on the impressions generated by the senses. Thus, the apprentice will only understand whatever is elaborated by him/herself.

This is the basis of the assertion that it is not enough to inform and present a finished knowledge to the Health Counselors, as they will only fully understand what they themselves structure; whatever is produced by their own investigations, undertaken from critical and creative incorporation of their experiences to the very process of digital inclusion. In this sense, digital inclusion can only be achieved when the Counselor seizes - out of their own experience - the meaning of the universe of information and of cyberspace in their dialogical actions as individuals, citizens, and health counselors.

This thought supports the theoretical-analytical matrix by enlightening the reflection that digital inclusion actions must occur within teaching and learning environments that foster an active<sup>9</sup> search for the meaning<sup>10</sup> of information and the utilization of new knowledges, as an investigative attitude towards life (Platonism), incorporating their experience/background<sup>11</sup> to the digital inclusion process. In this panorama, the Health Counselor

is not the object of digital inclusion actions, but a participating subject instead.

The theoretical-analytical matrix then developed has important gaps, even for an initial approach, concerning the understanding of the politics-education-digital inclusion triad. It is necessary to resort to Saint Thomas Aquinas<sup>12</sup>, who opposes Plato<sup>9</sup>, threading the path indicated by the Aristotelian theory of knowledge, sustained by the doctrine of act and potency, where the intellectual process is driven by the "agent intellect" as it, in action, drives the updating of potential intelligibility of data provided by the senses.

Inspired by this source, one can state that digital inclusion, as outlined here, is made feasible by the evidence that everyone potentially possesses the capacity to know the world (in the Aristotelian sense) that surrounds them. This potentiality is put into effect by the very act of knowing outlined by its experiences. Therefore, digital inclusion is only fulfilled by achieving a symmetrical dialogical relation of the investigative action of the counselor in the very action of digital inclusion, being an expression of the information and information technology in the health care area policy, imbedded in a project for the democratization of knowledges.

This thought can be supplemented by the philosophical tradition of Immanuel Kant<sup>13</sup> - albeit very different from Aristotle and Aquinas - whose approach highlights the idea of autonomy (Greek - "autos" = self and "nomos" = law), that is, "ruling oneself", extending it to the cognitive capacity, interrelated with a 'will to know'. The theory developed by Kant<sup>13</sup> also states that all knowledge is comprised of syntheses of data, arranged by the sensitive space-time intuition, by means of the aprioristic categories of understanding<sup>14</sup>.

The insertion of the Kantian thought into the core of the construction of the theoretical-analytical matrix enables the assertion that the digital inclusion of HC is carried out insofar as, by critically and autonomously seizing the meaning of access/appropriation/use of information and ITHs, they concurrently develop reflexive actions, linked to their daily lives, in the elaboration of a new knowledge (practical and critical), which broadens their abilities in the exercise of their roles as Health Counselors.

From the contemporary thought on education (influenced, among other things, by the aforementioned philosophical movements) we can highlight, in the outlining of the theoretical-analytical matrix, Whitehead's<sup>15</sup> work, for the emphasis it puts on the joy of discovery as an essential dimension of the *act* of knowing. This emphasis is inserted in his struggle against what is called a bookish knowl-



edge (teaching inert ideas), opposing itself to the teaching proposal where the student must learn to prove ideas, which can be done by means of experience or logic. As Ryle<sup>16</sup> states, the difference lies between teaching that/knowing that and teaching how/knowing how. According to this philosophical movement, in life learning how to do things is essential: The assertion “I taught John that water boils at 100°C” means that John was informed of something – a ready and finished knowledge; whereas the assertion “I taught John how to measure the temperature at which water boils” shows that we participated – both the teacher and the learner – in the experience of developing a capacity to produce knowledge.

This understanding supplements the theoretical-analytical matrix with the idea that the digital inclusion of HC must be primarily delineated by the development of abilities for the production of knowledge, more than by the mere “acquisition of data” or the “mere access to information available on sites”.

In the same context, one can highlight other contemporary approaches that can be included in the theoretical-analytical matrix: critical pedagogy (humanist Marxism of the School of Frankfurt and Paulo Freire’s pedagogy of the oppressed); the philosophy of the post-structuralists (Foucault, Deleuze and Derrida), and of the post-modern (Lyotard and Baudrillard). In common, there is the approach that binds up knowledge and power: knowledge produced results from power relations in society, unveiling the absence of objectivity in its production. This thought becomes the core of the development of critical thought concerning the myth of neutrality of information and ICTs, which still remains<sup>5</sup>. In dialogical processes of digital inclusion in the health care area, questioning the historic and social influence on the production of information in the health care area and on decisions regarding the adoption of information technologies – an expression of the correlation of political and economical powers struggling at the core of information and information technology in the health care area policies – broadens the capacity of the action of knowing.

The Kantian idea of critical thought is clearly associated with education as the promoter of a certain type of reflection - criticism - concerning reality, the contents of the hegemonic thought, in the very process of development of the individual’s ability to reflect on their condition as a person and, therefore, as a subject, as taught by Freire<sup>17</sup>. This Brazilian thinker goes even further by binding the development of a critical sense attitude to processes of cultural democratization: “providing all individ-

uals with that which humankind has produced is of utmost importance”. This approach, adopted by Adorno and other philosophers of the Frankfurt school and by Paulo Freire, can be summarized as follows: critical reasoning binds up the critical sense, subjectivity and culture within teaching/learning processes. This idea underlies yet another dimension in the outlining of a theoretical-analytical matrix of digital inclusion in the health care area.

Efforts employed in the organization of this matrix lead towards the thought of another Brazilian – Anísio Teixeira<sup>18</sup> (John Dewey’s pupil) who, back in the 1930s, binds education to democracy, where the freedom of thought is a precondition for a democratic society. The political idea of democracy is thus incorporated to the theoretical-analytical matrix, where digital inclusion is not limited to informing; instead, it should develop the ability to search, critically process and build knowledge in its actions in the world, in an autonomous and emancipating manner<sup>19</sup>. Therefore, digital inclusion becomes an achievement, an investigation, an opportunity to know oneself, of knowing the world of men and things, offering conditions of appropriation of meanings that become strategic for the continuous and ulterior production of knowledge, which may broaden the capacity to intervene in the world – as an individual, citizen, and Health Counselor: civic project, civilizational project.

The Digital Inclusion in the Health Care area that this article outlines includes, then, continuous crossings between the philosophical approaches that enrich the construction of a theoretical-analytical matrix that may contribute to powerful actions towards overcoming the digital inequality that exists among HC. It becomes evident, in the health care area, the expression of one of the dimensions of the severe and evil digital inequality in the country, where the speed of technological progresses imposes a rigorous attentive attitude concerning the complexity of the contemporary challenge of ensuring every citizen’s universal right to digital inclusion.

In this complex process, the democratization and quality of information and its technologies in the health care sector are strategic and vital for the progress of democracy and the struggle for improved health care conditions in the country. Despite such evidence and the technological development related to Information and Communication, one can observe the irregularity of its usage to the benefit of an increased power of intervention by the Counselors in the public sphere concerning the health of individuals and populations<sup>20</sup>.

The current cultural policy excludes Health Counselors, especially users’ representatives, from

this discussion under the excuse that it is a “technical” issue to be discussed by “specialists”. A technocratic reality is created so that the citizen can be politically excluded from the discussion concerning a public policy directly related to the health and democracy project that the society intends to build in the country.

In the common sense, the idea of ‘democratization of information’ is bound up with access. Having access is a necessity; it is not enough, however, as power and knowledge production relations are not democratized, implicit as they are in decisions concerning the policy on Information and Information Technology in the Health Care Area. This is one of the paths that lead towards the construction of a country that has the courage to overcome the existing inequalities, thus realizing the utopia

of a universal digital inclusion, not according to the rules of growth of the digital market and cyberspace, but one that fulfils a participative and emancipating democracy project.

### Collaborators

All authors have participated to an equal extent in the preparation of the present article.

### References

1. Barros MBA, Cesar CLG, Carandina L, Torre GD. Desigualdades sociais na prevalência de doenças crônicas no Brasil, PNAD-2003. *Cien Saude Colet* 2006; 11(4):911-926.
2. Barata RB, Almeida MF, Montero CV, Silva ZP. Health inequalities based on ethnicity in individuals aged 15 to 64, Brazil. *Public Health Records* 2007; 23(2):305-313.
3. Moraes IHS. *Informação em saúde: da prática fragmentada ao exercício da cidadania*. São Paulo: Hucitec; 1994.
4. Moraes IHS. *Política, tecnologia e informação em saúde: a utopia da emancipação*. Salvador: ISC/UFBA/Casa da Qualidade; 2002.
5. Moraes IHS, Gómez MNG. Informação e informática em saúde: caleidoscópio contemporâneo da saúde. *Cien Saude Colet* 2007; 12(3):550-551.
6. Moreira MR, Fernandes FMB, Sucena LFM, Oliveira NA. Participação nos conselhos municipais de saúde de municípios brasileiros com mais de cem mil habitantes. *Saúde para Debate* 2008; 43:48-61.
7. Labra ME. Conselhos de saúde: dilemas, avanços e desafios. In: Lima NT, Gerschman S, Edler FC, Suarez JM, organizadores. *Saúde e democracia: história e perspectivas do SUS*. RJ: Fiocruz; 2005. p. 353-383.
8. Escorel S. Conselhos de Saúde: entre a inovação e a reprodução da cultura política. *Saúde para Debate* 2008; 43:23-28.
9. Plato. *A República*. São Paulo: Nova Cultural; 1997.
10. Santo Agostinho. *De Magistro*. São Paulo: Nova Cultural; 1997.
11. Locke J. *Ensaio acerca do entendimento humano*. São Paulo: Nova Cultural; 1997.
12. São Tomás de Aquino. *Sobre o Mestre*. Rio de Janeiro: Martins Fontes; 2001.
13. Kant I. *Sobre a pedagogia*. São Paulo: UNIMEP; 1996.
14. Chauí M. Vida e Obra. In: Kant I. *Crítica da Razão Pura*. São Paulo: Nova Cultural; 1996.
15. Whitehead NA. *Os fins da Educação*. São Paulo: Ed. Nacional/USP; 1969.
16. Ryle G. *El concepto de educación*. Buenos Aires: Paidós; 1969.
17. Freire P. *Pedagogia do oprimido*. Rio de Janeiro: Paz e Terra; 1977.
18. Teixeira A. Os processos democráticos da educação. *Rev. bras. estud. pedagog* 1956; 25(62):3-16.
19. Santos BS. *Pela Mão de Alice*. São Paulo: Cortez; 1996.
20. Vasconcellos MM, Moraes IHS, Cavalcante MTL. Política de saúde e potencialidades de uso das tecnologias de informação. *Saúde em Debate* 2002; 26(61):219-235.

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