Mediations on Public Health Information: a study about dengue

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Abstract

The issue of (the) diseases risk and prevention emerges in a clearer way when we start with a concrete case, such as the dengue epidemic registered all over Brazil and its media coverage, as well as the strategies of disclosure and information to the population. This paper aims to bring subsidies for thinking about the relations between the Public Health and the media, as well as for the formulation and disclosure of information for citizens regarding health. The research focuses on information disclosure about the dengue fever epidemic in the city of Ribeirao Preto, SP. The theory of social representations was used as the main reference in this research, which seeks to capture the population social awareness regarding this disease. The used method was submission of questionnaires based on the Discourse of the Collective Subject (DSC), characterized by the organization and tabulation of qualitative data of (originally) verbal nature. In order to analyze and to set (provide a context for) such data into context, references were made to some theories regarding reflexivity, epidemiological risk and the Information Society. At the end, it emphasizes the importance of mediators so that the process of mediating information about health and specifically about dengue can present a good performance.

Key-words: Information Mediation; Public Health; Communication; Social Representations; Dengue fever

Introduction

Since the Renaissance, and especially from the Industrial Revolution, our civilization began a process of establishment of new transmission lines, and consequently new forms of interaction and types for social relationships. Having the emergence for the new media, the interaction is increasingly disassociated from the physical environment. It was then extended the mediated interactions __ those which implies on the use of a technical means, such as paper, wire, electronic waves, etc... __ and, the almost aimed interactions __ the social established relations through the means of communication mass, such as: books, newspapers, radio, television, and everything which involves a wide availability of information and symbolic content in terms space and time. Individuals, in general, started to all time using or looking on mobilizing information and symbolic content sources (and people) which are distant away from your daily life: "the creation and renewal of traditions are a processes which becomes even more linked to mediated symbolic exchange "(THOMPSON, 1998).

In the current world, the media plays an increasingly important role when disclosing information related to science, particularly about its impact on daily people’s life. It isn’t by accident, therefore, that health __ understood even in a wider conception of "welfare" __ takes a large space in magazines, newspapers and television programs. Such process about scientific facts disclosure involves not only the information divulging but the ideological construction of values and the consequent social legitimization of certain behaviours and attitudes as well.

The information in the health field has some specificity which shall be taken into account. In the case of the Public Health area, it can be seen as information into pairs, both for managers as for the population, in general. Professionals working with the information as tool are found close from researchers and managers from the public health, either in the organization as in the information storage, whether in the disclosure of the same. Through this sight, we stand these information professionals as mediators of the reading process and knowledge, information ownership, both
among researchers and institutions, as well as those with the communities or the wider public. However, if the first case it has received much attention from academic reflections, the second has not been sufficiently considered. In the last few years, the concept of social networks has been widely used within the health information field. The classic formulation for the concept is given by Castells (1999, 2003), and it tells about its conception that today the social actors interact in an "information society" context __ a society which’s supported on social networks, mostly connected by means of information and communication technologies (ICTs). In the specific computer network case where the Internet is comprised, these are the machines which can communicate among themselves and which are also capable of processing information in a very huge scale, making it possible the generation of new paths for the organization, capital and knowledge control. Social networks, can therefore be understood as a concept of junction between the health information and the foresee tendency towards a social change and exploitation of wealth action experience, it means, social networks can play an important social role over the health provided that the professional working with information professional commit itself promote such integration. You can see a special focus on secondary networks (formed by the collective actions came from groups, institutions and other movements). The focus into primary networks (relations of familiarity, kinship, neighbourhood, friendships, etc...), which account for the individuals’ socialization process, being therefore, much lower comparatively.

In specific cases such as the public health, to understand how this process and information arrives to communities individuals, how are they interpreted and appropriated, it turns a crucial aspect in prevent strategy building and combating diseases, for example, the dengue. This text presents some initial reflections on this process. The goal is to obtain, thereby an exploratory research on a sample of college students, information needed to improve the understanding around the social imagination of the general population about dengue, and the information we have about it. It is commonly used as the reference methodology Collective Subject Discourse (CSD), complemented by theoretical references from the fields of Sociology and Communication, engaging a concept which tries clarifying the processes of reflexivity and the subjects of communication and ownership information. We hope, like this, to get bringing benefits which possible people to reflect on the relationships between Public Health and Media.

**Information, communication and public health: mediation**

A preliminary enlightenment which relates about the risk concepts and norms, especially into the Public Health, and which correlates to the most general idea of a “Risk Society”. The idea of a risk society is enforced with the modernity, being liked with the thought and idea of probabilistic calculation, which would not enable its management. It’s useful to mention here the concept of “reflexivity”, developed by Beck (1997) and Giddens (1991), and which relates to the ability of people establishing a continuing review into their attitudes and behaviours based on new information or acknowledgement aspects about social life. The media certainly performs an important role in this process filled of contradictions and ambiguities.

The risk surges when the future as a concept is understood as something which’s capable for forecasting, anchoring on a strong belief in rationality and justifying certain forms of control. It is constituted, thus preventing the space in which the standard is the principal means of control of risk. The idea of a risk society allows us to an interesting hook to discuss the role of the media, which can be seen in two ways: first as a social tie, and as it spreads symbolic values that can be shared by the society’s members, we can build like this a symbolic aggregation factor in our daily days; b- by being a behavioural model, not in a deterministic, but in the reference standards sense which can be absorbed by individuals in their repertoire. This way, we perhaps explain not only the interest but the way as the media treats science as well.

It is also necessary to differentiate the approach of the various forms of science communication, as proposed by Luiz (2006): disseminating scientific (generic term which includes any type of communication that conveys scientific content); scientific dissemination (internal to their own area of knowledge, determines the criteria of scientific legitimacy to the field) and science communication (communication of science to the general public through the media of mass communication and also of the formal education, museums, etc...). Science journalism, despite their good intentions divulged, is part of the media, and as such should be considered: the role of education is not intrinsic to the media. Its purpose is to inform, but within a logic of the market, or sell information. Therefore, the media seek to make science a subject of popular interest, and not take matters to transmit scientific knowledge, such as formal education. Although education is not the primary function of the media, it often ends up educating, as well as "miseducating" and simplifying the scientific discourse often contributes to their mystification.

The media leads the public how to think, but emphasizes the fact that it can decide on what to think, define a "schedule" on what is important to know and have an opinion. There are "schedules" according to the different characteristics of the media (television’s approach differs from the written press and radio). The possible emphases, lacks and distorts about the news in the daily epidemiologic risks in newspapers which can’t be understood as just a simple predicted
manipulation, but as a result of phases and production routines of the media. Theories focusing on
the media's influence when it treats about behaviour, attitude or the public opinions building,
helps shining the approach about epidemiologic risk news in the daily newspapers. None of them
fails to recognize that the media contribute to people shape a certain idea between what is reality
and what’s adopting behaviours, attitudes and opinions from that idea. Therefore, the way people
behave in to the health also is influenced by the media, as it produces its own sense, as well as
the media reports which are linked to a reflexive expectations which people has respected to their
health.

On the other hand, Giddens (1991) in their understanding of the risk society, points out the
actors whom are both all time reflexive as and can change its behaviours at any time, which
produces a constant flow into social change. But he dismisses the identification of action with the
rationality and transparency of the subject in relation to himself, subdivided consciousness into
"practice" and "discursive," emphasizing that the actors are always skill-full in social life, which
does not imply necessarily into a more conceptual acknowledgement, and therefore discursively
articulable, the rules governing its interactive process, though many times it is possible for them
to translate their actions on well-articulated explanations. Like this, the practical consciousness
enables us to follow rules and changes them without the questions about its meaning and features.
The author attributes the notion of "structure" a conditioning character for the actors’
action, at the same time he acts as an enabling of their actions. This means that the structure is
simultaneously composed by "rules" and "resources", which defines parameters for actions, as
well as providing them tools; otherwise it would be something inexistent for acting. Obviously,
technology plays an important role in all this, and it wouldn’t be too much thinking in the Internet
and its social networks, from the expert notions of an expert system proposed by Giddens, as
perhaps it is the most recent example of this type of system, onto which it is possible to build a
range of sights.

It is important, therefore, to consider the role of science in contemporary culture as a producer
and sense legitimating. Science journalism does not follow the practice of comparing versions,
because it works almost always with a picture of science which does not consider contrary
versions, by building a "scientific truth" based on a consensus does not exist. This makes the
common sense of science journalism, once it stimulates the emphasis thereby the media in order
to promote a science "progress", pushing aside important and contradictory aspects of it. There is
a kind of "credential immunity" provided by the society for the scientists and, according to Latour
(2001), who lies in the existence of "black boxes": which works as already accepted knowledge,
over which hang no controversy, enforcing the idea of "ready science" in oppose to "building
science."

An example of the type of treatment given by the press to the scientific issues can be illustrated
with the question of epidemiological risk. The idea of risk has established itself with modernity,
being associated with the thought and idea of probabilistic calculation, which would allow your
"management." The idea of "risk" is "sold" as something related to test questions. Like this, a
new path for the individual surveillance wins visibility mainly thereby the media, which
reproduces and reconstructs the process’ explanation into the health-disease definition about
epidemiological risk. Certain behaviours, habits, etc... are encouraged while others, "condemned",
always under the legitimizing "science's mantle".

The research Looking over the media, was prepared by the Commission on Citizenship and
Reproduction, identifying gaps and distortions in addressing the press in terms of reproductive
and sexual rights. From this research, Luiz (2006) studied in a greater depth the way how the
press treated the meanings of the epidemiologic concept risk. She noted that, in general: -
publishing of scientific journals attributed such distortions both for journalists and the media as
for the epidemiologic research progress; b – the researching media dissemination also influences,
in another way, scientific researches (highest quote numbers within the research community).

Information about dengue fever as a public health problem

This discussion of risk and disease prevention seems clearest when we take a case such as the
epidemic dengue, registered in Brazil, and its coverage by the media as well as the strategies for
divulging information into population thereby the Ministry of Health according to Villela and Natal
(2009), where’s allowed to see the interrelationship between the media and health media which
enables the scope of the interdisciplinary context about an epidemic process. We will take this
process as an example within the São Paulo state, more particularly in the region of Ribeirão
Preto.

From 1986 on, successive outbreaks of dengue began to occur in the most of the Brazilian states
(SILVA; Angerami, 2008). In the state of São Paulo, the first registered cases of dengue occurred
in 1986, all imported (PONTES, 1992). The first dengue epidemic arrival in the city of Ribeirão
Preto, located itself in the north-eastern region, occurred at the end of November 1990 and
lasted until March 1991 (PONTES et al., 1991), with nearly 2305 registered cases, This
The epidemic process, in which there was only the circulation of the DEN-1, was considered of major magnitude, once scattered through Ribeirão Preto the sickness got to hit several cities in the São Paulo State countryside (PONTES et al., 1991). After this period, there were declines in the number of cases and the emergence of other dengue epidemic cases in Ribeirão Preto over the years, living in 2010 this was the largest epidemic process from the first record.

This picture, of course, attracted the attention of local and national media, but the coverage, in general, aimed more specifically to journalistic interests of public health. Moreover, the initiatives of the municipal health authorities, state and federal were not always coordinated. Task Forces were organized, with health workers and volunteers, in order to both visit residents’ homes as providing information in order to beat the vector mosquito. There were no information about the evaluation processes of these initiatives, or even a clear policy towards the permanent information flow and public education about diseases. Even by adopting control measures, cases continuous occurring in this city and elsewhere in the country until the present.

According to Laurell (1983), the epidemiologic triad disease (agent, host, and environment) analyzes only biological fact, it doesn’t show a holistic epidemic result, it means, it isn’t possible to overcome the fact that to achieve the unique social fact and explaining possibilities about non-exhausted diseases. Bertolli Junior (1993) states that a biological study that is complemented by the social sciences shows that the biologic phenomena vary in accordance with specific ecologic and social environments. From this perspective, both communication as education should no longer be considered one-way process, but a circulation processes of social intertwined meanings (Rangel-S, 2008). According to Araújo (2007), each individual has a dialoguing plan in the environment they live in, but the dominant model tends to erase some voices, calling them noise. In this context, the professional responsible for information, the mediator, makes use of their methodologies in order to not only enable but maximizing the health information flow. Each individual is an information transmitter which’s useful for the community, like this all the people should be instructed to develop into a receptor capable enough for extracting the message gist, both scientific as popular, and work as information multipliers within the communities.

Ahead the situation described, it is essential to study how the related dengue epidemic themes reach the population and how is the information circulation about it, describing how such cultural mediation can be established, provided that the professionals involved have correct information and not less important strategies to divulge the sickness. The focus of this study is to provide an example of how to enable the rescue of public opinion and popular knowledge, in an attempt to facilitate understanding of the epidemic process as social and political information in order to optimize health. It is due to this purpose the Theory of Social Representation became an important reference once it retrieves the social imaginary of the population on a given theme, enabling the construction of themes panel of speeches.

**Research Methodology and Assumptions**

Jodelet (2001) notes that this theory is comprised of several elements (beliefs and opinions, among others), which are organized in order to say something about reality. Given this theoretical framework, we can see the relevance of analyzing the information provided by people who are experienced about epidemic issues. The target population for this study, we chose when selecting select a group of people living in the region of study, but with specific characteristics of undergraduate students from the Information Sciences and Documentation, University of São Paulo (USP-FFCLRP). It was considered that, because they are college students supposed to have access and ability to decode this information, and they have certain cultural acknowledgement they confer legitimacy - in the sense used by Bourdieu (1989) – in order to disclose the information in their primary social networks. Another purpose was to understand beliefs, opinions and acknowledgement about the professional mediating into dengue’s potential future, and what their proposed as contribution to organize, retrieve and disseminate such health information.

The differential of this current work will be the use of the Collective Subject Discourse (CSD), which allows us to represent the thinking of a community through testimonies of individuals. The DSC is a method characterized by the organization and tabulation of qualitative data of verbal nature. This method is based on the theory of Social Representation and consists on selecting individual responses to a given question. The significant portions for these responses are the key expressions, it means, there are sections containing essential information to understanding the message of that answer, it literally transcribed. The synthesis of this present discursive content (in a key-expression is nominated central idea), which summarizes in few words the message extracted from that analysis selected key-phrase. Through key expressions and central ideas, we do form synthetic discourses, which are the CSDs, in which the ideas of a group appears as if it were an individual speech, and after this step, which are summed to central similar ideas and the work is also presented numerically, it means, it can also be studied in quantitative terms (LEFÈVRE; LEFÈVRE; TEIXEIRA, 2000). Interpretive comments are made about collective thinking...
Qualiquantisoft software was used, which, according to Lefèvre and Lefèvre, enables the implementation of research that and adopts the DSC as a method, increasing the scope and validity of results. It was formulated a questionnaire with open questions so that respondents offer their own answers, without limiting them to give desired responses for the researcher. As for the content of the questions, it is observed that there are questions about attitudes, beliefs, behaviours, issues and questions about action patterns, according to the classifications proposed by Gil (2009).

The questions were formulated in the clearest manner possible and practical, taking into account the importance of not suggesting answers within the question in itself. On the order of questions, we adopted the “funnel technique” (Gil, 2009). This technique proposes that each question must be related both to the history as for the present, more specificity than before. For the questionnaire, questions were raised orally by the researcher, designating itself as applied questionnaire with interview. Such denomination was formulated by Gil (2009), and allows people to clarify doubts at the time of filling. In the period distributing questionnaire, three classes of the course were in activity, making up a total of 113 students, from which 113 questionnaires were surrendered, while 97 have been returned answered (approximately 85.8% of total). The questions of the questionnaire were:

1. Do you consider dengue a serious illness? Why?
2. How is the disease cycle? Name the living beings which are part of the cycle
3. Even with campaigns, posters, notices, people generally do not change their behaviour. In your opinion, why is does it happens?
4. So what do you think that should be for that really occurs a dengue control permanently in your city?

Outcomes

Through the redemption of the social representations about dengue, it is possible to identify the knowledge built by individuals in social interactions. These interactions provides the foundation for actions and behaviours of the subjects (VALENTINE, 2005), opening like the possibility for modifying health professionals' decisions. That is, it is possible to identify the habits and attitudes of the community about the disease which allows us to redirect strategies in order to control it. Thus, we obtained data which allows you to map the context of social representations for this portion of university residents from Ribeirao Preto on what refers to the dengue. These data can be useful to re-evaluate the current information policy about diseases prevention, and providing analysis about the mediating information role.

For each question asked, there were extracted key phrases and ideas from the central responses, allowing multiplying of a range of formulated, thereby the discursive unions' content which are discursive for similar meaning in every category. According to Bosi and Market (2004), in order to have a connection of concrete situations and practices, it is necessary to seek some explanatory perspectives which looks on pointing out singular manifestations to logical or social structures. Preliminary analysis allows us to abstract the systematic and scientific qualitative research which should be related to the real investigating world.

The naturalness and vivacity of the collective thinking contrasts with the presentation of results in quantitative research. The DSC approaches the real life to the studied life, by connecting them (LEFÈVRE; LEFÈVRE, 2003), and it is such approach that will achieve the true understanding of the dengue continuity in the city and why not achieving effective control for this disease. The analysis of the obtained data allowed us mapping information related to the general surveying scope. It was noted that from the 97 participants, 89 answered to all the questions.

In a first contact, it is clear that from the 89 respondents, 61 of them have pointed in the 01 question the death as the cause of gravity (approximately 68.54% of group), thus confirming the lack of generality or specificity of information that it have, it means, the information disclosed has a superficial and immediate character (Table 1). It is in this context corroborate Araújo (2007), which states that the presence of too much information isn’t a guarantee of health, as people receive different information about dengue fever, but not always able to appropriate the same for use in their daily lives.

Table 1: Number and proportion of responses to a question: “Do you consider dengue a serious illness? Why?” According to the shaped categories, Ribeirão Preto, 2010.
With regard to the 2nd question, it can be noted that there is a confusion in the definition attempt which living beings are part of the cycle of this disease, once two concerning categories are formed: one says that the etiological agent is a bacterium, and the other states that transmission vector is the fly. Furthermore, some students affirmed they do not know the disease cycle (Table 2).

It can be seen therefore that the media, when transmitting information about dengue in emergency campaigns is more concerned to warn that dengue kills, not being fully effective to clarify how the cycle works, which agent has the sickness and what is the transmission vector. This finding allows us to observe the need to go through the process by overcoming an understanding presented by Araújo (2007), since the mere transfer of knowledge and induction activities does not guarantee effective control of the dengue. It is needed of an overcoming about the poles transceiver paradigm as well as seeing each individual not only as a receiver, but also as a transmitter and mediator - a truly information interlocutor.

### Table 2: Number and proportion about question’s responses 2: "How is the disease cycle? Tell about which living beings is part of this cycle, “according to the formed categories, Ribeirão Preto, 2010.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Yes, it can take to death.</td>
<td>61</td>
<td>68.54</td>
</tr>
<tr>
<td>B-Yes, spread easily, being difficult to eradicate and can progress to a dengue hemorrhagic fever</td>
<td>09</td>
<td>10.11</td>
</tr>
<tr>
<td>C-No, because it can be avoided, careful and controlled</td>
<td>06</td>
<td>6.74</td>
</tr>
<tr>
<td>D-Yes, due to the rapid proliferation of the vectors</td>
<td>03</td>
<td>3.37</td>
</tr>
<tr>
<td>E-Yes, due to the awareness lack and population’s negligence</td>
<td>03</td>
<td>3.37</td>
</tr>
<tr>
<td>F-Yes, once it’s a public problem</td>
<td>02</td>
<td>2.25</td>
</tr>
<tr>
<td>G-Yes, once it can be misunderstood with another sickness</td>
<td>02</td>
<td>2.25</td>
</tr>
<tr>
<td>H-Yes, once there’s the media which beef up important information, besides the campaigns done</td>
<td>02</td>
<td>2.25</td>
</tr>
<tr>
<td>I-Yes, once it is caused by a virus</td>
<td>01</td>
<td>1.12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data obtained from questionnaires used in research.

As the question 3 presents the social imaginary of the group related to the behaviour unchanging why on society campaigns, posters and notices (Table 3). Most of the group (47.19%) believes that people do not change their behaviour in relation to dengue due to lack of commitment and citizenship, indifference and complacency. Another considerable portion (30.34%) suggests that people believe that dengue will never happen to them.

A minor response, E (3.37%) deserves attention: the information in itself, already known, brings no change in behaviour. And it is this observation which allows us to bring out the difference between information and communication. The information is characterized by epidemiological and statistical processes, while the communication addresses the procedures by which information can be treated to circulate as well as be transformed, in fact, it reflects on a popular wise. Araújo and Cardoso (2007) draw attention to one basic issue: the meaning of the word appropriate, make something of their own. While the population has no means to make information about dengue in something proper, the effective control of the disease remains distant.

According to Mattelart (1999), the communication involves a multiplicity of meanings and is responsible for integrating the companies. Araújo and Cardoso (2007) bring to discussion the fact
that besides the multiplicity of meanings, there is a multiplicity of voices, polyphony, and Bakhtian concept. The same authors emphasize that social participation needs to be broadened, and presented as a problem, not only as a possibility for suiting sufficient access into the produced information, but also the possibility to express themselves, the latter problem is easily perceived as a weak point on the formulated E section, shown in the following table.

**Table 3:** Number and proportion of responses to Question 3: “Even with campaigns, posters, notices, people generally do not change their behavior. In your opinion, why is that?”, Formed the second category, Ribeirão Preto, 2010.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Due to the commitment, citizenship, indifference and lack of complacency</td>
<td>42</td>
<td>47.19</td>
</tr>
<tr>
<td>B - Because they do believe it will never happen to them</td>
<td>27</td>
<td>30.34</td>
</tr>
<tr>
<td>C - Because they are unaware about the sickness’ gravity</td>
<td>08</td>
<td>8.99</td>
</tr>
<tr>
<td>D - Cultural issues, they do believe that small behavior attitudes will produce any efficient outcome</td>
<td>07</td>
<td>7.87</td>
</tr>
<tr>
<td>E - The information in itself already known, it brings about change of behavior</td>
<td>03</td>
<td>3.37</td>
</tr>
<tr>
<td>F - They fault authorities, and do not collaborate</td>
<td>02</td>
<td>2.25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

**Fonte:** Data obtained from questionnaires used in research.

In order to improve the understanding into thoughts and proposals for the group actions which studied for the effective dengue control, we elaborated the fourth question. According to analysis of Table 4 it is clear that most of the group (39.33%) believes that it is essential to keep the population informed about a better conscience and mobilizing of the same. However, it is known that the information dissemination already occurs about the disease. The question is: Is spreading an enough action? There is concurrently correct mediate about this information? The information provided is of poor quality and can reach diverse audiences? It is clear; therefore, the need to review the measures can be taken by only checking the effectiveness of them.

Other categories which deserve attention are made D (It has to be done) and H (Do not know what to do), because at the same time a portion of the population criticizes both the governing action forms as the behaviour of their neighbours, she says she does not know what to do for having an effective control (4.49%) or there’s nothing that could be done (7.87%), being the last affirmation the most serious claimed, once people have appropriated themselves from the idea that dengue is a disease without solution, by ignoring information about the disease and circulating in their midst. Once there's the existence of a group which doesn't know what to do, it's clear the information dissemination alone, even in an unidirectional sense, does not have the necessary effect – it is need effectiveness into the communication as well as having people expressing themselves and acting as interlocutors.

**Table 4:** Number and proportion responses into question 4: “So what do you think that should be done in order to occur the dengue control once and for everybody in your city,” according to formed categories, Ribeirão Preto, 2010.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - informing the public to have their awareness increased and mobilizing the same</td>
<td>35</td>
<td>39.33</td>
</tr>
<tr>
<td>B - Intense supervision, punishment, fines and severe penalties</td>
<td>19</td>
<td>21.85</td>
</tr>
<tr>
<td>C - Campaigns and educational lectures, informative, enlightening, and not just emergency campaigns</td>
<td>07</td>
<td>7.87</td>
</tr>
<tr>
<td>D - There is nothing to be done</td>
<td>07</td>
<td>7.87</td>
</tr>
<tr>
<td>E - Higher combat into the breeding and prophylaxis dissemination</td>
<td>06</td>
<td>6.74</td>
</tr>
<tr>
<td>F - Government, municipal, state and federal actions</td>
<td>06</td>
<td>6.74</td>
</tr>
<tr>
<td>G - Media’s usage and other media, such as a link between the population and information</td>
<td>05</td>
<td>5.62</td>
</tr>
<tr>
<td>H - Don’t know</td>
<td>04</td>
<td>4.49</td>
</tr>
<tr>
<td>TOTAL</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Data obtained from questionnaires used in research.
Thus, it was noted, among other things, the need to provide adequate conditions for the students who made up the survey acknowledgement about its important role in related to public health and, more specifically, before the outbreak of dengue in Ribeirão Preto. It is therefore, essential that these students, who are probably trendsetters in their homes and neighbourhoods, the interlocutors have received enough training in order to perform satisfactorily this function of information mediators. When we say that it is necessary to receive sufficient information, we start from the enlargement reflexivity perspective in this context, by teaching students on how to use existing health data in an appropriate way to enhance their actions on social reality. It would be interesting then to train these undergraduate students to work actively having the intuit of promoting health issues through the media, so that would bring a technical language approaches, the popular language and allow a greater ownership about the content for people in the everyday life. Only then people will be able to question the day-to-day habits when faced with information from which they are able to extract from such significances. The individual lifestyle changes, can have a multiplier effect, as well as leading with a broader interaction (and here, the social networks plays a strategic role), of generating collective changes in the process.

Final Words

It can be noted a huge interest from the public, in specific scientific research. People want to know what does science states about their daily lives, and how could it help them to take better care from their health, children, work, relationships and love. This is particularly truth health case.

As observed by Marteleto (2009),

The official production knowledge health and other subjects are extensive and varied, as well as the organized information in large and sophisticated info-systems for the population health. This knowledge and information, however, are guided by the Universalist logic and positivist scientific knowledge, its break with the common knowledge sense, the omnipotent nature of science and his belief on resolving social issues, without a sense of great distance between scientific produced knowledge and social action.

A special attention must be reserved for the new media’s communication employment as well as the information in a social networking of knowledge and changes about the configuration of knowledge and research practices as well as their groups from such use. Methodologies such as social network analysis in studies of flow and transfer information, for example, can be useful for the mechanisms in the skills' potential of those who involved their access to information and acknowledgement into construction. Social networks encompass both the links between the researchers as the links between other actors and social organizations, in addition to the vehicles and communication disseminating knowledge means produces. The methodology of social network analysis points about the centrality of mediation in contemporary society, and can bring valuable insights to rethink the political role of mediators in contemporary social and cultural processes. So you can see these network effects beyond their own space, in interactions with the wider society, the State or other significant institutions, “micro decisions are influenced by macro, and the network as its intermediary” (MARTELETO, 2001).

In the nowadays society, social organization began to relate strongly with the content of the media. For Thompson (1998), returning to Giddens, there is dialectic between processes of reflexivity and monitoring, and the media having an impact both on nature as in the relations between these processes. The modalities of interaction are related to the various social contexts. Its successful accomplishment relies on the recipients’ ability to "negotiate" effectively with the various spatial and temporal structures that arise. To steer, the receivers will seek “symbolic cues” that allow them to understand the messages and connect them to the contexts of their daily lives. In the specific case of public health, there is no difference: it is to understand how this process and information arrives to individuals and communities, how this information flows, how they are interpreted and appropriated. This understanding is a key aspect in the strategy construction in order to both prevent as beating diseases such as, for example, the dengue.

The purpose of a classic study for users is to collect data to create and / or evaluate products and information services which allow a better understanding about the information transfer flow ___ it generally supports a still conductive concept into the communication process. However, this work goes beyond the question about information transfer flow, it is a study of users who have adopted the social paradigm for its realization, which proposes studying the social integration of human knowledge, it means, taking into account the established interactions between knowledge production and social activities, thus allowing us to know more deeply the problem of the intellectual processes into the collective (Shera, 1977 apud Araújo, 2010) in an attempt to ensure that the knowledge production is useful in social reality. It notices, like this, that the potential theoretical contributions of social representations, is: the dissemination of knowledge elaborated
in health which is essential for the population education in order to prevent diseases.

The next research step would be to refine the analysis based on a rather qualitative approach, by selecting a sample within the students’ universe who answered to the survey. This sample was subjected to in-depth interviews, seeking information for a better understanding in the construction, circulation and appropriation of information in specific contexts. The goal would be to rebuild some of the points (places) that make up social networks of individuals, universities, neighbourhood, family, work, church, leisure, etc... These are places that contextualize the reception and appropriation of information by means of cultural mediations contained therein (for further discussion, see Martin-Barbero (1997)). Get yourself would thus elements for a more refined and detailed process, particularly the dynamics of movement of specific information on these social networks. On the other hand, the preliminary analysis of the data shown above already indicates that even college students receive sufficient and satisfactory information about dengue or find it difficult to take hold it, which hinders the exercise of the function of mediators of information and its potential contribute in some way with the policies of Public Health. This deserves some consideration.

Given that the social imaginary rescued by social representations obtained in this work, is seen in the clarifying importance of students about the difference between information and communication, information showing that the food is a social network, while communication is what determines the structural organization of the same. No more will adopt a bipolar model of communication that does not give rooms for the voices’ multiplicity, and that, ultimately, prevent the reflectivity of the subject. Opening would be here the possibility of a “reflectivity” extension(in the sense used by Giddens) where the subjects in question, better able to appropriate resources (in this case, information) and reconfigure their actions.

About the circulation and information ownership in public health, not only on dengue, there is an unquestionable need for openness so that society can express itself about it. It is important to discuss how the public sees the health information and what values are attributed by the same in order to assigns it through the analysis of a speech. Through the redemption of the social representations which opens up a rich opportunity to identify knowledge constructed by individuals in social interactions, which ultimately provides the basis for actions and individuals’ behaviours. In this context, the social representations can contribute to health, by providing a more contextualized focus on the universe of the population which will be covered by policies for health information.

Conflict of Interests

Authors have declared they have no conflict of interests.

Bibliographic References


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