The surveillance in health basic: perspectives to reach the surveillance in health*

LA VIGILANCIA EN LA ATENCIÓN BÁSICA A LA SALUD: PERSPECTIVAS PARA EL ALCANCE DE LA VIGILANCIA EN SALUD

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INTRODUCTION

A Public Health Surveillance proposal has been discussed and elaborated since the beginning of the 90’s, when the Sole Healthcare System (SUS) was created and implemented. The trigger was the need of expanding epidemiological surveillance actions so that they were also able to approach the population’s living conditions as a whole instead of just targeting on controlling etiological agents and the environment(1). Unarguably, the latter are extremely important to break the diseases’ transmission chain, but they were usually limited, target-specific, and rather ineffective because they failed to approach adverse health outcomes(2). Additionally, the need of setting a new order in healthcare services so that they could meet the population’s demands has stimulated a broad debate on Public Health Surveillance, so much so that many of them refer to subjacent interpretations of the very expression Public Health Surveillance. Moreover, in the literature the expression is polysemic: surveillance to health, surveillance in health, surveillance in public health and surveillance of health. Anyway, in practice all expressions have a common axe: they are structured within epidemiology and within health information.

Since the 90’s there has been a varied scientific production on Public Health Surveillance which has progressively broadened and redefined the object of Epidemiological Surveillance and has led to the shaping of a new model of healthcare anchored in the social conception of health-disease.

As a result of that variety of meanings and practices a study has been conducted, a part thereof presented herein, with workers of a Healthcare Coordination Unit in São Paulo in an attempt to understand the meanings of Public Health Surveillance.

REVIEW OF THE LITERATURE

The review of the literature related to the theme surveillance evidenced, in brief, three main notions of Public Health Surveillance guiding the practices, specify tools and means and proposing reflections on the potentialities of that model(3), which will be presented next.

The first approach to Public Health Surveillance refers to a proposal for integrating epidemiological surveillance and sanitary surveillance aiming at overcoming the current fragmentation of healthcare actions by means of local surveillance within the healthcare system (at municipal level, for instance)(4). More recently said proposal seems to have transcended the ambit of the epidemiological and sanitary surveillance and has been organized based on a coordinated integration among environmental surveillance, labor health and animal control with the final objective of contributing to preventing adverse health outcomes and promoting health. That proposal has resulted in the creation of the Public Health Surveillance Coordination Unit(5-6) in the city of São Paulo.

The second approach shows an increase in the epidemiological surveillance’s object once it is not limited to the diseases that have to be reported; instead, it proposes an analysis of the health situation of groups of population by taking into account their living conditions(7).

The third approach refers more exactly to what is conventionally called Public Health Surveillance. Here, Public Health Surveillance is proposed as an instrument to transform health and disease’s determinants holding as reference the concept of territory, intervention in problems, cross-sectional approach, participation of the population and health promotion. Public Health Surveillance operates through geographic information systems based on site-specific health problems and targeting on planning healthcare locally(8). This process is based on the following pillars: territory, population’s participation and cross-sectional actions and it incorporates the concept of providing healthcare. Thus, Public Health Surveillance has been structured in an assistance model able to overcome the dichotomy between collective and individual practices whose object are the ways of living of different social groups and the various expressions of the health-disease process. The main marks of this model are: intervening in health problems in the several phases of the health-disease process; emphasizing problems demanding attention and doing continuous follow-up; operating the risk concept; articulating promotional, preventive and curing actions; cross-sector performance and actions in the territory(9).

Anyway, even if sometimes not explicitly, the three approaches allow us to evidence some potentialities of Public Health Surveillance contained in these approaches:

Monitoring living and health conditions

I.e., building a surveillance system of transmissible and non-transmissible diseases and adverse health outcomes; producing and divulging epidemiological information on those events, as much as ways of prevention related to the health-promotion network. To do that an articulation with the assistance provided(10) is required, and information is thought only to be able to contribute to shape the assistance models if it is broadly disseminated among healthcare providers and shared with the population(11).

Reorientation of healthcare services to overcome unequal coverage, access and quality

It includes the need of transcending bureaucratic actions to solve healthcare problems through the participation of the population, government, civil and scientific or-
ganization. Thus, building Surveillance Networks(12) can be useful to support joint actions of epidemic knowledge, detection and prevention under a perspective able to shelter in full the idea of an environment for social and collective systems. With the participation of the community Surveillance Networks can provide social control and enable identifying critical nodes preventing communication flows between public institutions and the civil society. Under this perspective the potential to mobilize several actors at different stances should be highlighted, which can allow more efficacy and transparency to epidemiological programs of the SUS. In order to do that it is essential to render information broadly and to use healthcare educational tools in social micro-environments.

Social control of healthcare information

The possibility of Public Health Surveillance become an organized social response is one of the main aspects of this proposal and it is based on the knowledge of health-disease’s determinants in social groups, of unequal distribution of adverse health outcomes and of the work with priority groups. To do that actions oriented towards social inclusion are required, as much as strengthening community actions and cross-sector actions in order to promote health(12). This potentiality can be formalized through the participation in social control activities related to policies and actions at economical, social, political and cultural level oriented towards promoting health(14).

Once approaches and proposals to make Public Health Surveillance viable have been stated, it is necessary to say that few studies on the practices of Public Health Surveillance in the healthcare system were found in the bibliographical review. The review was made from 1990 to 2005, in the Lilacs database with the following descriptors: population surveillance and epidemiological surveillance. This process of analysis deserves highlight the proposal of Public Health Surveillance as an assistance model(9) able to bring a new order for the working processes. The authors’ target is the ways of living of different population groups that determine the expression of different health-disease processes. As an instrument or a working tool they propose using managerial methods to make Public Health Surveillance feasible. It is worth stressing that this proposal includes other subjects in the work, such as service managers, technicians and representatives of the population, which makes it different from the traditional epidemiological and sanitary practices which, generally speaking, just include healthcare providers.

This study was proposed considering the Public Health Surveillance’s potentialities to contribute to a redefinition of the healthcare practices. Part of the results are presented here and the study’s objective was to analyze how surveillance practices are structured at primary healthcare units in a certain healthcare region in the city of São Paulo by studying the conceptions of healthcare providers of Public Health Surveillance and relating said conceptions and practices to the theoretical-conceptual approach to Public Health Surveillance.

METHOD

This is an exploratory-descriptive qualitative study based on the theoretical reference of Public Health Surveillance.

The healthcare units from where the professionals were interviewed were: Epidemiological Surveillance Supervision Unit and 6 Primary Healthcare Units (UBS) of the Center-Western Coordination Unit of the Health Department of the City of São Paulo.

Considering all the primary healthcare units in the region(14) a sample was composed by taking into account the modality of healthcare provided at that unit: Family’s Healthcare Program and Private Medical-Assistance Model in four administrative regions composing the healthcare region of Butantã: Butantã, Raposo Tavares, Rio Pequeno and Vila Sonia. The objective was to obtain information on each healthcare region according to the assistance modality at each primary healthcare unit. Additionally, the Healthcare Surveillance Unit of Butantã was included. Moreover, considering the option for the qualitative methodology, the saturation/repetition principle of representations when subjects were interviewed was used(16).

Therefore, 14 healthcare providers were interviewed: 7 managers, 6 out of which were in charge of the Primary Healthcare Units and one managed the Technical Epidemiological Surveillance Supervision Unit. The other 7 healthcare providers were in charge of epidemiological surveillance in the same Primary Healthcare Units and had been appointed by their managers to join the interviews.

The interviews were conducted from February to April 2006, ethical concerns being respected through a free and informed consent form and the submission of the project to the Committee of Ethics of the Health Department of the City of São Paulo (04$05/2005).

Data were analyzed according to the speech analysis technique supported by the Greimas’ Generating Theory that allows inferring the theme phrases and building analytical categories(17). The speeches were decomposed as from their narrative structure, more concrete, in search for their deeper structure, which translates the essence of the subject’s speech. Depth and literality of the individual’ speeches were privileged and that operation was made though several readings looking for their underlying themes.

RESULTS

Results are presented according to the analytical categories: meanings of surveillance and meaning of the work done in this area.
a) Surveillance conceptions and actions

Firstly it is worth stressing that when the professionals referred to the word surveillance, epidemiological surveillance was mostly meant. The question about the meaning of surveillance brought about impressions often referring to coercive actions related to control and survey: (...) policing, preventing, taking care of, to pay attention, to care for, to be able to close new cases.

In the analysis of the speeches three groups of meaning of surveillance emerged: those that come close to the classic epidemiological surveillance; other that integrates meanings denoting an amplified connotation related to the one previously mentioned, which will be called extended surveillance; and the other that would come close to the concept of Public Health Surveillance in8,9).

Public Health Surveillance mostly translated into the Classical Epidemiological Surveillance

The analysis of the speeches shows this notion when healthcare providers point out that their practice in full surveillance includes: receiving notices about diseases that have to be reported, visiting homes, setting therapeutic and sanitary actions in addition to others referring to improving health, but always within the ambit of multi-factors/multi-causes. The word surveillance shows actions that start at a Primary Healthcare Unit (UBS) with assistance being rendered to users who have diseases that have to be reported. Under this perspective, its focus is containing the dissemination of those diseases.

A broader perspective of Public Health Surveillance

This conception includes the meaning referring to controlling diseases and vulnerability situations through actions composing the care to be rendered (more extensive and deeper than assistance) and interventions based on preventing diseases. Moreover, surveillance actions are focused on surveillance of adverse health outcomes in addition to the diseases that have to be reported and include information on adverse health outcomes and educational practices able to broaden surveillance beyond an effect/result of diseases and other adverse health outcomes. It also encompasses actions related to the segments of users, including community joint efforts to collect garbage and educational actions in healthcare (on STD, new vaccines added to the official schedule, among others).

Thus, based on the contents of the themes it was observed that Extended Surveillance includes other dimensions beyond the traditional object of surveillance and transmissible diseases, including chronic-degenerative diseases and other adverse health outcomes. It also encompasses actions related to the segments of users, including the infrastructure required, such as information automation and debates on the cases. It also encompasses educational actions outside the unit. Therefore, the notion of Surveillance is based on the integration of subjects in teamwork. It is not understood as traditional Epidemiological Surveillance, which is usually seen as an isolated area in the healthcare area, but as a possibility of integrating actions able to broaden surveillance beyond an effect/result approach and oriented towards the continuity of the actions and monitoring users’ health situation whose search for the healthcare services.

Public Health Surveillance as a project and as a practice

When managers and healthcare providers refer to Public Health Surveillance one can see that they include actions part of epidemiological and sanitary surveillance’s practices, thus extending them to actions with a collective nature. Data on health support healthcare planning, sheltering and building alternatives to improve the status of healthcare with users’ participation. Moreover, there is a need of a social support network and inter-sector actions where health indicators would be able to support the monitoring of users’ health/disease and to set goals.
Another aspect to be highlighted is a more evident association between the health-disease process and the social process as an anchoring dimension determining said process, as much as the need of knowing the territory and identifying the main problems there to promote health, to prevent diseases/adverse health outcomes and to plan healthcare actions. The essence of the analysis is the population’s way of living and quality of life, which demand inter-section actions. Moreover, Public Health Surveillance is formalized through work projects integrating the workers working as teams and based on information evidencing the region’s risks and problems.

Therefore, overcoming the classical Surveillance model seems to be happening, despite incipiently. The experiences guiding said overcoming, even if partial, have started to lead to a transformation in the healthcare work in some Primary Healthcare Units based on the addition of new working tools, of an articulation among different workers to monitor specific health-related situations and to take actions outside those institutions.

The distinction between Extended Surveillance and Public Health Surveillance is marked by the latter’s capacity to guide the organization of the service based on the following pillars: knowledge of the living conditions and health status of the population residing in the territory linked to an UBS, including cultural, political, educational characteristics and their access to healthcare services; the correlation between individual and collective needs by understanding them as a dialectic unit; the participation of the population in detecting healthcare problems and needs and planning intervention strategies, including preventing diseases and promoting health; inter-sector actions and teamwork.

b) Conceptions of work organization

Working means and tools used in Surveillance actions are composed of: technical norms and reports, epidemiological bulletins, altered exam results, assistance programs, house calls, health information system, such as the SIAB, team meetings, in addition to the tools part of the planning, management and actions to operate the traditional Epidemiological Surveillance.

It has been said here that there are many work agents, but nurses are those who basically take the lead in surveillance actions (in house calls and acting to control the focus in case of infectious diseases, for instance), who manage administrative and bureaucratic actions, in addition to supervising the work and qualifying community health agents and nursing auxiliaries.

Nursing auxiliaries usually carry out actions outside the UBS: at home and at the social equipment in the area (daycare centers, schools). Community health agents, however, seemed to have a more intense performance in the field of educational actions and in articulating information between the healthcare team and users of the healthcare services.

Physicians’ participation in surveillance is limited to examining patients individually. On the other hand, at the sites where Extended Surveillance is practiced, physicians do participate in actions resulting from individual assistance when they monitor no-shows in appointments and altered results from exams.

The more healthcare providers know and differentiate concepts and theoretical and operational concepts, the more they do what in this article is called Extended Surveillance. Moreover, the Unit manager’s leadership and active participation in the Surveillance actions contribute to improve the unit’s organization and to stimulate the involvement of different subjects in the work. I.e., the important participation of managers can be highlighted as to qualified labor in Surveillance and possibly that happens because they have a broader view of the service as a whole.

On the other hand, it was verified that qualification for the Surveillance work among healthcare providers is not enough to ease the understanding of the objective of the work and to propose and perform it in ways oriented towards modifying the health-disease situation, as the Public Health Surveillance proposes.

Although teamwork was actually found in some Primary Healthcare Units, in most of them it happens in parcels, which impacts on the outcomes: focused actions limited to events and tending to alienate healthcare providers from the final outcomes of their work.

As to articulation between theoretical and basic practices in Public Health Surveillance, in half of the healthcare units healthcare providers theoretically understand Public Health Surveillance, but in their work their actions are limited to the traditional Epidemiological Surveillance. It should be highlighted that there are professionals with a broader conception of Surveillance work in the UBSs that have the strategy of the Family’s Healthcare Program or perform according to the Healthcare Programmatic Action Model. The most significant distance between the theoretical conception and the practices seemed to take place in the UBSs whose model is the traditional one or the Private Medical Assistance Mode.

DISCUSSION

Out of the number of outcomes found in the study, a reflection on some matters essential to make Public Health Surveillance feasible will be privileged in the model proposed. One of them refers to healthcare fragmentation, evidenced both in the separation between work conception and practice and in isolated actions taken by healthcare providers. In their fragmented work, each healthcare provider works under a traditionally hegemonic medical order. As a result, each segment is carried out autonomously and independently and actions in healthcare overlap each other in an alienated way. This is one of the fundamental aspects to be rethought in the practices oriented to...
wards Public Health Surveillance once the Public Health Surveillance is proposed as an assistance model able to bring a new order to the working processes whose object refers to the ways of living of different groups of population where there are different health-disease manifestations\(^ {19} \). Therefore, placing the analysis of the populations’ health situations under the Primary Healthcare Units’ responsibility and implementing interventions oriented towards decreasing vulnerabilities and risks should be a continuous action performed by the healthcare team, despite safeguarding the knowledge and ways of working specific to each healthcare provider.

Healthcare providers stressed some pillars composing the organization of their work. Those come closer to the conception of Public Health Surveillance\(^ {16-20} \) once they include the interpretation of certain health-disease processes based on Critical Epidemiology\(^ {20} \) and articulate it in a new operational system integrating social actions organized by different health workers, risk and adverse health outcome preventive actions, as much as others focused on recovering and rehabilitating the sick.

Public Health Surveillance should operate based on geographical information systems considering the particular location of the problems and subsidize healthcare planning at local level\(^ {26} \). For those purposes the territory is a key element once it is a space full of life, relations, tensions, interests, needs and shortages. Restating the interviewees’ speeches related to healthcare information, it would be necessary to gather demographic, socioeconomic, political-cultural, epidemiological and sanitary data, among others. With those it would be possible to identify and analyze problems, to draw epidemiological profiles and identify healthcare needs in order to define priorities of monitoring and interventions based on an inter-sector approach, integrality and equity\(^ {23} \). However, information can only actually contribute to shaping assistance models targeted on overcoming health problems if it is broadly disseminated among healthcare providers and shared with the population\(^ {21} \).

The SIAB can be deemed a tool to compose a diagnosis of the micro-areas under the responsibility of the family’s health teams once it includes determinants of the health-disease process, which can contribute to the planning and evaluation of healthcare actions\(^ {24} \).

Another important aspect related to making the Public Health Surveillance as a reality and which was pointed out by the interviewees refers to the population’s participation. The difficulty in mobilizing users to survey, monitor and improve their health situation was also related to lack of information by the population about their rights and related to the SUS specificities, including healthcare practices and responsibilities in the ambit of surveillance. Some managers advocated that the civil society should demand governmental actions to solve problems and the community should mobilize itself to implement proper living conditions, health and education.

Overcoming the dichotomy between individual and collective actions requires incorporating new subjects, such as an organized population and new technologies, such as social communication, to stimulate the mobilization and organization of different groups to promote and advocate better living conditions and healthcare in order to transcend the institutionalized spaces of healthcare and involve actions of governmental and non-governmental agencies\(^ {25} \).

On the other hand, professional qualification was identified by interviewees as one of the main barriers to the implementation of the Public Health Surveillance and to the enhancement of traditional actions of Epidemiological Surveillance. It is understood that this is a critical topic to transform healthcare practices, mainly as to Public Health Surveillance, a field of practices that compose a new way of thinking and acting in healthcare and extends the responsibilities of healthcare service beyond controlling damages and risks and take into account the health-disease process\(^ {16-22} \).

**FINAL CONSIDERATIONS**

The attempt to overcome traditional surveillance practices are pointed out in a proposal that includes disease, adverse health outcomes and health conditions monitoring, as much as understanding the situation in the territory under the healthcare units’ responsibility. For those purposes teamwork is required, and so is inserting new work tools and an inter-sector approach. Under this perspective, elements brought by the strategy of the Health Family and the dialog between universities and the healthcare area through learning-working processes deserve to be highlighted.

Setting up a Public Health Surveillance involves the practice of Epidemiological Surveillance supported and valued by the healthcare area and associated to health information serving as a bridge linking the clinical and epidemiological views permeating the healthcare area.

It is worth highlighting that the reflection on the working process in surveillance comes from the reality investigated and, therefore, it is related to the practices established in the region of the study. However, we should stress that the potential to re-ordinate healthcare in ways able to meet the healthcare needs of the population is located in the concrete reality of healthcare units and their political articulation with the different levels of the healthcare system. It is at local level that alternative models, Public Health Surveillance among them, can propagate to regional and municipal levels. To enable that it is essential an active and joint performance by all professionals in the healthcare area, professionals and users alike, to create new practices, thus making a movement able to transform the reality.
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