THE WORK PROCESS OF NURSES IN HOSPITAL EPIDEMIOLOGY CENTERS*

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ABSTRACT: This exploratory and qualitative study aimed to characterize the work process of nurses from Hospital Epidemiology Centers in relation to the agents, aim, means and instruments, object and products. The data were collected between March and May 2012, through open interviews held with nine nurses from five Hospital Epidemiology Centers in the city of Curitiba, Paraná, in accordance with Resolution 196/96. The study made it possible to identify the constituent elements of the work of the nurse in Hospital Epidemiological Surveillance and evidenced practices which are still incipient in some institutions. It emerged that the professional practice, in the centers referred to, must break from the task-centered model of work, in favor of a model which is articulated with specialist services and which contributes to the construction of Public Policies aligned with the population's health needs.
DESCRIPTORS: Nursing; Collective health; Epidemiological surveillance.

O PROCESSO DE TRABALHO DE ENFERMEIROS EM NÚCLEOS HOSPITALARES DE EPIDEMIOLOGIA

RESUMO: Estudo exploratório e qualitativo, com o objetivo de caracterizar o processo de trabalho de enfermeiros de Núcleos Hospitalares de Epidemiologia quanto aos agentes, finalidade, meios e instrumentos, objeto e produtos. Os dados foram coletados, entre março e maio de 2012, por meio de entrevista aberta com nove enfermeiros de cinco Núcleos Hospitalares de Epidemiologia existentes em Curitiba-PR, em conformidade com a Resolução 196/96. O estudo permitiu identificar os elementos constituintes do trabalho do enfermeiro em Vigilância Epidemiológica Hospitalar e evidenciou práticas ainda incipientes em algumas instituições. Depreendeu-se que a prática profissional, nos referidos núcleos, deve romper com o modelo de atuação centrado em tarefas, para um modelo articulado com serviços de referência e que contribua com a construção de Políticas Públicas alinhadas às necessidades em saúde da população.
DESCRITORES: Enfermagem; Saúde coletiva; Vigilância epidemiológica.

EL PROCESO DE TRABAJO DE ENFERMEROS EN NÚCLEOS HOSPITALARES DE EPIDEMIOLOGÍA

RESUMEN: Estudio exploratorio y cualitativo, cuyo objetivo fue caracterizar el proceso de trabajo de enfermeros de Núcleos Hospitalares de Epidemiología acerca de los agentes, finalidad, médios, instrumentos, objeto y productos. Los datos fueron obtenidos entre marzo y mayo de 2012, por medio de entrevista abierta con nueve enfermeros de cinco Núcleos Hospitalares de Epidemiología de Curitiba-PR, de acuerdo a la Resolución 196/96. El estudio posibilitó identificar los elementos que hacen parte del trabajo del enfermeiro en Vigilancia Epidemiológica Hospitalar y evidenció prácticas todavía incipientes en algunas instituciones. Se constató que la práctica profesional, en los referidos núcleos, debe romper el modelo de actuación centrado en tareas, para un modelo articulado con servicios de referencia y que contribuya con la construcción de Políticas Públicas referentes a las necesidades en salud de la población.
DESCRIPTORES: Enfermería; Salud colectiva; Vigilancia epidemiológica.

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INTRODUCTION

The National Epidemiological Surveillance Subsystem in the hospital ambit was instituted by the Ministry of Health through Ministerial Ordinance N. 2529/2004[1-2], based on the recognition of the articulative character – which promotes actions preventing harm to health and actions controlling it – which is represented by the hospital institutions. Currently, in Brazil, 190 hospitals make up the National Network of Specialist Hospitals, of which ten are in the state of Paraná (PR), of which five are located in the city of Curitiba[3]. The observations arising from the professional practice regarding the significant insertion of nurses in the Hospital Epidemiology Centers (NHE), the specific character of the different hospital scenarios and the heterogeneous character of the actions of the nurses working in Hospital Epidemiological Surveillance (VEH) motivated the undertaking of a Master's project in Professional Nursing Practice[4], which had as its study object the knowledges which supported the work processes of the nurses in the NHE in Curitiba (PR), this article being part of the above-mentioned project.

Hospital Epidemiological Surveillance is a fruitful area of work, generating challenges and numerous possibilities for investigation. The state-of-the-art in the area is concentrated in investigations of outbreaks and the proposing of conducts for controlling specific health risks in Primary Care, but is restricted in the indicating of theoretical-methodological frameworks regarding the work process of the nurse[5]. In this regard, this study's objective was to characterize the work process of NHE nurses regarding the agents, aim, means and instruments, object and products.

METHOD

The study had a qualitative approach, and an exploratory character, and the data collection was undertaken in the period March – May 2012 through open interviews, which were recorded, with all the nurses who worked in the five hospital epidemiology centers existing in the city of Curitiba (PR); a total of nine professionals was involved. After reading and signing the terms of consent, the subjects were requested to describe a typical workweek and (or) report unusual situations experienced, in which they had used Epidemiology as the theoretical basis for dealing with routine work. In order to guarantee anonymity, the data collected through the interviews was not identified but was coded randomly using the letter E followed by an ordinal number between 1 and 9 (E1 to E9), regardless of the institution linked.

The initial grouping of the accounts was by institution, in order to facilitate the transcription and understanding of the contexts in which they were given. Next, after exhaustive reading, thematic phrases present in each one of the discourses were identified, based on which two empirical categories were constructed with classificatory intention[6]: Instrumental Knowledges and Ideological Knowledges[4]. The aim was to cover similar concepts and open a path for Discourse Analysis[7], making it possible to characterize the agents, aim, means and instruments, object and products inherent to the work process of nurses of the NHE.

The project was approved by the Ethics Committee of the Health Sciences Department of the Federal University of Paraná (UFPR) under N. 0110.0.091.091-11. The directives of Resolution 196/96 were respected.

RESULTS

The analysis of the discourses evidenced the constitutive elements of the work process of nurses in the VEH. The importance attributed by the interviewees to the organization of this process in the VEH was well-known, given that in all the discourses it was possible to observe aspects related to the concern with implementing and organizing routines, seeking institutional visibility, and undertaking actions articulated with diagnostic confirmation. The discourses ratified the significant volume of the nurses' daily activities, which were fragmented and made up of various and repetitive stages.

Regarding the Agents – it was observed that, of the nine nurses interviewed, four worked in three hospitals which provided services exclusively to the Unified Health System (SUS), and five were distributed in a further two hospitals which, in addition to the SUS, attended patients with

private health plans. Among the nine nurses, five were aged between 20 and 30 years old and had worked in the area of VEH for periods which varied from less than one year to three years. Among the others, four mentioned an age over 30 years old and employment in hospital epidemiology centers for more than three years.

In relation to specific training to work in the NHE, only two professionals mentioned training in Epidemiological Surveillance, in the form of courses and workshops promoted by the municipal, state and federal government spheres. Among the others, there was mention of preparation for the roles, through the experience of colleagues from the institution; experience in care provision in hematology as highly important for good performance in the Hospital Cancer Registry, one of the activities of the NHE; participation in meetings in the Municipal and State Health Departments, and the undertaking of curricular placement/elaboration of a monograph in the area.

Two nurses emphasized the extent to which appropriate technical preparation is necessary for the NHE actions, in particular, in the surveillance of unusual situations requiring immediate actions, in the routine of hospital epidemiological surveillance.

Regarding the relationship between the Infection Control Service (SCIH) and the NEH it was observed that, in three institutions, the two services shared the same space and diverged as much in the acronyms and how the Service was known, as in the degree of intermeshing for the undertaking of the Hospital Infection Control actions and Surveillance actions of notifiable diseases.

Regarding the Aims, the nurses' discourses evidenced the character of surveillance, health promotion, prevention and control of health problems and notifiable diseases in the hospital ambit.

Among the Means and Instruments which constitute the work process in VEH, the discourses denoted the importance of the legislative and regulatory arsenal, as well as the role of the different notification forms and of forms for undertaking the active search for notifiable diseases by the NEH.

Within the set of actions undertaken in the hospital ambit – Object of the Work Process of the nurses in VEH – emphasis was placed on the active search for diseases and health issues. Of the nine nurses, apart from one, who worked for the Hospital Cancer Registry, all mentioned committing themselves to the daily search for notifiable diseases among patients attended in the Emergency Room and inpatient treatment areas.

Furthermore, seven discourses mentioned the filling out of the notification forms; the identification of laboratory samples already collected, and guidance regarding collections to be taken, for later sending to the state's Central Public Health Laboratory (Lacen) and the registering of the samples, when the laboratory did not take responsibility for this. In general, these examinations' results supported the finishing of the notification forms by the nurses.

Four nurses associated the visibility of the Epidemiological Surveillance actions with obtaining spaces for discussing subjects of this nature, in the form of meetings with teams, services, departments and even with the management of each institution. However, in two discourses there was indication of greater emphasis on the discussion of Infection Control issues:

For new collaborators, we run an integration session and this class is very fast and very poor, aimed at various professional categories, [...] *I talk about the composition of the team, Epidemiology, CCIH* [skills for controlling hospital infections] *and Risk Management.* [...] *Regarding Epidemiology, I give a general overview of what to do* [...] *reporting the notifiable health issues to the Municipal Health Department* [...] *Then we end by citing the notifiable diseases* [...] (E8)

The articulated work of the active search by the Epidemiological Surveillance unit for the capture also of cases of nosocomial infection was mentioned by only one of the subjects. In the discourse of six participants, there were attempts to establish differences between the work in Hospital Epidemiological Surveillance and Hospital Infection Control:

The SCIH is much older, the Epidemiology Center came later, in 2006, there is always confusion with the SCIH, [...] *We always make a point of emphasizing the difference, mainly because we head the vaccination campaigns* [...]. (E4)

The subjects' perception regarding their own work evidenced singularities in five discourses. In these accounts, issues emerged regarding the association, by some colleagues in care provision and by academia, which emphasized the activities of Epidemiological Surveillance and Infection Control as being of lower complexity:

[...] *I think that the teams do not understand the activities of the Epidemiology Center* [...] *They see us as professionals who fill out forms for sending to the local government* [...]. (E8)

[...] *extremely complicated, thorough* [...], *even the students have that view that you are an administrative nurse, that there is not much work, but they are shocked by the level of complexity of our activities.* (E4)

The work in commissions and committees was identified in three discourses, from the preparation of cases through to organizing meetings for discussion. Furthermore, characteristics such as those related to the guidance regarding, and administration of, vaccines in the hospital environment, both for patients and for collaborators, formed part of the set of activities performed by the nurses.

Finally, the nurses mentioned in their discourses the importance of the products of Hospital Epidemiological Surveillance in the control of outbreaks and epidemics, in the institution and outside the hospital environment, including: Knowledges for intervention with service users; Knowledges for intervention with service users' families; Knowledges for intervention with the hospital's services and teams; Knowledges for intervention with population groups and Knowledges for inter-institutional intervention.

The knowledges for intervention with service users and their families were mentioned by three nurses when they referred to providing guidance, indicating chemoprophylaxis, in the cases of meningitis and whooping cough, as well as the collection by the nurses themselves of the Center of laboratory samples from family contacts:

[...] *Sometimes it is the mother who is coughing, so we take samples from the child and from the mother, register them on the system and send the samples to LACEN.* (E3)

Among the knowledges for intervention with the hospital's services and teams, in five discourses, the nurses emphasized their role in training and providing guidance, as a result of the insertion of the Hospital Epidemiology Center in the Teaching Hospital, in a scenario in which all hospitals have teaching activities:

[...] *Our role here as a teaching hospital is to educate, our role is to teach* [...]. *We make a maximum effort when the residents enter* [...]. *We are here so that they may have this knowledge of the needs which a notifiable disease demands* [...]. (E4)

The dissemination of the notified data is presented as a knowledge which arose from the epidemiological notifications, which, after the appropriate analyses in the institution, can come to constitute useful information for the institution and for the community. Even though the dissemination of the data is not yet a constant in the nurses' opinion, there was recognition of the importance of the data generated by the Epidemiology Center as a possibility for dissemination in the scientific environment and for the community, as in this discourse:

[...] *Our managers proposed to the Marketing Department that a bulletin should be created, as already exist in other hospitals, made available to everybody. But this all depends on cost, on approval, without any certainty that the funds will be released.* (E8)

In the product related to knowledges for intervention with population groups, emphasis was placed on the Hospital Cancer Registry. In this, the volume and complexity of the registration activities were apparent in four discourses, with emphasis on their possibilities for contributing towards the improvement of the quality of the care, based on the analysis and dissemination of the data on cancer:

[...] *I like this work because I can contribute to INCA* [the Brazilian National Cancer Institute] *and to the hospital, and I identified with the investigation* [...]. *If it were not for the contribution*

of the Cancer Registry with these data, it would be impossible to undertake campaigns, because if you haven't got the data at hand, how are you going to provide information for campaignss [...]. *I think that information is the basis for you to be able to treat.* (E7)

Among the knowledges for the inter-institutional intervention, it was possible to observe the articulation of the work of the VEH with the other elements of the healthcare network. In five discourses, the nurses mentioned prioritizing the action of the health district in the cases of diseases which required the triggering of containment actions for family members of the index case, as well as of the community contacts:

[...] *When we have all the information, we get back, call and pass information so that the district can notify the next district or the other health region, we speed up this process in cases when a patient is being discharged home.* (E3)

In this relationship, the term "bridge" was used in three discourses to illustrate the role of the Epidemiology Center with the Municipal Health Department, through the relationship of partnership with the district.

However, a certain alienation from their own work was identified, as well as disbelief in the consequences of their actions in the articulation with the Health District. Nurse E9's discourse affirms:

[...] *This way, I feel like a provider of information! You make great efforts to manage to make things happen, and afterwards you don't know what happened* [...]. *One of the things that I, in particular, feel the lack of, is receiving a specific return from the District in relation to what was notified. The District has its reports, but doesn't inform us of the measures which were taken, and I don't know if they're going to carry on with what I began.* (E9)

This discourse, in referring to the articulation of the Hospital Epidemiology Center with the Health District, was unique and constituted one of the examples of the barriers which the VEH faces to be recognized in both the hospital sphere and the other spheres of the health system.

DISCUSSION

Taking into account that Epidemiological Surveillance of Notifiable Diseases in the hospital ambit is a recent field of professional activity, instituted in 2004[1], consonance was observed between the recent implantation of the services and the professionals' concern with organizing their work processes. In comparison with the State Report[3] for 2008, the greater presence of nurses is maintained, as the workforce in the Hospital Epidemiology Centers, undertaking a large proportion of the activities undertaken in the scenarios, regardless of the interdisciplinary character of the work undertaken.

In the same way, in conformity with the same report, the reduced number of professionals with specific technical preparation persists, based on Basic Courses in Epidemiological Surveillance and (or) training for undertaking data analysis[3].

The greater concentration of professionals and hospitals which provide attendance exclusively to the SUS makes it possible to consider that Epidemiological Surveillance is profoundly linked to public health policies[1], given that one of the criteria for inclusion in the subsystem and receiving monthly financial repayment was the provision of services to the SUS.

The large volume of daily activities taken on by the nurses highlighted a technicist and fragmented work process, with a biologicist view of the human being[8]. Agreeing with other authors[9], the worker's lack of clarity regarding the elements which constitute this process was indicated as one of the possible causes of alienation from its products. The knowledge and reflection regarding its constitutive elements can contribute to the detection of possible gaps and to the better delimitation of its functions[10] in the work process in VEH.

Nevertheless, consonance was observed between the legislative arsenal which regulates the National Epidemiological Surveillance Subsystem, the aims of the work process and the activities undertaken by the participants in the study, in each one of the scenarios studied[1-3].

Regarding the means and instruments used, the association was well known between the technical knowledge inherent to the profession, the techniques, and the relationships for working with the team in the day-to-day of epidemiological

surveillance undertaken in the hospitals. Three discourses referred to approaches based in guidance, technical recommendation, the return of information and personal contact with the care teams as important driving forces for a positive visibility of the activities of the Epidemiology Center.

The active search for diseases and health problems was emphasized for the implementation of the Object of the Work Process – Epidemiological Surveillance actions undertaken in the hospital ambit. In spite of the discourse of six participants, the joint work of the SCIH and the Epidemiology Center would avoid the overlap of work and would bring contributions for the work process[11]. In this study, in three hospitals, the Epidemiology Center is linked to the SCIH.

The perception by the other professionals of the hospitals regarding the activities undertaken in the VEH, held as "administrative, easy and bureaucratic" work, was shown to be contrary to what some subjects think of their own work, described as meticulous and complicated. Based on the discourses, the need was shown for greater attention on the actions for divulging data, previously observed by the State Health Department[3].

As a way of overcoming these problems, authors[11-12] affirm that the divulging of bulletins and informational campaigns, the undertaking of training, and the better integration of the NHE with services and management may represent greater legitimacy, input of resources, and broadening of the role of VEH, including through the greater sensitization of these institutions' professionals.

The Products of the VEH corroborate the reference role of the Centers in the provision of epidemiological information on diseases or mortality[11-12]. In addition to this, they contribute to the increase of the spontaneous notifications by the institution's professionals, as well as to the knowledge and valorization of the role of the VEH articulated with Primary Care[13]. The communication of health issues and diseases to the Health District, and of this to the other elements of the healthcare network, was characterized as a two-way street, in conformity with federal legislation[13].

However, regarding the dissociation and lack of feedback between the VEH activities and those of health surveillance undertaken in the Primary Care scenario, it is believed that this context arises from the failure to overcome the curative care model of Public Health, which does not recognize epidemiological surveillance actions to be part of the Process, but rather as something external to the process of work undertaken in hospital institutions[10].

This observation corroborates the importance of using Epidemiology as an important tool for interpreting the context, and for proposing professional practices in relation to the political and health models currently in place[14].

CONCLUSIONS

This study is a contribution to the consolidation of the work of the nurse in Epidemiological Surveillance in the hospital ambit, whether through characterizing the elements which constitute the work process in different scenarios, or through contributing in the professional valorization. The importance which the interviewees attributed to the organization of the work process illustrated the long path which remains to be trodden, until the construction of an institutional history in VEH and the acquisition of experience by the nurses in the area.

The professional practice must strive for the improvement of the integration between Primary Care and Hospital Care, in consonance with the role of "bridge" which was strongly present in the discourses of the nurses of the NHE. Moreover, it must break with the task-centered model of work, in favor of a model which contributes to the construction of strategies which make possible a conception of Public Policies which meet the population's real health needs.

The overcoming of models of health which are curativist and focused on individuals will be possible with feedback of information and with the inter-institutionality of the actions, in a scenario in which the individuals are not numbers, but, rather, subjects in a given context, with institutional specific characteristics and recognized uniquenesses. It is based on the strengthening of the inter-institutional actions, with priority groups, that it is possible to contribute to reducing social inequalities and improving the health conditions of Brazilian citizens.

Therefore, in characterizing the work process of nurses of NHE, this study made it possible to

give visibility to the nurses' important space of work, thus contributing to Nursing as a science.

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