ABSTRACT

Objectives: To understand vaccination as a scheduled demand and access to this demand in a day in the life of health services, from the perspective of users. Methods: Holistic-qualitative multiple case study, based on the Quotidian Comprehensive Sociology, with 74 users from four health microregions of the Extended Western Region of Minas Gerais State. Results: Scheduling vaccination demand in a day in the life of services is compromised by the fragility in data record, by computerized systems underutilization and by the loss of the immunization tracking card, resulting in missed opportunities of immunization and unnecessary revaccinations. The Primary Health Care team’s non-involvement also compromised access to this action. Final Considerations: There is a need for more effort to be dispensed with for the effective use of computerized systems and Permanent Education of professionals in order to take advantage of all the opportunities of orientations and referrals of users to the vaccination room.

Descriptors: Vaccination; Primary Health Care; Health Services Needs and Demand; Health Services Accessibility; Information Systems.

RESUMO

Objetivos: compreender a vacinação como uma demanda programada e o acesso a essa demanda no cotidiano dos serviços de saúde, sob a ótica dos usuários. Métodos: estudo de casos múltiplos, holístico-qualitativo, fundamentado na Sociologia Compreensiva do Cotidiano, com 74 usuários de quatro microregiões sanitárias da Região Ampliada Oeste de Minas Gerais. Resultados: a programação da demanda em vacinação no cotidiano dos serviços é comprometida pela fragilidade no registro dos dados, pela subutilização dos sistemas informatizados e pela perda de cartão de vacina, acarretando em oportunidades perdidas de imunização e revacinações desnecessárias. O envolvimento da equipe da Atenção Primária à Saúde também comprometeu o acesso a essa ação. Considerações Finais: ressalta-se a necessidade de mais esforços serem dispensados para a efetiva utilização dos sistemas informatizados e da Educação Permanente dos profissionais, para que haja aproveitamento de todas as oportunidades de orientações e encaminhamentos dos usuários à sala de vacinação.

Descritores: Vacinação; Atenção Primária à Saúde; Necessidades e Demandas de Serviços de Saúde; Accesibilidad a los Servicios de Salud; Sistemas de Información.

RESUMEN

Objetivos: comprender la vacunación como una demanda programada y el acceso a esa demanda en el cotidiano de los servicios de salud, bajo la óptica de los usuarios. Métodos: estudio de casos múltiples, holístico-cualitativo, fundamentado en la Sociología Comprensiva del Cotidiano, con 74 usuarios de cuatro microregiones sanitarias de la Región Ampliada Oeste de Minas Gerais. Resultados: la programación de la demanda en vacunación en el cotidiano de los servicios está comprometida por la fragilidad en el registro de los datos, por la infratulización de los sistemas informatizados y por la pérdida de la tarjeta de vacuna, acarreando en oportunidades perdidas de inmunización y revacunaciones innecesarias. La no implicación del equipo de Atención Primaria de Salud también comprometió el acceso a esa acción. Consideraciones Finales: se resalta la necesidad de más esfuerzos ser dispensados para la efectiva utilización de los sistemas informatizados y la Educación Permanente de los profesionales, para que haya aproveitamiento de todas las oportunidades de orientaciones y encaminamientos de los usuarios a la sala de vacunación.

Descriptores: Vacunación; Atención Primaria de Salud; Necesidades y Demandas de Servicios de Salud; Accesibilidad a los Servicios de Salud; Sistemas de Información.
INTRODUCTION

Nursing care follows the historical evolution of health production methods and the evolution of the profession. It incorporates the demands of everyday life and services to add to everyday work access to actions and care in a universal, comprehensive and equitable way for the materialization of health as a right that belongs to all. Demand for vaccination is present as a field of nursing activity to be scheduled in a specific sector, the vaccination room, in most health units.

Scheduled health demand is defined as the one that provides for the provision of actions by prior schedules performed by health services. It was implemented with the purpose of reorganizing the access to the Brazilian Unified Health System (SUS – Sistema Único de Saúde) and directing the population demands, based on the promotion of health and prevention of diseases through the longitudinality of care.

Health access is a complex and multidimensional process. It involves, in addition to quality of care, the relationship between care needs of a given population and the system’s ability to provide health services equitably and in a timely manner. Health promotion and risk prevention require that preventive actions, among them, vaccination, carried out through planned actions that ensure attention at the appropriate time, during people's life.

Most of the demand for vaccination is in front of the establishment of routine vaccination schedules consisting of life cycles and priority groups. It provides longitudinality as an essential tool to achieve effective results in individual and collective immunization. This implies the existence of a regular source of attention throughout people's life, in clear scheduling and easy practical implementation.

Nevertheless, scheduling vaccination actions and maintaining adequate vaccine coverage requires vaccination history knowledge. However, most of the time, it is not available, especially among adults, who have the habit of seeking vaccination only in situations where the current immunization tracking card is required, that is, to enter the market work or in the event of any injury.

Thus, computerized systems incorporation for the recording of immunization data assists in the operationalization and planning of vaccination actions. The physical immunization tracking card will not always be with the individual at immunization, causing repetition of a vaccine for lack of certainty regarding the date of vaccination and, consequently, the risk of post-vaccine adverse events.

Thus, the data record quality, regarding vaccination is an important tool to support management practices that promote the planning and planning of actions in the vaccination room, the achievement of vaccine goals and the continuous evaluation of actions. Consequently, greater user adherence to vaccination would be provided.

Vaccination coverage and proportion of vaccinations reflect the effectiveness of health services, being considered indicators of non-adherence of the user to vaccination.

Moreover, there must be training and involvement of the Primary Health Care (PHC) team with the vaccination room activities. Thus, all vaccination opportunities will be taken advantage of, since the success of scheduled immunization is conditioned to the maintenance of high vaccination coverage. Nevertheless, studies show that missed opportunities for immunization occur constantly in health services due to insufficient records of immunization and/or lack of guidance from health professionals.

Considering that vaccination, as a scheduled demand in PHC services, implies effective actions and in every possible opportunity of approach to users, in services and other places of the community, it is questioned: how is the access to the demand of vaccine in aday in the life of health services, from the perspective of users?

OBJECTIVES

To understand vaccination as a scheduled demand and access to this demand in a day in the life of health services, from the perspective of users.

METHODS

Ethical aspects

The Research Ethics Committee Involving Human Beings of the Universidade Federal de São João del-Rei (CEPES-CCO), Center-West Campus, approved this research. It is part of the Integrating Project called “PreveNIR: Avaliação da qualidade do PNI na região Ampliada da Saúde Oeste de Minas Gerais” approved by the Research Program for SUS (PPSUS – Programa de Pesquisa para o SUS). It was developed according to Resolution CNS (Conselho Nacional de Saúde – Brazilian Health Board) 466/2012, obeying the guidelines and norms of research involving human beings.

Theoretical-methodological framework and type of study

It is a study delineated by the methodological framework of multiple-case, holistic-qualitative, descriptive study, based on Quotidian Comprehensive Sociology.

Multiple and holistic case studies is the preferred method to investigate in depth a contemporary phenomenon in its real context, as it allows to gather numerous and detailed information. This method provides analysis strategies from a holistic perspective, which contributes to the global understanding of the phenomena of interest.

The Quotidian Comprehensive Sociology seeks to understand, not explain social phenomena, valuing the everyday knowledge and common sense. Therefore, it is opportune to cast your gaze upon the object of study. Thus, it would be possible to understand access to the vaccine as a scheduled demand through the plurality of visions and experiences experienced by users in the day-to-day health services. It intends to think about a day in the life of vaccination, in postmodern times, as a demand that is scheduled to facilitate access to immunopreventable diseases prevention.

Study setting

The study setting was the Western Extended Region of Minas Gerais, which is composed of 54 municipalities, grouped in six health microregions. The data collection was performed so far, where data saturation was verified by literal replication. Thus, four microregions of health were included in this study, totaling seven municipalities and 25 units of PHC/Family Health Strategy...
unable, temporarily or permanently, to respond legally for their equal to or greater than 18 years. As exclusion criterion: persons units for vaccination or other care at the time of data collection. In order that the results could have the capacity of generalization research development. The interview script was previously tested. The number of cases considered necessary or sufficient in multiple case studies should take into account a discretionary judgment and not follow formulas. The logic of discretionary judgment, in order to define the number of sufficient cases, parallels the logic of case-by-case studies that establish criteria for defining a “significant effect” in experimental science. Similarly, the number of replications designation in multiple-case studies depends on the level of certainty the researcher wants to get about the results and the feeling about strength and importance of rival explanations. In this study, this level of certainty was affirmed with the collection of data in the fourth microregion, where data saturation occurred by literal replication. That is, by the similar results presented in the four cases, and by the finding that the data collected were sufficient to meet the proposed method and objective. The case studies present the generalization capacity of theoretical propositions, therefore, its goal is to expand and generalize theories (analytical generalization). Thus, the findings of this study have the potential to extend to similar situations, conferring the capacity for external generalization in qualitative research. Participants in this study were 74 users who attended health units for vaccination or other care at the time of data collection. It was adopted as a criterion for the participant’s inclusion: age equal to or greater than 18 years. As exclusion criterion: persons unable, temporarily or permanently, to respond legally for their acts. 82 approaches were performed, of which eight users refused to participate in the research.

Methodological procedures

In each microregion an individual case study was carried out, having as single unit of analysis: “Access to vaccination in PHC”. Therefore, each case in particular consists of a “complete” study, in which convergent or divergent evidence is sought with respect to the facts and conclusions for the case. In order to obtain representativeness of different realities and in order that the results could have the capacity of generalization in qualitative research, within each microregion the municipalities were previously classified in terms of population size, FHS coverage, number of vaccination rooms and territorial extension. The seven municipalities selected have divergent characteristics among them, being three large, two medium sized and two small ones. Two have 100% FHS population coverage and five have FHS population coverage of less than 100%. Among these municipalities, the number of vaccination rooms varied from two to 35 rooms, and there was variation in relation to the territorial extension.

The number of cases considered necessary or sufficient in multiple case studies should take into account a discretionary judgment and not follow formulas. The logic of discretionary judgment, in order to define the number of sufficient cases, parallels the logic of case-by-case studies that establish criteria for defining a “significant effect” in experimental science. Similarly, the number of replications designation in multiple-case studies depends on the level of certainty the researcher wants to get about the results and the feeling about strength and importance of rival explanations.

In this study, this level of certainty was affirmed with the collection of data in the fourth microregion, where data saturation occurred by literal replication. That is, by the similar results presented in the four cases, and by the finding that the data collected were sufficient to meet the proposed method and objective.

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Data source

As sources of data evidence, the intensive open-ended individual interview was used, with a semi-structured script that approached the user regarding their access to vaccination in PHC; the technical visit to the vaccination rooms, and field notes for data records of the technical visit and for operational notes of research development. The interview script was previously tested.

Collection and organization of data

Data collection took place between June 2016 and April 2017. The interviews, conducted by the researcher, had an average duration of ten minutes and were performed individually, according to the availability of users in private space in the health unit itself. The interview was recorded in a digital file and later, transcribed literally, preserving the information’s reliability. In order to maintain the confidentiality and anonymity of research participants and the microregions, alphanumeric codes symbolized by the letter “I” (interviewed) followed by the participant’s interview number were sequentially and one of the numbers 1, 2, 3 or 4, corresponding to the four microregions health, cases of this study.

Data analysis

The data analysis was based on Content Analysis. It obeyed the analytic technique of cross-synthesis of the cases, in agreement with the methodological referential multiple-case holistic qualitative study. Each case was analyzed individually for the four health microregions. Three thematic categories emerged: “Vaccination as a scheduled demand: an access that can be facilitated”, “Functional adequacy and an agenda for access to vaccination from the user’s perspective” and “Access to vaccination in a day in the life of Primary Health Care in the user’s voice: senses and feelings in front of the service”.

RESULTS

Of the 74 participants in this study, 63 (85.1%) were female. The age ranged from 19 to 67 years, with a mean of 38.7 years. The predominant age group was 26 to 33 years (32.4%). Most of the participants (85.1%) live in urban areas and are Catholics (78.4%). Technical visit to the vaccination rooms and field notes allowed the apprehension of aspects concerning the place, the organizational structure and permanent resources and daily consumption in the vaccination room, and human resources. Thus, it was evidenced how the access to the demand of vaccination by the information, reception and by the physical structure is established.

Scheduling record on users’ immunization tracking card was pointed out as a conduit that favors the timely return to the vaccination room, conferring to the act of vaccinating the attribute of being a scheduled health demand:

He has an immunization tracking card, so I think that makes it easier. He always remembers, does not he? (I27-1)

Today I came to be vaccinated. I was scheduled for today. (I53-3)

My card even has the mark so I can come back at the beginning of the month and get the vaccine up to date. It’s all scheduled. (I66-4)

Nevertheless, study participants pointed out as inefficient the use of paper immunization tracking card to record the immunization data. They indicated the use of a computerized system, capable of recording the vaccination situation of each individual. They also emphasized the fact that they have to be vaccinated
again, in situations where there is a need to prove the vaccination situation. The card was lost, exposing them unnecessarily to the vaccination procedure, which was considered uncomfortable.

I do not have an immunization tracking card, actually, I might even have it, but I do not even know where it is, understand? [...] Therefore, this immunization tracking card issue, I think it should be a more computerized thing. If the immunization tracking card itself was like the SUS card, where all your data would come out, you would know which vaccinations you took, which vaccine you should take, I think it would be better. Then, what happens? My card is missing, so what’s the unit going to do? They do another [...] Then start filling in from that date and you have to take it all over again. (I8-1)

In fact, I took all the vaccines, but I lost my card at home, so I had to take it all over again. I cannot remember right [...] It would be important if you had a way to get taped at the health center, right? [...] Having a record, because today things are all computerized. If you had that on your computer, everything on a spreadsheet would be better. Because I do not know if it’s wrong to take the vaccines all over again, but even if you do not, there was no need, right? (I9-1)

Because I lost my card, it complicated me, because I had to take it all over again, it was late for me to enter the company, and it’s already the second time I’ve taken it all again, do you understand? [...] If it were an integrated system, it would be easier for them to find the record, and there was no need to spend. Sometimes someone else needs the vaccine and does not have it because they are giving it to a person who did not need. [...] Wow, it’s uncomfortable, especially tetanus. The tetanus one is bad. (I67-4)

Vaccination as a criterion for admission to the labor market has been declared:

I’ve even needed it in a matter of work. For me to work in the company, I had to present my immunization tracking card [...] they required it and I did not have. (I27-1)

My children’s card is up to date because they work at the factory, so it has to be. The factory itself requires. (I23-2)

Because, generally, all the vaccines I could get easy in the very hospitals I worked for. (I71-4)

Proof of immunization verification and guidelines for vaccination do not occur routinely in health services, resulting in missed immunization opportunities and scheduling.

I went to the doctor not long ago, he did not ask me for an immunization tracking card, and they also never asked me about vaccination when I went to the health center. They do not encourage to be vaccinated, do not. [...] When I looked for consultation, no one ever questioned, and I was already there, right? (I57-3)

It is like, I do the preventive, mammography, thing of every year, but vaccine? I thought I did not need vaccine anymore [...] No one has ever told me about vaccine. (I61-4)

No, I’ve never been targeted, I’ve never been asked for an immunization tracking card. I go to the health unit a lot and they have never asked me for a card. (I69-4)

The mass media and the media were identified as important vehicles for the dissemination of information on vaccination. Community Health Agents’ work (CHA) with the population was also highlighted as a means of disseminating information regarding vaccination, which may facilitate the scheduling of vaccine demand.

They disclose through pamphlets and through the famous “word of mouth” by CHA. They carry out their visits and spread the vaccination. (I8-1)

The media helps a lot, the publicity and the advertisements help a lot. Equally, here, which is a small and indoor city; many people live in the countryside and do not have access. Therefore, it is even through the media campaigns that everyone has access to this information. (I27-1)

They’ll tell you, they send some paper for CHA. They put up a poster here at the health center and notify the church when they will get a vaccine. Then, everyone knows. (I47-3)

The vaccines are announced on the radio. The agents go from house to house advising as well. (I63-4)

Participants highlighted aspects related to (lack of) guidance on vaccination and post-vaccination, revealing situations where professionals’ knowledge is below the desired level for the appropriate orientation on vaccination.

Usually we arrive and are already vaccinated, but nothing is said about the vaccine or about the benefits and pros of the vaccine. Usually, we’ll be vaccinated more by the sense of obligation, sometimes we’re not really aware of the benefits, are we? [...] Look, it was not a service with clarification. The person only takes you to the room where the vaccination will be done and ready, without any kind of guidance. (I22-2)

I really like this health center, the service is very positive. They arrive, they explain to you what vaccine and what it is for and they will tell you if that vaccine will be more painful or not. [...] Nurses are always helpful; any time you arrive they give you the information, so this gives me the ability to access. [...] A friend who was pregnant had asked me if I had taken the tetanus vaccine and I said no. [...] I went to my obstetrician and asked him, I found it interesting that he said he did not need to, because his materials were already sterilized. But I was left with that doubt, then I tried to find out with the health center nurse, and I saw that the sterilized materials are already obligatory, are not they? I had to take this vaccine because this vaccine also had the protection against whooping cough. [...] It turns out that my obstetrician did not know how to advise me on vaccination, the nurse directed me was the health center nurse. (I35-2)

Everything I asked and that I had doubt they clarified me with the most tranquility. I worked a long time as a manicure and the nurse herself told me that I had to take the Hepatitis B vaccine because I could have blood contact, and I did not know. [...] She sat with me, explained what reasons I should to take, then I came and took it. [...] They have always explained how to be less painful after vaccination, what to do to make the child feel a little better. (I63-4)

It was expressed the attendance to the basic calendar, which indicates vaccination schedule by age group, doses and priority groups.
Regarding my children, all the vaccines given by SUS, I have nothing to complain about. I was very well served and they are all up to date. Apart from this flu shot, the rest I do not have to complain about. (I11-1)

Always had, my oldest girl took all the vaccines, lots of vaccines. For my younger girl, it just changed calendar months and new vaccines. They took all, right, there was no vaccine. (I41-3)

My son has all the vaccines and on the right dates. […] At least the vaccines that my son and I needed we’re having for now, right? (I48-3)

So, my boys were all vaccinated on time and on time, all here, I paid no vaccine. (I50-3)

I always had access to the program’s vaccines, I always had. (I64-4)

**DISCUSSION**

In the context of PHC care, an environment with many competing demands, preventive actions, especially vaccination, are included as priority policies[14]. Vaccination claims are mostly based on the immunization tracking card timing, as determined by the program, according to the basic vaccination schedules of the National Immunization Program (NIP)[16].

Participants of this study indicated that immunization actions scheduling favors the timely return to the vaccination room. Corroborating this finding, a study carried out in Recife, PE, Brazil, described aspects related to the loss of vaccination opportunity in Basic Health Units. It was also pointed out that the guidance on intervals between doses, as well as the record of the user’s date of return at the immunization tracking card, it was considered positive behavior that favors the user’s return to receive the subsequent doses, contributing to the maintenance of adequate levels of vaccine coverage[20].

For vaccine demand scheduling, the card is essential for proving and monitoring the individuals’ vaccination situation[17], as well as for the science of vaccination in relation to the doses. Nonetheless, in a day in the life of health services, the immunization tracking card is presented by a paper document kept in various types of formats and content. This creates problems, such as the difficulty in providing the health professional with access to consistent and reliable information, since they are vulnerable to damages, compromising their validity[12]. Participants indicated the use of a computerized system, capable of recording in an individualized way these data.

In scheduling vaccination actions, the use of computerized systems to record immunization data has been documented as an operationally considered simple, flexible, stable, representative and experience to evaluate the vaccination situation. Nurses and other health professionals involved in the vaccination activity. Therefore, proof of immunization verification and user referral to the vaccination room were carried out, even though the latter sought the service for another purpose[15,26]. Nonetheless, the present study showed the occurrence of missed immunization opportunities. Proof of immunization verification and guidelines for vaccination do not routinely occur in health services. Some practitioners demonstrate knowledge below what is desired for proper vaccination guidance.

A study carried out in the city of Belo Horizonte, Minas Gerais State, Brazil, showed that medical professionals reported not carrying out the immunization tracking card verification due to the lack of time and experience to evaluate the vaccination situation. Nurses and nursing technicians, although mentioning immunization tracking card observation as a routine action, stated that the orientation on vaccination usually occurs only when a ‘problem’ is identified[11].
A US survey of the PHC practitioners’ perception of the importance of preventive services, including vaccination, has shown that a meaningful part of the participants do not regularly undertake visits focused on assessing prevention needs, advocated by the Government System Medicare. They find the immunization schedule for adults confusing, resulting in missed opportunities for vaccination.

Missed opportunities in vaccination indicate that actions and procedures routine in health services does not become an opportunity for an alert experience for information and active search. “Everything that connects to presenteeism, in the sense of opportunity”[29]. Such fluidity becomes possible in a day in the life of health services because it is imbricated in norms and routines that are manifested in the technical performance and in curative actions.

The mass media, the media and CHA actions, together with the community, were pointed out by the present research as important vehicles for the dissemination of information about vaccination and its schedules. Corroborating with these data, a study carried out in the city of Caxias, Maranhão State, showed that the main source of information on vaccination indicated by study participants was the mass media, followed by information received by higher-level health professionals and by CHA[30].

Considering the information attached to tautological schemes responsible for communication models perpetuation that do not interact with the complexity of people’s daily lives, form, and purpose are indicative for effective communication of information to users about age, schedules and dates to be vaccinated. “Communication is social cement”[29].

If the word information is given its true etymological meaning; to give shape, there would be no difference between information and communication. Inform means to be formed by. It is the form that forms, the forming form. It means that, in an information age, perhaps today, one does not think for oneself, but one is thought, formed, inserted in a community of destiny. The information also links, unites, joins[31].

The “essential is left out. The participatory element disappears, the sharing, the social bond”[31]. Thus, it is suggested to put in shape the information that refers “to the utility”[31] on vaccination so that target publics have a common destination; and that the scheduled demand for such action is effective in preventing vaccine-preventable diseases and in achieving the expected vaccine coverage.

Study limitations

This study limits intentional sampling by selecting only a subgroup of users present in the Primary Care Units on the day of data collection. But based on the information collected, intentional sampling can be considered representative of similar populations and conditions in multiple case studies with literal replication data saturation[17].

Contributions to Nursing

The nurse is responsible for supervising vaccination room activities and the constant nursing team education, which implies that the commitment of access to immunization may be closely related to their work routine. Therefore, this study provides important contributions to Nursing, since it enabled the identification of barriers and, consequently, subsidies for better organization and planning of a day in the life of work in vaccination.

FINAL CONSIDERATIONS

This study addressed the access to vaccination in a day in the life of PHC as a potential demand to be scheduled for health services for users. This is because it is a health action established through basic vaccination schedules, which are established in Brazil by life cycles and priority groups. Computerized systems used for immunization data record was pointed out as an instrument to subsidize the planning of vaccination promotion measures capable of avoiding revaccinations due to the lack of knowledge of individuals’ vaccination history, which burden the SUS budget and expose them unnecessarily to the risk of adverse reactions. Therefore, more efforts should be made to make them more effective.

The entire PHC team’s non-involvement with vaccination and lack of knowledge for appropriate guidelines compromises access to immunization. In this sense, the Permanent Professionals education is recommended to take advantage of all the opportunities of orientations and referrals of users to the vaccination room.

The study participants, when arguing vaccination as a scheduled demand, present contributions to Nursing and Health. The reality shows the lack of incorporation of the demand in vaccination as scheduled in a day of the life of services, evidenced in the lack of communication/information, and proper record. Difficulties in achieving expected vaccine coverage can be addressed by considering the population assigned to PHC services and scheduling the demand for vaccination, reaching all age groups and priority groups. Health and nursing teams have recording subsidies that can meet this demand in a scheduled way and facilitate access to vaccination.

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