# International Journal of Health Science

WORK PROCESS IN VACCINE ROOMS IN A MUNICIPALITY IN THE RECÔNCAVO BAIANO: INTERFACES BETWEEN THEORY AND PRACTICE

Edinaldo dos Santos Melo



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0). Abstract: The work process in vaccine rooms requires professionals to have technicalscientific knowledge and the adoption of operational standards recommended by the Ministry of Health for this service, in order to create safe environments for the correct administration of immunobiologicals and, thus, contribute to the reduction of morbidity and mortality rates caused by vaccine-preventable diseases. Nursing plays a fundamental role in all actions involving the immunization process. In this sense, the study sought to understand the work process carried out by the nursing team in vaccination rooms of the Family Health Units in a municipality in the Recôncavo Baiano, having as a reference base the norms established by the National Immunization Program. The research is descriptive, documentary, with a qualitative approach. 04 nurses and 04 nursing technicians were interviewed, using 28 hours of direct observation, in addition to document analysis. Data analysis was based on the thematic content analysis proposed by Minayo. Regarding the work process, most respondents have a superficial discourse. Although many more actions were observed than what was said in the interviews, it is noteworthy that activities proposed by the Ministry of Health were not carried out at the USF, which can interfere with the quality of the service provided and, in the planning, and redirection of health actions, vaccination. Due to the scarcity of research that discusses the work process in the vaccine room, it is therefore necessary to carry out new studies, due to the relevance of this procedure for Primary Care and Nursing.

**Keywords:** Immunization. Preventive Health Services. Nursing care.

### INTRODUCTION

Amid the various responsibilities of the Unified Health System (SUS), the control and/ or eradication of infectious, contagious and vaccine-preventable diseases is highlighted in the responsibilities of Primary Care. In this context, vaccination is of significant importance, as it provides individual and collective protection against certain diseases, thus reducing the chain of transmission.

organization vaccination The of comprises services related actions to the systematization of nursing care, in accordance with the norms established by the National Immunization Program (PNI), through the use of standardized instruments for the vaccination room: the use of user embracement to promote nursing care and to establish a bond with users, in order to ensure that vaccination schedules are followed, in addition to the use of appropriate technologies that guarantee patient safety, through supervision of services and the training of the team involved (TERTULIANO, 2014).

It is recommended that the activities carried out in the vaccine rooms be carried out by the nursing team and, for this, qualification, responsibility and specific knowledge directed to handling, the conservation, preparation, administration of immunobiologicals, registration of activities developed and disposal are required. of waste from vaccination actions. Therefore, the study raised the following question: How is the work process carried out by the nursing team in vaccination rooms at the Family Health Units (USF) in a municipality in the Recôncavo Baiano, based on the standards established by the NIBP?

In this perspective, the general objective of the study sought to understand the work process carried out by the nursing team in vaccine rooms at the USF in a municipality in the Recôncavo Baiano, having as a reference base the norms established by the PNI. To meet this objective, the following were listed as specific objectives: to verify how the division of labor between nurses and nursing technicians occurs in the vaccine room; present the work routine established in the vaccine room and point out the actions carried out in emergency situations in the vaccine room.

The study is justified by the fact that research regarding the work process in vaccine rooms is still incipient in nursing. It is hoped, therefore, that it can contribute to the socialization of knowledge and practices and this way, managers and services can redirect the planning of actions in search of immunization services that work within the norms established by the PNI for the effectiveness immunization, reduction of vaccine-preventable diseases and better quality of care. It is also believed that professionals are awakening to the execution of this practice, which requires responsibility and scientific knowledge, considering the dynamism that involves science when it comes to vaccine and immunobiological rooms.

The study included a research with a qualitative approach, with a descriptive nature and based on documents, since it intended to analyze the work process carried out by the nursing team in the vaccination rooms of the USF. For this purpose, documental research, structured interviews and direct observation were used as techniques, in order to prove whether the norms regarding the work process recommended by the Ministry of Health were in fact operationalized.

Initially, we describe the nursing teams and the division of labor in the vaccine rooms that were the object of this study. Next, we address the process as well as the technical and administrative aspects of working in the vaccine room. Finally, we present the conclusions obtained through this research.

### **RESEARCH METHODOLOGY**

To meet the objectives of this study, descriptive research was used. This type of research, for Michel (2005), seeks to analyze more precisely social and human characteristics, through observations, records, analysis of relationships, connections and interferences.

The study was conducted in vaccination rooms at four Family Health Units in a municipality located in the region of recôncavo Baiano. With a territorial area of 764 km<sup>2</sup>, the municipality has a total population of 25,419 inhabitants, of these 15,700 inhabitants live in the urban area (IBGE, 2010). Primary Care consists of ten USF, six of which are located in rural areas. These units make up 100% Family Health coverage in the municipality.

The study participants consisted of four nurses responsible for the management and assistance of the USF and four nursing technicians who work in the vaccine rooms of four units, three located in the Urban Zone and one USF located in the Rural Zone. The following were established as inclusion criteria for participants: 1. Working in a USF that has a vaccine room in operation; 2. Experience of at least six months in Family Health Units or Basic Health Units.

In order to understand the work process carried out by the nursing team in the USF vaccine rooms, the techniques of structured interview and direct observation and documents/records used in vaccine rooms were used. To complement the interview, a direct observation was carried out, in order to verify whether the norms regarding the work process recommended by the Ministry of Health were in fact operationalized.

In order to verify how certain activities of the work process were carried out, some records were analyzed through the SI-PNI information system, namely: daily vaccination bulletin, monthly bulletin of applied doses, monthly movement map of immunobiologicals, map of disabling immunobiologicals and mirror cards. In addition to these, the daily temperature record map, posted on the refrigerator, was also analyzed.

Data from this research were analyzed according to Minayo's (2010) content analysis method, which states that this is a set of research techniques that allow replicable and valid inferences about data from a given context, through specialized procedures and scientific. Considering the existing subtypes of content analysis, thematic analysis was chosen.

## NURSING TEAMS, AND LABOR DIVISION IN VACCINE ROOMS HEX

The study participants consisted of nurses responsible for the management and assistance of the USF and the nursing technicians who work in the vaccine rooms of these units. The sample had eight participants, among which four are nursing technicians and four nurses. The following table shows the characterization of the research participants:

Confirming the relevance of trained teams, the PNI recommends that activities in the vaccine room be carried out by nursing teams trained in the handling, conservation and administration of immunobiologicals. These teams must be composed, preferably, of two nursing technicians, for each work shift, and a nurse responsible for supervising the activities of the vaccine room and for the permanent education of the team (BRASIL, 2001). Despite this, only half of the health units have two nursing technicians in the vaccine rooms. In other units, only one technician works, becoming overloaded, since in addition to the vaccine room, they are also responsible for other activities in the unit.

# WORK PROCESS ACTIVITIES IN VACCINE ROOM

The vaccine room must be used exclusively for the administration of immunobiologicals. Bahia (2011) reports that the performance of the work process in the vaccine room comprises activities related to the beginning of daily work, reception, screening and procedures prior to the administration of immunobiologicals, administration of immunobiologicals, closing of daily work, as well as closing of monthly work. Most interviewees have a more superficial speech and restrict the start of daily work in the vaccine room to checking and recording the temperature of the refrigerator and preparing coolers for packaging the immunobiologicals used during the workday. The statements below reveal the above:

> Temperature check, remove the vaccines from the refrigerator to the thermal box and wait for the appropriate temperature. (E2)

> Check and record the temperature of the refrigerator, prepare the thermal boxes. (E3) Check the temperature of the refrigerator, remove the ice and arrange the boxes. (TE3) Monitor and write down the temperature of the refrigerator, prepare the thermal box with the vaccines, prepare the material that will be used. (TE4)

Despite most being succinct in the answers, during the observation of the workday, it was verified that the activities not mentioned in the interview were carried out. In a broader view, E1 lists activities that are carried out at the beginning of work in the vaccine room, being much closer to what the PNI recommends, as shown below:

> Check for cleanliness; air conditioning; wash hands; check the refrigerator temperature and record it on the map; remove the ice coils from the freezer and place them on the bench for maintenance, arrange the coolers with the coils and monitor the temperature

Code	Education	Gender	Age	Conclusion of the course	Time in vaccine room
TE1	Nursing Technician	Female	28 years	5 years	4 years
TE2	Nursing Technician	Female	43 years	10 years	6 years
TE3	Nursing Technician	Female	28 years	8 years	3 years
TE4	Nursing Technician	Male	22 years	2 years	1 year and 6 months
F1	Nurse	Female	35 years	6 years and 6 months	10 years and 6 months
E0	Nurse	Female	30 years	8 years	7 vears
E2	Nurse	Female	43 years	6 years	A vears
E3	Nurse	Female	33 years	5 years	3 years
E4					o youro

Chart 1 - Characterization of study participants.

Source: Data of the research

until it reaches the recommended standard; remove the amount of vaccines and diluents needed from the refrigerator; check, in relation to products presented in multidose vials, the period of use after opening the vial and organize the forms on the work table and consult the information system of the national immunization program. (E1)

Continuing the sequence of activities that are carried out, specifically regarding the procedures that must be performed before and during the administration of immunobiologicals, most of the interviewees have more succinct answers, directing the activities that precede the practice of administering vaccines to the reception of users, records, guidance on possible adverse reactions to immunobiologicals and maintenance of updated vaccination status. For the administration, it considers hand hygiene, the positioning of the user and issues related to the care of the technique itself. The fragments below show the findings:

> Welcoming, guidance regarding adverse reactions, the importance of updating the vaccine booklet. [regarding the administration of the 40 immunobiologicals] hand washing, [...] the

right immunobiological, the right route of administration. (E3)

Write it down in the system and then explain about vaccines, the effects and medications that can be used if you have a fever. [regarding the administration of immunobiologicals] wash your hands, separate the immunos, write down the cards, validity and administer after washing your hands. (TE2)

Registration of the Si-PNI, annotation on the vaccination card and guidelines. [regarding the administration of immunobiologicals] hand washing, preparation of immunobiologicals and administration of vaccines. (TE3)

Complementing the above, two interviewees detail the activities that precede the application of immunobiologicals, with a focus on reception, screening, administrative and educational issues, as well as the performance of the technique itself, with a speech more in tune with what the PNI says:

Check if the user is attending the vaccination room for the first time, open the standardized documents of the vaccination record (vaccination card) or the user's booklet in the Si-PNI; obtain information

about the person's health status; guide the user on the importance of vaccination and completion of the basic scheme; register the immunobiologicals to be administered in the reserved spaces in the respective documents; in the vaccination booklet, write down the dose, batch, expiry date, health unit, legible name of the vaccinated person in the space indicated; write it down in the booklet and record it in the Si-PNI program and reinforce the guidance, informing the importance of vaccination. Check which immunobiological must be administered; hand hygiene before and after the procedure; examine the product, observing the appearance of the solution, the condition of the packaging, batch number and expiration date, observing the route of administration, the dosage, preparing the immunobiological; administer the immunobiological; observe the occurrence of post-vaccination adverse effects; Disregard the material used in the sharps collection box. (E1)

A screening is carried out, where the client's vaccination status is observed, guidance on the calendar and vaccine, possible adverse reactions, use of ice, warning about the care to be taken in relation to self-medication. Preparing the vaccines, orienting the patient about the administration site, positioning them in a safe and comfortable position (with children it is sometimes necessary to immobilize them to maintain safety), clean the area and administer it, record on the card and in the SIPNI. (TE4)

The end of the working day in the vaccine room, in turn, demands some activities to enable the organization of the work flow, maintaining the quality of care and recording data. In this regard, the participants were asked about the corresponding actions that are carried out at the end of the working day and seven interviewees reported as activities only recording the temperature of the refrigerator, returning immunobiologicals that can still be reused for the refrigeration equipment, cleaning the SIPNI room and backup, as can be seen in the following fragments: Closure of the daily system, refrigerator temperature and storing the immunobiologicals in the refrigerator. (E2)

Check the temperature, store immunobiologicals in the refrigerator and recyclable ice, clean the room. (E3)

Record the temperature of the refrigerator, store the vaccines, make a backup in the system. (TE1)

The room is cleaned, we keep the gelox and vaccines that are in the coolers, the temperature is noted and we close the SIPNI. (TE4)

Only one interviewee brings in her report other activities such as those that need to be carried out at the end of the day. Here is E1's report:

> Check the daily bulletin, the vaccination doses administered on the day; remove the vaccine from the thermal box for daily use; identify in the multidose bottle the amount of these that can be used the next day, observe the expiration date after opening and store, remove the reusable coils from the thermal box and pack, discard the vaccine bottles, record the discarded bottles on the form, check and write down the temperature of the refrigerator; proceed with cleaning the box, make sure that the refrigeration equipment is working and leave the room clean and in order. (E1)

Despite the fact that many more actions were carried out than what was said in the interviews, it is noteworthy that some activities proposed by the Ministry of Health were not carried out in the units, such as cleaning and packaging the coils in the refrigeration equipment, as well as cleaning the coolers, checking the daily bulletin of the doses of vaccines administered, recording the doses discarded in the standardized form to support the evaluation of the movement and loss of immunobiologicals, checking the list of absentees to organize the search for defaulters. In addition to the activities mentioned, at the end of the month, the team that works in the vaccine room, together with the supervising nurse, have some responsibilities that need to be fulfilled to guarantee the community's access to immunobiologicals and immunization of the population, as well as the monitoring of important indicators. Despite this, regarding monthly work-end activities, most reports show a concern restricted to productivity, as can be seen below:

> Monthly production on pendrive, sent to the health department. (E3) Vaccines count, monthly backup, send to the pendrive [...] at the health department and make the monthly order of immunosupply. (TE2)

> Carry out the production of immunobiologicals monthly, through the consolidated, where I transfer it to the pendrive and send it to the municipal health department. (TE3)

> We carry out the balance of the immunos that were received and used during the month: This balance is carried out in SiPNI. Performing the "closing", we make the backup and send the pen drive to the cold chain. (TE4)

In a broader perspective, interviewee E1 brings, in addition to data consolidation, records in the information system and monthly movement of immunobiologicals, information such as the monitoring of immunization activities and the establishment of strategies to search for missing persons:

> Consolidate the doses recorded in the Si PNI system, carry out the movement of immunobiologicals, monitor vaccination activities and revise the system with information on vaccinees to establish bureaucratic actions for defaulters. (E1)

In view of the above, it is observed that of the eight interviewees, only one interviewee (E1) has greater theoretical knowledge, although she is the same one who was not seen performing supervision in the vaccination room. Although there is a lot of superficiality in the reports, one cannot fail to recognize that the observation brought the idea that more is done than revealed. Even so, it is worth mentioning that there are flaws in the work process related to some technical issues (hand hygiene, for example) and, above all, administrative demands, such as the proper use of certain instruments, keeping records and actively searching for absentee people who are of paramount importance for the planning and redirection of vaccination actions.

## WORK IN A VACCINE ROOM: TECHNICAL AND ADMINISTRATIVE ASPECTS

Working in a vaccine room requires a series of precautions that include conservation of immunobiologicals, organization and cleaning of refrigeration equipment in the vaccine room, care for waste produced in the vaccine room, the established routine for infectious immunobiologicals. One cannot fail to consider, also, the emergency situations translated by the lack of energy, which involves different conducts when this lack occurs during or outside the unit's opening hours.

Regarding the recording of the temperature of the refrigeration equipment, all study participants stated that the temperature of the refrigerator is checked in the morning, before starting activities, and in the late afternoon. At both times, the temperatures found are duly noted on the daily temperature recording map, located on the refrigerator door.

It must be noted that in the units studied, the temperature is recorded in the way recommended by the Ministry of Health, through the PNI. Regarding the care adopted by the nursing team, only one respondent provides more complete information regarding the care that must be adopted for the conservation of immunobiologicals: It must be observed in the morning before starting the activities and at the end of the afternoon, we have to record the minimum and maximum of the moment must be between 2°C and 8°C. Place the equipment away from sources of heat and sunlight; leave the refrigerator perfectly level; away from the wall at least 20 cm for air circulation in the condenser; use an outlet exclusively for the refrigerator, check the temperature at least twice a day, and record it on weekends; use the refrigerator solely and exclusively to preserve immunobiologicals and avoid opening the storage refrigerator every time you administer vaccines. (E1)

All vaccine rooms were found to have an air conditioning system installed and working properly. It must be noted that in all rooms, the equipment used is a domestic-type refrigerator and, therefore, the municipality still does not comply with the ministerial recommendation.

As for care for the refrigeration equipment, specifically related to organization and washing, they are carried out by nursing technicians. It is noteworthy that most respondents were wrong about the organization of the refrigerator, reporting that viral vaccines were stored on the first shelf and bacterial vaccines on the second. The refrigerator is cleaned every two weeks, as shown in the testimonials below:

In the gelox freezer, 1st shelf: Virals; 2nd bacterial shelf; 3rd thinner shelf, drawer: pet bottles with water with dye. Yes, every 15 days. Remove the immunobiologicals and store them in thermal boxes. Turn off the fridge, wait for the ideal temperature and pack the immunobiologicals. (E3)

gelox freezer; 1st viral, 2nd bacterial and in the drawer, pet bottles with water. Every 15 days, disconnect from the socket, place the immunos in the thermal box and the gelox in the other clean box after thawing with a damp, clean cloth. After turning on the fridge, wait for the temperature to be normal and replace the gelox and immunos. (TE2) Only one of the interviewees presents a more appropriate speech with the NIP guidelines, properly allocating each item in the corresponding place in the refrigerator.

> In the freezer we put the gelox that will be used in the coolers, on the first shelf the vaccines less sensitive to lower temperatures, mostly viral vaccines. In the second, we put the vaccines that are more sensitive to lower temperatures, mostly bacterial vaccines. We don't put anything in the door drawers, in the bottom drawers we put a couple of vases with water and dye. [...] the refrigerator is washed every 15 days or if there is excess ice. When washing the refrigerator, we transfer all the vaccines to an acclimatized thermal box; we turn off the device so that it defrosts and then we wash the refrigerator. (TE4)

According to what is recommended by the Ministry of Health, the study by Ribeiro et al. (2010) points out that in the organization of refrigerators, the freezer must contain reusable ice, vaccines that can be subjected to negative temperature must be placed on the first shelf; between the first and second shelves, the maximum and minimum thermometer bulb; on the second shelf, vaccines that cannot be subjected to negative temperature; on the third shelf, stocks of vaccines, diluents, serums and immunoglobulins and on the lower part only bottles with water and dye. It also mentions that the refrigerator door cannot contain any type of vaccine or any other object.

Despite the professionals pointing out the frequency and correct way of washing the refrigerators, it is recorded that no daily temperature map found a record with the date of said washes. Furthermore, this washing process did not observe, since in the period in which the observations took place in none of the units this procedure was performed.

In addition to issues related to the conservation of immunobiologicals, attention must be paid to the production of waste. Study participants highlighted different behaviors for waste produced, common or sharps, as shown in the reports below:

There are garbage bins in the unit, where all the vaccine room material is stored. They are autoclaved and destined for pumps. (E2)

Dispose of needle syringes in sharps boxes. The immunobiological vials are autoclaved and discarded in the drums that are collected for the infectious waste company (private). All bottles are separated and autoclaved and sent to the common waste. (E3)

Use of the sharps box. There is common waste that is disposed of normally and infectious waste is disposed of in the bin and the company collects it at home every 15 days. Autoclaved and discarded in the common trash. E4)

Needle in the puncture and syringe boxes, the immunos in the cardboard box, after a good amount is sterilized and placed in the bottle. Sterilized everything together, this is the routine. (TE2)

Used syringes are discarded in the sharps box and vaccine vials are autoclaved. No, all vials are autoclaved and disposed of in regular waste. (TE3)

According to Brasil (2014), empty vials of immunobiologicals considered infectious, as well as those that must be discarded due to physical loss, in addition to the others, must be placed in collection boxes for sharps material along with other infectious waste, such as used syringes and needles, the boxes must be forwarded to the CME of the health unit or another and be submitted to sterilization. The following testimonies make it clear that the study participants demonstrate a lack of knowledge regarding the segregation of waste produced in vaccine rooms:

> Disposal of waste is carried out separately, sharp objects are disposed of in an appropriate box, common garbage in another vessel, immunological vials are kept for checking the map. After closing the

map, the inactivation process is performed through self-washing and discarded. (TE04)

The person responsible for cleaning the vaccine room also identifies and separates waste, as well as treats daily leftovers of immunobiologicals or those that have undergone changes in temperature, or that have expired, in addition to treating other 50 piercing and infectious waste. Place the closed vials in the autoclave for 15 minutes at a temperature between 121°C and 127°C, at least once a week. (E1)

One of the participants states that it is the cleaning professional who separates the waste. In Brasil (2014), it is the responsibility of the vaccination room worker to carry out the segregation, packaging and identification of such waste. It also points out that the inactivation of infectious waste occurs by autoclaving, for 15 minutes, at a temperature between 121°C and 127°C. After autoclaving, such waste can be packaged according to the classification of Group D, which corresponds to common waste.

Another concern in vaccine rooms must correspond to emergency situations, which are those related to the suspicion or finding of immunobiologicals with quality deviation. In this sense, professionals were asked about what they do in an emergency situation, for example, the lack of electricity. E1 brings the conducts for this situation, when the power outage happens during working hours, consistent with the NIP guidelines:

Keep it closed and strictly monitor the temperature using a thermometer with an extension cable, if it is not reestablished or resolved within two hours and the temperature is close to 8°C, immediately transfer the product to another refrigerator or thermal box, keeping the temperature between 2°C and 8°C, as instructed and if not resolved, transfer to another location. (E1)

Most of the interviewees inform that they wait for a period of up to two hours and if the energy does not return, the immunobiologicals are sent to another appropriate place with energy. They report that immunobiologicals in suspicious conditions are notified and forwarded to the Cold Chain.

> Keep the fridge closed, vaccine room with air conditioning on. After 2 hours of power outage, forward to the cold network of unit 51 that has a generator. Vaccines are under suspicion, fill in the notification form. (E3)

> The refrigerator remains closed and the cyax immunos remain in use. If power does not come back, place all immunos in the box and bring them to the cold chain. Fill out the form, notify the nurse and place all immunos as suspect in a bag that remains in the identified refrigerator. (TE2)

Keep the refrigerator closed for two hours, after this period and there is no return of energy, the immunos are placed in thermal boxes. A technical form identifying the immune as a suspect is filled out and forwarded to the Cold Chain. (TE4)

The reports above show that exceeding the period of two hours without power would already classify immunobiologicals as under suspicion in the conception of the interviewees. This is not consistent with the guidelines of Brasil (2014), which states that when there are failures in the power supply, the internal temperature of the refrigerator must be rigorously checked and the equipment must be kept closed. Immunobiologicals must be transferred to other refrigerator equipment or a cooler with the appropriate temperature between +2°C and +8°C if power is not restored within a maximum period of two hours or when the temperature is close to +7°C, in these cases the immunobiologicals must be transferred immediately.

What makes an immunobiological unsuitable for use until the conditions in

which it was exposed are reassessed is if it exceeds the temperature recommended by the PNI, that is, above +8°C. (BAHIA, 2011; BRAZIL, 2014). It is noteworthy that this was not mentioned by any of the interviewees, which may show that wrong actions are being taken in the vaccine rooms, when there is a lack of electricity.

### CONCLUSION

In the vaccine rooms of the municipality studied, there is an evident division of labor. The nurse is responsible for supervisory actions, while the technician is responsible for the operationalization of the service, through practical actions. However, supervision seems to be punctual and specific to certain activities of an administrative nature.

As for the activities that comprise the work process itself, most of the interviewees have a succinct, superficial speech without a vision of the whole. Despite the fact that many more actions were carried out than what was said in the interviews, it is noteworthy that some activities proposed by the Ministry of Health were not carried out at the USF, such as cleaning and packaging the coils in the refrigeration equipment, as well as cleaning the cool boxes, checking the daily bulletin of administered vaccine doses, recording discarded doses in the standardized form to subsidize the evaluation of the movement and loss of immunobiologicals, verification of the list of absentees to organize the search for absentees.

The absence of these activities reveals partiality in complying with the stages of the work process related to some technical issues and, above all, administrative demands, such as the proper use of certain instruments, recording and active search for absentees that can interfere with the quality of the service. provided and are of paramount importance for the planning and redirection of vaccination actions.

It must be noted that in the units studied, the temperature is recorded in the way recommended by the PNI, different from the care adopted for the conservation of immunobiologicals and the organization of the refrigerator. The refrigerator is cleaned fortnightly, in line with what is proposed, however no record was found with the date of said washes.

Regarding the care with the waste produced in the vaccine room and its packaging, the study participants highlighted different conducts for the waste produced and some of them contradict the recommendations of the PNI. In general, study participants demonstrate a lack of knowledge regarding the segregation of waste produced in vaccine rooms. As for emergency situations, characterized by interruption in the supply of electricity in the vaccination room, the interviewees do not have speeches compatible with the guidelines recommended by the PNI, which may show that wrong actions are being taken in the vaccine rooms.

Knowingthatthenursingteamisresponsible for actions related to immunization, greater investment in the academic training of professionals and the adoption of permanent health education is urgent, due to the constant changes in norms and vaccination schedule.

In addition, the study also showed the scarcity of research that discusses the work process in the vaccine room, making it necessary, therefore, to carry out new studies, due to the relevance of this procedure for Primary Care and Nursing.

#### REFERENCES

BAHIA. Secretaria da Saúde do Estado da Bahia. Coordenação do Programa Estadual de Imunizações. **Manual de Procedimento para Vacinação.** 4.ed. Salvador BA. 2011, 573 p.

BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde Departamento de Vigilância das Doenças Transmissíveis. **Manual de Procedimento para Vacinação.** 4ª ed. Brasília (DF): MS; 2001. 316 p.

BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde Departamento de Vigilância das Doenças Transmissíveis. **Manual de Normas e Procedimentos para Vacinação**.1. Ed. Brasília, DF, 2014. 176 p.

MICHEL, Maria Helena. Metodologia e Pesquisa Científica em Ciências Sociais. São Paulo: Atlas, 2005. 141 p.

MINAYO, Maria Cecília de Souza. O Desafio do Conhecimento: Pesquisa Qualitativa em Saúde. 12 ed. São Paulo. Hucitec, 2010.

RIBEIRO, D. O. et al. Qualidade da conservação e armazenamento dos imunobiológicos da rede básica do Distrito Sul de Campinas. Inst.; v. 28 n.1 p.21-28, 2010. Disponível em: https://repositorio.unip.br/wp-content/uploads/2020/12/V28\_ n1\_2010\_p21-28.pdf. Acesso em 15 mai 2022.

TERTULIANO, G. C. Repensando a Prática de Enfermagem na Sala de Vacinação. **ANAIS DA VIII MOSTRA CIENTÍFICA DO CESUCA** – NOV./2014, ISSN – 2317- 5915