ABSTRACT
The aim was to collectively build an implementation proposal with the coordinating nurses for the 5S Program in the units of Primary Health Care. An intervention study, conducted with 12 nurses from the city Vale do Paranhana, Rio Grande do Sul. The study was conducted between August and October of 2018, created from three sessions of focus groups guided by themes, with a mean duration of an hour. Thematic content analysis was used. The participants considered important to apply the 5S in the Primary Health Care; however, they reported a lack of physical space and time to continue the actions as implementation challenges. Nurse’s responsibility to manage work was identified, and a strategical plan was built together with nurses to implement the Program. This study contributes to the quality improvement of services by planning and implementing the 5S Program in the Primary Health Care, and it gives visibility to the organizational demands of work processes.

Descriptors: Primary Health Care; Nursing; Health Services Administration; Health Management.

RESUMO
Objetivou-se construir coletivamente com enfermeiros coordenadores uma proposta de implantação do Programa 5S nas unidades de Atenção Primária à Saúde. Trata-se de uma pesquisa-intervenção, realizada com 12 enfermeiros de um município do Vale do Paranhana, Rio Grande do Sul. O estudo ocorreu de agosto a outubro de 2018, a partir de três sessões de grupos focais guiadas por temas, com duração média de uma hora. Foi utilizada análise de conteúdo temática. Os participantes consideraram importante a aplicabilidade do Programa 5S na Atenção Primária à Saúde, entretanto, destacam como dificuldade na aplicação deste a falta de espaço físico e de tempo para continuidade das ações. Foi evidenciada a responsabilidade do enfermeiro no trabalho gerencial e construiu-se conjuntamente um planejamento estratégico de implantação do Programa. Este estudo contribui para a melhoria da qualidade dos serviços a partir do planejamento da implantação do Programa 5S na Atenção Primária à Saúde e dá visibilidade às demandas organizacionais dos processos de trabalho.

Descritores: Atenção Primária à Saúde; Enfermagem; Administração de Serviços de Saúde; Gestão em Saúde.
INTRODUCTION

The 5S Program is a quality management tool that provides improvements related to safety, prevention to risks, work conditions. It also serves as an attribute to improve routine management and, consequently, efficiency and productivity. Its name represents five words/Japanese senses that start with the letter S: Seiri (sort), Seiton (set in order), Seiso (shine), Seiketsu (standardize), and Shitsuke (sustain). The practice of these senses in the health field constitutes a system that organizes, mobilizes, and transforms people and organizations because it facilitates teamwork, and it also improves the work process, eliminating losses that favor errors and work accidents.

Each sense relates to a step of the Program, and they should be implemented one at a time following the order previously described as it naturally leads one sense to another. Its application in the health services depends on the people involved (managers, professionals, and users) and their values, as it will benefit the physical and mental health. Thus, the team needs training, also flexibility and creativity, commitment with persevering adherence to the Program, and the creation of action plans for each sense. Additionally, the manager needs to be an example by conducting the Program’s steps and providing feedback at the end of each one.

A study of a hospital in São Paulo that applied the Program pointed out that more than 95% of the problems were resolved through efficient control of internal and external activities. The idea of conducting the “D Day” (cleaning day) was created to eliminate waste, accumulated materials, and general disorganization. Another study in a Primary Care Unit (PCU) in Bahia, had results including more clarity and adequacy in the work environment from the reorganization or materials and equipment, cleaning, and correct identification of files and cabinets.

The application of the 5S Program in the Primary Health Care (PHC) is incipient. Still, progressively, health services have tried to start programs related to quality, considering their positive effects, such as providing organized and efficient care. But these services can face implementation challenges due to lacking knowledge on the subject. Therefore, the concept of strategic planning helps to think about this management tool by allowing a better definition of how an organization should follow to reach one or more goals within a previously analyzed context.

Based on the assumption that through helping to maintain organization in the work environment and better management of routine tasks, the 5S Program can be used as a strategical tool. The nurse can control losses, and waste and, especially, the team becomes conscious about the creation of an environment compromised with quality and sustainability. Quality management is only obtained through the interaction of all involved. Therefore, the nurse’s action in the management work process corroborates with the application of the Program considering his/hers capacity and training. Investigations about the nurse’s role in the management of operations and/or use of systemic organizational tools focused on quality improvement, such as the 5S Program are essential and needed. These studies favor the relevance of the nurse’s action in the management, thus, contributing to building nursing knowledge. Also, studies focused on obtaining satisfactory results in the nursing work can inform managers, as they use different strategies favoring continuing improvement and the adoption/maintenance of quality patterns.

Considering the importance of this theme, the question arose: How the 5S Program can be implemented in PHC units? To answer the question, the objective was to collectively build with the coordinating nurses a proposal to implement the 5S Program in the PHC units.

METHODS

An interventional study with a qualitative approach, developed with nurses working in PHC units in a city located at Vale do Paranhana, Rio Grande do Sul. The inclusion criteria were: coordinating nurses in the unit, assumption that the coordinating nurse has broader knowledge related to PHC management; therefore, a strategical actor in a possible implementation of the 5S Program. The exclusion criteria were: nurses on vacation, on health/maternal leave, or any type of leave. From 13 coordinating nurses in active APH units in the city, 12 participated in the study because one professional was on a health leave during the study. In this city, all coordinators of PHC units were nurses.

The research operationalization was between August and October 2018, through focus groups. There were three gatherings, each one with an approximate duration of one hour, mediated by a moderator and with the assistance of an observing participant. The sessions were after the weekly ordinary nursing meetings of the PHC in the city.

Ten professionals participated in the first session. In the second, two more nurses adhered after returning from health leave and vacation, totaling 12 participants. In the last session, eight participants attended, and others had personal and/or professional commitments.

The organization of the group sessions followed structured planning from a guide of themes designed by key-moments related to the objective/debate of the session. The sessions were organized to provide structuring (what has been developed in the PHC), disarrangement (group reflection, and building possibilities for the 5S Program in the assistance routine) and restructuring (proposal to implement the 5S Program). Thus, sessions were composed of articulation of ideas, synthesis moment, and closure.
there was a consensus discussion to build and validate the proposal through questions previously defined by the author. The cooperative building was based on the systemic process of planning, allowing the articulation of how to approach each sense (what, why, where, when, who, how, for how long).

The meetings were recorded in MP4 audio format and posteriorly transcribed. The thematic content analysis was used\(^2\), comprising three phases:

1. pre-analysis: organization of the information;
2. exploring the material: classification in pre-defined categories;
3. treatment of the obtained results and interpretation: interpretations and analyses of the collected information.

Ethical and legal aspects of the Resolution no 466/2012 about research involving human beings were respected.


<table>
<thead>
<tr>
<th>Moments</th>
<th>1st session</th>
<th>2nd session</th>
<th>3rd session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening</td>
<td>– Session opening.</td>
<td>– Session opening.</td>
<td>– Session opening.</td>
</tr>
<tr>
<td></td>
<td>– Establishing the setting.</td>
<td>– Returning the debate from the previous meeting and introduce the concepts of the 5S using posters for active discussion in this meeting.</td>
<td>– Returning the debate from the previous meeting for the active discussion in this meeting.</td>
</tr>
<tr>
<td></td>
<td>– Clarifications about the participative dynamic discussion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Estimated time:</strong></td>
<td>10 min.</td>
<td><strong>Estimated time:</strong> 15 min.</td>
<td><strong>Estimated time:</strong> 10 min.</td>
</tr>
<tr>
<td>Themes of debates</td>
<td>Previous knowledge and explanation about the 5S Program.</td>
<td>Limitations and possibilities to implement the 5S Program in the PHC.</td>
<td>Building a collaborative plan for the implementation of the 5S Program in the PHC.</td>
</tr>
<tr>
<td>Group dynamic activities</td>
<td>– A dynamic exercise, a game show based on questions and answers with participants divided into two groups.</td>
<td>– Dynamic exercise with posters using images, with participants organized in doubles.</td>
<td>– Participative planning to propose strategies and flows to implement the 5S Program in the PHC using posters.</td>
</tr>
<tr>
<td></td>
<td><strong>Estimated time:</strong> 10 min.</td>
<td><strong>Estimated time:</strong> 15 min.</td>
<td><strong>Estimated time:</strong> 50 min.</td>
</tr>
<tr>
<td>Collective discussions</td>
<td>– As health professionals, do you consider essential to remove unnecessary things from the workplace?</td>
<td>– Based on what was presented, did you self-identify with any situation that happens in your unit?</td>
<td>– How could the 5S Program be implemented in the PHC units of the city?</td>
</tr>
<tr>
<td></td>
<td>– Do you believe that by performing the steps of the 5S Program, there will be improvements in your workplace?</td>
<td>– What do you do so these issues do not occur in your unit?</td>
<td>– What would the nurses’ roles be in this implementation?</td>
</tr>
<tr>
<td></td>
<td>– Which of the five senses were easier to understand? And which were the harder?</td>
<td>– Do you think it would be relevant to have the implementation of the 5S Program in the PHC in the city?</td>
<td>– What are the facilitators and challenges to implementing this Program in the PHC?</td>
</tr>
<tr>
<td></td>
<td><strong>Estimated time:</strong> 10 min.</td>
<td><strong>Estimated time:</strong> 10 min.</td>
<td><strong>Estimated time:</strong> 20 min.</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Resuming and validating the central ideas of the participative discussion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure</td>
<td>Acknowledgment of their participation, scheduling the following session.</td>
<td>Acknowledgment of their participation, scheduling the following session.</td>
<td>Feedback from the meetings. Acknowledgment of their participation and data collection closure.</td>
</tr>
</tbody>
</table>

PHC: Primary Health Care.
Source: Research database.
Authors’ elaboration.
Participants signed an Informed Consent. The research project was approved by the Ethics and Research Committee, CAAE nº 93178218.9.0000.8135, in August 2018.

RESULTS

The participants’ time of employment ranged from two months to 21 years, and their ages ranged between 31 and 57 years. Eleven participants had a graduate degree (specialization course), being six focused on public health.

After the information analysis, the following categories emerged: Perceptions of the importance of the 5S Program and its applicability in the PHC; Facilitators and challenges in implementing the 5S Program; Proposal for implementing the 5S Program.

Perceptions about the importance of the 5S Program and its applicability in the Primary Health Care

The importance of the 5S Program and its applicability in the PHC was noted when participants considered it an improvement strategy to their routines by organizing their work process.

It is a way to change how the unit works, the organization, flow, material [...] serves to have a different view [...] with the 5S you can change a lot of things [...] to improve the routines, to improve the processes. (P4)

Participants demonstrated previous knowledge about the 5S Program, and a few referred to experiences in other services. They attributed importance to the health service organization by noticing contributions to the quality of life and their work processes.

I knew it from the company where I used to work [...] there wasn’t a pattern of order so that these names [senses] I did not know. [...] But it was done this way, separating and everything was identified, the draws and cabinets, and what was inside that cabinet was written in a tag. (P5)

More organization where I work. My desk is always full of notes; then I don’t know what has already happened; it lacks cleaning. [...] The first and the second [senses] are essential [...] The biggest problem is to keep the ambulatory organized, I enter there, and I see the medication box or the needle that were not put outside the trash, or the kidney dish to wash. [...] We do everything kind of in a rush. (P10)

Sometimes even a disorganized bedsheet, you enter with the patient to do one dressing, and then there is that sheet. [...] Another thing is the cleaning, we need to do training or something with the cleaning crew. (P4)

About a possible implementation of the 5S Program, the participants considered it a fundamental process because it organizes work routines, contributing to the organization of the health service.

I think it facilitates the service in the unit [...] if possible to implement; it would facilitate, it would be more organized. (P4)

[...] it lacks us to have initiative and desire and to have in mind [...] that this is an interesting process [...] that you can be much more organized. (P6)

Facilitators and challenges in implementing the 5S Program

Regarding the challenges of a possible application of the 5S Program, participants referred to lacking time and physical space in the health unit.

The biggest problem is the lack of time to implement this, we always have patients [...] Also we have little space because the units are slammed, and there is not much to do, there isn’t a way to get organized, there is no space to put the cabinets [...] a lot of things we do, for example, my cabinet is all identified and pretty. But what you need always to use, there is always something missing. (P4)

The management/order [that is considered the most difficult] [...] It lacks time to organize, it is not because it lacks desire, but there are so many things to do. [...] it is to make people understand and to have time for them to make it. (P3)

They noted the challenge in modifying the work processes, the continuity of these actions, and the particularities of the organizational culture of each service, which also emerged as challenging elements.

To modify the processes [refering to the difficulties] [...] But I think that to give continuity is the greatest challenge, because all of a sudden, everything can be disorganized again, then you have to go back to the beginning. (P2)

I think it is easier to implement it when dealing with absolute truths, but here we deal with people, and we do not have absolute truths; this is more complex, each one has a vision, and it is not necessarily right or wrong. If you think that each reality is different, and I think this is the greatest difficulty. (P11)

Yet, as facilitators, participants pointed out the initial senses (sort, set in order and shine) being the easiest to implement,
attributing improvements in the work environment, and gains related to productivity and in processes of evaluating services.

*I think that the easiest [the senses] are the shine and the one about care. They are the most practical, does not need too many things.* (P7)

[...] the better environment to work, everything becomes more accessible. Removing what is unnecessary, and it is better for the PMAQ-AB [National Program of Improvement in the Access and Quality of the Primary Attention]. (P3)

**Proposal for implementing the 5S Program in the Primary Health Care**

Participants referred that as team leaders, they feel responsible for this implementation, mediating, and organizing the logistical system. But, they highlighted the need for compromise and cooperation of other team members to achieve the expected results and the effectiveness of actions. Therefore, they consider fundamental to use strategies to mobilize the team, as well as the adoption of management instruments during the implementation process.

*I think that we had to start by identifying the problems in the unit, to have a team meeting, as they need to know what is this program, to know why we are doing it, to improve and to organize, to improve work routines. To see if everyone would compromise [...] To make a checklist, because first, you have to identify what is wrong, then see what you can change.* (P4)

Showing the situations and the unit diagnoses, and proposing to all employees together. (P12)

*To create a routine with these protocols, to create an internal committee and maybe also to have another sight [external], because sometimes we don’t see the mistakes, right?* (P6)

The proposal of the final product of this work illustrates the collective construction of a plan to implement the 5S Program in the PHC of the city (Figure 1).

**DISCUSSION**

It was noted that previous knowledge about the 5S Program legitimizes its importance regarding organizing the work process. Knowledge is essential for better adherence to the 5S Program proposal, as well as to think about strategies to deal with challenges that may arise during the process of implementing these strategies in health services(13).

---

Authors’ elaboration.

*Source: Research database.*

*Figure 1.* Design of the 5S Program implementation in the city collectively built in the group sessions. Rio Grande do Sul, Brazil, 2018.
Based on the results, the 5S Program implementation in the PHC seems to be a strategy that triggers improvements in the work environment, thus, contributing to the increase in productivity and effectiveness in executing programs recommended for these services. It has relevance because it is not usual to implement these programs in the PHC, which is a result of the lack of proper strategies and organization tools aimed at the quality of the work process by health services[31].

Therefore, as the participants manifested, nurses in strategical leading positions assume great importance in the implementation process of such Program. Nurses mobilize people and resources by using management tools aimed at the solution of routine issues in the PHC, focused on the quality of actions. Within the strategies mentioned by coordinating nurses, there are the creation and organization of a committee, team meetings, application of checklists, and the use of operationalization protocols of senses. These strategies ratify the complexity of the nurse’s management work because when positioned as the worker with a managing impact, they are responsible for its efficacy of the Program. Still, they also need to deal with inherent issues related to interpersonal relationships and excessive demands. These require skills to assess, recognize, and personal qualifications to change habits and behaviors[40].

Despite the facilitators reported, nurses highlighted possible challenges related to lacking time and physical space and the continuity of the actions aiming at results. Such challenges impede the achievement of good health results and, consequently, the quality and continuity of care because they interfere in promoting better health practices[14]. Other studies in the same perspective show difficulties and challenges similar to the ones seen in this study, such as lacking space and financial resources[30]; pressure from managers, lack of proactivity from the team, stress and long work journeys[31]; and difficulties to adhere to the Program by a few professionals due to resistance to changes[60].

Therefore, the nurse’s role, especially when in a strategical leadership position, gives professional visibility in implementing the 5S Program. When the implementation is done correctly and effectively, it can change values, socio-professional relationships, resulting in the organization of a pleasant work environment. Thus, it is suggested that the implementation of the 5S Program can be a facilitator in the nurse’s strategies to improve the quality of care in the PHC. Not only by providing continuous improvement to the physical structure but also, in the promotion and practice of “good habits” in performing tasks and in intra-and interpersonal relationships maintained and/or adopted. Thus, resulting in effective teamwork[19].

The proposals of coordinating nurses in the collective construction of an implementation design for the 5S Program were extremely important. They reinforced the consciousness and positioning of the group regarding their disseminating role when in a management position, in conducting better practices in the PHC with the multi-professional team. Best practices in the PHC result from proper management, such as applying strategies to strengthen the organization’s culture and applying tools aimed at the worker’s quality of life and health. Therefore, the 5S Program is a management tool that can help to restructure internal processes to qualify and certify the work in the PHC, benefiting users and collaborators[16]. For this reason, maybe the nurse is perceived by the participants of this study as the main responsible for the management of the quality process in action, being the one who directly acts about the use, organization, preservation, standardization, and discipline of assistance processes in the PHC.

In summary, the proposals of coordinating nurses to implement the 5S Program in the PHC according to the operational design, collectively consolidated in this research includes: Shared planning between the members, intended to decentralize objectives and goals, and the collective construction of strategies and actions to make a feasible implementation; to detail the specific actions for each sense: sort, set in order, shine, standardize, sustain. The proposal of an implementation design for the 5S Program gains attention because of its strategical potential to improve the quality of actions in the PHC. Based on that, the implementation of this tool deserves dissemination in the organizations and services in the PHC, primarily because it assists the nurse’s management work. The assistance occurs by making the nurse adopt dynamism characteristics, communication, planning and decision making, to act as a team leader[17], at the same time that it provides visibility to the PHC professional.

Therefore, it was noted that the management and quality of attention to users are particularities that health professionals face daily in the Unified Health System. Thus, coordinating nurses are care providers who make decisions, act as communicators, leaders, and managers. For all of this to be effective, efficient, and with quality, the PHC should be well-structured, allowing the implementation of central functions: to welcome, to listen, and to offer. Therefore, actions and the implementation of new programs, for example, the 5S Program are needed[18]. An organized health unit helps to resolve health problems and needs of the population, facilitating actions of promotion, protection, and rehabilitation[19].

This study has limitations, such as the geographical delimitation that translates the reality of a specific city. Also, the participation of only one professional profile, the coordinating nurse; however, for the applicability of the 5S Program in the PHC, all institutional actors are required to constitute culture and organizational discipline to subsidize the needed conditions for its implementation in this scenario.
CONCLUSIONS

The proposals from coordinating nurses in building an implementation design for the 5S Program in the PHC reflects that this Program depends on the involvement of the whole team. It also reaffirms the need for management competencies from the nurse in the articulation process to sensitize and mobilize the team members for this demand.

Thus, it is concluded that the actions of the nurse in a strategical leadership position in the PHC are elementary to this implementation. It translates the opportunity to promote behavior changes in people and changes in the work environment, to favor the optimization and sustainability of resources, upon principles of use, organization, cleaning, standardization, and discipline. These aspects seem to be linked to the coordinating nurse’s job, being leveraged by the proposal of elevating and guaranteeing improvements in productivity, accessibility, and reach of better results. These findings, as well as the proposal of an implementation design for the 5S Program in the PHC, although inherent to the health management, is not completely clear in the context of quality management in the PHC and the literature.

The collective construction of a strategical plan is the final product of this study, where nurses ranked the steps and actions they believed to be needed to implement the 5S Program in the PHC. Thus, this study brings an innovative proposal to implement the Program, considering the PHC scenario. This is an initial proposal, consolidated by acting nurses, but still needs criticism and more depth regarding a standardization instrument for the referred Program, which can be added to other approaches to analyze the organizational environment.

Thus, there is a need for new studies with the same focus or studies to measure the impact of the 5S Program implementation in PHC services. However, this study contributes to the field of nursing and for management of quality in the PHC, by providing clear proposals from nurses in a strategical leadership position about their role in the management of health processes, and by providing an initial idea of implementation design that can be improved and applied in other scenarios of health production.

REFERENCES


