



Self-care of recyclable material collectors: nursing actions in light of Convergent-Assistance Research

Autocuidado de catadores de material reciclável: ações de Enfermagem à luz da Pesquisa Convergente-Assistencial

Autocuidado de los recolectores de material reciclable: las acciones de enfermería a la luz de la Investigación convergente asistencial

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ABSTRACT

Objective: to promote the self-care of recyclable material collectors through the application of the Theory of Self-Care Deficits. **Method:** Convergent-Assistance Research conducted with recyclable materials collectors from two recycling associations in Southern Brazil. The data was produced through participant observation, semi-structured interviews and convergence groups. The data was analyzed according to the steps proposed by the method: apprehension, synthesis, theorization, and transfer. **Results:** the participants had deliberate actions undertaken and motivations for self-care. However, they presented deficits related mainly to habits that exposed them to occupational risks. In the supportive-educational group actions, participants discussed their self-care deficits and strategies to mitigate them. The research enabled changes in the work scenario; however, some self-care deficits persisted. **Conclusions and implications for the practice:** it is pondered that profound changes require permanent actions for transformations in social inequities. However, the supportive-education nursing system enabled positive changes in the recyclable materials collectors' self-care, which corroborates the theoretical-practical contribution of the theory to nursing care.

Keywords: Self Care; Solid Waste Segregators; Nursing; Occupational Health; Nursing Theory.

RESUMO

Objetivo: promover o autocuidado de catadores de material reciclável a partir da aplicação da Teoria dos Déficit de Autocuidado. **Método:** Pesquisa Convergente-Assistencial realizada com catadores de material reciclável de duas associações de reciclagem do Sul do Brasil. Os dados foram produzidos por meio de observação participante, entrevistas semiestruturadas e grupos de convergência. Os dados foram analisados segundo os passos propostos pelo método: apreensão, síntese, teorização e transferência. **Resultados:** os participantes possuíam ações deliberadamente empreendidas e motivações para o autocuidado. No entanto, apresentaram déficits relacionados, principalmente, a hábitos que os expunham aos riscos ocupacionais. Nas ações grupais de apoio-educação, os participantes discutiram seus déficits de autocuidado e estratégias para mitigá-los. A pesquisa possibilitou mudanças no cenário laboral, no entanto, alguns déficits de autocuidado persistiram. **Conclusões e implicações para a prática:** pondera-se que mudanças profundas exigem ações permanentes para transformações das iniquidades sociais. No entanto, o Sistema de Enfermagem apoio-educação possibilitou mudanças positivas no autocuidado dos catadores, o que corrobora a contribuição teórico-prática da teoria para o cuidado de Enfermagem.

Palavras-chave: Autocuidado; Catadores; Enfermagem; Saúde do Trabalhador; Teoria de Enfermagem.

RESUMEN

Objetivo: promover el autocuidado de los recolectores de materiales reciclables basado en la aplicación de la Teoría de los Déficit en el Autocuidado. **Método:** Investigación de Asistencia Convergente realizada con recolectores de material reciclable de dos asociaciones de reciclaje en el sur de Brasil. Los datos fueron producidos mediante observación participante, entrevistas semiestructuradas y grupos de convergencia. Los datos fueron analizados según los pasos propuestos por el método: aprehensión, síntesis, teorización y transferencia. **Resultados:** los participantes habían realizado deliberadamente acciones y motivaciones de autocuidado. Sin embargo, mostraron déficits relacionados principalmente con hábitos que los expusieron a riesgos laborales. En las acciones grupales de apoyo-educación, los participantes discutieron sus déficits de autocuidado y estrategias para mitigarlos. La investigación permitió cambios en el escenario laboral, sin embargo, persistieron algunos déficits de autocuidado. **Conclusiones e implicaciones para la práctica:** se considera que los cambios profundos requieren acciones permanentes para transformar las desigualdades sociales. Sin embargo, el sistema de apoyo-educación de enfermería permitió cambios positivos en el autocuidado de los recolectores, lo que corrobora el aporte teórico-práctico de la Teoría al cuidado de Enfermería.

Palabras clave: Autocuidado; Segregadores de Residuos Sólidos; Enfermería; Salud Laboral; Teoría de Enfermería.

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INTRODUCTION

The recyclable material collectors are an emerging group in the urban landscape. In the world, it is estimated that about 15 million people are involved in recyclable material collection or recycling activities. In Brazil, approximately 300 thousand people perform this work¹.

The recyclable material collectors are a population of low socioeconomic status, living in vulnerable areas and performing unhealthy work². Their work environments are full of occupational hazards³ aggravated by long working hours¹. As a result, recyclable material collectors have a high prevalence of work-related accidents and diseases⁴.

There is evidence that the recyclable materials collectors have a lack of protection against the risks inherent to their work⁵. The social vulnerability in which they find themselves hinders their access to health care. Moreover, this population does not always perform effective self-care, which increases the risks⁶. In this sense, one can consider that the promotion of self-care represents a strategy capable of protecting the health of this population.

Promoting self-care brings into play the Theory of Self-Care Deficits, postulated by Dorothea Orem⁷. Orem's theory is one of the most important theories in Nursing and its use is a differential in research⁸. Constitutes a model capable of improving the self-care of individuals^{9,10}, divided into three interdependent cores: Self-Care Theory, Self-Care Deficits Theory, and Nursing Systems Theory.

Through the Theory of Self-Care, it is assumed that all individuals are potential self-care agents, i.e., they have actions and motivations for such. The Theory of Self-Care Deficits establishes that nursing is required when a person or group is unable or has difficulties in providing self-care⁷.

In these cases, Nursing Systems are formed by nurses, through their deliberate exercise of specialized Nursing skills (Nursing agency), in the context of their interpersonal relationship with persons or groups with deficits with the goal of ensuring that self-care demands are known and met⁷.

Self-care is a mark of the subject's autonomy over their health. Nurses understand the challenge of promoting it from a theory-driven practice, but there is a lack of recent evidence showing which strategies and tools can help them. Currently, the scientific literature lacks evidence on the practical approach of this theory to obtain better health outcomes¹¹.

In this sense, it is based on the premise that nurses have an important role in promoting the health of individuals and communities and can contribute to the optimization of healthy behaviors¹². In light of the above, this study aimed to promote self-care among recyclable materials collectors by applying the Theory of Self-Care Deficits.

METHOD

A qualitative study, developed from Convergent Care Research (CCR), a method that enables the conduction of scientific research

in conjunction with a care practice with the aim of promoting changes and transformations in practice¹³.

The scenario of the study was composed of two recycling associations located in Southern Brazil. These associations totaled a population of 23 recyclable material collectors, who worked together in the same recycling shed. All were invited to participate in the study. During the period of data production, one worker left her job and three were not interested in participating. Therefore, 19 workers participated in the research.

Data was produced between August and December 2017. As advocated by CCR, research and assistance data was produced through the triangulation of three methodological tools: participant observation, semi-structured interviews, and focus groups.

The participant observation was conducted in two phases. The first phase occurred during 20 days, totaling 115 hours of observation in the recycling shed, on the premises of the association and in the selective collection, inside the truck. It was conducted, with the aid of a script, that systematized information to the perceptions of the main researcher in relation to the self-care actions undertaken by the collectors and possible deficits.

This was followed by semi-structured interviews, which were carried out individually, in a reserved place, on the association's premises. They were conducted with the help of a semi-structured instrument that investigated: perceptions about the relationship between work and health; daily attitudes to take care of oneself; difficulties encountered in taking care of oneself; conceptions about what one thinks is necessary for the maintenance of health on a daily basis at work, and suggestions for the educational groups.

The first interview, considered a pre-test, led to adjustments in the semi-structured script, and was excluded from the database. The average duration of the interviews was 28 minutes. They were audiorecorded with the consent of the participants. From the field diary and the interview transcriptions, a synthesis of the content was prepared in the form of topics. This synthesis helped to validate the data during the third stage, which consisted of the convergence group.

The convergence group was used, in this study, as the main tool for care practice, because it allows the conduction of the investigative practice together with the care action in the same physical and temporal space¹³. The care action was outlined, based on the application of Nursing Systems Theory, understood as an explanatory model of the relationships between nurses and individuals/groups. The support-education system was used as a model of a Nursing System. The support-education system is opportune when a person or group is in full capacity to lead their self-care actions, but needs guidance⁷.

The recyclable material collectors were divided into two convergence groups for which the same assistance plan was applied. The meetings took place in the associations' cafeterias, lasted an average of one hour and thirty minutes each, and were audiorecorded with the consent of the participants.

The meetings were conducted by the main researcher, assisted by a team of three previously trained research assistants.

The group meetings began with a welcome, a review of the study's objectives, a presentation of the research assistants, and the construction of pacts (duration of the meeting, planning, freedom of speech, respect for the other's opinion, confidentiality about what was said in the group space, among others). Afterwards, the summaries of the interviews and observation were read for validation. All participants validated the data. The meetings were then conducted according to the phases that make up the convergence group: phases of recognition, revelation, sharing, and rethinking.

In the recognition phase, the participants were able to recognize the purpose of the action and build cohesion as a group. An awareness-raising technique called "Who is important to me" was used. A rose was handed to the group. Each participant, in possession of the rose, was asked to verbalize who was/are the most important person(s) in his/her life. After the round of testimonies, the researcher invited the participants to reflect on the perspective that they themselves should also be the most important people in their lives. The goal of this technique was to invite them to think of self-care as the valuing of themselves.

This was followed by the disclosure phase in which the participants shared their perceptions and experiences regarding self-care. This movement was facilitated by the researcher through questions such as: "How does self-care happen? What are the difficulties and barriers? What is good? What could be improved?"

To optimize the process of knowledge and knowledge exchange, the game of True and False was performed. In possession of boards with T for "true" on one side and F for "false" on the other, the participants judged the myths and truths told by the researcher, with the sharing of knowledge.

The next phase, sharing, consisted of shared decision making based on the discussion. In this phase, the workers were able to realize the need for transformation of individual and collective self-care practices. Finally, in the last phase, the rethinking, the collectors reflected on the application of what was built by the group. The rethinking culminated in the establishment of pacts and the identification of key behaviors for the establishment of self-care and care for others in the association.

The meetings were concluded by the evaluation of the activity. For this moment, one of the research assistants read the synthesis of the meeting for data validation. The participants made adjustments to the content of the syntheses verbally, and then validated them.

The closure of the research process happened with the second phase of participant observation, which aimed to recognize the changes in the scenario studied after the care practice. After 30 days of the convergence groups, eight hours of observation were carried out by the main researcher, over two days, with the observations recorded in a field journal.

The corpus for the analysis was composed of the field diary, the interview transcripts, the transcripts of the convergence groups, and the syntheses validated by the participants. The analysis was carried out based on the stages Apprehension, Synthesis, Theorization, and Transfer proposed by CCR¹³.

The Apprehension consists of the organization of the material and is characterized as the approach of the researcher to the empirical content¹³. In this step, the main researcher selected the material that contributed to the study's objective and proceeded to explore it through in-depth reading. The chromatic technique was applied to systematize the finding of similarities between the texts and approximations with the objective of the study. This resulted in the separation of the empirical material into four semantic groups: actions and motivations for self-care; self-care deficits; actions to promote self-care.

The Synthesis consists of the immersion and subjective analysis of the systematized material¹³. In this step, the empirical material was cut out, grouped according to its colors, and pasted onto posters. This allowed a global visualization of the relationships among the data and a reflection process that resulted in the composition of the thematic axes.

In the Theorization stage, data abstraction takes place, that is, the researcher turns to the theories that support the study and seeks to unveil the meanings and formulate theories to produce new knowledge¹³. This movement was facilitated by notes made on the posters that helped in the task of interpreting the data in light of the Theory of Self-Care Deficits. At the end of this stage, it was possible to conclude the adjustments on the thematic axes and structure the conclusions of the study.

Finally, the Transfer consists of contextualizing the study's conclusions for similar contexts¹³. This movement was made possible by discussing the results from the interface with other national and international studies.

In the presentation of the results, the participants were identified by pseudonyms chosen by them during the conduction of the focus groups followed by the acronym "IN" ("Interview Notes"). The field diary excerpts were identified by the acronym ON, referring to "observation notes", followed by the corresponding date.

This research complied with the ethical precepts established in Resolutions 466/12 and 510/16 of the National Health Council. All participants who agreed to participate in the research signed the Informed Consent Form before the beginning of participant observation. The study was approved by the local Research Ethics Committee, under protocol number 2.057.103.

RESULTS

Of the 19 waste pickers, 15 were women. The average age was 43.7 years (the youngest worker was 30 years old and the oldest was 62 years old). Regarding color/race, eight participants declared themselves brown or mulatto, four declared themselves white, three declared themselves black, and two declared themselves light brown. Of the 19 interviewees, 11 had complete or incomplete elementary school education, six had complete or incomplete high school education, and two had incomplete college education.

The average time of the participants in recycling was eight years. Of the 19 interviewees, 17 were chronically ill and 15 had already suffered work accidents. In the period in which the data was collected, the individual financial earnings were about

R\$600.00 per month (the national minimum wage was R\$937 in the period in which the data was collected).

Actions and motivations for self-care identified by waste pickers

The data in this category reveal the actions and motivations for self-care of waste pickers, identifying how self-care agency (capacity for engagement and autonomy for self-care) is characterized in this group.

The recyclable materials collectors were shown to establish, within their own group, most of their self-care actions. Feeding and hydration were identified as examples of these actions:

[...] our health is better because of diet. We also take care, we call people's attention because they have to drink a lot of water during the day. What comes here [food received by the Mesa Brasil program] we distribute to take home, to make sure that they will have [...]. (Simoniti)

The self-care actions were also evidenced through care for occupational risks and the use of Personal Protective Equipment (PPE):

I am very careful with rat urine. [...] I try not to eat the things that appear in the recycling. I don't eat with dirty hands. [...] (Alessandra)

I use the PPE. I use it a lot, I value it. I take care not to hurt myself, I take care of myself a lot, I learned to take care of myself. (Paloma)

Another resource identified as an important self-care action was the use of medications and dressings:

[...] a worker complained of intense pain in her right wrist. [...] used an ointment whose name I didn't identify (by smell, it resembled diclofenac diethylmonic) and bandaged her wrist with a bandage. He said that this relieved the pain. (ON, 08/09/2017)

Moreover, it was also evidenced that leisure and spirituality consisted of self-care actions for the psychic and existential well-being:

[...] when it is very hard, I make a point of fishing. [...] on weekends, I go out for a little ride on my motorcycle. [...] I can relieve my mind. [...] (Simoniti)

During the midday break, I was talking to a group of female workers. One of them mentioned how spirituality had played a role in easing negative feelings and sensations such as stress, anxiety, and suffering. She mentioned that her personal investment in this had begun with reading a book she had found, by chance, in the recyclables, called "Violets in the Window". He said that this book

had changed his life and the way he saw the world. Since then she had been reading spiritist content and reflecting on the spiritual dimension and said that this had helped her to face the adversities of life. [...] (NO, 16/08/2017)

Finally, the workers explained their motivations for self-care. The desire to live, with health and quality, was one of the motivations cited. In addition, the memory of past periods, in which accidents were common, also acted as motivation:

I don't want to die so soon. [laughs] My life! I want to be on my feet, to always work and not have to depend on a son, or a husband, or anyone. [...] (Sônia)

[...] when we work in a hazardous place, we have to be aware. Sometimes it is a little bit lacking, but I think that if we look back at what happened, we will remember and we will put on a glove. [...] (Tassiane)

By viewing the actions undertaken by the waste pickers, one can infer that they were agents of self-care, i.e., they were people with the potential to meet their health needs.

Health at risk: elements that signal self-care deficits

Despite the results showing that the recyclable materials collectors were self-care agents, with potential and motivation, the data also showed that the participants had a set of difficulties in the operationalization of these actions, often due to insufficient knowledge or daily actions that exposed them to risks.

The little knowledge that the workers had about the relationship between health and work acted as a limiting factor for the establishment of self-care. Sometimes, participants expressed denial of the interference of work in their health:

[...] health does not depend only on recycling. [...] I have bronchitis, but my mother has bronchitis. So, this comes from before. [...] if I have a heart problem it is because my family has it, I can't blame recycling. [...] I think that if the disease comes it is because it has to come. [...] (Tassiane)

The lack of knowledge about the possible impacts of the work on their health caused the recyclable materials collectors to adopt habits that exposed them to risks, such as ingesting food from recyclable material:

They [colleagues] eat a lot of crap that comes in the recyclable. [...] they are there on the conveyor belt, they see that there is a cookie and they eat it. They don't know how many years ago that little bag was there, or if any animal had passed through there. [...] (Fia)

The recyclable materials collectors sometimes trivialized the risks inherent in their work, which put them in a situation of

vulnerability. The relativization of the importance of PPE stood out as an example:

[...] you get used to it [risks] and stop taking care of yourself. Something that used to be disgusting to me is now normal. So, I may not be so careful when dealing with it. Sometimes, you don't wear gloves, you don't wear boots, because you get used to it. [...] I observe that I come home with my fingernail all dirty, full of things underneath [...]. (Madalena)

[...] I don't take much care of myself. I am very stubborn. [laughs] These days, I caught something with shards of glass, I don't take care of myself, I don't do anything to take care of myself. [laughter] (Fernanda)

Finally, one can observe the prioritization of work over self-care. The need for financial gain was understood as a necessity that overrode the health of the worker:

[...] it is time. It's a lot to take care of. If you take care of yourself, you can't do everything. So, we really don't take care of ourselves [...]. (Fernanda)

The data highlights that the self-care agency of the participants in this study was not linear. While some participants were engaged in their actions, others had more profound knowledge and motivation gaps, which characterized a heterogeneous scenario.

The nursing system support-education in practice: convergence of research and assistance for the promotion of self-care

The convergence group was the instrument chosen to trigger the assistance stage of the CCR, which consisted of the practical application of the Theory of Nursing Systems. The researcher assumed a facilitator posture by means of asking provocative questions at some moments, and providing supportive and educational Nursing orientations at other moments. The support-education movement was translated into the process illustrated in Figure 1.

In the first stage of the CCR, the survey of research data provided a glimpse into the relationships between self-care agency (composed of actions and motivations) and self-care deficits. Interviews and observations were the sources of evidence. This diagnosis allowed the recognition of the demands for the Nursing agency (caregiving action).



Figure 1. Illustration of how the Nursing Support-Education System was established with recyclable materials collectors, configuring the convergence of research and Nursing care for the promotion of self-care. Santa Maria, RS, Brazil, 2017.

In the second stage of the CCR, the care action triggered by means of the convergence groups consisted of the meeting between the recyclable materials collectors and the main researcher/nurse in a space of knowledge sharing, health education, and agreements for the promotion of self-care. This assistential action was translated into the application of the supportive-educational Nursing System, in a participatory movement that enabled the convergence between research and assistance.

As part of this process, the workers were able to recognize their self-care deficits and the need to mitigate them with the help of the research team. From this, the workers signed pacts to establish individual and collaborative self-care from the problems identified by the group. Chart 1 illustrates these pacts.

At the end of the convergence groups, the assistive action was positively evaluated by the participants. As described in the method, 30 days after the actions, there was a second stage of participant observation to visualize the possible transformations of the research in practice. It was noticed that the participants modified some behaviors in favor of self-care, but that some deficits had persisted:

[...] I asked what she [worker] thought about the work that I had done with the group and, in particular, if there had been any changes. She answered me that some things had changed. She said that the workers were sanitizing their hands. [...] (ON, 20/12/2017)

[...] on a visit to the warehouse today, I found it quite organized. I noticed that there were few recyclables on the floor, which made transit much easier. I discovered that there is a worker responsible for organizing, cleaning, loading the recyclables, and helping the other colleagues, as was talked about during the focus group. However, I noticed that some workers are still working without gloves. (ON, 19/12/2017)

DISCUSSION

The first category highlighted the recyclable materials collectors as self-care agents whose actions focused primarily on the appreciation of a quality diet and hydration. Recyclable

Chart 1. Individual and collective self-care deficits recognized by the group with the help of the research team and pacts signed for their mitigation. Santa Maria, RS, Brazil, 2017.

Self-care deficits	Pacts
Difficulties in the use and maintenance of PPE.	<ul style="list-style-type: none"> - Always wear PPE; - Always wear the uniform, especially on the street; - Keep gloves clean and inform the coordinators when they need to be changed; - Do not misplace PPE in the warehouse.
Inadequate consumption of food and utensils from recyclable material.	<ul style="list-style-type: none"> - Do not consume food from recyclables; - Avoid reusing objects for personal use (such as toothbrushes and razors); - When reusing an object, proceed with proper cleaning with water, soap and 70% alcohol.
Self-medication	<ul style="list-style-type: none"> - Be aware of the risks of taking medication without a doctor's prescription; - Pain that persists, even with the use of medication, has a cause that must be investigated; - Search for the health service that is the reference for your territory.
Improper hand washing before meals.	<ul style="list-style-type: none"> - Wash your hands properly every time you use the collective space of the cafeteria, paying attention to nail hygiene.
Little cooperation on strenuous tasks.	<ul style="list-style-type: none"> - Offer help whenever a colleague is performing a difficult task; - Ask for help whenever you are performing a difficult task.
Disorganization of the warehouse, resulting in increased accident risks.	<ul style="list-style-type: none"> - Establish that one person is solely responsible for the organization and packaging of the recyclables inside the warehouse.

materials collectors are a vulnerable population to the social determinants of health¹⁴, because they often live under precarious health, living, working and eating conditions^{6,15}. It is known that their dietary conditions are often weakened by low pay¹⁵. This highlights that the actions of valuing food and water intake, as self-care actions, are positive in the cooperative.

However, other demands for self-care are established, expressed mainly by occupational risks. Faced with these risks, the collectors seek to protect themselves, even if they live with them daily, and remedy the consequences on their health through the autonomous use of medicines and dressings.

The work with recyclable material is marked by physical risks (heat, humidity, cold), chemical (toxic substances), biological (organic or biological material), ergonomic (related to posture and physical effort), accident risks and risks related to living with insects and rodents^{1,2,6,15,16}.

However, an integrative review study showed little access or little demand for health services by recyclable materials collectors, especially with regard to basic vaccination and preventive actions⁶. Therefore, faced with the need to establish self-care and in the absence of professional guidance, workers seek medication resources on their own.

Although the participants have identified these attitudes as self-care actions, one should consider the risks related to the use of drugs without medical prescription. A study conducted with recyclable materials collectors showed that the participants did not resort to health services when they needed them, choosing to use home remedies or medical waste found among the recyclables².

Leisure and spirituality were also mentioned as self-care actions. There is evidence that psychosocial risks are present in the daily lives of recyclable materials collectors, being related to the lack of recognition by society^{1,6} and adverse conditions in their life trajectories¹⁷. Thus, actions to care for the spiritual and existential dimension are important for the maintenance of mental health.

The first category closes with the confirmation of the motivation for self-care based on the expectation of quality survival, autonomy and the desire for a more secure job. A study conducted with diabetic individuals showed that dietary care and care related to emotional well-being were shown to be self-care actions¹⁸, which is in line with the results of this study.

In counterpoint, the data from the second category evidenced that the recyclable materials collectors' self-care agency was contrasted by deficits. In line with this, studies conducted with other populations have shown that although individuals often recognize the importance of self-care and identify the actions they need, they are not always able to put them into practice, because they encounter, as obstacles, the lack of guidance from health professionals, demotivation and extrinsic factors such as domestic and work^{18,19}.

The recyclable material collectors do not always recognize the relationship between their work and their health^{15,20}. Sometimes they have little understanding of the risks at work and fall back on processes of denial⁶.

Ignorance of occupational risks is associated with the trivialization of these risks when recyclable materials collectors ingest food from recyclables⁶. Sometimes, these workers also take advantage of objects or even medicines found in the recyclables without considering the risks to their health^{2,15}. Moreover, the non-use of PPE also highlights the denial and trivialization of risks and is an element evident in other research with these groups^{2,6,16,20}.

This category concludes with the idea that self-care sometimes takes precedence over the search for increased financial gains. One study discussed that because the earnings from recycling are conditioned to the productivity of the waste picker (amount of material collected and separated), these workers accept the daily risks as a necessary condition for their subsistence⁶. This confirms that the health and illness dynamics of recyclable materials collectors find important determinants in socioeconomic aspects^{14,21}.

Finally, the third and last category highlights the encounter between investigative action and care practice, culminating in the promotion of self-care, based on the application of Nursing Systems Theory. The establishment of theoretical nursing systems plays an important role in the nursing care practice and consists of a fundamental prerequisite in the consolidation of a professional and scientific nursing²².

The application of the Theory of Nursing Systems, in this study, proved to be adequate for the reality of the recyclable materials collectors and provided sufficient theoretical support for the systematization of care practice. It also showed theoretical-practical convergence with the CCR method, which methodologically enabled the practical application of the theory. The collective educational approach evidenced an important contribution of CCR to the application of the Theory of Nursing Systems, confirming that the promotion of self-care can extrapolate the individual and be performed in spaces in which the group can exchange experiences and empower itself.

The Theory of Self-Care Deficits has been applied in recent national and international studies, contributing to good results, not only in research, but also in intervention^{8,9,18,19}. In this research, the completeness of this nursing theory is corroborated and its potentiality for research and assistance.

However, it should be noted that the results of this study were not completely successful, because a number of self-care deficits were not minimized. In view of this, it is important to emphasize, first, that the promotion of self-care requires that the individual recognizes the centrality of his role and that nurses act as a supporter of the change process, but considering that the individual is the protagonist¹⁸.

In addition, it is essential to rescue Orem in his concept of basic health conditioning factors, elements that interfere not only in the agency of self-care (actions and motivations), but also in the self-care demands of individuals. Sociocultural orientation, living standards, availability of resources, health care system, among others, are examples of conditioning factors that interfere in self-care⁷.

At this point, we recognize the importance of these constraints in order to understand why the mitigation of complex health problems in vulnerable populations is a challenge for Nursing. Poverty, social exclusion, barriers in access to education, precarious work, distancing from health services and, many times, hunger and other privations are elements that exert force on subjectivities, interfering on their decisions, motivations and power over their own health, especially in the context of life and work of certain groups that are not always visible in the Unified Health System.

Thus, it is argued that it is possible to promote autonomy for self-care with the work of nurses instrumented by theory and scientific evidence and, preferably, working in the context of primary health care, able to establish links with their territories. However, the work of Nursing must be added to a process of transformation of historically sedimented social and economic structures, which exclude certain groups from access to education, professionalization, income, social inclusion and a life without hunger and deprivation.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The recyclable materials collectors had deliberately constituted actions and motivations to care for themselves, which characterized them as self-care agents. However, they had a set of actions that signaled deficits.

The Nursing Support-Education System proved to be adequate for the promotion of self-care among this group, as positive changes were achieved in their daily lives. However, it was identified that punctual educational actions are not enough to eliminate complex problems, as they need to be articulated with permanent actions, led by social actors together with health professionals established and held responsible for the territory, in addition to the reduction of inequities in health through public policies of education and combating poverty.

This study was limited by the restricted availability of the recyclable materials collectors to participate in the production of data. Since financial gains were conditional on production, it was necessary to agree on a shorter time frame for the interviews and a minimum number of meetings for the focus groups. This may have limited, at times, the depth of the data obtained.

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