# Theory-Practice Integration In Health Education: Analysis Of Thiollent's Action Research Methodology

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## Abstract:

Action research was initially developed by Kurt Lewin during World War II and was consolidated in the Social Sciences as a methodology aimed at promoting changes in the contexts studied. Its participatory character allows the integration between theory and practice, valuing the collaboration between researchers and participants to solve problems and generate new knowledge. In Brazil, it was popularized by Michel Thiollent, standing out for uniting social transformation with critical reflection. Currently, action research is applied in several areas, especially in education and organizational contexts. In this context, the main objective of the present study is to analyze, according to the scientific production, how Thiollent's Action Research methodology promotes the integration between theory and practice in the process of training and professional education in health, aiming at improvements in care and educational practices. The present research sought to answer the following question: How can the application of Action Research, according to Thiollent's model, contribute to the formation and development of collaborative and reflective practices in professional health education? To investigate this issue. we analyzed articles indexed in the Scientific Electronic Library Online (Scielo), Latin American and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF) databases, focusing on publications from the last 10 years that were available in full and free of charge. The search was carried out using the following keywords: "Professional education" OR "Continuing Education" OR "Health Professional" OR "Nursing" OR "Primary health care" AND "action research" and their equivalents in Portuguese. The selection of studies followed inclusion criteria that favored relevance and alignment with the theme of action research in the context of professional health education. Thiollent's Action Research, applied to professional training in health, promotes the integration between theory and practice, developing critical and reflective skills through collaborative solutions and valuing the role of professionals and users in the continuous improvement of educational and care

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## I. Introduction

Action research was developed about six decades ago, with its first applications made in the United States by Kurt Lewin, during World War II. Later, it expanded globally, consolidating itself as a particular methodology in the Social Sciences. This type of investigation is characterized by a methodological approach that aims to promote intentional changes in the realities studied, with the objective of transforming the analyzed

context and, simultaneously, generating new knowledge. Faced with a dynamic and complex scenario, there is a growing demand for methodological approaches that can face these challenges. Among them, action research has stood out in several areas of study, since it plays an important role both in the learning process of researchers and in the solution of problems experienced by the participants involved.

This type of research, due to its pragmatic nature, not only modifies the object investigated, but is also conditioned by the ethical and contextual limits of practice. This methodology proposes that those involved conduct systematic investigations to improve their own practices, which also contributes to the improvement of the environments in which they operate. The central purpose of action research is to promote specific changes in the contexts in which it is applied, being seen as a form of investigation that uses established methods to guide practical action. Over the past few years, its use has expanded, especially in areas such as education, adult training, and social work, and more recently in organizational studies. This diversification reflects the growing relevance of action research in different fields of activity<sup>2</sup>.

Action research is characterized by being a collective and dialogical process, whose focus is the transformation of reality. Although it does not follow a rigid methodological path, this approach is guided by common and flexible principles. The main focus of this methodology is to overcome the dichotomy between objectivity and subjectivity, promoting a critical and participatory reflection of those involved. Thus, by integrating theory and practice, social and educational transformation is allowed through reflective processes, especially in the context of basic education, where professionals often do not participate in the political decisions that directly influence their work. In its context, the idea is defended that the subjects involved are capable of understanding and transforming social structures through awareness and emancipation. An approach that values the plurality of knowledge and promotes a participatory pedagogy is needed, and in this context, action research offers a path for critical reflection on the educational and social reality, integrating teaching, research and extension<sup>3</sup>.

Action Research is distinguished from conventional research methods by its direct engagement with pressing educational problems, which are often overlooked by traditional approaches that are limited to describing situations or evaluating performance. Such a methodology commits researchers to popular causes, seeking solutions or, at least, a greater understanding of the problems through collective action. It promotes changes in practices, attitudes, and conditions, raising social and political issues that challenge the prevailing order. In addition, Action Research involves a continuous process of theoretical and practical reflection, which must be built collectively, unlike classic research, in which the researcher is solely responsible for the final report. In methodological terms, Action Research follows a spiral cycle, involving planning, action, observation, reflection, and replanning as necessary<sup>4</sup>.

In the epistemological field, action research is based on several theoretical currents, such as the theory of praxis, existentialism, social constructivism, phenomenology and pragmatism, forming what we call metatheories. These philosophical foundations support the use of methods and procedures in applied research contexts. While scholars often focus on one of these meta-theories, action research as a whole is not limited to any one of them in particular, seeking to avoid any dogmatism. The multiplicity of perspectives should not be seen as eclecticism, but rather as a complementarity that aims to deal with problematic situations through collaboration between researchers and participants, promoting mutual learning<sup>5</sup>.

Often, this type of research receives different names, such as participatory action research, participant research, active research, study-research, action investigation, or militant research, depending on the theoretical approach and the authors. Although the expression "participatory action research" seems redundant, since participation is inherent to this method, this nomenclature serves to distinguish the specific action of this modality. Not every action triggered in participatory research corresponds to that required by action research, which follows its own participatory principles. The action of the investigator, or that which he provokes in the situation investigated, does not always meet the participatory criteria of action research.

Thus, it stood out for uniting theory and practice, allowing the researched subjects to participate in the construction of knowledge, with the objective of promoting social changes. Throughout the process, real interactions are valued, and problem solving is guided by cooperation between those involved, considering their cultural and social characteristics. Brazil incorporated action research based on the contributions of Michel Thiollent, who emphasized collaborative participation and the importance of reflective practice for the solution of collective issues. Action research seeks to overcome traditional dichotomies and work in the field to understand the reality of the subjects, based on their own experiences and language<sup>7</sup>.

Action research, associated with pedagogical practice, is applied at different levels of education, from elementary to higher education, and, more expressively, in training aimed at specific groups, considering factors such as social class, ethnicity, gender, occupation, among others. This method seeks to integrate into the classroom curriculum, offering a complete pedagogical approach. Although it has found greater viability in isolated initiatives or aimed at specific audiences, its adoption in formal contexts faces barriers imposed by strict

institutional regulations. However, its potential lies in its ability to balance scientific and political determination, allowing for a continuous renewal of this balance<sup>2</sup>.

Especially from the 1970s onwards, Action Research began to incorporate a critical and dialectical perspective, influenced by Habermas, and focused on helping educators solve practical problems with a collaborative and qualitative approach. In Latin America, this practice gained strength in the late 1960s, with the support of entities such as the World Bank, promoting the inclusion of marginalized groups in decision-making. In Brazil, the redemocratization of the 1980s brought greater prominence to Action Research, with significant contributions from authors such as Thiollent and Paulo Freire and other researchers, as well as events that systematized participatory approaches in education<sup>4</sup>.

In this context, the main objective of the present study is to analyze, according to the scientific production, how Thiollent's Action Research methodology promotes the integration between theory and practice in the process of training and professional education in health, aiming at improvements in care and educational practices. The specific objectives are: (1) to identify how Action Research enables the active participation of health professionals in the construction of practical solutions to educational and care challenges; (2) to examine the impact of collaboration between researchers and participants on the development of professional competencies and the improvement of health practices; and (3) to evaluate how the continuous and cyclical reflective process, characteristic of Action Research, contributes to the transformation of educational practices and to the integration of knowledge in the training of health professionals.

The selection of this theme is justified by the need to integrate theory and practice in the training process of health professionals, especially in a context of complexity and dynamism of health care. The Action Research methodology, as proposed by Thiollent, stands out as a tool capable of promoting the active participation of professionals and collaboration between different actors in the educational process, fostering reflective and continuous learning. Given the fragmentation that still exists between traditional educational models and care practices, investigating how this methodological approach can contribute to overcoming these gaps becomes important for the training of professionals who are more qualified, critical, and capable of responding to the real needs of the health system and the population.

## II. Material And Methods

It is an integrative literature review, a method that enables the synthesis of available knowledge on a given topic, integrating research from different approaches to provide a comprehensive view of the state of the art. This methodology involves clearly defining the research question, carefully selecting studies, assessing their quality, and synthesizing the results in a systematic and orderly manner. Integrative review allows you to identify gaps in knowledge, suggest new directions for research, and support evidence-based practice. One of the key points of this method is its ability to combine empirical and theoretical studies, offering a critical and in-depth analysis of the findings. By following a selection and analysis process, integrative review contributes to the development of more consistent practical guidelines and scientific theories<sup>8</sup>.

The present research sought to answer the following question: How can the application of Action Research, according to Thiollent's model, contribute to the formation and development of collaborative and reflective practices in professional health education? To investigate this issue, we analyzed articles indexed in the Scientific Electronic Library Online (Scielo), Latin American and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF) databases, focusing on publications from the last 10 years that were available in full and free of charge. The search was carried out using the following keywords: "Professional education" OR "Continuing Education" OR "Health Professional" OR "Nursing" OR "Primary health care" AND "action research" and their equivalents in Portuguese. The selection of studies followed inclusion criteria that favored relevance and alignment with the theme of action research in the context of professional health education.

# III. Result

A total of 372 studies were found in the Scielo, LILACS and BDENF databases. After applying filters and analyzing the texts, 7 studies were selected. The publications chosen cover the period from 2014 to 2023. The results are presented in Chart 1.

**Chart 1.** Summarization of the selected studies in the sample

Study	Author (Year)	Title	Methodology	Results	Database
E <sup>9</sup>	Barbosa, Teixeira, Oliveira, Pessoa, Vaz, Forte (2023)	Interprofissionalidade, formação e trabalho colaborativo no contexto da saúde da família: pesquisa-ação	Action research	He highlighted the importance of interprofessional and collaborative work in the Family Health Strategy, emphasizing the need for continuous training to	SCIELO

				strengthen the integration of the teams.	
E <sup>10</sup>	Ramos, Araruna, Lima, Santana, Tanaka (2018)	Education practices: research-action with nurses of Family Health Strategy	Action research	It identified gaps in continuing education and contributed to the development of more effective educational practices among nurses of the Family Health Strategy.	SCIELO
E <sup>11</sup>	Mendonça, Santos, Buso, Malaquias (2017)	Health education with older adults: action research with primary care professionals	Action research	It promoted the improvement of educational practices with the elderly in primary care, strengthening the self-care and quality of life of this population.	SCIELO
E <sup>12</sup>	Marques, Branco, Cavalcante, Santos, Catrib, Amorim (2016)	Pesquisa-ação na perspectiva da enfermagem em educação ambiental: da teoria à prática	Action research	Environmental education has contributed to significant changes in the practice of health professionals, favoring sustainability actions in the community context.	BDENF
E <sup>13</sup>	de Menezes, dos Santos Moura, Barros, Araújo, Guedes (2017)	Pesquisa-ação: práticas de autocuidado das pessoas com pé diabético	Action research	Educational interventions improved the self-care of people with diabetic foot, reducing associated complications and strengthening treatment adherence.	BDENF
E <sup>14</sup>	Forlin Benedet (2021)	A competência da enfermeira para o cuidado pré-natal na atenção primária à saúde: pesquisa-ação	Action research (Doctoral Thesis)	It identified the need for specific training for nurses in prenatal care, proposing a plan for the development of competencies for effective action.	LILACS
E <sup>15</sup>	Lopes (2014)	Percepção e prática dos profissionais da estratégia Saúde da Família sobre educação permanente em saúde: um estudo na ótica da pesquisa ação	Action Research (Master's Thesis)	It identified the lack of integration between professionals and continuing education, suggesting strategies to improve communication and educational practices in the team.	LILACS

Source: Survey data, 2024.

# IV. Discussion

Action research can be understood as a modality of social investigation based on empirical data, developed in close collaboration with a practical intervention or aiming at the solution of a collective challenge. In this context, researchers and participants who represent the situation or problem analyzed work together in a collaborative or participatory manner<sup>16</sup>. As defined by Michel Thiollent, this social methodology engages researchers and participants in active cooperation to solve issues, creating a mutual relationship between research and action. In addition, this methodology promotes continuous discussions, with constant adjustments in research practices, being a dynamic process that values active listening and transdisciplinary interaction. The objective is not only the result, but the collaborative process that empowers and involves the community in the search for solutions, strengthening the production of shared and transformative knowledge<sup>17</sup>. Thus, this method seeks to integrate theory with practice, promoting active interaction among those involved to achieve results that contribute both to the advancement of knowledge and to the improvement of specific processes or social contexts<sup>15,16</sup>.

Action research offers a dialogic interaction between researchers and participants, enabling a participatory and collaborative approach in solving problems related to professional practice. This method, by integrating research and action in a continuous and cyclical manner, allows for the constant improvement of health practices, mainly through systematic reflection on the actions carried out<sup>14</sup>. Action research focuses on solving practical problems and improving educational practices, resulting in knowledge that is directly applicable to the school context. Instead of limiting themselves to theory, educators generate solutions that can be implemented and tested in practice, creating a continuous cycle of learning and improvement <sup>16</sup>. The problem addressed must be scientifically relevant and solved through collaboration between researchers and the affected subjects themselves, highlighting the importance of cooperation and mutual involvement. Thus, this type of methodology aims to transform social reality and that the results are complex constructions, shaped by the interactions between

the actors involved. Thus, it allows for a participatory and cooperative approach, promoting concrete changes in the reality investigated<sup>18</sup>.

Current methodologies make it difficult to connect theory and practice, which reduces cultural diversity and contributes to the uniformity of local cultures. Action research, in this context, emerges as a methodology that can help overcome these problems by promoting a collective and dialogical reflection among all those involved in the educational process, being a response to dissatisfaction with traditional models of educational research, especially quantitative ones. This approach allows for greater interaction between teachers, students and the community, aiming at the joint construction of solutions and the expansion of the range of possible interpretations of the school reality. Participants, when they feel comfortable sharing their experiences, promote a mutual learning process. The workshops and conversation circles mentioned are examples of how these interactions can enrich the training of professionals, contributing to the construction of a more cohesive and efficient team.

The methodology encourages self-training and reflection on educational practices. Participants are encouraged to think critically about their actions and their consequences, promoting a continuous cycle of learning and improvement. This aspect is especially important in health education, where the ability to reflect on practice and adapt it to the needs of the population is fundamental for the effectiveness of professionals<sup>11</sup>.

The articulation between theory and practice provided by this method allows learning to be contextualized and applied immediately, favoring the development of practical solutions to the challenges encountered in the health area <sup>14</sup>. Action research allows students to integrate their prior knowledge with new information, creating a network of knowledge that complements each other. This integration of knowledge helps in the training of health professionals, who need to be able to connect theory and practice in real contexts <sup>11</sup>. Based on the study reported in the Primary Health Care unit of Fortaleza, it is possible to observe that PA, by integrating theory and practice, allows the investigation to be directly applied to solve real problems in specific contexts. This aspect makes it a valuable tool to transform educational scenarios and improve learning outcomes <sup>13</sup>.

One of the challenges faced in health practices is the fragmentation of care, which often results from vertical relationships and a uniprofessional approach. Action research seeks to displace this paradigm, promoting collaboration and communication among professionals. By breaking down barriers and fostering a culture of joint work, it is possible to develop more comprehensive and effective care<sup>9</sup>. Thus, it is possible to promote a more collaborative work among health professionals, recognizing that health education is a shared responsibility among the entire multiprofessional team. Through joint reflection and research on educational practices, professionals can redefine their roles and responsibilities, leading to a more integrated and effective approach to health actions<sup>10</sup>.

One of the main contributions of action research to health education consists of its inclusive approach, which involves all actors in the educational and care process, respecting their knowledge and experiences. By promoting the active participation of professionals, such a methodology could be used to redesign the educational space within the health unit, valuing spontaneous knowledge and daily experiences, since it does not treat the participants as ignorant or disinterested, but as subjects of knowledge, whose perception and practice are important to understand reality and propose concrete changes. This is in line with the need to transform professionals' perceptions of continuing education in health and to promote a leveling of knowledge, in order to highlight the cultural, symbolic and social capital involved in the process<sup>15</sup>. It promotes active and collaborative engagement between researchers and participants directly affected by the issues under analysis. This type of investigation is not limited to collecting data, but seeks to create practical and relevant solutions to real problems faced by community groups, health professionals, and organizations<sup>16</sup>.

It is also noteworthy that action research is relevant to address the structural and organizational issues that hinder the effective implementation of continuing education in the health unit. Data from a study indicate that most professionals (70.8%) did not undergo specific training on the subject, and 58.3% believe that there is no permanent education process in the unit. However, 54.2% of the professionals recognize that this type of education could improve user care. This shows a potential for change, which can be explored through participatory and formative interventions<sup>15</sup>.

One of the central benefits of action research is its ability to promote a collaborative environment, in which those involved (educators, students, and the community) are active agents in the construction of knowledge. In the example of the study on diabetic foot care, the methodology was used to better understand patients' self-care practices while providing evidence-based education and preventive strategies. Similarly, in the educational context, action research can be used to investigate learning difficulties, behavioral problems, or issues related to school management, involving teachers and students in the joint search for solutions<sup>13</sup>. Action research promotes the active participation of all those involved, creating a collaborative space where educators, students, and the community become co-researchers. This participation increases student engagement, but also encourages a sense of belonging and responsibility in relation to the topics discussed, such as health and the environment. In the study in question, the participation of 5th grade students in discussions about environmental changes demonstrates how action research can integrate theory with practice, facilitating the construction of knowledge in a more significant way<sup>11</sup>.

Action research could act as a strategy to map educational needs and to develop training activities that are more meaningful and contextualized for professionals. By involving the team in a process of critical and collective reflection on their practices, it would be possible to create an environment that is more conducive to continuous learning and the development of competencies that really impact the quality of care provided to users <sup>15</sup>. By involving participants as active actors in the process, action research values the informal knowledge and experience of professionals, creating a space for mutual exchange that enriches both theoretical and practical knowledge. Thus, it supports the resolution of specific problems and fosters continuous professional evolution, being an instrument for health education <sup>14</sup>.

Action research allows educators to tailor their interventions to the specific needs of the community in which they are embedded. In a given study, the choice of generating themes, such as environmental pollution and rational water consumption, was made based on the students' concerns, ensuring that learning was relevant and applicable<sup>11</sup>. In the case of a study on diabetic foot, the methodology made it possible to survey the patients' needs in terms of self-care guidelines and based on this diagnosis, to intervene through appropriate educational strategies. In a classroom, AP can work in a similar way: by diagnosing the challenges faced by students, the educator can develop targeted interventions to address these difficulties, such as differentiated activities or personalized teaching methods<sup>13</sup>.

Through a survey, in a study whose focus was on continuing education in health in primary care, it was possible to identify the difficulties, such as from the data that 33.3% of the professionals pointed out the lack of management incentive as one of the main obstacles to its implementation. Through an action research process, it would be possible to engage both professionals and managers in the joint construction of a permanent education model that considers the specificities of the local context and promotes a real change in management and care practices<sup>15</sup>. This method allows the identification of problems in practice and the co-construction of solutions together with the professionals involved. Through Reflective Workshops, for example, nurses can review and improve their skills, raising the quality of care for pregnant women<sup>14</sup>.

Within this context, there is an environment of constant feedback, where educational practices can be evaluated and adjusted in real time. This cyclical approach allows health professionals to learn from experience and continuously improve their actions, aligning them with the needs of the community and the conditions of the health system<sup>10</sup>. Action research allows for a detailed situational diagnosis, which helps to identify the specific needs of the elderly population and the challenges faced by health professionals, providing a basis for the development of educational interventions that are relevant and effective<sup>11</sup>. To reinforce this perspective, it is exposed that the critical reflection of the participants of a study on their self-care practices was encouraged, promoting a greater awareness of the risks and the importance of preventing complications. In education, this reflective process can be used for educators and students to question their pedagogical practices, identify areas for improvement, and work together to achieve more effective learning objectives<sup>13</sup>.

Action research promotes an approach that considers the reality of the participants, addressing topics of interest, for example to the elderly, and promoting the autonomy and empowerment of professionals and users themselves<sup>11</sup>. By involving students in the process of inquiry, they learn to formulate questions, collect data, analyze information, and present results. These skills are fundamental for the development of students' critical thinking and autonomy<sup>16</sup>. Action research allows health professionals, such as nurses, to work directly with the community to identify their real health needs and interests. Instead of imposing an educational agenda based on assumptions, nurses can use participatory approaches to understand what the main concerns and demands of the population are. As mentioned, many users only seek health services when they have specific complaints, and this biomedical logic can be reversed through the active involvement of the community in the research, leading to more effective planning that is aligned with the expectations of users<sup>10</sup>.

In a study whose approach was action research, it was noticed that even without conceptual clarity on the subject, the teams demonstrated a development of these competencies, thus being able to act in an integrated way, seeking collective solutions to health demands. The focus on communication and knowledge sharing is a key element that allows the construction of more effective and user-centered care<sup>9</sup>. The problem-solving approach used during the group dynamics allows participants to learn from each other, fostering a culture of collaborative learning. This is especially important in health education, where the sharing of experiences and practices can enrich the training of professionals and the effectiveness of interventions<sup>11</sup>.

By allowing participants to co-author the research and intervention process, the methodology fosters a sense of belonging and responsibility for the success of the proposed changes. In a case study, where many professionals did not perceive their contribution as relevant to the unit's educational activities, action research could help to reframe the role of each team member, promoting greater engagement and a sense of purpose in relation to continuing education<sup>15</sup>. This dynamic favors collaboration, as team members feel safe to express their ideas and contributions. The strengthening of interpersonal relationships is fundamental for the effectiveness of teamwork, directly reflecting on the quality of care provided<sup>9</sup>.

The educational practices in the health unit analyzed are impregnated with a hierarchical logic, where higher education professionals tend to determine the themes and methodologies to be addressed. In this sense, action research can promote a horizontalization of educational practices, creating spaces for dialogue and collective construction of knowledge, where all professionals have a voice and can contribute to the definition of the unit's educational guidelines<sup>15</sup>. Through participatory discussions and the construction of intervention plans, professionals are able to identify barriers and facilitators for the execution of more effective and participatory educational strategies, strengthening the link between theory and practice and stimulating engagement with the community. Thus, action research enables educational interventions to be developed in a more collaborative way, promoting the development of a continuous learning environment that respects the experiences and social context of the users and professionals involved<sup>15</sup>.

Action research encourages interprofessionality, by bringing together professionals from different areas in a collaborative environment, participants can share knowledge, experiences and practices. In this context, the importance of horizontal relationships and dialogic planning is emphasized, which favor the integration of health teams, allowing a more comprehensive and effective approach to the care of children and their families<sup>9</sup>. Action research is not a single method, but rather a strategy that brings together different research methods and techniques. This diversity allows educators to use varied approaches, such as interviews, observations, and participatory techniques, to collect meaningful data about the teaching-learning process. The combination of methods can enrich information gathering and lead to deeper insights<sup>16</sup>.

The reflective cycle of action research — reflection-action-reflection — contributes to health education and for health students, as it encourages professionals' awareness of their practices, promoting active learning and the development of skills. In the health area, where demands are dynamic and contexts are complex, this approach offers an effective mechanism for adaptation and continuous improvement <sup>14</sup>. The application of continuous cycles of planning, action, observation and reflection, characteristic of action research, enables a continuous improvement of educational and care practices, promoting an education that is, at the same time, transformative and sustainable <sup>15</sup>.

Instead of a traditional education, where the educator is the only holder of knowledge, action research stimulates the collective construction of knowledge. This reflects Freire's vision of an awareness-raising education, where participants become agents of change in their communities<sup>11</sup>. By allowing the situational actors themselves to be protagonists in the process, action research ensures that their experiences and knowledge are taken into account, which in turn can increase the acceptance and effectiveness of proposed interventions. In addition, the continuous interaction between researchers and participants facilitates the identification of priorities and the formulation of concrete actions, adapted to local needs<sup>16</sup>.

By engaging in a continuous cycle of reflection and action, nurses can identify their own gaps in knowledge and skills and seek opportunities for continuing education. Action research can encourage partnerships with educational institutions to develop training programs that meet the specific needs of professionals in the USFs<sup>10</sup>. Through the active engagement of users and the continuous professional development of nurses, it is possible to build a care model that prioritizes education and health promotion, overcoming the limitations of the predominant biomedical model<sup>10</sup>.

In one study, it was possible to verify that the teams planned and implemented actions that range from prenatal care to the monitoring of child growth, always with the participation of the different social actors involved. This collaborative planning allows actions to be more appropriate and effective, responding more precisely to the demands of the community<sup>9</sup>. Accordingly, it is highlighted that its application can facilitate the exploration of more dynamic and interactive educational methods, such as the use of puppets, dances, or theaters, which were suggested by nurses in a study<sup>10,11</sup>. By involving the community in the design and implementation of these activities, professionals can ensure that they are more relevant and engaging, increasing the participation and interest of users<sup>10</sup>.

Another important aspect of action research is the valorization of the knowledge of users and their families. The involvement of mothers and guardians in decision-making about care is fundamental, as they bring information about their children, for example. This exchange of knowledge strengthens care, while empowering users, making them active participants in the process<sup>9</sup>. When users perceive that their opinions are valued and that they are actively participating in the construction of their care, adherence to health practices tends to increase. This is fundamental for the promotion of more comprehensive and problem-solving health care<sup>10</sup>.

During the implementation of continuing education in health (PEH) reported in a study, professionals were encouraged to research and present relevant topics. This promotes continuous learning and strengthens the skills necessary to conduct health education groups, such as group dynamics, planning, and didactics. Action research, therefore, becomes a tool for professional development<sup>11</sup>. In the same way, the methodology is not limited to producing academic knowledge, but seeks to transform the educational practice, as observed in the study on diabetic foot, where the guidance provided was based on the needs of the patients, generating a positive impact on self-care and the prevention of amputations<sup>13</sup>.

Within this approach, it is possible to align educational practices with the National Policy for Permanent Education in Health (PNEPS), directing actions towards solving local problems and considering the needs and peculiarities of the communities served. By adopting action research, health professionals are motivated to stop being mere executors of prescriptive guidelines and start to act as protagonists in the development of solutions, using their knowledge and experiences to actively contribute to the improvement of services<sup>15</sup>. One of the most relevant aspects of this methodology is the development of critical thinking and the ability of professionals to adapt to the specificities of each location, facilitating the implementation of interventions that really make a difference in daily practice. In addition, the conceptual restructuring of health workers is favored, allowing them to distinguish and better understand the principles of continuing education, continuing education and popular health education, overcoming the reductionist and prescriptive view that often permeates educational practices in the Family Health Strategy (FHS)<sup>15</sup>.

Continuous education, based on evidence and reflective practice, should be incorporated into nursing curricula, enabling future professionals to face daily challenges with competence and confidence. By valuing the identity of nursing and its role in the health team, action research contributes to the construction of a more visible and respected practice, directly reflecting on women's adherence to prenatal care and the quality of care provided <sup>14</sup>. At the end of the process, action research not only seeks to solve specific issues, but also expands the awareness and knowledge of the participating groups, contributing to collective empowerment and the improvement of health practices. This dynamic and reflective approach, therefore, has the potential to transform the way education is conceived and applied, making it more contextualized and impactful <sup>16</sup>.

These characteristics make action research a tool to transform education practices in the health area, expanding the autonomy of the teams and favoring a more humanized care adjusted to local realities. Although it does not solve all the problems of the health system, action research contributes to creating conditions that promote more participatory management, social control and continuous training, elements that favor the qualification of health services and the strengthening of the Unified Health System (SUS)<sup>15</sup>.

Action research in health education is presented as a strategy to transform practices and promote more comprehensive and user-centered care. Through collaboration, the development of competencies and the appreciation of popular knowledge, this approach contributes to the training of more qualified and engaged professionals, in addition to improving the quality of health care. The reported experiences demonstrate that, by joining efforts and knowledge, it is possible to build a more effective and fair health system, capable of meeting the real needs of the population<sup>9</sup>.

Action research stands out as an innovative and effective methodology in health education, promoting engagement, critical reflection, integration of knowledge and adaptation to local realities. By placing students at the center of the teaching-learning process, this approach enriches academic training and the training of health professionals who are more aware and committed to social transformation. Through experiences such as the one described in the study, it is evident that action research can be a catalyst for significant changes in both education and health practice<sup>11</sup>.

### V. Conclusion

The application of Thiollent's Action Research in the process of training and professional education in health reveals itself to be a methodology capable of promoting the integration between theory and practice, something that contributes to the development of critical and reflective competencies. By directly involving health professionals and users in the investigative process, this approach allows participants to identify challenges in their practices, but also to develop collaborative solutions, adjusted to the specific realities of each specific context. The active cooperation between researchers and participants, characteristic of Action Research, strengthens engagement and co-responsibility in the construction of knowledge and in the improvement of educational and care practices.

The results indicate that Action Research promotes a continuous cycle of reflection and action, favoring the development of more collaborative practices centered on the reality of professionals and users of the health system. This method contributes to the improvement of professionals' skills, by encouraging them to rethink their practices and adapt them according to emerging needs. In addition, the dialogical and participatory nature of Action Research facilitates the creation of a more dynamic and interactive educational environment, in which the exchange of knowledge between the various actors enriches the training process and raises the quality of health care.

Therefore, it is concluded that the use of Action Research in professional health education promotes the transformation of educational and care practices, as well as reinforces the autonomy and protagonism of professionals in the development of solutions to everyday challenges. By uniting theory and practice, and by valuing the previous knowledge and experiences of the participants, this methodology proves to be a tool for the training of professionals who are better prepared to face the complex demands of the health sector, contributing

to the continuous improvement of the care provided and to the evolution of educational processes in the field of health.

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