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Osteopathy in primary health care: partial results of continuing education experience and some initial outcomes

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Abstract *This paper presents partial results of a research-intervention, through training of PHC work teams. Initial consultation was made in a group by HC professionals, and the osteopath then performed the consultation. The socialization and training of practical knowledge and techniques of the osteopathic approach was done between consultations. Multiprofessional teams from three health centers from Florianópolis, southern Brazil, participated in the training, and the process was audio and videorecorded, along with a final interview. Data was analyzed using the Grounded Theory. Apprehending the osteopathic knowledge was a triggering tool for reflective processes about care. Faced with the efficiency and resolution of this approach in practice, participants showed a willingness to transform their acts of care of patients and also their self-care. The professionals argue that the common understanding about self-regulating mechanisms and the inclusion of the tissue mobility in their anamnesis, including the stimulation of endogenous mechanisms, contributed to less protocol-based care, more appropriate care for each case, better multidisciplinary team work, the rational use of additional tests, medication, and surgical procedures.*

Key words *Osteopathic medicine, Medicalization, Primary Health Care, Physical therapy*

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Introduction

Osteopathy/osteopathic medicine is a peculiar clinical style that can be defined as a person-centered health care system, which includes a highly developed sense of manual touch as a significant component for establishing the diagnosis and therapeutic approach. It involves a required advanced understanding of the relationship between body structure and function and is implemented to streamline self-regulation capacities, aiming at individual homeostasis through endogenous mechanisms[1].

In Brazil, osteopathy was recognized as an occupation by the Ministry of Labor in 2013. In 2011, it became a physiotherapy specialty[2], and Bill PL2778/2015 started to be processed in the House of Representatives in 2015. This bill recognizes osteopathy as a specific branch of health and regulates the osteopathic profession. The profession was included as an Integrative and Complementary Practice in the Unified Health System (SUS) in 2017, with an incentive for its inclusion in PHC[3]. The National Policy of Integrative and Complementary Practice (PNPIC)[4] emphasizes the need to transform the care model towards comprehensive and humanized care, in multiprofessional fashion and under the principles and guidelines established for Permanent Health Education (EPS)[5], a model of continuing education which directs learning efforts into the work process with the aim of transforming it through knowledge.

The adequacy of osteopathy to PHC is not new and is primarily based on its history outside Brazil[6]. However, it is barely explored at this level of care in Brazil. This paper is nested in the doctoral research in public health that involved the participatory construction of training experience in osteopathy for/with PHC professionals in the city of Florianópolis[7]. This paper aims to present and discuss results of the research-intervention process, through training, related to the socialization/teaching of aspects of knowledge/techniques/osteopathic approaches to/with family health professionals, in the face of PHC work and care processes, under the logic of Permanent Health Education, from the perspective of the professionals involved.

Methods

This research-intervention was agreed with the Municipal Health Secretariat (SMS) of Florianópolis, capital of the state of Santa Catarina, southern Brazil, including its Commission for Integrative and Complementary Practices (CPIC), the primary care management and the coordinators and teams of three of its Health Centers (HC). In the Brazilian public health system, those HC are established by multidisciplinary teams (Family Health Teams) that are responsible for the primary care of the population in a determinate territory. It was preceded by four months of exploration of clinical care in PHC, in which a researcher accompanied and shared services with a family health team one morning a week, in order to identify the main demands, types of problems and respective approaches used there, which was the basis for the proposal and multilateral negotiation of training in osteopathy aimed at Family Health professionals.

The training was organized under the precepts of Permanent Health Education, mainly concerning addressing the unpredictability of the field, considering the interests and desires of the participants, seeking inclusion in their daily and professional reality, drawing learning about participatory transformation closer to the studied contexts, and dealing with the resolution of practical problems[4].

Two training stages were carried out with a 32-hour workload, divided into eight weekly meetings. Thirty-five family health teams and family health support center's (NASF) professionals participated, including three doctors, seven nurses, five physiotherapists, a psychologist, a nursing technician, ten community workers, three physical educators, and some medical residents and scholars. Twenty-one users of the health centers also participated and were assisted throughout the process. The research was approved by the Human Research Ethics Committee and was conducted within the professionals' working hours. Pseudonyms were used to keep identities confidential.

The training sessions sought to bring theory and practice as close as possible, through cycles of action-reflection-action within the work process. The dynamics of each training shift (4h) were organized into experiences, namely, the group listed clinical cases (among its members or HC users). Initial consultation was made in a group by HC professionals, and the osteopath then performed the consultation.

The selection of approaches that could be socialized occurred in the heat of the interventions, as per the therapeutic priority of each consultation, the effectiveness produced in practice, and

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the possibility of adapting to the context experienced there. The professionals were encouraged to ask questions as per their needs and concerns. Throughout the visits, the osteopath/researcher focused on the patient and the possibility of socializing knowledge, reserving a second moment to allow professionals to experience the techniques used in the case attended to, from which subjects and dialogues spontaneously emerged among the participants. These were organized through reflective dynamics and later synthesized in mental maps (graphically organizing a set of key words)[8], and the conversations were recorded in audiovisual materials (videorecording).

The reflective dynamics involved the construction of triggering questions conducted by the researcher. The researcher built such questions by systematically revisiting the notes and recordings of the previous meeting, attentive to the narratives that indicated the group's strangeness, gaps, or tension regarding what was being experienced. The questions sought to illuminate situations that were not yet understood by the participants, allowing the group to express itself concerning what still did not seem very well established, organized, or even acceptable from their viewpoint. The researcher strived consciously to bring the intervention closer to the daily routine, either through the experience of the participants' bodies, their complaints, and their daily use or nearing the real situations in the shared consultations within the service.

All the materials produced were revisited following the chronological order in which they were produced after the training meetings ended. Then, a round of interviews was held to capture the meanings and senses attributed by the participants to their training experience and daily practice. The interview roadmap contained broad and open-ended questions in order not to influence the answers but place the professionals before the training (in the past: *what was the training for you?*; present: *do you notice any change in your relationship with health?*; and future: *what is the impact of training to the service if we continue with it?*). Next, the interviews were held with 20 respondents selected by convenience (ease of meeting, scheduling, and realization) until data saturation. The analysis of the material was guided by the Grounded Theory[9], as it allows exploring data diversity creatively, comprehensively, and interactively. This method operationalized us from the empirical findings to seek concepts and theoretical references, and not the other way around. Data was transcribed, grouped, categorized, compared, interpreted, and discussed with authors capable of deepening and strengthening the relationships between the thematic categories[9].

Results and discussion

The first categories emerging from the process of our research-intervention refer to the following contexts: work process characteristics; self-care and care with others relationships; participants' beliefs and assumptions about health; health learning; and care model shared by service professionals. More materials were produced by analyzing and working on these initial categories through reflective dynamics in training, which generated, in the final analysis, the topics that are part of our results.

What was shown to be socializable in osteopathy for PHC professionals

Concerning the socialized osteopathic contents selected from the demands received in the consultations, priority was given to learning clinical osteopathic reasoning; the instrumentalization of an investigative attitude about the movement and self-regulation capacities (underdeveloped aspects in biomedical knowledge); and the establishment of simplified criteria for their selection (summarized below). This attitude included some criteria found in the osteopathic rationality, which did not seem to be present in the clinical style adopted by service professionals.

Three main criteria were relevant for socialization: 1) evaluation of tissue mobility, palpably exploring the tensest tissues, and the central axes of movement starting from the flexion and extension of the joints; 2) observation and evaluation of the relationship of the organism as a whole and with its parts, realizing possible anatomical relationships, especially concerning vascularization and innervation, from the spine to the limbs, and considering how the emotional and social aspects can be tension-related; 3) observation of the relationship between the function (including the movement performed in work, leisure, and social activities) and the signs and symptoms, asking about where (context) and when (time) the problem manifests, which movements aggravate, and which bring comfort[7].

Beyond the biomedical prognosis: the revival of clinical curiosity and the surprise of the effectiveness of self-regulation mechanisms

Most professionals raised the issue of clinical evaluation beyond the biomedical model after training:

I managed to deepen this investigative part... on the reason of this historical line, of trying to understand when it came about, and how. Not only from a mechanistic, biomechanical viewpoint but considering the entire social context of the patient's life... (Caio, a physical educator).

Learning of osteopathy generated reflective processes about the clinic model, this occurs by the testing the indicial diagnostic hypotheses, and verifying whether the vision of the future built for each case (prognosis) converges or diverges from the real evolution of each case treated by the Osteopath. When the professionals reassessed the prognosis they expected in the first consultation (that has been recorded) and confronted the progress after the osteopathic approach, they observed the effectiveness or ineffectiveness of the clinical model used daily in their work process.

In the literature Osteopathy demonstrates its efficacy in several pathologies (low back pain, headache, reflux in babies, for example). However, most studies still lack a high standard of methodological quality[7,10]. Manipulations aim to restore body tissue mobility. Their mechanisms are complex and, thus, explanatory models coexist (biomechanical, vascular, neurological, biopsychosocial, and bioenergetic)[1,7].

In our study, reports of improvement and effectiveness that was observed in the consultations strengthened the group's confidence in learning and the body's inherent self-healing ability. In permanent education, change involves not only pedagogy and learning processes but also critical incorporation of knowledge/techniques, listening patterns, relationships established with users and between professionals, based on the effectiveness of the clinic produced[10,11]:

I was able to observe a substantial resolution in cases of chronic and non-chronic pain that we attended, with a very significant improvement ... that impressed me a lot in the course. (Pedro, nurse).

In the typology developed by Merhy[12], which comprises technological densities in health, osteopathy seems to fit into space hitherto little inhabited or recognized, a kind of gap between the so-called light-hard technologies, (which include structured clinical knowledge, involving clinical efficacy, semiology, physiology and anatomy, applied in care) and light technologies (relational issues, such as the reception and establishment of bonds and partnerships among professionals, and between them and users). While osteopathy presents itself with a right amount of knowledge related to the so-called "hard" clinic, including physiological and epidemiological knowledge common to biomedicine, on the other hand, it has a significant component of live work in action that seeks to create relationships that integrate the hard and light-hard information with the sensations and references of the individual himself, approaching his uniqueness and facilitating the revival of greater autonomy vis-à-vis his body and health issues.

From expanding the clinical view to teamwork strengthening

For the professionals, the socialization of osteopathic knowledge in a multiprofessional context included valuing different views, expanding the clinic in practice, and strengthening teamwork. By acting, through continuing education, in the learning of different professionals, we strengthen the possibilities of transforming the work process based on the consensus on the inclusion of new care strategies:

It wasn't like a book that you pick a fixed line and read, instead, a way that everyone could understand and work together as a team (Fabiane, ACS).

The necessary transformation of health services towards strengthening people-centered teamwork, through interdisciplinary training, is widely recognized[13]. Merhy et al.[14] argue that monitoring and collective discussion of clinical cases is a powerful device for identifying the complex nature of problems, requiring the articulation of different knowledge and resources in the production of therapeutic projects. When challenged by complicated situations, the possibilities for workers to mobilize themselves to produce a team for better care are expanded, as the effort of articulation and interdisciplinarity in these situations is worthwhile[14].

Opening the eyes to catastrophization

Throughout the process, the professionals realized how much the exercise of the biomedical approach could generate misinterpretations associated with narratives about catastrophic prognosis, with consequent decrease of the patient's

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activities, fear of movement, and consequent deterioration of the situation as a whole:

We realized the importance of observing how we talk... because if we don't explain, he will spend his whole life without doing anything else (Fernanda, physiotherapist).

The training often confronted the participants with the associated events of kinesiophobia and catastrophization, which are common concepts in osteopathy but rarely discussed in public health, biomedicine and PHC, and can be seen as a facet of life biomedicalization[15]. Catastrophization can be characterized by patients generating or reinforcing the anticipation or expectation of adverse outcomes, while kinesiophobia is defined as the fear of moving. They are related to the quality of the professional-user interaction and the expected improvement or deterioration of the patient's condition. Clinical conduct and the quality of the professional-user relationship, including verbal and non-verbal communication, can reinforce limiting beliefs, increase pain, and generate anxiety and stress[16,17]:

It was a surprise for us... the physician told her that she was going to get worse with time, that she would no longer swallow... Then depression surfaced. What struck me was that one thing she liked to do was walking on the beach, and the physician said to her, "no, you can't walk on the beach" ... She was very active, and from that accident, she lived what the physician told her to live... (Clara, nursing technician).

In many situations, the catastrophizing process discourages the patient from continuing his/her life of disability-free beliefs. Incapacitating beliefs generally gain strength in the clinical relationship through recommendations of prolonged rest and irrational withdrawal from physical activities, supported by diagnoses of diseases, legitimized or not by complementary tests, and indications of lifelong therapeutic strategies[17,18]. This process causes delays or prevents recovery while increasing the demand for conventional and unconventional health services, higher consumption of medications, and unnecessary surgeries[18]. This is sometimes induced by established biomedical knowledge, related to the chronicity of diseases or situations for which there is no cure (as per the dominant model), with a subliminal implicit (inscribed in professional knowledge and culture) deterioration, especially when there are diagnoses of chronic injuries or illnesses technically confirmed by complementary tests.

Quantity vs. quality within the service

A significant obstacle to changing care practices was the strict organization of the work process concerning time and demand, which, on the one hand, points to a recurrent finding in the literature regarding the undersizing of the Brazilian PHC services network and demand overload[19], and, on the other hand, indicates that permanent learning models should be maintained because they are meeting spaces about unending themes, as they are inherent to work and require cycles of experimentation/reflection/action to reach the due negotiations in the agendas aiming the necessary changes in work processes:

[...] *here at the Health Center, I would need to consult more than 10 minutes to do what we learned in the course. Thinking that my schedule is 10 to 15 minutes and that the demand is high.... it is much easier for us to give the prescription with the medicines than to provide an opinion, evaluate, talk and test. While being with the patient, I am thinking about my delay and people who are waiting outside... that I need to attend to very quickly.* (Roberta, nurse).

Health care is a unique act, and people under care and the caregiver must be in a qualitatively productive interaction[20,21], which involves actions, attitudes, and behaviors guided by a scientific foundation, experience, intuition, and critical thinking. This process requires the professional's attention concerning being in the relationship with the other, aiming to promote, maintain, or recover not only his/her physical integrity but above all human dignity and wholeness[21,22]. Otherwise, if left to the rules and automatic mode, workers tend to reproduce the protocol without adequate to the person needs, which sometimes produce neglect[12,23].

In this context, the professional's attention split between external goals and the exercise of making himself available to perceive the other, putting himself in his place to establish empathic relationships that convey something more than technical protocol information:

Because of the demand, we sometimes bypass the therapeutic process, we want to do everything very quickly.... and the training brings back the issue of touch and the importance of receiving that person, not only the person's pain but what he/she is bringing with a more sensitive, more integrative view... (Joana, physiotherapist)

The relational skill of building a bond can determine the choice of this or that professional as the center of care in longitudinal monitor-

ing. However, this did not seem to be included in the service productivity indicators. In our study, the health work full of meanings, bonds, and agreements, as advocated for greater PHC effectiveness, has shown to be devalued because of the time it takes. This hinders change of the care model concerning introducing singular and non-protocol approaches, as proposed by the osteopathic clinical style. In the words of the nursing technician, Clara:

[...] I look the person itself, not just the disease [...], from the individual as a whole.... the team asks me, "why do patients only want to come when you're there?" I am very pressured for this attitude [...] they say... "come on, come on, there is no time, there is a huge list waiting for you... this is not where you should do this" ... the patient comes with a prescription; you check, administer, and quickly send him away. [...] this logic of numbers, numbers, and numbers! It makes me anxious as a professional. (Clara, nursing technician).

According to Scherer et al.[24], overcoming the biomedical care model requires sharp cognitive tools to perform all the functions demanded in our daily life with quality and sensitivity, which determines a greater 'self-use'. In our journey, we observed that workers more attentive to singularities ended up being overloaded and pressured to adhere to a contradictory production in a set of procedures. Contatore et al.[25] mentions an obstacle to the realization of the integrative complementary practices, as the services are linked to a policy that favors quantitative evidence denying qualitative evidence.

Reflecting on the clinical conduct and achieving greater autonomy with shared responsibilities

When in touch with the therapeutic resources presented in training, the professionals seemed motivated to participate more in the service itself, seeking and testing new therapeutic possibilities instead of merely adhering to conduct that was not satisfactory in their previous experience:

The training was a way to help others to have a vision... as it happened with my friend. She came saying: "I am going to do a tomography and a resonance"; and I said: "wait, calm down, let's see if there is any alternative"... it was a way for me to have this autonomy to say that. (Fabiane, ACS).

The autonomy to recommend or question a particular care strategy, whether for oneself or others, can raise suspicions regarding the safety involved in this process. Are all professionals in a position to ask specific questions? Who has the power over these decisions? We believe that the experience of professionals in monitoring different cases over time brings a valuable framework of experiences that can contribute to safe and more assertive decision-making about treatment choice. On the other hand, it is predictable and inevitable that professionals bring their previous experiences, both self-experienced and witnessed in the monitoring of other cases, as guiding elements of the recommendations in their care for users.

Regarding the construction of a care relationship that involves autonomy and sharing decision-making, Menendez[26] revives a type of behavior characterized by non-compliance with the prescription, which is known as the case of the "well-informed" individuals, not because of their ignorance of its consequences, or because they do not understand the prescription, but due, on the one hand, to the amount of technical information of this type of patient, and on the other, that changing the treatment follows their own experience. Individuals decide to increase, reduce the dose, or space it based on their knowledge and experience, which is not concealed but discussed with the team. By doing so, these users or professionals do not question the "medical authority" or the effectiveness of biomedicine; they support it and do not care to discuss the doctor-patient power relationship but improve health, controlling the chronic suffering as possible. These users or professionals are characterized by their knowledge and learning from their experience of illness and care[26].

This relational stance stimulated in training involves a questioning and dialogical attitude that seeks to merge technical information and own experiences for a shared and responsible decision, and reveals a practice between professionals and users that is systematically veiled and, thus, not notified or developed technically. This practice is related to the use of medications that already belong to the users' self-care framework, used in daily practice for recurrent symptoms such as musculoskeletal pain, headache, common gastrointestinal problems such as heartburn, reflux, poor digestion, flatulence, among others. During training, some cases used osteopathic evaluation to recognize different diagnoses (reformulating diagnostic hypotheses) and therapeutic strategies, which allowed redirecting some self-care strategies. In the words of Cilene:

[...] I had abdominal pain. The doctor had ordered blood tests and given antibiotics (without

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any improvement). We thought it was cystitis, but then (after the palpatory assessment), we found out that it was gas, and got better. (Cilene, ACS).

In this case, the osteopathic evaluation pointed to tension and loss of tissue mobility in the region of the large intestine and an increase in gases. The ACS, on its own, chose a medication she had already used for gases, symptoms that had lasted for two weeks disappeared within two days, even with the previous inefficient use of antibiotics.

The ability to establish diagnostic hypotheses based on the study of physiological signs has characterized osteopathy since its advent in the 19th century. While being openly averse to this approach, Flexner[27] maintained osteopathy as a medical school in his 1910 historical report, as he observed that "osteopaths were trained to recognize one disease and differentiate one disease from the other as carefully as possible as any other medical doctor"[27](p.125).

This issue touches a significant barrier regarding autonomy in decision-making on the use of drug therapy strategies and others that aim the circumscribed territories by the exclusive performance of professionals/specialists, or the gradual dissolution of knowledge in fields of joint, dialogued and multiprofessional action. The simple denial of this event seems only to pull empirical and technical knowledge apart, making care more ineffective and reducing the dialogue and the bond between the parties involved.

Tesser[28] highlights four lines where integrative complementary practices can potentially contribute to health promotion. We observed three of them in our intervention. The first involves some "community empowerment" so that individuals and communities can actively participate in building a healthier life and society. This axis can be observed in strengthening teamwork and the feeling of autonomy in seeking alternatives and less invasive strategies as a form of therapy. The second axis comprises a positive and expanded concept of health, which can be observed in several reports where the participants brought the importance of understanding the context including the life stories of each person, and when they found the effectiveness produced by promoting self-healing mechanisms through tissue flexibility (osteopathic manual techniques). The third axis refers to the transformation of pedagogical practices into something more dialogic and less directive[28].

The restructuring of knowledge from the experience of the osteopathic approach on oneself and the other

The professionals recognized the promotion of a "human" posture during training, which is expected of every professional who exercises clinical care for users, that is, a genuine, supportive and empathetic interest in others, in the words of Fabiane "above all, it was very human", and according to Fernanda:

I think you were very truthful with the patients and us. You didn't come here just to show the work and apply your work. You cared about the patients.

The experience of the osteopathic approach seemed to access part of the subjectivity and affects involved in the act of care, as health workers and patients. Bessa et al.[29] argues that affects involved in the health work process are feelings that are made based on each person's personal history and the image produced by the service or the professional. They may or may not contribute to the effectiveness of the therapeutic conduct and the maintenance of life in each affected person, the worker, or the user. It is essential to consider the affects in health learning, especially in the establishment of care intersubjective interactions and its learning.

Ceccim and Feuerwerker[30] affirm self-invention emerges as meaningful learning from continuing education activities, the thinking-acting-perceiving issues, and their interpretation. Identities, ways of acting, within and outside work dissolve in this process, which reconfigures new subjectivities about the issues experienced. These new methods produce a rupture because they put people facing themselves; they replace a heteronomous educational process with a more autonomous process. In our process, the learning of osteopathy, through experiencing this approach in oneself and the other, proved to be a trigger for reflective processes that induce, to some extent transforming care and oneself. In the words of nurse Roberta "here I have a reflection on myself", and for João, a family physician, the training affected the quality of his professional identity, and says "I feel like a better professional after these two months of training".

Signs of overcoming the biomedical model

Throughout the training, professionals could see possibilities for overcoming the current biomedical model and some of its most evident problems beyond theory. For example, Nursing's

most recent training is geared to PHC typical skills and concepts. However, there are difficulties in bringing these concepts to practice[31]. In our study, professionals brought examples of the application of the approach in the work routine, which included issues related to diagnostic differentiation, testing hypotheses, overcoming purely protocol-oriented behavior, rational use of drugs and additional tests, and consequent better outcomes. The participants were practically unanimous about a change in the lenses of care practice. According to the nurses: Isabel says, "A new way of seeing care, another aspect of care". Diana affirms, "we see that it is not something theoretical...", and Roberta argues "training changes our viewpoint, we test... give a different look, not just that cast in question".

Finally, when asked about the impact of this long-term continuing education strategy, the professionals presented elements that point to change in the culture of care, both by professionals and the population. The statements were accompanied by a repertoire related to what is currently advocated as "good practice":

It will decrease the demand, for example, for pain medication, anxiety ... It is a course that teaches how to perceive the person as a total human being (Isabel, nurse).

Final considerations

Our research-intervention aimed to transform the work process in order to promote more resolutive therapeutic actions, through training on the osteopathic approach for PHC family health teams. The researcher had a methodological commitment to remain within the practice, in the body, and the worker's daily life. Not many theoretical moments were used, nor were learning groups separated into different professions, as is conventional. The strategy seemed to facilitate the strengthening of the assessment, and professional action focused on the totality of each human being, placing the technique in the background, in the sense of staying in an appropriate position, at the service of the subjects, who practice or access it (or not), with greater or lesser expertise. It also allowed the socialization of osteopathy as an approach and not just as a set of isolated techniques. The summarized and analyzed process seems to have motivated professionals to transform their professional behavior to some degree, which may have some impact on service indicators. The evaluation of impact indicators was not evaluated in this study and suggests that for future studies, indicators such as medication dispensing rates, use of additional tests, costs, patient satisfaction, among others, be monitored. Our study indicates that at least part of the set of knowledge and techniques of osteopathy can be socialized, learned, and practiced safely by the PHC teams and that this potentially expands their clinical understanding, people-centered behavior, favors teamwork, and increases service resolvability.

Collaborations

Both authors participated in all stages of the construction of the manuscript. From its conception, through structuring, literature review, method construction, agreement with partners and participants, training, collection, interviews, data analysis, writing, conclusions and reviews.

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