

## Implementation of a vegetable garden in a family health strategy

Implementación de un huerto con plantas medicinales en una estrategia de salud familiar

Implantação de uma horta com plantas medicinais em uma estratégia de saúde da família

### RESUMO

**Objetivo:** Relatar a experiência dos acadêmicos de medicina sobre a implantação de uma horta com plantas medicinais em uma estratégia de saúde da família de Várzea Grande. **Método:** Trata-se de um relato de experiência descritivo sobre a implantação de um projeto comunitário que envolveu, planejamento e pesquisa, plantio e educação continuada com a equipe de saúde da família. **Resultado:** A experiência possibilitou aprendizagem dos acadêmicos a respeito das plantas medicinais, locais que distribuem de forma gratuita no município, bem como a oportunidade de desenvolver uma horta na área externa de uma unidade de saúde. Em relação ao conhecimento, foi oportunizado tanto para os acadêmicos, quanto para os profissionais e população, acerca dos benefícios das plantas medicinais. O projeto teve boa adesão da equipe, que se comprometeu em manter os cuidados necessários para a manutenção da horta, além do benefício de usufruir das plantas, especialmente na utilização dos chás para consumo da equipe e dos participantes nas ações educativas. A ação se mostrou proveitosa criando um ambiente de troca de saberes. **Conclusão:** Esse relato evidencia a importância da realização de projetos comunitários para promover o exercício do caráter humanitário em estudantes de medicina e profissionais da atenção primária à saúde. O objetivo é conquistar a adesão da população através da integração da medicina com práticas culturais, ampliando os conhecimentos e o consumo de plantas medicinais.

**Descritores:** Atenção primária à saúde; Plantas medicinais; Medicina.

### ABSTRACT

**Objective:** To report the experience of medical students on the implementation of a vegetable garden with medicinal plants in a family health strategy in Várzea Grande. **Method:** This is a descriptive experience report on the implementation of a community project that involved planning and research, planting and continuing education with the family health team. **Result:** The experience enabled academics to learn about medicinal plants, which are distributed free of charge in the city, as well as the opportunity to develop a vegetable garden outside a health unit. In relation to knowledge, it was provided with opportunities for both academics, professionals and the population, about the benefits of medicinal plants. The project had good support from the team, who committed to maintaining the necessary care for maintaining the garden, in addition to the benefit of enjoying the plants, especially using teas for consumption by the team and participants in educational activities. The action proved to be fruitful, creating an environment for exchanging knowledge. **Conclusion:** This report highlights the importance of carrying out community projects to promote the exercise of humanitarianism in medical students and primary health care professionals. The objective is to gain the population's support through the integration of medicine with cultural practices, expanding knowledge and consumption of medicinal plants.

**Descriptors:** Primary health care; Medicinal plants; Medicine.

### RESUMEN

**Objetivo:** Relatar la experiencia de estudiantes de medicina en el montaje de una huerta con plantas medicinales en una estrategia de salud familiar en Várzea Grande. **Método:** Se trata de un relato descriptivo de la experiencia en la implementación de un proyecto comunitario que involucró planificación e investigación, plantación y educación continuada con el equipo de salud familiar. **Resultados:** La experiencia permitió a los universitarios conocer las plantas medicinales, los lugares que las distribuyen gratuitamente en el municipio, así como la oportunidad de desarrollar un huerto fuera de una unidad de salud. En cuanto a los conocimientos, tanto los estudiantes como los profesionales y la población tuvieron la oportunidad de conocer los beneficios de las plantas medicinales. El proyecto fue bien apoyado por el equipo, que se comprometió a tomar los cuidados necesarios para mantener el huerto, así como el beneficio de disfrutar de las plantas, especialmente cuando se utilizan los téis para el consumo del equipo y los participantes en las actividades educativas. La acción resultó fructífera, creando un ambiente en el que se intercambiaron conocimientos. **Conclusión:** Este informe destaca la importancia de llevar a cabo proyectos comunitarios para promover el ejercicio del carácter humanitario en estudiantes de medicina y profesionales de atención primaria de salud. El objetivo es ganar el apoyo de la población mediante la integración de la medicina con las prácticas culturales, ampliando el conocimiento y el consumo de plantas medicinales.

**Palabras clave:** Atención primaria de salud; Plantas medicinales; Medicina. **DESCRIPTORES:** Cuidados de enfermería, Heridas, Diabetes Mellitus.

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## INTRODUCTION

**W**ith the advent of industrialization and modernization arising from capitalism, there was recognition of natural products that could be used as medicines. The United Nations Conference on the Environment, held in Stockholm in 1972, was characterized as a way of raising discussions regarding natural resources and their use by man.<sup>(1)</sup> Subsequently, new ideas were discussed at the International Conference on Primary Health Care, held in 1978, in the city of Alma Ata, about the interrelationship between health and other social and economic sectors, which led to discussions about phytotherapy.<sup>(2)</sup>

In the Brazilian scenario, the impacts arising from global discussions took on greater proportions from the 1980s onwards, when Alternative and Traditional Medicine began to dialogue in their practices, aiming at individual health and the search for new routes.<sup>(3)</sup> The use of medicinal plants as a remedy for various illnesses is traditionally known and differs depending on the region and culture of the local community, as well as the way in which it is transmitted through generations.<sup>(4)</sup>

Biodiversity is a predominant feature in the country and, due to the

climatic conditions for planting, the cultivation of medicinal plants is increasingly studied. As can be seen from the creation of the National Policy on Medicinal Plants and Phytotherapeutics, prepared by the Ministry of Health in 2006, which, in addition to emphasizing the importance of transversality in the implementation of actions aimed at the balance and well-being of the community, discusses technological dependence that can be overcome with herbal medicine.<sup>(5)</sup>

Integrative and multidisciplinary practices enable, in an environment of scarcity, new ways of learning about health practice to be applied, with interdisciplinarity of individual content and rooted in the individual. In contrast to the technological era that, on many occasions, sells treatment at inaccessible prices and places the patient in a position of submission.<sup>(6)</sup>

The implementation of integrative and multidisciplinary education, combined with the benefits arising from phytotherapy, is a task that demands time and patience, both from health professionals who work in the area, and from their patients. Considering that the method prioritizes the implementation of new habits in the individual's daily life, facing resistance and questions from some, as well as, despite

the demonstration of interest by several patients, many do not adhere to the practice in their lives.

In this context, in which phytotherapy is rooted in the country's traditions, it was decided to take the project of implementing medicinal plants to the community, so that they could be used concomitantly with individual needs and that, positively, eliminate gaps in the Unified Health System. Health regarding the distribution of medicines or treatments, as well as enabling greater interaction between the community. Therefore, this study aims to report the experience of medical students on the implementation of a vegetable garden with medicinal plants in a family health strategy in Várzea Grande.

## METHOD

This is an experience report of four medical students in the first semester of graduation, in the year 2022, and a nurse preceptor, in the "Community Interaction Program" curricular component of the medical course, in a private institution in the city of Várzea Grande.

To implement the project, through prior research in the Horto Florestal of the Municipality of Cuiabá, the acade-

mics selected plant species with relevant therapeutic properties that adapted to the local soil and climate.

Then, twenty-three seedlings were obtained by the students in the forest garden, namely: saffron, arnica-do-cerado, boldo-baiano, boldo-de-jardim, boldo-do-chile, cajuru, lemon balm, peppermint, jurubeba, ora-pro-nobis, pennyroyal and stonebreaker. The entire process for removing these was done free of charge, requiring only the presentation of the Unified Health System card.

On November 26th, 2022, the seedlings were planted outside the family health unit (USF - unidade de saúde da família). Furthermore, in the same location, continuing education was carried out for the family health team, in the form of lectures and conversation circles, regarding the therapeutic properties of plants grown in the community garden, with the purpose of raising awareness and encouraging adherence to the project in the locality.

An educational banner was also made available to students, containing information about the benefits of some of the planted seedlings, as well as their most common forms of use in everyday life.

Therefore, the project was developed based on the following planning:

1. Analysis of the site for the construction of the vegetable garden and study of the medicinal plants grown on site and their properties.

2. Planting seedlings and finishing the garden.

Explanatory lecture for the Health Team about the medicinal properties and cultivation methods of cultivated plants.

Due to the methodological nature, approval from the Research Ethics Committee is not required in accordance with resolution No. 510/2016 of the National Health Council.

## RESULT

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The medical students experience in implementing the garden with medicinal plants was inspiring, they were motivated by the partnership with the family health team who showed interest and support in the developed project.

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21 seedlings were used for planting outside the health unit. The limitations were related to the limited equipment for planting, the land being hardened and with rocks in some places, but despite the difficulties, all the seedlings were planted and watered on November 26, 2023. The following table presents the popular name, scientific, number of seedlings planted and therapeutic indication.<sup>(7)</sup>

After planting, everyone gathered in the waiting room to explain to the team the therapeutic indication of each plant and a discussion was held later in a conversation circle. In addition to the students, approximately 9 team members participated in the action.

After this day of project implementation, some practical activities were carried out in the unit and monitoring was

carried out regarding the team's adherence to using the banner tool and the garden for the population. The evidence was the team's consistency in maintaining the banner's exposure to the population, the encouragement to use medicinal plants, however the limitation was the dry weather, little rain, and ants that affected some plants in the garden. On the other hand, in relation to the plants that remained healthy, the team continued to use teas for consumption in the unit.

An important benefit of this project was the acquisition of scientific knowledge about these plants. In fact, the students recorded a video for the medical course's social network in order to share this successful experience.

It is worth mentioning that professionals from the family health team were interested in acquiring and sharing knowledge with academics about the functioning, correct use and therapeutic properties of plants grown in the garden.

Furthermore, the multidisciplinary team was helpful in helping students during the planting of vegetables and plants and in maintaining the garden in the subsequent weeks, which exemplifies the exercise of the humanitarian nature of the project itself and the opportunity to exchange experiences experienced by participants.

Finally, in relation to the community, it is clear that the displayed banner allows reading and acquiring knowledge about medicinal plants, as well as the opportunity to get to know the garden.

Table 1: Medicinal plants and their therapeutic indications, Várzea Grande, 2024.

POPULAR NAME	SCIENTIFIC NAME	NUMBER OF SEEDLINGS	THERAPEUTIC INDICATION
Arnica	Arnica chamissonis	2	Machucado e contusão.
Crajiru	Arrabidaea chica	2	Tratamento de feridas, inflamações do útero e dos ovários, conjuntivite, cólicas intestinais, diarreia sanguínea e enterocolite.
Saffron	Curcuma longa	2	Cálculo biliar, vesícula biliar, fígado, psoríase, leucemia, colesterol, câncer de colo de útero e feridas.
Lemongrass	Cymbopogon citratus	3	Ansiedade e insônia, distúrbios digestivos, dores e inflamações.
Lemon balm	Melissa officinalis	2	Regular a menstruação, cólica, insônia nervosa, problemas gastrointestinais funcionais e herpes simples.
Pennyroyal	Mentha pulegium	2	Estimulador de funções gástricas, gases intestinais, dores estomacais, afecção da pele, ferida, coceira e picadas de inseto.
Peppermint	Mentha spicata	2	Feridas, febre, asma, tosse, dor de cabeça e garganta, afta, picada de escorpião e centopeia, dispepsia, sarna, úlcera, bronquite e queixa genitourinária
Ora pro nobis	Pereskia aculeata	2	Câncer, hipertensão arterial, diabetes, doenças associadas ao reumatismo, inflamação, alívio de dores no estômago, úlceras e revitalização do corpo.
Boldo	Peumus boldus	2	Distúrbios de estômago e fígado, gases intestinais, colesterol alto, diarreia alimentar, insuficiência hepática, inapetência, inflamação da vesícula, colecistite e gastrite.
Jurubeba	Solanum paniculatum	2	Febre, doença do fígado, diabetes, tumor do útero e abdome, anemia, inflamação do baço, problema de bexiga e resaca.

Source: Authors, 2024.

## DISCUSSION

The experience of implementing the garden in the external area of the family health unit allowed medical students to understand the importance of knowing the Medicinal Plant Policies and the National Policy for Integrative and Complementary Practices (PNPIC - Política Nacional de Práticas Integrativas e Complementares) during their medical training.

Research revealed a lack of knowledge among health professionals regarding integrative practice policies and general

aspects of medicinal plants. A cross-sectional study in 45 units of the Family Health Strategy (ESF) in the city of Blumenau (SC) showed that the majority of health professionals do not understand the PNPIC in its entirety and are unaware of the existence of medicinal plants and herbal medicines making up the National List of Essential Medicines (RENAME - Relação Nacional de Medicamentos Essenciais). (8) This scenario reveals that, although professionals know about the therapeutic effects associated with the use of medicinal plants due to cultural know-

ledge, they do not prescribe them as multidimensional care, probably due to a lack of knowledge of the associated policies.

Concomitant to this, the population itself, lacking scientific information about herbal medicines, makes use of various plants based only on knowledge disseminated through oral tradition. In this sense, a cross-sectional study carried out by participants of the Tutorial Education Program (PET - Programa de Educação Tutorial), in the city of Campina Grande, revealed that a large part of the population uses medicinal plants, associating

them with allopathic medicines, which can have drug interactions and adverse effects. (9) This situation demonstrates that, even though the community reports interest in and adherence to the use of herbal medicines, it needs specific knowledge and a proven theoretical basis for their correct use.

It is important to highlight that, far beyond a space for planting and managing medicinal plants, the garden, in a public place, intensifies coexistence and provides an opportunity for an exchange of knowledge and experience between its participants. A case report carried out with an intergenerational community garden group, in the interior of São Paulo, demonstrated that interpersonal relationships between members were strengthened and brought closer, with the transformation of functional bonds into primary bonds. (10) With

this, it can be inferred that, even though the population has their space to plant these plants in privacy, the application of this activity in a public environment brings benefits both physical, with the use of herbal medicines, and psychosocial, due to the interaction with residents of the region.

## CONCLUSION

The activities associated with the reported project contributed to the academic training of medical students, to the exercise of solidarity based on humanitarian care and to the promotion of self-care through the reintroduction of ancestral health knowledge and practices, integrating popular, traditional and scientific knowledge. Given the nature of the experiment carried out, it should be noted that it is not possible

to accurately state the true formative and awareness-raising impact caused on the team, especially. To prove the efficiency of an intervention in this context, it is suggested that associated scientific research be developed, with the aim of collecting information and customs from the local community and the team before and after the intervention project so that behavior change can be tested and the benefits of the intervention legitimized.

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