

## Integrated Care for Childhood Illnesses – IMCI: experience report in the Xingu Indigenous Territory

**Atenção Integrada às Doenças Prevalentes na Infância – AIDPI: relato de experiência no Território Indígena Xingu**  
**Atención Integral a las Enfermedades de la Infancia – AIEPI: relato de experiencia en el Territorio Indígena Xingu**

### RESUMO

**Objetivo:** relatar a experiência das capacitações aplicadas em Agentes Indígenas de Saúde e Técnicos de Enfermagem indígenas no Território Indígena Xingu. **Método:** relato de experiência que descreveu experiências vivenciadas em capacitações ofertadas via parcerias acadêmicas no Xingú em três Polos (Pavuru, Wawi e Diauarum). **Resultado:** a cooperação técnica entre os profissionais de saúde da Universidade Federal de São Paulo (UNIFESP) e o Distrito Sanitário Especial Indígena (DSEI Xingu), permitiram a elaboração e execução de capacitações voltadas para as necessidades de cada território. Outro fator que facilitou o andamento das capacitações foram o apoio da comunidade em todos os locais organizando-se para receber os membros no território cedendo espaços como: escola, cozinha comunitária e alojamento. **Conclusão:** A experiência das capacitações contribuiu para a equidade à medida que deu acesso a formação em saúde de atendimento padronizado.

**DESCRIPTORIOS:** Educação em Enfermagem; Agentes Comunitários de Saúde; Serviços de Saúde Indígena.

### ABSTRACT

**Objective:** to report the experience of training applied to Indigenous Health Agents and Indigenous Nursing Technicians in the Xingu Indigenous Territory. **Method:** experience report that described experiences in training offered via academic partnerships in Xingú in three Hubs (Pavuru, Wawi and Diauarum). **Result:** technical cooperation between health professionals from the Federal University of São Paulo (UNIFESP) and the Special Indigenous Health District (DSEI Xingu) allowed the development and execution of training focused on the needs of each territory. Another factor that facilitated the progress of the training was the support of the community in all locations, organizing itself to receive members in the territory, providing spaces such as: school, community kitchen and accommodation. **Conclusion:** The training experience contributed to equity as it provided access to health training with standardized care.

**DESCRIPTORS:** Nursing Education; Community Health Agents; Indigenous Health Services.

### RESUMEN

**Objetivo:** relatar la experiencia de formación aplicada a Agentes Indígenas de Salud y Técnicos Indígenas de Enfermería en el Territorio Indígena Xingu. **Método:** relato de experiencia que describió experiencias de formación ofrecidas a través de alianzas académicas en Xingú en tres Hubs (Pavuru, Wawi y Diauarum). **Resultado:** la cooperación técnica entre profesionales de la salud de la Universidad Federal de São Paulo (Unifesp) y el Distrito Sanitario Especial Indígena (DSEI Xingu) permitió el desarrollo y ejecución de capacitaciones enfocadas en las necesidades de cada territorio. Otro factor que facilitó el avance de la capacitación fue el apoyo de la comunidad en todas las localidades, organizándose para recibir a los integrantes en el territorio, brindando espacios como: escuela, comedor comunitario y alojamiento. **Conclusión:** La experiencia formativa contribuyó a la equidad al facilitar el acceso a la formación en salud con atención estandarizada.

**DESCRIPTORIOS:** Educación en Enfermería; Agentes Comunitarios de Salud; Servicios de Salud Indígena.

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- ID Damiane Santos Cerqueira**  
Mestre em Ciências Ambientais e Saúde pela Pontifícia Universidade Católica de Goiás (PUC) (2020), Goiânia, Brasil. Enfermeiro de campo na área assistencial de atenção primária junto as populações indígenas no Parque Indígena do Xingu. ORCID: 0000-0002-3162-6159
- ID Larissa Bessani Hidalgo Gimenez**  
Doutora (2019) em Ciências pela Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo (EERP/USP). Enfermeira (2012) pela Universidade Professora Substituta na Universidade Federal de Mato Grosso, MT, Brasil. ORCID: 0000-0002-3262-0023
- ID Marieli Basso Bolpato**  
Enfermeira e Fisioterapeuta. Doutora em Saúde Pública pela Universidade Americana (UA, 2015) e, Doutora em Psicologia pela Pontifícia Universidade Católica de Goiás (PUC) (2021), Goiânia, Brasil. Professora Adjunta na Universidade Federal de Mato Grosso, MT, Brasil. ORCID: 0000-0002-7923-2343
- ID Gilmar Wagner**  
Enfermeiro Responsável Técnico DIASI/DSEI/XINGU/SESAI/MS. Especialista em Saúde Indígena pela Universidade Federal de São Paulo (UFS) (2017). ORCID: 0009-0004-2936-3881
- ID Karine Cardoso Santos**  
Enfermeira. Especialista em Saúde Indígena pela Universidade Federal de São Paulo (2019). Enfermeira de campo na área assistencial de atenção primária junto as populações indígenas no Território Indígena do Xingu.
- ID Vivian Vaz Costa**  
Enfermeira Responsável Técnica DIASI/DSEI/XINGU/SESAI/MS junto aos programas de Saúde da mulher, criança e Vigilância Nutricional. Especialista em Saúde Indígena pela Universidade Federal de São Paulo (UFS) (2014). ORCID: 0009-0001-6233-460X
- ID Daphne Lourenço**  
Médica de Família e Comunidade atuando na atenção primária junto aos povos indígenas do Território Indígena Xingu – UNIFESP. ORCID: 0009-0004-7803-2851
- ID Brígida de Assis Sousa**  
Enfermeira pela Universidade Federal de Mato Grosso ( UFMT), Especialista em Acupuntura pela Associação Brasileira de Acupuntura (ABA).

## INTRODUCTION

To begin the experience report, it was necessary to make a brief presentation: The Special Indigenous Health District (DSEI - Distrito Sanitário Especial Indígena) Xingu carried out, in partnership with the Xingu Project of the Federal University of São Paulo UMIFESP). The Socio-Environmental Institute (ISA - Instituto Socioambiental) provides continuity to the Integrated Management for Childhood Illnesses – IMCI strategy, which aims to reduce child mortality through the training of higher and secondary level professionals in the local health system. Composing this strategy, there is Community IMCI, based on community and specific actions for each territory and aimed at Indigenous Health Agents - AIS and indigenous nursing technicians.

In this sense, the Alma Ata Meeting in 1978 could be considered as the historic milestone of Primary Health Care (PHC) defined as the key to obtaining health levels that would allow populations to lead a socially and economically productive life.<sup>1</sup> The main components of PHC are: health education, basic and environmental sanitation, maternal and child health programs, prevention and treatment of endemic and common diseases, essential medicines and nutrition promotion.<sup>2</sup>

The fight against infant mortality is an old problem that has been faced since the 1980s and 1990s. The Ministry of Health (MH) and the Pan American Health Organization (PAHO) together with the United Nations Children's Fund (UNICEF), with the aim of reducing the number of deaths from diseases prevalent in childhood, draw up protocols to

be systematically developed by professionals from Basic Health Units (UBS) in child care, resulting in a favorable response.<sup>3</sup>

Attributed to this, Law 8,069, of July 13, 1990, the Child and Adolescent Statute (ECA - Estatuto da Criança e do Adolescente) in title II of fundamental rights, Chapter I of the right to life and health, article 11, says that medical care is guaranteed to children and adolescents through the Unified Health System (SUS), guaranteeing universal and equal access to actions and services for the promotion, protection and recovery of health.<sup>4</sup>

In this context, it is considered that the application of the IMCI strategy by indigenous health agents enables work in synergy with the health unit's team of professionals, supporting and strengthening the implemented actions, especially those considered for

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Damiane S. Cerqueira, Larissa B. H. Gimenez, Marieli B. Bolpato, Gilmar W., Karine C. Santos, Vivian V. Costa, Daphne L., Brigida A. Sousa  
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the community component of the strategy.<sup>1,2</sup> In a more integrated situation, it is possible to minimize the serious problems that affect children's health so that they can develop into healthier people.<sup>3</sup>

Corroborating the data above, the authors<sup>5,6</sup> believe that these professionals, despite having a low level of education, are capable of learning the content of the strategy and applying it appropriately in the communities.

From this perspective, it is extremely important to recognize that these professionals constitute an essential part of the multidisciplinary teams that work in Brazil's DSEI. In addition to being the category with the greatest retention and possibility of longitudinal monitoring of patients, they are community residents, knowledgeable about traditional medicine and the cultural aspects necessary for the comprehensive care of this population.

Furthermore, the IMCI strategy considers, in a simultaneous and integrated way, the set of diseases most prevalent in childhood, proposing an approach to child health by systematizing clinical care, curative actions with preventive and promotional measures.<sup>6</sup> The IMCI manual has careful measures to evaluate, classify and direct the treatment of children under five years of age. Provides guidance on breastfeeding, immunization, nutritional recovery and advises those responsible for the child with the aim of reducing child mortality.<sup>7</sup>

This experience allows replicability, and constitutes a relevant strategy for children's health. Given this context, it was necessary to question the following hypothesis to report the case: How could the Community IMCI strategy contribute and/or assist the care processes for indigenous children from zero to five years of age in Xingu?

From this perspective, the objective of this study was to report the experience of training applied to Indigenous Health Agents and Indigenous Nursing Technicians from the Xingu Indigenous Territory, thus training professionals to identify clinical signs of danger, evaluate and classify the main diseases of children under 5 years of age with the appreciation of traditional knowledge.

## METHOD

This is an experience report study in which experiences in training in Xingú were described, including Indigenous Health Agents (AIS - Agentes de Saúde Indígena) and Nursing Technicians developed in three Centers (Pavuru, Wawi and Diauarum) referred to as "participants". This fact contributes to the area of activity of several indigenous health researchers and other professionals in related areas, highlighting results that can be extended to other situations similar to this report represented here.<sup>6,7</sup>

The methodology adopted in the training observed was in line with the actions recommended by the Community IMCI, however, in an individualized manner according to the reality of each community of the three: Pavuru, Wawi and Diauarum. Training was carried out in the Xingu Indigenous Territory, covering 98 AIS, 4 indigenous and non-indigenous nursing technicians and 5 indigenous nursing assistants working in the Pavuru, Diauarum and Wawi Base Poles, from December 2nd to 10th, 2022; March 2nd to 11th, 2023; June 17 to 27, 2023; July 25th to 30th, 2023. The Community IMCI strategy developed made it possible to continue the process of standardizing conduct in care for diseases prevalent in childhood, which began in 2022.

In this view, the activities were carried out focused on sociocultural aspects, using methodological paths that allowed the content to be worked on in order to stimulate and promote the integration of Indigenous Health Agents (AIS) and nursing technicians to develop actions in communities with an emphasis on standardizing conduct.

It is known that the Indigenous Health Agent develops its activities and lives in the same community, acting as a bridge between the community and the Health Unit, maintaining permanent contact with families and children to create a lasting bond.

In this way, the activities carried out in training in Community IMCI, in a way adapted to the reality of the indigenous communities of the Xingu, were of utmost importance in constituting an improved differential in health care for indigenous chil-

dren, adding new values and knowledge to resume cultural practices.

The training was applied respectively in three different Centers as mentioned above, but with the same teaching premises (respiratory diseases and diarrheal diseases). In sequential order of actions, the first location was at Polo Pavuru, the second at Polo Wawi and the third at Polo Diauarum.

In this context, we sought to employ the strategies described below: the first activity, participants had to answer questions based on conversations with traditional caregivers or older people in the villages and they had to bring them during the training in writing. The objective was to learn how care for flu and diarrheal syndromes is carried out according to the knowledge of each people and how each community faced the times of COVID-19. This strategy aimed to value traditional knowledge.

The second activity developed was the use of the Rio da Vida methodology, which is one of the spaces for collective approaches, through drawings. In Rio, participants were able to reflect on the path to be taken by an indigenous health agent during their personal and professional career, inviting them to think about the beginnings, paths and horizon of this itinerary. This strategy also facilitated interaction and exchange of experiences between participating professionals who have a great heterogeneity in professional experience.

Therefore, they discussed with the participants what the "path of air" would be in the human body, and from this clinical reasoning was developed about the diseases that affect the respiratory system. Participants were able to learn about the early identification of danger signs that can lead to a child's death from flu-like illness, how to carry out the correct assessment and physical examination of these patients and how to classify and treat these children after the assessment.

Theoretical training was used as learning resources: videos, audios, slides, life-size anatomical doll, practical physical examination workshop, practical nasal washing workshop, board game with questions about health and small groups to review the content.

In addition to theoretical activities, the

training included practical activities aimed at monitoring care at the Basic Indigenous Health Unit (UBSI - Unidade Básica de Saúde Indígena) with care for children aged 0 to 5 in the villages and home visits focused on the importance of health surveillance in the territory. All practical activities were carried out in small groups with an indigenous and a non-indigenous supervisor and according to the possibilities of each region.

The team coordinating and facilitating the training was attended by an educator and clown, who gave the groups the possibility of learning the content through games, dynamics and theater. The playful activities were designed according to the content to be taught and the learning needs of each day. The activities focused on the integration of participants, the importance of teamwork, detecting danger signs for serious illnesses, understanding the anatomical structures of the body and its physiology and encouraging participants' clinical reasoning. In addition to promoting relaxation and great interaction between participants, the activities also helped bring the non-indigenous team closer to the AIS.

The study group with tutoring from older AIS was an important activity during the end of each theoretical training. In all classes, there were beginner professionals and professionals who have worked in healthcare for more than 10 years. The strategy of forming smaller study groups allowed younger people to learn from older people and to feel more comfortable asking their questions.

To better understand the feedback, what they called a "health game" was used, using strategies for establishing knowledge and exchanging information between participants. Thus providing a playful way of teaching and learning, bringing health concepts and care to players, highlighting the main lessons learned in the COVID-19 pandemic.

Throughout the training, the importance of teamwork and sharing cases to better care for children was valued. Furthermore, the need to maintain health surveillance in the villages was highlighted to improve monitoring and infant mortality rates in the region.

During the training, the importance of the traditional knowledge of each person in

the care of children with flu syndrome and the importance of AIS as disseminators and encouragers of the use of traditional medicine in their villages were highlighted.

The organization of activities in the area had the support of schools and teachers, local indigenous associations and the communities themselves. In relation to logistical support, the schools provided tables and chairs to carry out the training and indigenous teachers were with the classes facilitating the pedagogical process throughout the training.

The indigenous associations provided the physical space to carry out the training in the three covered regions of the village, providing traditional food for the participants (flour, honey, starch and others) providing full support for the structural needs that arose during the training. It is worth mentioning that the communities provided traditional foods from their fields for food and received the entire team with great affection in their villages.

To record the activities, a partnership was established with indigenous communicators who filmed and photographed the events, producing videos related to each in-person activity.

The creation of partnerships during this work proved to be essential for the good performance of the activities. The partnership between the institutions (Special Indigenous Health District (DSEI-Xingu), the Xingu project at the Federal University of São Paulo (UNIFESP) and the Instituto Socioambiental (ISA) as an important tool for carrying out activities within the territory with a focus on training indigenous professionals. The expertise of these partnerships was extremely valuable in developing a pedagogical project suitable for the classes served.

At the end of all modules, evaluations were carried out and feedback was given to the community about the process experienced in those days. A conversation circle was held with the participants of the first Community IMCI module and the question asked to the group was: "How did the training in the I Module: Flu Syndrome Update contribute to your work?". Orally, each participant told the group about the cases of flu syndrome that appeared in their villages, the identification of warning signs, the challenges experienced

in reducing the use of syrup and approaching families, the routine implementation of nasal washing, the demand from communities for the return of health education and the difficulties in carrying out procedures such as respiratory rate counting.

## RESULTS AND DISCUSSION

The results and discussions of this study made it possible to understand the appropriate resources for the structuring and logistics of training in the villages and the acquisition of foodstuffs. The Xingu Project team provided human resources such as teachers, doctors, nurses, psychologists and art educators, as well as teaching materials, stationery and food. The partnership with UNIFESP and ISA allowed these barriers to be overcome.

Technical cooperation between health professionals from the Xingu/UNIFESP project and DSEI Xingu allowed the development and execution of training focused on the needs of each territory, with a wide variety of teaching techniques and approaches to adult education. Furthermore, the resources brought by these institutions allowed the purchase of traditional foodstuffs from each region and foods from the "city" to enable the hiring of cooks, fishermen, chefs, colanders and cleaners to work during training days.<sup>7,8</sup>

It was noticed that the lack of accommodation in more suitable conditions was another barrier faced by professionals in training. The Base Centers have accommodation designed to provide healthcare services. However, the accommodations have poor structures like traditional houses with torn canvas or no doors, that is, the accommodation structures were precarious in some places.

The partnership with the institutions DSEI XINGU, Projeto Xingu/UNIFESP and ISA was an important facilitating factor that made it possible for the training to be carried out in three different territories. Another factor that facilitated progress was the support of the community. In all locations, the community organized itself to receive training in the territory, providing spaces such as school, community kitchen and accommodation. In addition, each region provided the Basic Health Unit (UBS) and

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residents' homes for practical activities to be carried out.

Schools and local indigenous associations were also important partners to ensure that the training went smoothly, providing stationery, overhead projector, screen, community kitchen, table, chair and kitchen utensils.

107 indigenous professionals were trained in Community IMCI: 98 AIS, 4 indigenous and non-indigenous nursing technicians and 5 indigenous nursing assistants, male (63) and female (44).

The experience enabled the resumption of training for indigenous health professionals in person, the return of actions in the territory, intercultural dialogue and rekindled spaces for exchange with communities and health professionals. It was found that the AIS were able to learn the content and correctly apply what was passed on and above all with greater autonomy and decision-making capacity based on the cases presented.

It was possible to promote integration between health team professionals. The work carried out led to the strengthening of health surveillance and teamwork.

Heterogeneity allows younger people

to learn from older people about the challenges and duties to be fulfilled in this profession, in addition to promoting a feeling of appreciation for the category and unity among participants in training.<sup>9,10,11</sup> The active participation of professionals with longer professional experience facilitates the transmission of content in accordance with local cultural issues.<sup>12,13</sup>

The experience is ongoing, so it is expected to reduce infant mortality and morbidities prevalent in childhood, as well as professional action, in accordance with recommendations, built knowledge and harmonized conduct.

## CONCLUSION

In the medium and long term, it is expected to monitor the experience based on information system indicators, such as: use of antibiotics, removal of patients to cities and infant mortality; number of cases and prevalence of respiratory and diarrheal infections; number of health education actions, number of participants in health education actions, among others.

The experience contributed to equity as it provided access to health training for health care for indigenous mid-level and technical health professionals. As a result, training in Community IMCI enabled better health conditions for the indigenous child population.

It was realized that strengthening attention to Children's Health is of paramount importance, so the continuity of the process of training and training of professionals is necessary, in order to achieve better health conditions and well-being of the child population. Efforts will be made by the Xingu Special Indigenous Health District, Xingu Project/UNIFESP and ISA, aiming to strengthen Community IMCI, in order to minimize the possibility of discontinuing this relevant strategy.

It was considered that this study was an innovative resource for the team of Indigenous Health Agents and Nursing Technicians of the three Centers under study (Pavuru, Wawi and Diauarum, thus allowing a better quality of indigenous health care in Brazil.

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