Alliance Amazonas-Covid Program addressing digital health clinical and mental care actions for traditional indigenous and riverine populations adults and elderly

Programa Aliança Covid- Amazonas para as ações de cuidados clínicos e mentais de saúde digital para as populações adultas e idosas indígenas e ribeirinhas tradicionais

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The world economic and social scenario was modified by the appearance of COVID-19, and in Brazil, especially in the State of Amazonas, it has been alarming, as Manaus was among the capitals that had the highest number of confirmed cases in the country. Intriguingly, a place has a low demographic density and a lower proportion of elderly people than other Brazilian states. So, one of the possible causes could be related to the ethnic structure. The Amazon has traditional communities of the Hydrographic Basin, including 165 indigenous populations concentrated in small urban settlements located along the river and tributaries. These populations have little access to transportation and specialized healthcare services, which poses a major challenge to providing a quality healthcare system. In view of this scenario, the Amazonas Sustainable Foundation, at the beginning of the pandemic, started the COVID Amazônia Alliance project, established so far with more than 100 institutions. The Alliance's role in confronting COVID-19 provided the possibility of creating bridges through connectivity, which has been enabling these populations to reach medical, psychological and other assistance.

Keywords: COVID-19. Amazônia. Traditional communities.

Resumo

O cenário econômico-social mundial foi modificado pelo aparecimento da COVID-19, e no Brasil, em especial no Estado do Amazonas, tem sido alarmante, pois Manaus, esteve entre as capitais que obtiveram os maiores números de casos confirmados no país. De um forma intrigante pois, é um local que apresenta baixa densidade demográfica e menor proporção de idosos que os demais Estados brasileiros. Então, uma das possíveis causas pode estar relacionada à estrutura étnica. O Amazonas apresenta comunidades tradicionais da Bacia Hidrográfica, incluindo 165 populações indígenas concentradas em pequenos assentamentos urbanos localizados ao longo do rio e afluentes. Essas populações têm pouco acesso a transporte e serviços de saúde especializados, o que se traduz em um grande desafio para fornecer um sistema de saúde de qualidade. Diante deste cenário, a Fundação Amazonas Sustentável, no início da pandemia, iniciou o projeto Aliança COVID Amazônia, estabelecido, até o momento, com mais de 100 instituições. A atuação da Aliança no enfrentamento do COVID-19 proporcionou a possibilidade de criar pontes por meio da conectividade, que vem possibilitando o alcance dessas populações a atendimentos médicos, psicológicos dentre outros atendimentos.

Palavras-Chave: COVID-19. Amazônia. Comunidades tradicionais.

In Brazil, a not expecting large incidence and mortality by COVID-19 emerged in the State of Amazonas, a local that presenting low demographic density and older adults' proportion than the other Brazilian States. One of the possible causes could be related to the ethnic structure. Amazonas present traditional River Basin's communities, including 165 indigenous populations concentrated in small urban settlements localized along the river and tributaries (MAIA-RIBEIRO, et al., 2013)¹. These populations have low access to transport and specialized health services, translating into a big challenge to deliver a quality health system.

Currently, both riverine and indigenous populations' health care services are supported by the Brazilian Unified Health System (SUS), which has an indigenous people health care subsystem based in the National Policy for the Care of Indigenous Peoples (PNASPI) policies. Public health services in protected areas have direct action by the ACS (Community Health Agent) in rural communities, located in conservation units, and in Indigenous Lands there are professionals such as AIS (Indigenous Health Agents). Health teams, including community health agents (CHA) and indigenous health agents (IHA), attend these traditional populations (MENDES et al., 2018)². The vast majority of these health agents are members of their own, which brings the health system closer to these communities.

Since before COVID-19, non-governmental and government partnerships started a working group to build strategies for improving the traditional population's health care via digital health solutions (telehealth). This working group, coordinated by Amazonas Sustainable Foundation (FAS), allowed the rapid organization of a multidisciplinary strategy named ALLIANCE AMAZONAS-COVID compound by indigenous populations, traditional riverine populations, and 84 partner organizations. Based on this cooperative effort, four significant actions were implemented using digital health solutions:

Building and supporting local capacity, mainly by tele-education providing preventive strategies COVID-19 adapted to the reality of traditional populations (tele-orientation); providing remote access to specialists including mental health services (tele-mental care); providing patient-directed interventions (Figure 1, supplementary material).

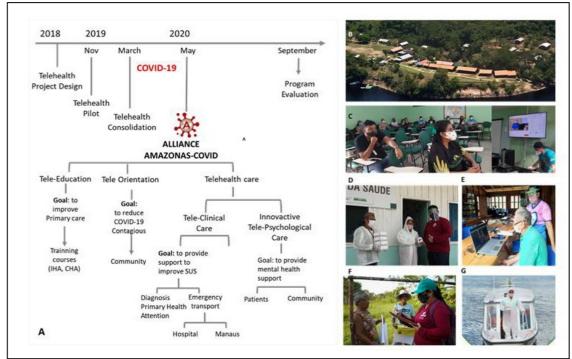


Figure 1 Origin and structure of the ALLIANCE, an Amazonas-COVID multidisciplinary program addressing digital health clinical and mental care actions for traditional indigenous and riverine populations. (A) ALLIANCE presents three main strategies: teleducation, teleorientation and telehealth care subdivided in tele clinical health care and tele mental health care; (B) digital solutions applied to the confrontation of COVID-19 by the ALLIANCE are possible through the use of the infrastructure of the sustainability nuclei of the Fundação Amazonas Sustentável (FAS; (C) Training courses for health agents, community leaders and health managers are possible via the use of distance learning technology provided by universities that participate in ALLIANCE Program; (D,F) The ALLIANCE Program also made it possible to donate diagnostic tests, basic food baskets, medicines for riverside populations; (E) Digital psychological consultation; (G) assistance in transporting patients with COVID-19 to health units and hospitals.

The tele-education and tele-orientation are actions oriented to training health agents (CHA and IHC), traditional community leaders, and health team managers. These actions include training to apply the Recommendations for Primary Health Care. Other training courses included identifying multidimensional health indicators (clinical-epidemiological, psychological, and nutritional) that could affect the contagion and severity of COVID-19. Training to move patients correctly from communities to health service units and hospitals were also offered to health agents.

The ALLIANCE tele-clinical care has provided digital nurse or physician support to health workers to manage patients with suspected of SARS-Cov-2 infection. These actions speed up the quality of health care for these populations, who would have to wait for a medical evaluation only after being moved to health service units in standard situations.

One of the most innovative ALLIANCE's actions was implementing a mental telehealth service based on digital experiences developed in other countries (HENSEL et al., 2019)3. In total, 119 telehealth centers were implemented. Historically, Brazilian indigenous populations have shown worrying mental health indicators, emphasizing alcoholism and high suicide rates, which is 8.1 (95%Cl 7.2-9.0) times higher than in the non-indigenous population (ORELLANA et al., 2019, ORELLANA et al., 2016)^{4,5} in addition, anxiety and sadness are presented as the main symptoms. Despite this epidemiological context, there have been no concrete actions to provide support and access to these traditional populations' psychological and psychiatric care. The epidemic by COVID-19 imposes a highly stressful element on these riverine communities, that are organized to meet the demands and difficulties cooperatively. However, as it is a highly contagious disease, families with infected patients have started to experience a social isolation level that has never been experienced by them before. In this context, the implementation of a psychological Tele assistance service has been strategic. Besides organizing consultations with psychologists, training courses are being organized training participants to assess and monitor mental health in a simplified way to provide appropriate professional services.

However, even though this first phase of COVID-19 is being controlled, other challenges are already emerging, including the consolidation of digital actions implemented by ALLIANCE. Moreover, that is the necessity for the creation of new strategies to face emerging problems that have a direct impact on the health and social of traditional communities, including deforestation, burned in the forest, and the post-COVID phase.

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