Pink APP: Strategy for resolving breast cancer screening actions according to the ITABERAÍ project

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Objective: The ITABERAÍ Project is a phase III multicenter randomized clinical trial that deals with intervention through training of community health agents (ACS) based on evidence of tracking in physical examination of the breast. This study aimed to develop an application for a mobile device as a strategy for resolving ACS actions in breast cancer screening, based on the ITABERAÍ Project. Methodology: The application was developed to be installed on the tablet used by the ACS, who works in the Primary Health Care Network in the city of Itaberaí. The graphical interface of the application was developed in Dart/Flutter, and for the back-end part, Python programming language was used, together with its Flask framework for the creation of the application programming interface (API), which is responsible for making the communication between the database data and the application. For the relational database, the MySQL software was used. The variables used to build the application were sociodemographic data, life habits, anamnesis, previous examinations, and information about the physical breast examination of women aged 40 years or older, residing in the municipality of Itaberaí. For analysis, the database will be exported to the REDCap Platform (Research Electronic Data Capture). Results: The application was validated with 235 entries, it is currently in version 1.5 and in use by 75 ACS. In the 4 months of use, 1,963 women were registered, of which 1,261 (64%) were in the control group and 702 (36%) were in the intervention group. Conclusion: The Pink APP proved to be easy to use and effective for collecting, storing, and exporting data for analysis, which can help improve and manage public policies.

Keywords: mobile applications; screening; breast cancer; community health workers.