

## EpiR: a graphic user interface oriented to epidemiological data analysis

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The use of R is rapidly growing among Brazilian graduate students as well as academic researchers, especially in public health sciences. Several post graduate programs have recently replaced proprietary software by R. In addition, the personnel from official epidemiological surveillance services is being trained to use R in the routine analyses, together with other software, like Epi-Info, as part of the current Brazilian government effort towards open source solutions. Despite R's power and flexibility, the absence of a graphic user interface (GUI) still refrains from adopting R as the main environment for data analysis, hence creating a demand for the development of an R GUI oriented to some applied statistical analysts. The aim of the Epi-R project is to fill this gap in public health.

The interface is being developed as both a package and a standalone application. The functions library is separated from the GUI, so commands can be issued either by point and click or command line. The GUI is developed over RGtk2 package and built with *libglade*. GTK widgets look nice and it is fairly stable running on any operating system. There are four main modules designed for data management (which also include a front end for ODBC connections and a recycle bin), data description and statistical modelling, graphical display and Epidemiology specific analyses. The library core relies on the functions available from several existing R packages as well as some homemade ones. A plug-in API is also being developed so the GUI may be easily extended and to keep the code light and clean. Besides the usual R help pages for the functions, an alternative help system for the GUI is available and information about the resources available in an open window can be obtained directly from such a window. The development of a Portuguese version of EpiR is supported by the Brazilian Ministry of Health. The EpiR package will be submitted to CRAN as of the acceptance of this paper.