Reference standards based on statistical methods for human identification in Mexico: Forensic Science Apps

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The statistic in forensic science provides the scientific basis for a fundamental area known as 'human identification' in which different disciplines, such as dentistry, anthropology, dactyloscopy, and genetics, to mention a few, participate in the biological profile construction. Nevertheless, this profiling that provides relevant information such as gender, age and ancestry depends directly on the reference standards of the specific population, which so far are not contextualized to the population of Mexico.

Due to this, through different data collections and protocols established in each discipline, qualitative and/or quantitative information is collected, which allows one to give an estimate or approximation to an unknown value that are mainly evaluated by several statistical techniques or methods such as multivariate methods, non-parametric tests, confidence intervals, generalized linear models, among others.

In this work, we present some free distribution applications that have been developed in Shiny that could be contribute not only to research or education but also to forensic practice since new methodological processes and adaptations to protocols based on the current statistical evidence of the Mexican population have been proposed.

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