http://dx.doi.org/10.1590/1516-4446-2019-0757
Psychiatric neuroimaging research in Brazil: historical overview, current challenges, and future opportunities - Busatto Filho et al.

Online-only supplementary material

Selection strategy for publications used to generate data for tables and Figures 1 and 2

One of the authors (GBF) initially selected Brazilian universities and research institutes with potential for having produced publications in the field of psychiatric neuroimaging since the 1990s. The selection was based on the author's expert knowledge of neuroscience research applied to psychiatry and familiarity with neuroimaging research carried out in Brazil over the past decades. This list of institutions included: Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo (HCFMUSP); Faculdade de Medicina de Ribeirão Preto (FMRP), USP; Universidade Federal de São Paulo (UNIFESP); Universidade Estadual de Campinas (UNICAMP); Universidade Estadual Paulista (UNESP); Universidade Federal do ABC (UFABC); Universidade Federal do Rio Grande do Sul (UFRGS); Pontifícia Universidade Católica, Rio Grande do Sul (PUC-RGS); Universidade Federal do Rio de Janeiro (UFRJ); Universidade Estadual do Rio de Janeiro (UERJ); Universidade Federal Fluminense (UFF); Universidade Federal de Minas Gerais (UFMG); Universidade Federal do Paraná (UFPR); Universidade Federal da Bahia (UFBA); Universidade Federal de Pernambuco (UFPE); Universidade Federal do Ceará (UFCE); Universidade Federal do Rio Grande do Norte (UFRN); Universidade Federal de Santa Catarina (UFSC); Universidade de Brasilia (UnB); Instituto D´Or de Pesquisa e Ensino (IDor), Rio de Janeiro; and Hospital Israelita Albert Einstein (HIAE), São Paulo. For the PubMed search, the full names (in Portuguese and English) and abbreviations of institutions were combined with the following imaging-related keywords: "brain" AND "magnetic resonance imaging" OR "MRI" OR "fMRI" OR "magnetic resonance spectroscopy" OR "MRS" OR "diffusion tensor imaging" OR "DTI" OR "white matter hyperintensity" OR "WMH" OR "single photon emission computerized tomography" OR "SPECT" or "positron emission tomography" OR "PET" or "functional near infrared spectroscopy" OR "fNIS." This served to identify leading Brazilian researchers from each institution authoring at least one original or review paper (first or senior author) of interest to neuroimaging in psychiatry. For each researcher identified, a full PubMed search was repeated to identify co-authorship (any position) in additional neuroimaging papers evaluating psychiatric disorders (original or review articles). Studies of healthy aging, mild cognitive impairment, and Alzheimer´s disease were also included given the interface between psychiatry and neurology. Publications relating to other neurologic disorders were only included if they referred to psychiatric manifestations linked to these conditions. Task-related functional MRI studies in nonpsychiatric samples were included only if they involved tasks of emotional processing or socially relevant behavior or if they evaluated the use of nonpharmacological interventions of potential interest to psychiatry, such as meditation, cognitive remediation or physical exercise. Review papers were included only if they were specifically devoted to neuroimaging. The same strategy was run for Brazilian researchers identified in the initial PubMed search as co-authors in neuroimaging papers in psychiatry, but only when no additional leading Brazilian researcher (first or senior author) was identified in those papers. In all cases, we excluded papers that were produced by researchers during or up to 2 years after their doctoral or postdoctoral studies abroad (as confirmed by the dates provided in the Lattes curriculum database) having no additional Brazil-based coauthors. The full list of publications identified and selected for each year of interest is available upon request.