#3116 Title: Preliminary findings ofvisual hallucinations in organic psychosis: A meta-analysis

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Objectives/aims:

In some cases, psychosis arises due to a secondary, or 'organic' cause. Identifying these cases early on is important in ensuring these patients receive appropriate management, which may reverse the underlying cause. Determining whether the psychiatric phenotype differs in patients with an organic cause would be a major advance in the field. We sought to determine whether the presence and content of visual hallucinations was associated with an organic cause of psychosis.

Methods:

A meta-analysis of case-control studies was conducted. PubMed, OVID, MEDLINE, Embase, PsychINFO and Global Health databases were searched without date restrictions by two researchers using the keywords "Psychos*" AND "Schizophreni*" AND "Visual hallucinat*". The inclusion criteria werea) reported frequency of visual hallucinations, b) categorisation of patientsinto having an organic or non-organic psychosis and c) publication in English. A random-effects model,following the DerSimonian and Laird method, was used to pool studies to generate overall odds ratios (OR) and 95% confidence intervals (CI).

Results:

Fifteen studies (890 organic and 955 non-organic psychosis patients) were included. Visual hallucinations were significantly associated with organic psychosis (OR = 3.17, 95% CI = 1.92, 5.24), however there was moderatebetween-study heterogeneity (I^2 = 70%).In the 4 studies where content was reported (158 organic and 52 non-organic psychosis patients), visual hallucinations most frequently took the form of people in both organic (n = 76; 48.1%) and non-organic psychosis (n = 31; 59.6%). However, inanimate objectswere significantly associated with organic psychosis ($\chi^2(1) = 5.44$, p = 0.020).

Conclusions:

Visual hallucinations are associated with organic psychosis. The presence of visual hallucinations, and in particular inanimate objects, mayserve as a potential 'red flag' for an organic psychosis. Findings have importantclinical utility, as a simple and convenient bedside assessment to inform which patients would benefit from further neurological investigation.