

- Title** Phytotherapy for Autism and Attention Deficit Hyperactivity Disorder (ADHD)
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- Reference** Technology Review Report - 004/2018, online: http://www.moh.gov.my/index.php/database_stores/store_view_page/30/321

Aim

To evaluate the safety, efficacy and cost-effectiveness of phytotherapy for autism and ADHD.

Conclusions and results

A total of 435 titles were identified through the Ovid interface and PubMed. There were six articles included in this review which consist of one systematic review and five RCTs.

Effectiveness:

Autism

Phytotherapy was not effective as an adjunct treatment for children with autism. There was no significant difference in children with autism who received risperidone plus *Gingko biloba* compared to risperidone plus placebo.

ADHD

a) Single treatment

There was limited fair level of retrievable evidence to suggest that phytotherapy may have the potential for treatment of ADHD symptoms in children. Compound herbal preparation, *Pycnogenol* and *Gingko biloba* were shown to be effective in improving ADHD symptoms when compared to placebo, but was less effective when compared to MPH (one study). However, since the evidence retrieved were limited in number, had small sample size with diverse medicinal plants being used and short-term follow up, hence, more high quality research is needed. Phytotherapy was not effective in adults with ADHD.

b) Adjuvant treatment

One study reported that combinations of *Gingko biloba* with MPH were more effective in improving ADHD symptoms compared to treatment with MPH alone in children.

Safety:

Autism

There was very limited fair level of retrievable evidence on the safety of phytotherapy as an adjunct therapy for children with autism. There was no significant difference in the incidents of side effects between the experimental group receiving *Gingko biloba* plus risperidone and the control group receiving risperidone alone.

ADHD

There was limited fair level of retrievable evidence to suggest that phytotherapy was safe and tolerable. Most common side effects reported were gastrointestinal discomfort, nausea, headache, and decreased appetite. However, most of the studies conducted have short-term follow up (the longest was four months). Hence, the long-term safety could not be determined.

Organizational:

Phytotherapy is not a recognised practice under Traditional and Complementary Medicine Act 2016 (Act 775) in Malaysia. Those prescribing phytotherapy need to be trained. In Germany, medical practitioner can obtain postgraduate qualification for phytotherapy, while non-medical CAM practitioners need to obtain state license before prescribing phytotherapy.

Cost/ Cost-effectiveness:

There was no retrievable evidence on the cost-effectiveness of phytotherapy for autism and ADHD.

Recommendations

Based on this review, phytotherapy for ADHD children may be used for a research purpose to provide more high quality evidence on long term safety and effectiveness.

Methods

Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and other Non-indexed citations and Ovid MEDLINE® 1946 to present, EMBASE – 1996 to March 2018, EBM Reviews - Cochrane Central Register of Controlled Trials – March 2018, EBM Reviews - Cochrane Database of Systematic Reviews - 2005 to March 2018, EBM Reviews - Health Technology Assessment – 4th Quarter 2016, EBM Reviews – NHS Economic, Evaluation Database 1st Quarter 2016. Searches were also run in PubMed. Google was used to search for additional web-based materials and information. Additional articles were identified from reviewing the references of retrieved articles. Last search was conducted on 9 March 2018.

Further research/reviews required

Further research on long term safety and effectiveness are needed.

Written by

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