

Randomised Double Blind Study to Compare Effectiveness of Honey, Salbutamol and Placebo in Treatment of Cough in Children with Common Cold

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Abstract

Background: Acute upper respiratory infection is the most common childhood illness and presents with cough, coryza and fever. Available evidence suggests that cough medicines may be no more effective than honey-based cough remedies.

Objective: To compare effectiveness of honey, salbutamol and placebo in the treatment of cough in children with acute onset cough.

Design: Randomised control trial

Setting: Aga Khan University Hospital Paediatric Casualty

Subjects: Children between ages one to twelve years presenting with a common cold between December 2010 and February 2012 were enrolled.

Outcome measures: Frequency, severity and extent to which cough bothered and disturbed child and parental sleep were assessed at baseline and over the subsequent five days through telephone interview using a validated scoring tool.

Results: One hundred and forty five children were enrolled in the study (45- placebo, 57 – honey, 43 –salbutamol). Of the 145 children 51% were male. Honey significantly reduced the total mean symptom score by day three ($p < 0.001$). Total mean difference in scores between day zero to five demonstrated a significant difference of honey's efficacy over placebo ($p < 0.002$) however no difference was noted when compared to salbutamol ($p < 0.478$). Significant differences in both total as well as each individual symptom score was detected with honey consistently scoring the best whilst placebo and salbutamol scored the worst. In paired comparisons honey was superior to placebo but not salbutamol, whilst salbutamol was not superior to placebo.

Conclusion: Honey was most effective in symptomatic relief of symptoms associated with the common cold whilst salbutamol or placebo offered no benefit.