
Assessment of the Impact of Secondhand Smoking On Children's Mental Health; an Egyptian Study

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Background: Secondhand smoke (SHS) may be affecting the mental health of children as many mental disorders have an onset in youth, a time when exposure is high. **Objectives:** Investigation of the potential impact of SHS exposure on children's mental health. **Methodology:** Forty five SHS exposed Egyptian children were enrolled as group I; all of them had at least one smoking parent and or were exposed to environmental tobacco smoke while group II included thirty age and sex well matched controls, with neither history of parental smoking nor exposures to environmental tobacco smoke. For all studied children, complete history taking, thorough clinical examination, psychometric assessment using Pediatric Symptom Behavior Checklist (PSCL), Strength and Difficulties Questionnaire (SDQ), and IQ measurement were done. DSM IV TR criteria were used to confirm any suspected behavioral and or psychiatric disorder. Laboratory assessment of secondhand smoke was carried out measuring urinary cotinine levels. **Results:** SHS exposed children had significantly higher mean value of urinary cotinine level, total PSCL, and SDQ scores compared to controls ($p < 0.001$, $p < 0.001$, $p < 0.05$ respectively). In studied SHS children, degree of smoking significantly positively correlated with PSCL internalization behavior subscore and emotion subscore of SDQ while smoking index significantly positively correlated with ADHD subscore of SDQ. Meanwhile, prosocial subscore of SDQ and urinary cotinine level were significantly negatively correlated. **In conclusion,** SHS exposure significantly compromised mental health of the studied sample of Egyptian SHS exposed children.