Society for the Study of Addiction PhD Studentship

Final Report 2016

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Adolescent drinking patterns: Associations between alcohol consumption and neuropsychological development

Adolescence presents a unique time of neurodevelopment, whereby the use of alcohol may have detrimental consequences for brain structures and neurological functioning. Adolescent drinking patterns have been largely formulated using measures designed for adult populations, which may lack the fine-grained characterisations, which might theoretically more likely lead to neuropsychological impairment in this group.

This research explored the prevalence and nature of alcohol use drawing from the SIPS Junior Research Programme (http://www.sipsjunior.net/) a screening and prevalence survey of alcohol consumption in adolescents attending Emergency Departments in England and IMAGEN (http://www.imageneurope.com/) a European research project examining risk taking behaviours in teenagers (14 years). Metrics of alcohol use were formulated into latent class structures aimed to represent the heterogeneity of drinking behaviours. Associations between latent classes and a range of outcomes of harm and neuropsychological function tasks were examined.

Results demonstrated a range of distinctive drinking patterns and profiles, which exist among adolescent populations which included, further evidence that adolescents are more likely to drink more than one type of alcoholic beverage with observed differences with both age and gender. Males and females presented differences in beverage preference and associated risks, which may be indicative of underlying subgroups, which can be characterised by beverage type consumption.

Both the identification of beverage type consumption and the latent conceptualisation of this aspect of a young persons alcohol use could be generalised to wider populations. This could provide a joined up consistent approach and directive for clinicians, researchers and policy makers of the importance of emerging drinking preferences in young people. This in turn could be used to inform or tailor screening, assessment and delivery of health advice in the quest to prevent or minimise the use and/or misuse of alcohol in adolescence.

Alcohol screening and assessments should continue to be widely supported in both Emergency Departments and school settings and where possible greater consistency and detail in drinking patterns, beyond the standard quantityfrequency aspect should be obtained. This is likely to further understanding and insight into how drinking typologies or profiles may present at a time when a young person may be making decisions around their future direction. This should inform how policy, health education, assessments and interventions can be best placed during this critical developmental period.

This research programme has provided me with numerous opportunities to present my findings both nationally and internationally. During this time I've received invaluable feedback, which has helped me to grow and develop as a researcher.