

## Guillermo Gallego, Huseyin Topaloglu

## Constrained Assortment Optimization for the Nested Logit Model.

Children with conduct disorders (CD) and their families are in contact with multiple agencies, but there is limited evidence on their patterns of service utilization. The aim of this study was to establish the patterns, barriers and correlates of service use by analysing the cohort of the 2004 Great Britain child mental health survey (N = 7,977). Use of social services was significantly higher by children with CD than emotional disorders (ED) in the absence of comorbidity, while use of specialist child mental health and paediatric was significantly higher by children with hyperkinetic disorders (HD) than CD. Children who had comorbid physical disorders used more primary healthcare services compared to those without physical disorders. Utilization of specialist child mental heath and social services was significantly higher among children with unsocialized CD than socialized CD and oppositional defiant disorders. Services utilization and its correlates varied with the type of service. Overall, specialist services use was associated with co-morbidity with learning disabilities, physical and psychiatric disorders. Several correlates of services use in CD appeared non-specific, i.e. associated with use of different services indicating the possibility of indiscriminate use of different types of services. The findings led to the conclusion that there is the need for effective organization and co-ordination of services, and clear care pathways. Involvement of specialist child mental health services should be requested in the presence of mental health comorbidity.