Using logistic regression to predict the risk of depression among parents who have lost a child through suicide

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Abstract

In this paper we use data from a survey study among 666 parents who have lost a child through suicide between the years 2004-2007. We create a dichotomised indicator variable for the prevalence of moderate to severe depression and, with the purpose of predicting the risk of depression among these parents, we fit two different logistic regression models. The first, and simpler, model is to be used in a direct manner, mainly containing predictors that are easy to measure and known at the time of loss of the child, or at least quite constant over time. The second, and more complex model, contains predictors that may be influenced by mood, and that may be unknown at the time of loss. Hence the second model is harder to interpret, and, rather than to be used in a direct manner like the first model, it has a hypothesis-generating purpose for future research. The two fitted models have good predictive qualities within the dataset, but they remain to be tested on new observations. Some effects may be underestimated due to influential observations.

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