Survey evidence indicates a relatively high prevalence of emotional and/or behavioral problems for U.S. children. Estimates vary according to the measure used. Several such measures have been included in the U.S. National Health Interview Survey. The Strengths and Difficulties Questionnaire (for 2001 forward) indicates that 5% of non-institutionalized children ages 4-17 had emotional or behavioral difficulties. The emotional difficulties question (EMODIFF, analyzed here for 2001 forward) indicates that 5% of non-institutionalized children ages 4-17 had definite or severe difficulties with “emotions, concentration, behavior, or being able to get along with other people.”

A question on child depression (KIDDEPRES, analyzed here for 1999 to 2000) indicates that 16% of non-institutionalized children ages 4-11 were sometimes or often “unhappy, sad, or depressed” during the past 6 months.

LeClerc and Kowalowski (1994) found that the presence of a disabled family member in the household significantly increased the mean number of severe and common behavior problems of non-disabled children. Children were most likely to have severe behavioral problems if they lived with more than one disabled person. A higher mean number of severe behavioral problems was associated with the presence of (in descending order) a disabled parent, sibling, or other relative.

Altman, Cooper, and Cunningham (1999) studied physician visits and medical expenditures. They found that children who live with a disabled adult female family member have a 7.5 percent decrease in the probability of their being sad, unhappy, or depressed (KIDDEPRES), over the past 6 months.

Data source, the National Health Interview Survey/IHIS, uses a complex sample design. Therefore, we use sampling weights to obtain correct point estimates, and we used STATA’s svy commands to account for the impact of sample design stratification and clustering to obtain appropriate variance estimates.

We also examined whether the relationship between limitation of other family members and the child’s likelihood of emotional/behavioral difficulties or depression varies by whether the child has a disability (results not pictured here). We found no significant interaction (p=0.229 for EMODIFF, p=0.513 for KIDDEPRES), which indicates that there may be no difference in the effect of any other family member’s limitation on the odds of emotional/behavioral problems in children with and without disability. We assessed the basic model fit with “linktest” and found the model was a subpopulation while retaining the sample design information needed for variance estimates.

As compared to families without disability, children (age 4-17) in families with a disability are more than twice as likely to experience emotional or behavioral difficulties (EMODIFF) children (ages 4-11) are 1.5 times more likely to have depression. Children in families with an adult female family member who is disabled by memory problems or are children with “emotions, concentration, behavior, or being able to get along with other people.” Here, too, the effect is greatest when the child’s own disability. Here, too, the effect is greatest when the child’s own disability.

Minority children, girls, and children in households with two adults are less likely to have EMODIFF. Poverty has the largest effect on EMODIFF and 1.37 times on KIDDEPRES.

Patients whose disability is more likely to increase the likelihood of emotional or behavioral problems and explore the differing effect of disability in specific family members (e.g., mothers vs. fathers).

These results persist when controlling for the effect of race, poverty, family structure, and sex. Our future research will examine the effect of poor health of self and others on children’s emotional and behavioral problems and explore the differing effect of disability in specific family members (e.g., mothers vs. fathers).

Support for this research comes from The Eunice Kennedy Shriver National Institute of Child Health and Human Development and from the Minnesota Population Center at the University of Minnesota.

The Impact of Disability in the Family on Child Mental Health

Miriam L. King, Ryan Moltz, and Kathleen Rowan

Minnesota Population Center, University of Minnesota

OBJECTIVE

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DATA

Odds ratios for EMODIFF and KIDDEPRES by number of other family members with a disability.

Graphical results

METHODOLOGY

We use logistic regression to assess children’s probability of having emotional or behavioral difficulties (EMODIFF) and the probability of their being sad, unhappy, or depressed (KIDDEPRES), over the past 6 months.

Our data source, the National Health Interview Survey/IHIS, uses a complex sample design. Therefore, we use sampling weights to obtain correct point estimates, and we used STATA’s svy commands to account for the impact of sample design stratification and clustering to obtain appropriate variance estimates.

Because our dependent variables are only obtained for one sampled child per family, we pool data across several years (1999-2000 and 2001-2009) to increase our sample sizes. As such, it is necessary to adjust the sampling weights so that the total sample is representative of the U.S. population. Using the STATA command subpop, we are able to perform our analysis on a subpopulation while retaining the sample design information needed for variance estimates.

We also examined whether the relationship between limitation of other family members and the child’s likelihood of emotional/behavioral difficulties or depression varies by whether the child has a disability (results not pictured here). We found no significant interaction (p=0.229 for EMODIFF, p=0.513 for KIDDEPRES), which indicates that there may be no difference in the effect of any other family member’s limitation on the odds of emotional/behavioral problems in children with and without disability. We assessed the basic model fit with “linktest” and found the model was adequately specified.

Odds ratios for EMODIFF and KIDDEPRES by number of other family members with a disability.

Adjusted odds ratios for EMODIFF by disability type of other family members.

Adjusted odds ratios for KIDDEPRES by disability type of other family members.

CONCLUSIONS

A child’s own disability is the best predictor of having difficulties with “emotions, concentration, behavior, or being able to get along with other people.” However, living with another family member who is disabled also increases the likelihood of such problems. The effect is greater when 2 or more disabled family members are present. The type of disability of the other family member(s) also matters, with limitation from memory difficulties or the presence of another child needing special education services having the greatest effect.

For children 4-11, living with 2 or more disabled family members has a greater effect on the child’s likelihood of depression than the child’s own disability. Here, too, the effect is greatest when family members who are disabled by memory problems or are children needing special education services.

These results persist when controlling for the effect of race, poverty, family structure, and sex. Our future research will examine the effect of poor health of self and others on children’s emotional and behavioral problems and explore the differing effect of disability in specific family members (e.g., mothers vs. fathers).

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