

PSYCHOSOCIAL ADJUSTMENT OF POOR MEXICAN MOTHERS OF DISABLED AND NONDISABLED CHILDREN

Johanna Shapiro, Ph.D. and Kenneth Tittle, M.D.

Department of Family Medicine, University of California, Irvine

A comparison of 50 low-income Mexican mothers, 38 of whom had disabled and 22 nondisabled children, found significant differences in the areas of social support, child adjustment, perceived stress, and family functioning. Study findings point up the need for community-based education and support services.

It has often been stated, and more recently documented, that the entire process of family functioning is affected by the presence of a disabled or chronically ill child. Both anecdotal observation and survey methodology have been used to report on the effect of a disabling condition on the family and on the family's coping response to such a condition. Existing summaries,^{25, 35, 43} based primarily on observation and case studies, stress the high morbidity of parents and children due to 1) lack of acceptance of such a child and 2) severity of stress imposed on the family. Several studies^{17, 19, 30} have referred to identifiable phases that families undergo as a result of their child's disability, similar to the stages identified in the bereavement literature. For parents of a disabled child, these include initial shock and disbelief, often followed by rage,

guilt, denial, and adjustment or acceptance. Reference is also made to the phenomenon of chronic sorrow in which, because the child does not die, parents must deal with issues of loss and disappointment on an ongoing, often unresolved, basis.¹⁸ Another important theoretical concept is that of marginality, in which both parents and child must come to terms simultaneously with the child's normal and deviant aspects.²⁹

Several articles have attempted to distinguish between successful and unsuccessful coping in parents and family of the disabled child. Denhoff¹³ concluded that good coping on the part of parents consists of 1) acceptance, 2) developmental understanding, 3) warm and secure family relationships, 4) encouragement of self-help, 5) initiative and stamina in the area of therapy and rehabilitation, and 6) professional trust.

A revised version of a paper submitted to the Journal in February 1985. Research was supported by grants from the March of Dimes Birth Defects Foundation (Number 12-82); the Irvine Campus Mexican/Chicano Program Award, 1981, 1983; and the Department of Family Medicine, UC Irvine Medical Center.

Another article, examining the adaptive patterns of parents of amputee children,¹⁰ mentioned as indices of good coping the importance of love and acceptance, communication within the family, limit setting for the affected child, and flexibility in managing daily crises. An English study²⁶ gathered survey material on the problems of 50 handicapped children and their families. This study identified widespread emotional difficulties in the parents, such as overanxiety, depression, overprotection, rejection, friction, and aggression. Among siblings, poor coping was marked by jealousy, a negative effect on their social life, and a negative effect on family leisure time. For the affected child, poor coping was associated with withdrawal, behavior problems, anxiety, depression, temper tantrums, enuresis, and aggression.

A study of 25 children and families¹¹ emphasized the importance of realistic acceptance of the child's condition and prognosis, and the importance of effective information-seeking and help-seeking. According to parents surveyed in this study, successful coping meant achieving a quality of life as close to normalcy as possible. This study and others^{14, 33} also emphasized communication efforts and utilization of support systems as positive coping strategies. Another study concluded that coping styles of parents raising a disabled child fall somewhere between normal and poorly adjusted parents³⁹ and emphasized that the presence of the affected child was the primary contributor to these patterns.

Despite growing numbers of individuals and families in this country from a variety of developing nations of the Third World, we have very little information on cultural variation in response to disabling conditions in a child. One article of particular importance to this

study dealt with factors interfering with the successful implementation of intervention programs aimed at physically disabled Mexican-American children and their families.¹ These included 1) strong family pride resistant to the help of "outsiders"; 2) the need for approval of any treatment plan by the priest or other religious leader; 3) the *machismo* ethic, which often interpreted disruptive, maladaptive behavior in male children as normal "masculine" behavior and thus not in need of treatment; 4) family values encouraging child passivity, which reduced the affected child to an inappropriately dependent state; 5) superstition and lack of knowledge about medical and rehabilitation technology; and 6) the potential negativism of extended family and friends. This article stressed the importance of a home-centered approach. Such information is becoming increasingly important as health care providers encounter resistance or apathy in the face of attempted intervention and treatment with non-Anglo, non-English-speaking patients and families.

Other reports have suggested that family function and structure are not only altered by the presence of a disabled child within the family, but by the (usually) negative pressures and attitudes exerted from outside the family by the larger society.^{11, 15} There is also beginning to be some evidence that attributions of parental blame for life-threatening and disabling conditions in children are made by the community at large.³⁸ It is equally important to understand whether this stigmatization is culture-specific or a phenomenon that transcends particular cultures.

STUDY PURPOSES

The data presented here are part of a study examining the overall impact of a

disabled child on Spanish-speaking, low socioeconomic families. This report will compare mothers of a disabled child with mothers of a nondisabled child on a variety of dimensions, including physical health, depression, attitudes toward disabled persons, child adjustment, social support, and family function. The study also sought to compare the two groups in terms of their attributions of blame about disabling conditions and in terms of hypothetical and actual coping strategies employed in response to such a condition in one of their own children. Based on existing literature, admittedly derived from a white, middle-class population, the following hypotheses were developed:

1. There exists some research evidence to support the belief that higher levels of depression and anxiety exist in mothers of disabled children than in the general population.^{4, 21, 26} However, other researchers have argued that maternal depression is not necessarily a correlate of having a disabled child.³ We hypothesized that mothers of a disabled child would be significantly more depressed than mothers of a nondisabled child.

2. There is also some evidence that parents of disabled and chronically ill children report an unusually high number of physical symptoms.⁴⁰ Therefore, we hypothesized that mothers of a disabled child would report significantly more physical symptoms and illness episodes than mothers of a nondisabled child.

3. There is some evidence to suggest that contact with disabled individuals, plus access to information about them, influences general attitudes toward this population.² Thus, we hypothesized that attitudes of mothers with nondisabled children, representative of the community at large, would be more negative toward disabled persons than the atti-

tudes of those mothers who actually had children with disabilities.

4. Research evidence exists that, on a variety of dimensions, parents of children with disabilities find their children to be more difficult than parents of nondisabled children.¹⁶ Thus, we hypothesized that mothers of disabled children would perceive their children to be less well-adjusted than mothers of nondisabled children.

5. A large literature exists^{12, 20, 28} documenting the positive mediating effect of social support on stress. However, the literature on social stigmatization suggests that precisely those individuals undergoing significant, chronic stress in the form of dealing with a seriously disabled child, are deprived of this important resource.¹¹ Therefore, we speculated that mothers of a disabled child would have less available social support than mothers of a nondisabled child.

6. As the brief literature review above suggests, the presence of a disabled child clearly has an impact on the family unit. There is also evidence³¹ that families dealing with another chronic stressor (*i.e.*, alcoholism) do indeed exhibit different patterns of family functioning than the population at large. We sought to apply these findings to our own population coping with a stressor of an equally significant, but qualitatively very different nature, and hypothesized that mothers of a disabled child would perceive their families as functioning significantly differently than mothers of a nondisabled child.

7. Based on concepts of blame attribution cited above,³⁸ we hypothesized that there would be significantly more other-blame in mothers of nondisabled children than self-blame in mothers of children with disabilities.

8. It is beginning to be recognized that coping is not a unitary concept, but

rather is comprised of many different behavioral, cognitive, and affective components.^{5, 23, 35} We are still exploring how to define "good" or "effective" coping, and there is the growing belief that these concepts are situation-specific, *i.e.*, what is "effective" coping in response to certain aspects of a given stressor may not be applicable to other aspects of the same stressor.⁴² What individuals *believe* to be most important coping skills may turn out to be less important than other types of coping when confronted with the actual stressful event. In an effort to gather further information on the multidimensional nature of coping, we asked both groups to report respectively on their real and hypothetical coping with a disabled child. We hypothesized that the "hypothetical" group (mothers of non-disabled children) would stress problem-focused coping, while the "real" group (mothers of disabled children) would emphasize emotion-focused coping. Thus, we expected significant differences between the two groups in terms of their hypothetical and actual coping in response to child disability.

METHOD

Subjects

Subjects were 50 mothers, 38 of whom had a handicapped child. A potential group of 100 handicapped children was identified through a private orthopedic clinic in a California border town. The clinic provided diagnostic and therapeutic services for the Mexican community on the other side of the border. The following inclusionary criteria for subject selection were applied: 1) child had to be between the ages of

2 and 12; 2) child had to suffer from a physically disabling condition of moderate to extreme severity, as evaluated by the investigator-physician;* 3) child had to be of normal intelligence, as determined by medical records and the assessment of the investigator-physician; 4) nature of the disorder had to be either congenital or early onset paralytic polio; 5) a father as well as a mother had to be currently involved in providing for the child (this led to the inclusion of some families where the parents were either separated or divorced, but where the father maintained regular contact with the family and contributed to its financial upkeep); and 6) at least one other sibling had to be present in the home.

Fifty families, out of the 100 children identified through clinic records, were contacted. This low percentage was related to several factors, including the somewhat transient nature of the population (*i.e.*, movement both across the border and to other areas of Mexico), the virtual absence of telephones, and the frequent changes of address within the community. Of the 50 families approached, 38 (76%) completed the study. These families averaged 4.6 children, with a mean age of 8.2 years. Of these 38 children, 16 had had early onset paralytic polio, 16 others had a major mobility impairment, and six had a variety of congenital disorders. Over 75% of the children had been hospitalized because of their orthopedic problems. Of the 12 nonparticipant families, four mothers told investigators their husbands did not wish them to answer questions about their families, five relocated and could not be recontacted, and three had to interrupt the interview pro-

* This included the following functional criteria: mobility impairments sufficiently severe to prevent ambulation or to require mechanical aids; absence or loss of useful function of one or both upper extremities.

cess to attend to family affairs and could not be rescheduled.

Thirty mothers of nondisabled children were recruited from two local churches. Of these, 22 (73.3%) completed the interview process. Of the remaining eight, three had family emergencies that precluded their participation, two moved to other parts of Mexico, two could not be contacted subsequently, and one reported she did not wish to discuss the topic under study. We realized that recruitment through churches might bias our sample. However, preliminary inquiries suggested that the church played a major role in community life and that a large majority of citizens were involved in its activities. Criteria for inclusion in the comparison group were as follows: 1) a father as well as the mother had to be currently involved in providing for the child, 2) at least one child between the ages of 2 and 12 had to be present in the family, 3) at least one other sibling had to be part of the family, and 4) a handicapped individual could not be part of the immediate family. In addition to these criteria, we attempted to match subjects in both groups on a variety of demographic variables. We were largely successful in this attempt, with a few notable exceptions to be indicated in the Results section.

In general, these were poor families, with a median monthly income of less than \$200 (families with disabled children) and less than \$600 (families with nondisabled children). The majority of parents had not completed elementary school. Most of the fathers, while employed, worked in unskilled, low-paying jobs. Their homes, which consisted on the average of four rooms, almost always had electricity and running water; however, several were without indoor toilets or refrigerators. In the majority of the families, mother and father were

either currently married or living together (over 50% for both groups). The age of the parents ranged from mid-30s to early 40s. The majority of respondents stated their religious affiliation as Catholic, with Mormons also having some representation among both groups.

Measures

Several standardized measures, as well as a semistructured interview, were employed in this study. Measures of respondent individual adjustment included:

1. A modification of the Center for Epidemiological Studies Depression Scale, a 20-item symptom checklist used to assess situational depression.³⁶ This instrument was selected for its ease of administration and because it had been normed and validated with a Spanish-speaking population. The modified version of this measure had a reliability coefficient (Cronbach's alpha) of .86 for the group of mothers of nondisabled children, and .93 for the group of mothers of disabled children.

2. A measure of perceived physical health, based on health incidents and frequency of symptoms.^{22, 24} The modified version of this measure had a reliability coefficient of .86 for the group of mothers of nondisabled children, and .88 for the group of mothers of children with disabilities.

3. The measure of social support was a variant of the Sarason instrument,³⁷ which assesses availability rather than utilization *per se*. To improve the reliability of this instrument, items were deleted and added to the original scale. The final reliability coefficient for the group of mothers of nondisabled children was Cronbach's alpha = .80, and for the group of mothers of children with disabilities, Cronbach's alpha = .87.

4. Attitudes toward disabled persons

were measured through use of a standardized instrument, the ATDP,⁴⁴ used to measure general attitudes toward disability, rather than toward specific disability groups.

5. The measure of family function employed was the Moos Family Environment Scale,³² which has also been used with Spanish-speaking populations. This is a true-false instrument with 90 items which yields ten subscales: cohesion, expressiveness, conflict, independence, achievement-orientation, intellectual-cultural orientation, active-recreational orientation, moral-religious emphasis, organization, and control.

In addition to these instruments, two other scales were developed for comparison purposes between the two groups. One, measuring perceived child adjustment, solicited parental evaluation of the child's mood, behavior, and interpersonal relationships. This scale achieved a reliability coefficient (Cronbach's alpha) of .78 for the group of mothers with nondisabled children, and .83 for the group of mothers with disabled children. A final scale, measuring the perceived stress of having a handicapped child in the family, had a reliability coefficient of .92 for the group of mothers of nondisabled children and .94 for the group of mothers of disabled children.

The Interview

The interview for mothers of children with disabilities used a semistructured format and combined open-ended, multiple-choice and yes/no answers. The interview assessed the impact of a disabled child on the family as a unit, and on various subsystems within the family (mother-child, mother-father, child-siblings, mother-siblings). A primary purpose of the interview was to get further information about coping

strategies and behavior of the respondent and of the family unit as a whole, utilized in response to the demands made by the index child's condition.

The comparison interview, used with the mothers of nondisabled children, was intended to provide information in the following areas: 1) attitudes toward children with disabilities; 2) speculation by respondents as to how they would deal with a disabled child in their own family; 3) how their own family would respond to the presence of such a child; and 4) how they perceived and related to their own children. To facilitate the comparison of the hypothetical and actual coping data generated by the interviews of both mothers with disabled and nondisabled children, we constructed a composite profile of a disabled child, sex unspecified, which represented the mean age of children in our families with disabled children; the child was described as having attributes typical of the actual children in this sample (*i.e.*, significant mobility impairment, normal intelligence). The cause of this hypothetical disability was left ambiguous.

Both interviews were pretested on five mothers selected respectively from the orthopedic clinic and from one of the two community churches used in our study. These were mothers who failed to meet our inclusionary criteria, but were judged comparable to the desired sample. Based on these experiences, the interviews were revised twice, to tighten structure and improve translation problems.

Procedure

All of the above instruments were translated into Spanish, retranslated into English, and then translated again into Spanish. This version of the questionnaire packet was subsequently modified twice, based on nuances of local dialect. Translators were bilingual

graduate students; final editing was performed by members of the local community.

All standardized instruments were administered orally, a deviation from normal procedure necessitated by the widespread illiteracy in our study population. This administration was combined with the administering of the structured interview whenever possible; otherwise this last was administered separately. The overall interview time was between three and four hours per subject. Interviewers were a social work instructor and a social work graduate student from the Mexicali School of Social Work. These individuals were native Spanish-speakers and had the great added advantage of being quite familiar with the local community. They proved to be skillful interviewers; in fact, the instructor herself taught a course on interviewing. Total training time was approximately eight hours and emphasized potential sources of response bias.⁴¹

Interviewees included mothers only. The identified patient and the father were not interviewed, primarily due to lack of financial resources supporting this study. Although initially efforts were made to interview fathers, we encountered some resistance, perhaps because both interviewers were women who were conducting interviews about a subject (the child and the family) traditionally in the province of women, and because the focus of discussion was a disabled (therefore "imperfect") child. Some research evidence exists that fathers of chronically ill children derive less satisfaction and gratification from their children than do fathers of normal controls.⁹

Data Analysis

Because of the large number of variables generated by the exploratory

methodology employed, it was decided to collapse as many individual variables as possible into scales. This was done, as is described in the Measures section, using Cronbach's alpha⁸ as the reliability coefficient. Then, scale scores and certain individual variables shared in common by the two groups were compared, using either *t*-tests, chi-square, or Kendall's Tau C, depending on the ordinal or nominal nature of the variable.^{6, 7}

RESULTS

Demographics. On most demographic measures, there were no significant differences between the two groups. Both groups were comparable in terms of the type of housing they had (mostly homes rather than apartments), whether they shared their residence (the majority did not), whether they owned their home (about half of each group), and whether their homes had electricity, running water, toilets, and refrigerators (the majority of families had these conveniences). However, the number of people living in the homes of families with disabled children was significantly greater than those living in the homes of families of nondisabled children (Kendall's Tau C = .45; $p < .01$). This was certainly related to the fact that the group of mothers of disabled children tended to have more children per family (Kendall's Tau C = .75; $p < .01$). The group of families with nondisabled children also tended to have lived a significantly longer time in the community (Kendall's Tau C = -.50; $p < .01$; \bar{X} = 14.9 years compared to \bar{X} = 6.8 years).

In terms of the two sets of parents, the groups were largely comparable, although again there were differences. The comparison group mothers tended to be somewhat older than the mothers of disabled children (Kendall's Tau C = -.29; $p = .03$; \bar{X} = 44.1 yr. vs. \bar{X} = 35.6

yr). There were no differences in terms of father's age or occupation (almost 90% of the men in both groups were employed, the majority in unskilled labor). The vast majority of mothers in both groups (almost 90%) were full-time housewives. The level of parental education was also approximately the same for both groups. For the majority of the women, this meant less than an elementary school education; of the men, the majority also had only some elementary school education, with a few more having completed the primary grades. However, despite the equivalence of education and occupation, the fathers of nondisabled children provided a better living for their families: their earned income was significantly higher than that of the other group ($t=6.79$; $df=24$; $p<.01$). Although the parents of nondisabled children had been married longer than the parents of disabled children (Kendall's Tau $C=-.34$; $p=.02$), there was no difference between groups in levels of marital satisfaction (as measured by a marital rating scale), with the parents of disabled children having a mean score of 3.5 (slightly more than moderate satisfaction) and the parents of nondisabled

children having a mean score of 3.2. There were no significant differences in the religious affiliations of either group; the majority in both listed themselves and their husbands as Catholics.

Respondent individual physical and psychological adjustment. The study employed two measures of individual adjustment: 1) Respondents' perception of their physical health (as measured by number of illness episodes, visits to doctor, presence of symptoms) and 2) level of depression (as measured by a modification of the CES-Depression scale. There were no significant differences between the groups on either of these two measures. (See TABLE 1.)

Child adjustment. Respondent perception of child adjustment was measured through a scale containing items about the child's mood, behavioral problems, fears, and relationships with parents and siblings. Overall, mothers of disabled children saw their children as significantly less well adjusted than did mothers of nondisabled children ($p<.01$). On a single-item question, mothers of disabled children also felt they had significantly more problems with their children than did mothers of nondisabled children ($\chi^2=25.56$; $df=2$;

Table 1
COMPARISON OF MOTHERS OF DISABLED CHILDREN ($N=38$) AND MOTHERS OF NONDISABLED CHILDREN ($N=22$) ON STUDY MEASURES

MEASURE	DISABLED		NONDISABLED		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Individual Adjustment							
Health	26.6	8.9	27.6	8.8	.5	58	NS
Depression	17.7	13.9	14.7	7.5	-9	58	NS
Child Adjustment	51.0	7.7	56.8	2.2	3.4	58	.01
Social Support	43.2	8.3	38.7	6.1	-2.2	58	.03
Attitudes Toward Disabled	119.9	14.3	110.6	16.3	-2.3	58	.02
Stress/Handicapped	36.7	8.5	22.8	9.9	-5.7	58	.01
Family Function Variables							
Conflict	2.8	1.8	3.8	1.9	2.0	55	.05
Achievement orientation	6.8	1.3	6.1	1.1	-2.0	55	.05
Intellectual-cultural orientation	2.8	1.8	4.0	1.5	2.5	55	.02
Active-recreational orientation	3.1	2.4	4.5	1.3	2.5	55	.02
Control	5.1	1.5	4.3	1.4	-2.1	55	.04

$p < .01$). Mothers of disabled children also spent less time with their disabled child than mothers of nondisabled children spent with their comparable child ($\chi^2 = 7.89$; $df = 2$; $p = .02$). (See TABLE 1.)

Family function. Families of children with disabilities were characterized by less expressed conflict ($p = .05$) and greater control ($p < .05$) than were families of nondisabled children. The families with disabled children also tended to emphasize achievement more than did families with nondisabled children ($p = .05$), but were less intellectually oriented ($p = .05$) and less active-recreationally oriented ($p < .01$). There were no differences between the two groups of families in terms of their perceived cohesion, expressiveness, independence, moral-religious orientation, or degree of organization. (See TABLE 1.)

Social support. The mothers of nondisabled children perceived themselves as having significantly more social support than the mothers of disabled children ($p < .05$). (See TABLE 1.)

Attitudes toward disabled people. Mothers of nondisabled children had a significantly more negative attitude toward disabled persons than did mothers of disabled children ($p < .05$). However, mothers who actually had a disabled child felt the stress of such a child to be significantly greater than did

mothers of nondisabled children who were speculating on the hypothetical stress of having a comparably disabled child in their family ($p < .01$). (See TABLE 1.)

Attribution of blame. On a list of items attributing responsibility for the disability to influences under some degree of parental control, the mothers of nondisabled children tended to endorse these significantly more often than mothers of disabled children. (See TABLE 2.)

Specific coping strategies. When comparing the hypothetical coping strategies of mothers of nondisabled children to the actual coping strategies used by mothers of disabled children, the primary difference that emerged was one of instrumentality vs. affiliation. Mothers of nondisabled children were significantly more likely to endorse coping strategies that emphasized acquiring information, setting goals, and actively communicating about the disability, then were mothers of children with disabilities. In terms of cognitive coping (locus of control), they were more likely to perceive the outcome of the child's condition as able to be influenced than were mothers of disabled children. Mothers of children with disabilities, on the other hand, were significantly more likely to seek emotional support than were mothers of nondisa-

Table 2

COMPARISON OF MOTHERS OF DISABLED CHILDREN ($N=38$) AND MOTHERS OF NONDISABLED CHILDREN ($N=22$) ENDORSING PARENTAL BLAME ATTRIBUTIONS

ITEM	DISABLED	NONDISABLED	M^2	df	p
Mother's health during pregnancy	52.6%	85.7%	5.1	1	.02
Parental health habits	23.7%	95.2%	24.9	1	.01
Environmental factors	16.2%	45.0%	4.2	1	.04
Virus, infections	48.6%	90.0%	7.7	1	.01
Punishment from God	26.3%	33.3%	.1	1	NS
Not breastfeeding	10.5%	52.4%	10.4	1	.01
Frightened during pregnancy	39.5%	90.5%	12.4	1	.01
Problems during labor	18.4%	81.0%	19.4	1	.01

bled children. (See TABLE 3.) The mothers of nondisabled children felt that religion would be more important to them than did the mothers of disabled children (Kendall's Tau $C=3.17$; $p < .05$); not surprisingly, they endorsed the use of prayer significantly more often as well ($\chi^2=7.29$; $df=1$; $p < .01$).

DISCUSSION

Despite the small sample size of this exploratory study and the statistical problems inherent in dealing with a large number of variables, important areas for future research emerge from these findings.

In terms of the measures of individual adjustment, the confirmation of the null hypothesis is interesting, particularly in light of reports on white, middle-class populations pointing to the existence of greater depression and greater health problems in families with a disabled child. Several speculative points need to be made in this regard. First, despite the widespread prevalence of assumed greater depression and physical ailments, there is little methodologically sound research to support this assertion. It may be that the mere presence of

a disabled child is not in itself associated with increased depression and physical symptomatology. Also, clearly, the nature of the child's condition is significant. Since children in this study were of normal intelligence, we did not investigate the possibility of such a relationship existing in the presence of mental retardation. Further, assuming larger studies confirmed the null hypothesis, it is possible to speculate that certain culture-specific attitudes and cognitions (acceptance, resignation, "God's will"—concepts endorsed by the vast majority of our respondents) may act as a kind of stress inoculation²⁷ against the development of depressive cognitions and affect and the perception of increased physical symptoms.

In terms of child adjustment, there was some doubt at the start of the study as to whether we could induce parents to discuss their child's problems honestly. Results in this area confirm our hypothesis that disabled children would be perceived by mothers as having more adjustment difficulties than nondisabled children. It also gave us confidence that mothers, under the conditions of investigation specified earlier, could provide

Table 3
COMPARISON OF REAL AND HYPOTHETICAL COPING STRATEGIES OF MOTHERS OF
DISABLED ($N=38$) AND NONDISABLED ($N=22$) CHILDREN

ITEM	DISABLED	NONDISABLED	M^2	df	p
Professional information seeking	44.4%	100.0%	15.6	1	.01
Other information seeking	36.1%	81.0%	9.0	1	.01
Learn treatment methods	48.6%	81.0%	4.5	1	.03
Set short-term goals	61.1%	90.0%	3.9	1	.05
Question facts	69.4%	100.0%	5.8	1	.02
Seek professional advice	18.8%	57.1%	6.7	1	.01
Talk with family	50.0%	95.2%	10.3	1	.01
Talk with friends	44.4%	81.0%	5.8	1	.02
Able to influence outcome of child's condition	58.3%	90.5%	5.1	1	.03
Outcome up to God	66.7%	95.0%	4.3	1	.04
Powerful people can influence outcome	61.1%	90.0%	3.9	1	.05
Seek support from spouse	82.9%	42.9%	7.9	1	.01
Seek support from families in similar position	50.0%	4.8%	10.1	1	.01

accurate information about their child's behavior and mood. This finding highlights the importance of developing intervention strategies for such children tailored to the cultural and economic exigencies of a poor, Spanish-speaking community. In particular, such interventions might focus on the mother-child dynamics, which seemed especially difficult for mothers of disabled children.

The families of disabled children did seem to function somewhat differently than the families of nondisabled children. Overall, for both groups, the family units appeared to be warm, supportive, and communicative. However, the combination of low expressed conflict and high control in the families of children with disabilities suggests an environment in which the expression of conflict is not safe, possibly because of the higher degree of stress in these families. Perhaps as compensation for their child's disability, these families also appeared to expect more from their children and push them harder. Again, further documentation of these findings might suggest the need for family-oriented interventions for such families, which would allow for the expression and resolution of conflict, as well as the relaxation of possibly overly controlling patterns in the family.

Of particular interest is the finding on social support. Part of the greater social support available to the families of nondisabled children may have been a function of their greater length of residence in the community. However, the mean length of residence for the group of mothers of disabled children was over seven years, which suggests at least a relative stability for this group as well. An alternative hypothesis might derive from the phenomenon of social isolation which has been documented to characterize white, middle-class families of

disabled children. Some support for this theory is given by the percentages of mothers who endorsed specific items relative to this phenomenon (see TABLE 4). Approximately one-fifth of the sample felt people responded to them differently because of their disabled child, while over 60% felt that their friends and neighbors were moderately to extremely unhelpful in assisting them in dealing with this child.

Further indirect evidence for this hypothesis is provided by the finding that mothers of nondisabled children had a significantly more negative attitude toward disabled persons in general than did mothers with a disabled child. This negative attitude might indeed translate into avoidance of persons with disabilities, including families containing a disabled child. In a further distancing strategy, mothers of nondisabled children appeared to minimize the stress that would be involved in having a disabled child in the home in that they evaluated this hypothetical stress as significantly less than did mothers of actual disabled children.

This interpretation of minimization of hardship is given further indirect support by the interesting patterns of blame

Table 4
 PERCENTAGE OF MOTHERS OF DISABLED CHILDREN (N=38) ENDORSING STATEMENTS RELATED TO PERCEIVED SOCIAL ISOLATION

ITEM	RESPONSE
Friends give needed moral support	No: 27.3%
Rely on friends for emotional support	No: 39.4%
Helpfulness of neighbors	Moderately to extremely unhelpful: 62.8%
Helpfulness of friends	Moderately to extremely unhelpful: 63.7%
Hesitancy to tell friends about disabled child	True: 18.2%
People treat me differently	Always to sometimes: 22.8%

attribution which emerged from this study. Overall, we may conclude that mothers of nondisabled children tended to engage in patterns of blaming which held the parents of the child at least partially responsible for the child's condition. This tendency may have further contributed to the hypothesized phenomenon of social isolation, in a kind of vicious cycle: parents who feel somehow blamed, albeit indirectly or implicitly, may unconsciously avoid association with individuals who provoke this feeling in them.

An analysis of the coping strategies of both sets of mothers sheds further light on the concepts of distancing and minimization. Overall, both groups of mothers tended to endorse pro-social strategies (seeking information, talking to friends, keeping a sense of humor) and to avoid endorsement of antisocial strategies (*e.g.*, drinking, smoking, overeating, undereating, using tranquilizers). However, within this general trend, some important distinctions emerged. Notably, the mothers of nondisabled children seemed to rely almost exclusively on instrumental, problem-solving strategies; there appeared to be a special reliance on medical science to provide all the answers. An almost complacent quality seeps through their responses. A combination of God, medicine, and their own indefatigable energy appears to be able to generate the solution to any problem. The mothers of disabled children, by contrast, seem more resigned, more realistic, and much more aware of the importance of the emotional component in the coping process, particularly the importance of reaching out to families in similar situations and seeking support from their own families and friends. Whereas the group of mothers with nondisabled children tended to empha-

size talking about what to do, the mothers of actual disabled children had often coped by sharing what they felt. In a final, painful example of minimization, 71.4% of the mothers of nondisabled children felt that their lives would be "enriched" by the experience of a disabled child; only 27.8% of the mothers with disabled children endorsed this statement. This is not to say that many of these mothers had not grown, matured, and learned through the experience of their child's disability. However, few would say facetiously that their life had changed for the better as a result of this tragedy. Overall, they appeared to be more sober and realistic about those aspects of their child's condition they could control, and more valuing of the intangible areas in which they could derive support and hope from others.

In conclusion, the results of this study appear to point to two directions: First, the documentation of significant problems for the child, in the mother-child relationship, and stresses in the family system point to the need for the development of community-based, low-cost interventions which could give support and education to families with disabled children. Secondly, the evidence of negative attitudes in the community as a whole and the possible consequence of social isolation and stigma for families of the children with disabilities suggest the need for education and intervention at a community level. True therapeutic change for both mothers and children may occur only as the result of an interaction between changes at the family level and changes at the community level.

REFERENCES

1. ADKINS, P. AND YOUNG, R. 1976. Cultural perceptions in the treatment of handicapped school children of Mexican-American heritage. *Res. Devlp. Ed.* 9:83-90.

2. ANTHONY, W. 1972. Societal rehabilitation: changing society's attitudes toward the physically and mentally disabled. *Rehabil. Psychol.* 19:117-126.
3. BURDEN, R. 1980. Measuring the effects of stress on the mothers of handicapped infants: must depression always follow? *Child: Care, Health and Development* 6:111-125.
4. BUTLER, N. ET AL. 1978. Handicapped children—their homes and lifestyles. Unpublished manuscript. Department of Child Health, University of Bristol.
5. COHEN, F. AND LAZARUS, R. 1979. Coping with the stresses of illness. *In* *Health Psychology*, G. Stone, F. Cohen and N. Adler, eds. Jossey-Bass, San Francisco.
6. COHEN, J. 1977. *Statistical Power Analysis for the Behavioral Sciences* (Rev. Ed.) Academic Press, New York.
7. COHEN, J. AND COHEN, P. 1975. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Erlbaum, Hillsdale, N.J.
8. CRONBACH, L. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika* 16:297-334.
9. CUMMINGS, S. 1976. The impact of the child's deficiency on the father: a study of fathers of mentally retarded and of chronically ill children. *Amer. J. Orthopsych.* 46:246-255.
10. DANIELS, L. AND BERG, C. 1968. The crisis of birth and adaptive patterns of parents of amputee children. *Clinical Proceedings/Handicapped and Crippled Children's Unit of Columbia & District General Hospital* 23:108-117.
11. DARLING, R. 1979. *Families Against Society*. Sage, Beverly Hills, Calif.
12. DEAN, A. AND LIN, N. 1977. The stress buffering role of social support. *J. Nerv. Ment. Dis.* 165:403-417.
13. DENHOFF, E. AND HOLDEN, R. 1971. Understanding parents: one need in cerebral palsy. *In* *Counseling Parents of the Ill and the Handicapped*, R. Noland, ed. Charles C Thomas, Springfield, Ill.
14. EDELSTEIN, J. AND STYRDOM, L. 1981. The doctor's dilemma—how and when to tell the parents that their child is handicapped. *South African Med. J.* 59:534-536.
15. ENGLISH, R. 1977. Correlates of stigma towards physically disabled persons. *In* *Social and Psychological Aspects of Disability*, J. Stubbins, ed. University Park Press, Baltimore.
16. FRIEDRICH, W.N. AND FRIEDRICH, W.L. 1981. Psychosocial assets of parents of handicapped and nonhandicapped children. *Amer. J. Ment. Defic.* 85:551-553.
17. GATH, A. 1977. The impact of an abnormal child on the family. *Brit. J. Psychiat.* 130:408-410.
18. GREEN, C. 1981. Handicapped children: let's be more positive and practical. *Med. J. Austral.* 1:402-404.
19. HEISLER, V. 1972. *A Handicapped Child in the Family*. Grune and Stratton, New York.
20. KAPLAN, B., CASSEL, J. AND GORE, S. 1977. Social support and health. *Med. Care* 15 (Suppl.):47-58.
21. KEW, S. 1975. *Handicap and Family Crisis*. Pitmans, London.
22. LANGNER, T. 1962. A twenty-two item screening score for psychiatric symptoms indicating impairment. *J. Hlth Hum. Behav.* 3:269-276.
23. LAZARUS, R. 1980. The stress and coping paradigm. *In* *Theoretical Bases for Psychopathology*. A. Kleinman and P. Maxim, eds. Spectrum, New York.
24. MARX, M., GARRITY, T. AND BOWERS, F. 1975. The influence of recent life experience on the health of college freshmen. *J. Psychosomat. Res.* 19:87-98.
25. MCDANIEL, J. 1969. *Physical Disability and Human Behavior*. Pergamon Press, Elmsford, N.Y.
26. MCMICHAEL, J. 1971. *Handicap: A Study of Physically Handicapped Children and their Families*. Staples Press, London.
27. MEICHENBAUM, D., TURK, D. AND BURSTEIN, S. 1975. The nature of coping with stress. *In* *Stress and Anxiety*, Vol. 2, I. Sarason and C. Spielberger, eds. John Wiley, New York.
28. MILLER, P., INGHAM, J. AND DAVIDSON, S. 1976. Life events, symptoms, and social support. *J. Psychosomat. Res.* 20:515-522.
29. MINDE, K. 1978. Coping styles of 34 adolescents with cerebral palsy. *Amer. J. Psychiat.* 135:1344-1349.
30. MINDE, K. ET AL. 1972. How they grow up: 41 handicapped children and their families. *Amer. J. Psychiat.* 128:1554-1560.
31. MOOS, R. ET AL. 1979. Family characteristics and the outcome of treatment for alcoholism. *J. Stud. Alcohol* 40:78-88.
32. MOOS, R. AND MOOS, B. 1976. A typology of family social environment. *Fam. Proc.* 15:356-372.
33. MORGAN, M. 1979. Counselling parents who have a handicapped child. *J. Royal Coll. Physicians* 13:245-247.
34. PEARLIN, L. AND SCHOOLER, C. 1978. The structure of coping. *J. Hlth Soc. Behav.* 19:2-21.
35. POWER, P. AND DELL ORTO, A. 1980. General impact of child disability/illness on the family. *In* *Role of the Family in the Rehabilitation of the Physically Disabled*, P. Power and A. Dell Orto, eds. University Park Press, Baltimore.
36. ROBERTS, R. 1980. Reliability of the CES-D Scale in different ethnic contexts. *Psychiat. Res.* 2:125-134.

37. SARASON, I. ET AL. 1983. Assessing social support: the social support questionnaire. *J. Pers. Soc. Psychol.* 44:127-139.
38. SHUMAKER, S., SHAPIRO, J. AND KELLERMAN, J. 1981. Parents' strategies for coping with cancer in their children: sources and impact of self blame. Presented to the American Psychological Association, Los Angeles.
39. TAVORMINA, J. ET AL. 1981. Psychosocial effects on parents of raising a handicapped child. *J. Abnorm. Child Psychol.* 9:121-131.
40. WALKER, J., THOMAS, M. AND RUSSELL, I. 1971. Spina bifida and the parents. *Devlpn. Med. Child Neurol.* 13:462-476.
41. WELCH, S., COMER, J. AND STEINMAN, M. 1973. Interviewing in a Mexican-American community: an investigation of some potential sources of response bias. *Pub. Opin. Quart.* 37:115-126.
42. WORTMAN, C. AND SILVER, R. 1980. Coping with undesirable life events. *In* Human Helplessness, S. Garber and M. Seligman, eds. Academic Press, New York.
43. WRIGHT, B. 1980. Physical Disability: A Psychological Approach. Harper and Row, New York.
44. YUKER, H., BLOCK, J. AND YOUNG, J. 1966. The Measurement of Attitudes Toward Disabled Persons. Human Resources Center, Albertson, N.Y.