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The plight of extremely poor Puerto Rican and Non-Hispanic White single mothers

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Abstract Using data from a case-control study of family homelessness in Worcester, Massachusetts, this analysis compares the economic, psychosocial and health characteristics of 159 Puerto Rican and 170 Non-Hispanic White poor, single mothers. When compared to Non-Hispanic Whites, the Puerto Rican mothers had more children, less education, fewer work experiences, fewer social supports, and more English language problems. Although the absolute rates were high in both groups, Puerto Rican mothers had experienced less violence and suffered fewer mental health problems, with the exception of major depression, than Non-Hispanic Whites. In addition, Puerto Rican mothers were less likely to use traditional health services. These findings suggest that to escape poverty, Puerto Rican mothers need a unique combination of educational opportunities (including English as a Second Language), job training, and child care.

Introduction

Hispanics are the most socioeconomically disadvantaged minority group in the United States (Santiago 1992); and by the year 2020, will also be the largest (Aponte 1993). Among Hispanics, Puerto Ricans are the poorest. For example, in 1990 Puerto Ricans had a poverty rate of 37.5%, compared to 25% for Mexican-Americans and 13.8% for Cuban-Americans (Aponte 1993). Although data specifically about Puerto Ricans were not available, the fact that in 1995 Hispanic households were the only ethnic group with declining median income is particularly disturbing (US Bureau of the Census 1996). To stop this downward trend, researchers, practitioners, and policy makers must better understand the unique life experiences of Hispanic subgroups, particularly as they relate to poverty.

The high rates of poverty among Puerto Ricans can be partly attributed to migration and settlement patterns that affect access to jobs and social mobility (Santiago 1992; Aponte 1993). For example, by 1980, almost 40% of Puerto Ricans were living on the mainland, predominantly in large northeastern cities, where Puerto Ricans were residentially segregated, job discrimination was extreme, and opportunities for unskilled and semiskilled labor were limited (Pelto et al. 1982; Santiago 1992; Aponte 1995; Rodriguez 1994). Compared to non-Hispanics and other Hispanic subgroups, Puerto Rican labor force participation was the lowest (Rodriguez 1994).

Among Hispanics, Puerto Rican women are most likely to be head of household and receive welfare. A substantially higher percentage of Puerto Rican families than Mexican-American families are headed by women (43% vs 19% in 1991; Aponte 1993; US Bureau of the Census 1995). Among the poorest families, Puerto Rican single mothers tend to receive government assistance far more often than mothers of Mexican origin (72% vs 25% in 1988; Tienda and Jensen 1988; Aponte 1993). This is not surprising given the fact that Puerto Ricans are United States citizens, and thus eligible for a range of benefits not available to immigrants. The decreasing value of these benefits over time (Parrot 1995) has undoubtedly contributed to increased poverty among single-parent Puerto Rican families.

In general, families headed by women alone tend to be extremely poor, with nearly 40% living below the federally established poverty level of $11,890 for a family of three. Among Puerto Rican women heading families, the rate is an astounding 57.3% (US Bureau of the Census 1990); compared to 52.6% for all Hispanic

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women (May 1995). Poor single women are faced with the daunting task of raising children alone, often without financial and other supports. As Belle and others (1990) have reported, poor women in the United States are extremely stressed and have higher rates of emotional disorders than women with greater financial resources. In community samples, low-income women had especially high rates of depressive symptoms (Breaky et al. 1989; Smith et al. 1993; Zima, et al. 1996). Similarly, Guarnaccia et al. (1991) found that non-married Hispanic women had higher rates of depressive symptoms than their married counterparts, with Puerto Rican women having the highest rate of all.

Puerto Rican single mothers on the mainland are faced with an additional challenge. They are living in a society not fully willing to accept them (Padilla and Ruiz 1973; Comas-Diaz 1988) and must deal with a conflict of values, priorities, and expectations related to working outside the home (Toro-Morn 1995). Toro-Morn reported that they try to solve these conflicts "in ways that do not disturb traditional family arrangements" (p. 724). Raised in a culture where motherhood is sacred and "traditional sex roles are rigidly demarcated," women remain primarily responsible for raising children and caring for the home (Toro-Morn 1995).

Given the challenge of cultural issues among Puerto Rican female-headed families, it is not surprising that some researchers have documented higher rates of mental disorders (Moscicki et al. 1987; Guarnaccia et al. 1990). Among mainland Puerto Ricans, these higher rates were associated with low levels of acculturation. In contrast, the Epidemiologic Catchment Area study in Puerto Rico indicated that, with the exception of somatization disorder and severe cognitive impairment, lifetime and 6-month prevalence rates of mental disorders were similar among a general population sample of Puerto Ricans and Non-Hispanic Whites at three sites (St. Louis, New Haven, Baltimore; Canino et al. 1987).

Because of migration patterns and cultural and language differences, we are assuming that Puerto Rican mothers' experience of poverty will be different than that of Non-Hispanic White mothers. However, few studies have systematically described their economic and psychosocial characteristics, despite the extreme disadvantage experienced by mainland Puerto Rican single mothers. Furthermore, to our knowledge, no prior studies have documented the prevalence of mental disorders among Puerto Rican single mothers on the mainland and compared them to Non-Hispanic Whites.

Using data from the Worcester Family Research Project (WFRP), a longitudinal study describing the needs of 436 low-income homeless and housed single mothers in Worcester Mass. (Bassuk et al. 1996), this paper compares the characteristics of poor, single Puerto Rican and Non-Hispanic White mothers. Because the sample reflects the population of Worcester, it contains a greater percentage of Hispanics and fewer Blacks than many other mid-sized cities.

Methods

Participants and enrollment

A sample of sheltered homeless and low-income housed mothers was recruited following a case-control design. A total of 220 homeless mothers were enrolled from nine family shelters and two welfare hotels in Worcester, Mass. For the purposes of this study, family homelessness was defined as residing in a family shelter for 7 days or more (Stewart B. McKinney Homelessness Act, 1988). Since Worcester shelters can only accommodate 70 families at any given time, new families were enrolled as they became homeless between August 1992 and July 1995. This was the first homeless experience for 76.4% of those enrolled. Although we attempted to interview all families residing in shelter during this time, we were unable to interview an estimated 20–30% because they were not in shelters long enough, staff felt their safety would have been compromised by participating, or they refused to participate (see below).

A comparison group of 216 never homeless, single mothers were recruited at the Worcester Department of Public Welfare (DPW). Initially, women who came to the DPW for their routine redetermination of benefit eligibility were enrolled. Since all Aid to Families with Dependent Children (AFDC) recipients were required to attend for redetermination, this allowed us to approach potential participants randomly. As the rules for redetermination changed, we included some women in the sample who came to the DPW for other reasons.

Basic demographic information was collected from 141 homeless and 178 housed mothers who refused to participate or did not complete all the interviews. Among the homeless, approximately 20–30 women were in shelter for too short a period to participate. No significant differences were found between women in the study sample and those who refused to participate, in terms of age, marital status, education, number of children, and welfare status. However, among the housed, Puerto Rican women were somewhat more likely to refuse to participate than Non-Hispanic Whites (49% vs 36%). In addition, refusers in both groups were somewhat less likely to be high school graduates compared to those who completed the interview. (For more details on the study design, see Bassuk et al. 1996, 1997.)

Representativeness

Based on DPW data, women in the comparison group are similar to Worcester's AFDC population in terms of age and ethnicity (Worcester Department of Public Welfare 1990). No comparable data about Worcester's homeless population exist. The homeless sample is similar to homeless families in nine large US cities in terms of age and number of children (Rog 1995). In terms of ethnicity, however, our homeless sample contains more Puerto Ricans and fewer African-Americans. These ethnic differences are also true for the housed comparison group when compared to a national sample of AFDC recipients (US Bureau of the Census 1990). Although different from many US cities, our sample reflects the poverty population of Worcester, which in 1990 was 66% Non-Hispanic White, 9% African-American, and 30% Hispanic (US Bureau of the Census 1990).

Given the unique ethnic composition of our sample, the analysis described in this paper focuses only on Non-Hispanic White and Puerto Rican respondents. This included 170 Non-Hispanic Whites and 159 Puerto Ricans and excluded 72 African-Americans, 27 non-Puerto Rican Hispanics and 8 mothers of other ethnicity.

Data collection

Women were interviewed in a series of four sessions lasting 2–3 hours each. Interviews were conducted in private, and took place in homeless shelters, at a temporary field office in Worcester, or in women's homes, depending on their housing status at the time

of interview. Respondents were given the option of being interviewed in Spanish or in English by bilingual, bicultural interviewers. In addition, mothers received vouchers redeemable for merchandise at local stores as incentives to participate.

Instruments were selected for their reliability and validity and their appropriateness for use with homeless and low-income women. Special consideration was also given to instruments that had been used in other research with Hispanic populations. All question sets and instruments were translated into Spanish by bilingual, Puerto Rican translators. Once translated, one of the authors (C.G.C.) reviewed each instrument for cultural relevance (including clarity of the Spanish and use of phrases and vocabulary that are common in Puerto Rico) and made appropriate modification. Although it would have been ideal to back translate all instruments into English, limited resources allowed this in only a few cases. Wherever possible, pre-existing Spanish instruments were used.

Information on income, housing, employment, marital status, family size, and service utilization were collected using the Personal History Form (Barrow et al. 1985). Support networks were assessed using the Personal Assessment of Social Support (PASS) scale (Dunst, and Trivette 1988). Mothers were asked to name up to ten persons who participated in their lives in either a negative or positive way. Questions were then asked about the nature and quality of each of the first seven relationships listed.

Mental health and substance abuse were assessed using the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, 3rd edn, Revised (DSM-111-R) Non-Patient Edition (SCID-NP) (American Psychiatric Association 1987; Spitzer et al. 1989). A Spanish version of SCID-NP was obtained from one of the instrument authors, and modified for use with Puerto Rican respondents by clinical researchers in the Department of Psychiatry at Harvard Medical School. The completed instrument was back translated and then re-reviewed for adherence to diagnostic intent. The completed Spanish instrument was carefully piloted by the study authors to make sure that cultural and linguistic differences did not lead to misdiagnosis. All mothers were assessed for lifetime and current (past 30 days) prevalence of mood disorders, anxiety disorders, including posttraumatic stress disorder (PTSD), somatoform disorders, eating disorders, and alcohol and other drug abuse or dependence.

Distress was assessed using two self-report instruments, the Symptom Checklist-90 (SCL-90) Global Severity Index (GSI; Derogatis 1994) and the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff 1977; Radloff and Locke 1986). The SCL-90 GSI provides a summary score that reflects the number of symptoms in the past 7 days and the intensity of perceived distress across nine symptom groups. Scores range from 0 to 4, with higher scores indicating a greater number of symptoms and greater severity. A pre-existing Spanish version of this instrument was used. The internal consistency for both Puerto Rican and Non-Hispanic White mothers are similar and quite high (PR $\alpha = 0.89$; NHW $\alpha = 0.89$).

The CES-D is a 20-item instrument that measures depressive symptoms in the past week. Higher scores reflect greater distress. The CES-D has been widely used with both mainland and island Puerto Rican populations (Guarnaccia et al. 1989; Vera et al. 1991; Cho et al. 1993). For respondents in the WFRP, the internal consistency was similar for Puerto Ricans and Non-Hispanic Whites (PR $\alpha = 0.79$ vs NHW $\alpha = 0.76$). In previous research, the cut-off point that best predicted DIS (Diagnostic Interview Schedule) major depression was 20 for Puerto Ricans (Guarnaccia et al. 1989, 1990; Cho et al. 1993) compared to 24 for Non-Hispanic Whites (Radloff and Locke 1986).

The SF-36 Short-Form Health Survey (Ware and Sherbourne 1992; McHorney et al. 1994; Ware et al. 1993) was used to assess physical health, mental health, and social functioning. All subscales are standardized so that scores are between 0 and 100, with higher scores representing better health. The authors of this instrument created a Spanish version using back translation. Although the intent was to create a general Spanish version, the instrument was only piloted on Mexican-Americans. For the physical limitation scale the internal consistency was strongest among Puerto Rican respondents (PR $\alpha = 0.92$ vs NHW $\alpha = 0.83$), whereas the mental health inventory showed stronger consistency among Non-Hispanic Whites (PR $\alpha = 0.79$ vs NHW $\alpha = 0.83$). The pain subscale appeared to be similar across the two groups (PR $\alpha = 0.84$ vs NHW $\alpha = 0.84$). Questions on mental health and substance abuse service utilization were adapted from the National Institute of Mental Health Epidemiological Catchment Area Survey (National Institute of Mental Health 1988).

Information on sexual molestation and violent victimization across the lifespan was gathered using a modified Conflict Tactics Scale (CTS; Straus 1979), combined with additional detailed questions on the context and outcomes of violent acts. Although the CTS is a self-report instrument, violent acts are broken down into individual components, such as "slapped you" or "used a knife or fired a gun." If a woman experienced a threshold number of violent acts she was coded positively for having experienced various forms of childhood and adult violence (see Browne and Bassuk 1997 for more detail). Although the CTS has been used in a variety of population-based studies that include Hispanics (Straus and Smith 1990; Kantor et al. 1994), we used a back translation technique to make sure the Spanish version of this instrument was valid.

The Short Acculturation Scale for Hispanics was used to determine overall familiarity with American culture, including comfort speaking and watching television in English and associating with English speaking friends (Marin et al. 1987). This 12-item scale produces a score between 1 and 5, with a higher score representing greater acculturation. The scale shows strong reliability and validity. The instrument was normed on a predominantly Mexican-American sample. The scale shows strong internal consistency in our predominantly Puerto Rican sample, with a Chronbach's α of 0.90 for Puerto Rican respondents and 0.81 for Non-Hispanic White respondents. In addition to the acculturation scale, a question on ethnic self-identification was asked.

Ataque de nervios or "nervous attacks" were measured using a two-part screener developed in both Spanish and English by Lewis-Fernandez. All respondents are asked whether or not they are a nervous person (*una persona nerviosa*) and if they have ever had an attack (*ataque*). If a respondent claims to have had an *ataque*, they are then asked to describe the type, duration, and frequency of the event. The screener has been used in other representative samples of Puerto Ricans and has strong face validity (Lewis-Fernandez 1994). The *ataque* screen was not added to the interview protocol until 41 women had already been interviewed. The women who did not receive the screener were disproportionately homeless (87.8%), but evenly distributed among Non-Hispanic Whites (34.1%), Puerto Ricans (43.9%), and women of other ethnicity (22.0%).

Data analysis

Data were analyzed using *t*-tests for continuous variables and chi-square tests and odds ratios for discrete variables. The cut-off point for all tests of significance was 0.05 (using two-tailed tests). Logistic regression was used to determine the association between "attacks" (*ataques*) and ethnicity while controlling for various mental health covariates.

Results

Demographic and other characteristics of Puerto Rican and Non-Hispanic White mothers

As shown in Table 1, Non-Hispanic White mothers had lived in Worcester an average of 10 years longer than Puerto Rican mothers. Puerto Rican mothers had more children than their Non-Hispanic White counterparts (2.5 vs 1.9), and their children were older.

Table 1 Demographic characteristics of Puerto Rican and Non-Hispanic White low-income single mothers in Worcester, Mass. (*AFDC* Aid to Families with Dependent Children, *GED* Graduation Egoivalency Diploma)

	Puerto Ricans ($n = 159$)	Whites ($n = 170$)	*P*-value
Age (years)			
Mean (range)	27.3 (16–58)	26.9 (15–49)	ns
Teens (15–19)	15.9%	23.9%	0.03
Marital status			
Never married	68.6%	65.5%	ns
Married	7.6%	4.2%	
Separated/divorced/widowed	23.9%	30.4%	
Residing in Worcester (years)			
Mean	7.0	17.1	0.0001
Range	(0–27)	(0–46)	
Children			
Mean no. of children	2.5	1.9	0.0004
Age of children (years)	5.8	4.7	0.004
Pregnant now	8.9%	8.3%	ns
Income			
Mean annual income	$9,022	$9,248	ns
< $7,000	32.2%	26.5%	ns
$7,000–$15,000	63.2%	66.7%	
> $15,000	4.6%	6.8%	
AFDC			
Age first received AFDC (years)	21.9	21.4	ns
Length of time on AFDC (months)	51.6	49.0	ns
Sources of income in last year			
Government benefits (means tested)			
AFDC	83.5%	85.9%	ns
Food Stamps	83.4%	84.7%	ns
Women, Infants and Children program (WIC)	42.1%	48.8%	ns
Housing subsidy	19.9%	16.5%	ns
Child care subsidy	14.1%	16.5%	ns
Fuel assistance	14.6%	32.9%	0.001
Private sources of revenue			
Job	17.7%	33.5%	0.001
Family/friends/partner	19.5%	18.2%	ns
Education			
Mean years of education	10.2	11.3	ns
Some or no high school	56.5%	27.4%	0.001
High school Grad/GED	32.6%	54.8%	
Some college	10.9%	17.8%	
Work history			
Ever worked	53.5%	79.4%	0.001
Currently working in a paid Job	2.5%	3.5%	ns
Currently looking for work	25.0%	27.7%	ns
Housing history			
Mean moves in past 2 years	2.6	3.0	ns
Mean moves 3 mo. prior to homelessness	3.7	1.6	ns
Mean time homeless (months)	1.1	1.8	0.03
Homeless more than once	6.9%	14.1%	0.03

The mean annual incomes were comparable between the two groups. Although not significant, a larger percentage of Puerto Ricans earned less than $7,000 in the past year. Both groups initially received AFDC when they were approximately 21 years old, not as teenagers, and were on it for a total of more than 4 years.

Although the mean number of years of education was similar for both Puerto Rican and Non-Hispanic White mothers (10.2 years vs 11.3 years), more than twice as many Puerto Rican mothers did not graduate from high school. Many more Puerto Ricans than Non-Hispanic Whites had never worked. Both groups supplemented their AFDC grant with other sources of income, but Puerto Rican mothers were less likely to receive income from work.

Migration, acculturation, and supports

As shown in Table 2, almost two-thirds of the Puerto Rican women were born in Puerto Rico and came to the

Table 2 Migration, acculturation and supports of Puerto Rican and Non-Hispanic White low-income single mothers living in Worcester, Mass.

	Puerto Ricans (n = 159)	Whites (n = 170)	*P*-value
Place of birth			0.001
Worcester	6.3%	57.1%	
Other Mass. city	3.2%	24.7%	
US city (not in Mass.)	28.5%	15.3%	
Puerto Rico	61.4%	0.6%	
Migration			
Mean age came to US (years)	17.1	–	
Came to US as child (0–16)	50.1%	–	
Came to US as young adult (16–21)	15.1%	–	
Came to US as adult (21+)	34.3%	–	
Went back to PR in year before homeless	25.6%	–	
Went back to PR since age 17	50.0%	–	
Mean no. of times back to PR	2.1	–	
Mean months in PR since age 17	28.6	–	
Literacy			
Difficulty reading English	34.6%	5.3%	0.001
Difficulty writing English	38.4%	4.1%	0.001
Difficulty speaking English	37.1%	0.0	0.001
Difficulty understanding English	29.6%	0.6%	0.001
Acculturation score	2.6	–	
Non-professional support network (mean no. of persons)	3.8	4.8	0.0001

mainland when they were an average of 17 years old. Overall, almost two-thirds migrated to the United States before the age of 21. Half had returned to Puerto Rico (a mean number of two times) since the age of 17 years, having spent a mean total of approximately 29 months there.

More than one-third of the Puerto Rican mothers had difficulty speaking, reading, and writing English. Almost 30% had difficulty understanding English. The total score on the Marin acculturation scale for Hispanics was 2.6, indicating only a moderate level of identification with American culture.

Puerto Rican mothers also had significantly fewer supports than Non-Hispanic White mothers (3.8 vs 4.8). Both groups experienced many stressors, but Non-Hispanic White women experienced significantly more moderate and household stressors.

Physical and sexual assault

Puerto Rican mothers had fewer experiences of victimization than their Non-Hispanic White counterparts, although absolute rates were high (Table 3). Over the lifespan, approximately 77% of Puerto Rican mothers had been physically and/or sexually assaulted, compared to 87% of the Non-Hispanic White mothers. With the exception of severe physical violence during childhood, these differences were significant.

Mental health and substance abuse

Overall, the lifetime prevalence of DSM-III-R disorders was significantly lower among Puerto Rican mothers than among Non-Hispanic White mothers, with the exception of major depression, which was comparable. Similarly, the lifetime co-morbidity of two or more psychiatric and/or substance use disorders was far less among Puerto Ricans than Non-Hispanic Whites. In multivariate modeling, controlling for education and duration of homelessness, ethnic status remained an independent predictor of co-occurrence of DSM-III-R Axis I disorders; Puerto Rican women suffered from fewer disorders than Non-Hispanic Whites.

Current prevalence of major depression occurred almost twice as often among Puerto Ricans than among Non-Hispanic White mothers, whereas current rates of PTSD, substance abuse, and anxiety disorders were lower. Co-occurrence of DSM-III-R disorders was comparable.

The percentage of Puerto Rican and Non-Hispanic White mothers reporting symptoms of nervousness (*nervios*) and attacks (*ataque*) was comparable. When a mother's mental health status (i.e., the presence of three or more lifetime SCID diagnoses) was taken into account using multivariate logistic regression, the odds of having an attack (*ataque*) was higher for Puerto Rican than for Non-Hispanic White mothers. Although this relationship only approached statistical significance ($P = 0.06$), the multivariate odds ratio (1.80) was much higher than the univariate odds ratio (1.06).

When the specific nature of the attack was considered, Puerto Rican mothers reported a significantly higher rate of *ataque de nervios* than their Non-Hispanic White counterparts. Non-Hispanic Whites, on the other had, reported more panic attacks. The rates of hysterical, rage, and anger attacks were similar across the two groups. Within the Puerto Rican subgroup, women who

Table 3 Physical and sexual assault in the lives of Puerto Rican and Non-Hispanic White low-income single mothers

	Puerto Ricans		Whites		*P*-value
	%	*n*	%	*n*	
All violence by a family member or intimate partner over the lifespan[a]	77.6	121	87.1	148	0.02
Severe physical violence by childhood caretakers or other adult household members before age 18	57.7	90	64.1	109	ns
Sexual molestation in childhood – any perpetrator	30.8	48	50.6	86	0.001
Severe physical violence by adult intimate partner	47.4	74	70.0	119	0.001
Physical or sexual assault by non-intimates in adulthood: any perpetrator	10.3	16	32.9	56	0.001

[a] Includes childhood physical assault, childhood sexual assault, and physical violence by an adult intimate

reported *ataques de nervios* were much more likely to be diagnosed with a SCID disorder.

Puerto Rican mothers were less likely to attempt suicide than Non-Hispanic White mothers (26.3% vs 32.7%). However, levels of distress and functioning were similar for the two groups.

Physical health and habits

As shown in Table 5, Puerto Rican and Non-Hispanic White women had similar numbers of chronic conditions. However, Puerto Ricans suffered more frequently from asthma and less frequently from chronic bronchitis and ulcers. Puerto Rican women practised fewer high-risk activities and smoked less than their Non-Hispanic White counterparts.

However, on the SF-36 Puerto Rican mothers rated their physical functioning and role functioning as more compromised than did Non-Hispanic White mothers. They also reported significantly higher levels of physical pain.

Service use

As reported in Table 6, Puerto Rican mothers with lifetime and/or current SCID diagnoses reported significantly less service use and more hospitalization than their Non-Hispanic White counterparts.

Discussion

To our knowledge, no studies to date describe the experiences of extremely poor Puerto Rican single mothers living on the mainland. Based on data from an epidemiologic study of 220 homeless and 216 low-income single mothers in Worcester, Mass., this paper documents their characteristics and needs, and compares them to poor Non-Hispanic White single mothers. Reflecting the population of Worcester, this sample comprised almost 45% Puerto Ricans, giving us the unique opportunity to learn more about their life experiences.

Although a majority of the Hispanic mothers were born in Puerto Rico and came to the mainland as adolescents, they visit Puerto Rico frequently. These patterns of migration have been documented in other Puerto Rican populations in the United States (Rodriguez 1994). Half the women in our sample had spent an average of 2 years in Puerto Rico since age 17. As the acculturation scale suggests, their values are still more consistent with Puerto Rican than with mainland culture. Furthermore, almost one-third had difficulty understanding, speaking, reading, and writing English.

Literally “straddling two worlds” (Zavala-Martinez 1994), these single mothers must face the challenge of raising children alone in a highly technological, impersonal culture. Overall, low-income Puerto Rican mothers living in Worcester were extremely poor, socially isolated, had limited involvement with the labor market, and had inadequate personal and institutional supports. Compared to their Non-Hispanic White counterparts, Puerto Rican women tended to be slightly poorer, but had significantly less education and had worked less.

Consistent with Puerto Rican cultural expectations, these women focused their energies primarily on their children. They tended to have slightly larger families, with somewhat older children. Their attempts to move into the labor force may have been hampered by their lack of education and realistic job opportunities, inability to speak English, lack of supports – especially childcare, and cultural expectations about the importance of staying home to raise and oversee children.

Although the overall rates of physical and sexual assault over the lifespan were extremely high for both the Puerto Rican and Non-Hispanic White mothers, the percentage of Puerto Rican women who had been victimized was lower. Furthermore, rates of sexual molestation in childhood, severe physical violence by adult intimate partners, and stranger violence were significantly lower among Puerto Rican single mothers. Only rates for severe physical violence in childhood were similar for Puerto Rican and Non-Hispanic White respondents. These rates of childhood violence are similar to those found in earlier studies (Siegel et al. 1987; Straus and Smith 1990). The rates of adult violence, however, are inconsistent with other studies, which have

Table 4 Mental health and substance abuse in Puerto Rican and Non-Hispanic White low-income single mothers (*DSM* Diagnostic and Statistical Manual of Mental Disorders, *SCID* DSM-III-R Non-Patient Edition, *PTSD* posttransmatic stress disorder, *CES-D* Center for Epidemiologic Studies Depression Scale, *SCL-90* Symptom Checklist-90, *GAF* Global Assessment of Functioning, *SF-36* Short-Form Health Survey-36)

	Puerto Ricans (n = 159)		Whites (n = 170)		*P*-value
	%	*n*	%	*n*	
Lifetime prevalence					
Any DSM disorder	61.6	98	80.0	136	0.001
Major depression	39.6	63	47.7	81	ns
PTSD	27.7	44	41.8	71	0.006
Sub. Abuse/Dep.	26.1	32	52.9	90	0.001
Anxiety	15.1	24	29.4	50	0.001
Panic disorders	2.5	4	9.4	16	0.009
0 SCID disorders	38.4	61	20.6	35	0.001
1 SCID disorder	30.8	49	18.2	31	
2 SCID disorders	16.4	26	20.0	34	
3+ SCID disorders	14.5	23	41.2	70	
Current prevalence					
Any DSM disorder	36.5	58	41.8	71	ns
Major depression	15.1	24	7.1	12	0.02
PTSD	12.3	19	22.3	38	0.02
Sub. Abuse/Dep.	1.9	3	4.7	8	ns
Anxiety	10.7	17	18.8	32	0.04
Panic disorder	1.9	3	4.7	8	ns
Somatization	0.0	0	0.6	1	ns
0 SCID disorders	66.0	105	63.5	108	ns
1 SCID disorder	23.9	38	23.5	40	
2 SCID disorders	7.5	12	9.4	16	
3+ SCID disorders	2.5	4	3.5	6	
Ataque screener					
Ever Had an attack (*ataque*)	22.6	36	25.9	44	ns
Type of attack (for those who reported an attack):					
Nervous attack (*ataque de nervios*)	38.9	14	11.4	5	0.006
Hysterical attack (*ataque de histeria*)	16.7	6	9.1	4	ns
Panic attack (*ataque de panico*)	11.1	4	27.3	12	0.06
Rage attack (*ataque de rabio*)	5.6	2	9.1	4	ns
Anger attack (*ataque de coraje*)	11.1	4	9.1	4	ns
Other/unknown/unspecified	19.4	7	31.8	14	ns
Suicide attempts					
Ever attempted	26.3	39	32.7	54	ns
Mean no. of attempts	1.9		2.0		ns
Mean age at first attempt	18.1		16.7		ns
CES-D	22.4		20.8		ns
SCL-90 Global Severity Index	0.78		0.82		ns
GAF lowest level of functioning	60.7		61.4		ns
SF-36 Mental Health Inventory	61.2		62.6		ns

documented higher or comparable rates of intrafamilial violence for Latino and Anglo groups (Straus and Smith 1990; Sorenson and Telles 1991; Kantor et al. 1994; Sorenson 1996). In the most relevant of these studies, Kantor et al. found that after controlling for known risk factors, including income and partner's employment status, Hispanic Americans had similar violence rates to Anglo Americans. Furthermore, Kantor et al. reported considerable heterogeneity among Latino subgroups in terms of income, acculturation, country of birth, and acceptance of wife abuse. These data were limited to women in a current relationship, however, suggesting that extremely poor single mothers may have different risk profiles (Kantor et al. 1994).

The violence rates in our study are highly related to the mental health outcomes. The Worcester Family Research Study previously documented that rates of mental health diagnoses in the entire sample were highly associated with histories of violent victimization (Bassuk et al. 1996). For example, almost all (96.6%) single mothers in the entire sample with any two or more lifetime DSM-III-R diagnoses had been sexually and/or physically abused (Bassuk et al., unpublished manuscript). Consistent with the rates of violence, Puerto Rican single mothers in our sample had significantly fewer lifetime DSM-III-R disorders than their Non-Hispanic White counterparts (61% vs 80%). However, compared to the general population, all rates were ele-

Table 5 Physical health of Puerto Rican and White single low-income mothers

	Puerto Ricans		Whites		P-value
	%	n	%	n	
Chronic conditions (8 count)					
Now	64.2	102	65.3	111	ns
Ever	42.8	68	42.9	73	ns
Asthma	35.8	57	24.1	41	ns
Anemia	40.2	64	35.9	61	ns
Chronic bronchitis	7.6	12	21.9	37	0.001
Hypertension	10.1	16	7.6	13	ns
Ulcer	4.4	7	14.7	25	0.006
Practise high-risk activities	66.7	107	86.5	147	0.001
Smoking					
Ever	53.5	85	72.9	124	0.001
Now	43.4	69	69.4	118	0.001
SF-36 score (0–100)					
Physical functioning	75.5		85.5		0.0001
Physical limitation	64.2		78.1		0.001
Pain	62.1		72.0		0.001
Social functioning	72.6		77.3		ns

vated. Similarly, rates of current disorders tended to be lower among Puerto Ricans than Non-Hispanic White mothers.

Consistent with other studies (Guarnaccia and Farias 1988; Guarnaccia et al. 1990), our findings document that Puerto Rican women have fewer DSM-III-R diagnoses and comparable medical conditions than Non-Hispanic Whites. Overall, more than one-third of the Puerto Rican mothers had no lifetime SCID diagnosis and more than two-thirds had no current diagnosis. The lifetime and current rates of substance abuse, anxiety disorders and PTSD were strikingly lower than among their Non-Hispanic White counterparts – a finding that contradicts previous studies (Guarnaccia et al. 1990). However, consistent with earlier research (Moscicki et al. 1987; Rogler 1991), Puerto Rican women on the mainland were twice as likely to be currently suffering from major depression compared to Non-Hispanic White single mothers. This is not surprising, given the stress and social and cultural isolation they experience.

Despite the fewer adverse mental health outcomes experienced by Puerto Rican single mothers compared to Non-Hispanic Whites, their level of emotional distress and functioning were comparable (see Table 4). Previous studies reported that Puerto Rican mothers living on the mainland compared to other ethnic groups report

Table 6 Mental health, physical health, and substance abuse service utilization among (Puerto Rican and Non-Hispanic white single, low-income mothers

	Puerto Ricans		Whites		P-value
Medical hospitalizations in past 1 year	15.8	25	14.1	24	ns
Hospitalizations for those with a lifetime SCID diagnosis					
Physical health	21.4	21	14.8	20	ns
Mental health	5.1	5	14.1	19	0.03
Substance abuse	6.1	6	14.1	19	0.05
Source of regular health care[a]					0.001
Doctor's office	8.0	12	23.5	36	
Private clinic	12.0	18	8.5	13	
Hospital outpatient clinic	21.3	32	25.5	39	
Community health center	54.0	81	20.3	31	
Hospital emergency room	0.7	1	3.3	5	
Health maintenance organization	3.3	5	16.3	25	
Lifetime service utilization for those with a lifetime SCID diagnosis					
Talk w/clinician about nerves	50.0	49	68.9	93	0.004
Talk w/clinician about drugs	12.2	12	29.6	40	0.002
Current service utilization for those with a current SCID diagnosis					
Talk w/clinician about nerves	27.8	15	41.9	26	ns
Talk w/clinician about drugs	7.4	4	14.5	9	ns
Received detox services	1.3	1	15.3	10	0.001

[a] Only includes women with a regular care provider

more symptoms and distress, and that a discrepancy exists between the levels of distress and rates of psychiatric disorder (Guarnaccia et al. 1990). In our study, Puerto Rican mothers reported more limited physical and role functioning as well as higher levels of bodily pain (see Table 5) than Non-Hispanic White mothers, although both groups had similar types and numbers of chronic medical conditions. Previous studies have shown that Puerto Ricans seem more willing to report their symptoms in interviews and may reply to interview questions more "acquiescently", since bodily symptoms are viewed as less socially undesirable (Angel and Guarnaccia 1989; Guarnaccia et al. 1990).

Puerto Rican women are more likely to express their distress through culturally sanctioned more general, nonspecific bodily complaints and symptoms, variously described as *nervios* and *ataque de nervios* (Guarnaccia et al. 1993). As expected, we found that the percentage of Puerto Rican mothers reporting *ataque de nervios* was higher than among the Non-Hispanic White mothers and was strongly associated with the presence of a psychiatric disorder. However, the rates of *ataques* (or general attacks) were similar for the two groups. On further analysis, we found *ataque* more strongly associated with Puerto Rican ethnicity when controlling for mental health status. The high rates of general attacks among Non-Hispanic White mothers can be explained by the disproportionate percentage suffering from PTSD and co-occurring disorders. In fact, 70% of Non-Hispanic White women reporting *ataque* had three or more DSM-III-R disorders.

As other studies have shown, low-income women suffer disproportionately from various mental disorders, but tend to underutilize mental health services (Rogler and Cortes, 1993). Language and cultural differences may further interfere with the use of more traditional and preventive services.

When considering the findings, various limitations should be borne in mind. First, several of the instruments have not previously been used with Puerto Rican populations. Second, this study used the SCID to determine rates of psychiatric diagnoses, while most previous research has used the Diagnostic Interview Schedule. This may limit the comparability of the findings. Third, Puerto Ricans, especially women, tend to report higher levels of transient emotional distress, which is not necessarily associated with greater psychopathology (Cho et al. 1993). Fourth, the study may underreport current substance use disorders, since most of the Worcester shelters did not accept women who were actively using alcohol/drugs. Finally, slightly more Puerto Rican mothers refused to participate in the study.

The findings highlight the need for researchers to address the experiences of each Hispanic subgroup separately (Guarnaccia, personal communication, 1997). Most previous literature about poverty has focused on the needs of Mexican-Americans and has been regionally focused. In addition, existing instruments must be further refined to account for reporting differences and manifestations of emotional distress that are culturally determined (Malgady et al. 1996). Furthermore, as Guarnaccia et al. (1990) note, "the cross-cultural validity of several diagnostic categories" must also be re-examined (p. 1454).

In sum, the study highlights the desperate plight of Puerto Rican single mothers with young children living on the mainland. These mothers are extremely poor, undereducated, without adequate supports, and face multiple barriers toward entering the labor market. Although the rates of violence and adverse mental health outcomes are less than among Non-Hispanic White single mothers, they are still disproportionately high in absolute terms when compared to the general population. Stringent time limits and work requirements now tied to cash assistance are likely to push many of these families into even more desperate circumstances.

With the growth in numbers of the Puerto Rican mainland population, responsive programs and policies must account for their extreme socioeconomic disadvantage as well as the unique challenges faced by these mothers. Education, including English as a Second Language (ESL) programs, and realistic job training and opportunities must be provided. For mothers to become economically independent, social supports including adequate childcare are imperative. Until some combination of education, job training, and supports are offered, many of these mothers will remain emotionally distressed and depressed. As a society, we know what is needed to address the plight of these families. Unless we have the will to implement it, the future of these families will be seriously compromised.

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