Welfare to Work: The Effect of a Health-Care Program in Child-Care Centers

Judith Glazner, MS; Brenda L. Renfrew, MSPH; Kathleen Kamps Henderson, MS, RN, CPNP; Paul Melinkovich, MD; Stephen Berman, MD

Objective.—Welfare reform has increased pressure on welfare recipients to enter the labor force. When they become employed, former recipients often do not have paid leave that can be used to care for their young children when they are sick. We wished to determine whether an on-site health-care program in child-care centers serving low-income families affected the amount of time parents took off of work to care for mildly ill children.

Methods.—We surveyed parents in 6 child-care centers with an on-site health-care program and in 2 comparison centers without such a program. To analyze survey results, a regression model including demographic and other variables was used to determine which, if any, variables were associated with time taken by parents from work to care for sick children.

Results.—Analyzing the variables of employer leave policy, poverty level, age of child, and enrollment in the health-care program, only the variable of health-care program enrollment was associated with taking less time from work to care for sick children.

Conclusion.—Health-care programs in child-care settings can help parents meet the health needs of their children while reducing absenteeism from work, thereby contributing to job stability.

Ambulatory Pediatrics 2002;2:17-21

n 1996, Congress enacted broad welfare reform that included lifetime limits on the length of time during which families could receive welfare benefits. These limits, in addition to several incentives, were designed to encourage parents receiving welfare to enter the labor force. One of the issues facing parents entering the labor force after welfare is caring for their young children when they are sick. Child-care centers often require that a child be removed from the center as soon as it becomes apparent that he or she is ill, both in order to have the parent assume responsibility for determining whether the child needs medical attention and to avoid infecting other children. Child-care centers rarely use the services of health care providers to assess and treat children on site in order to determine whether a child who is mildly ill may safely remain at the center.

The transition from welfare to work may be a particularly vulnerable time for parents because they often face job conditions that make it difficult to care for sick children at home. They are significantly less likely than workers who have never used welfare to have paid sick leave or paid vacation leave that could be used to care for children; they are also less likely to have flexible schedules

From the Department of Preventive Medicine and Biometrics, University of Colorado School of Medicine (Ms Glazner); the Department of Pediatrics, University of Colorado School of Medicine (Ms Renfrew and Dr Berman); the Denver Health & Hospital Authority (Ms Henderson and Dr Melinkovich), Denver, Colo.

Address correspondence to Judith Glazner, MS, Department of Preventive Medicine, Campus Box C-245, University of Colorado, 4200 E Ninth Ave, Denver, CO 80262 (e-mail: Judith.Glazner@uehsc.edu).

Received for publication January 9, 2001; accepted September 12, 2001.

that could facilitate caring for sick children. Parents without these benefits lose wages when they take time from work to care for sick children, and, in some cases, they lose their jobs. Most parents leaving welfare for work have low educational attainment and low incomes, and loss of income or of jobs is a serious threat. Not surprisingly, therefore, low-income and single working mothers are more likely to prefer out-of-home care to taking off time from work to provide in-home care for their children when they are mildly ill.

The Mile High Child Care Association in Denver, Colo, provides child care in 13 centers for over 800 children living in primarily low-income families. In 1997, single parents headed 91% of these families, and 96% of the families received financial assistance for child care. A majority (56%) of the children were either enrolled in Medicaid or were uninsured. Recognizing the difficulties that working single parents with limited or no paid leave have in caring for their sick children, the University of Colorado's Pediatrics Department, the Mile High Child Care Association, and Denver Health (the City and County of Denver's consolidated public hospital, system of neighborhood health centers, and public health department) collaborated to create the Healthy Beginnings Program.

Healthy Beginnings integrates acute health care and parental health education with child care to assist low-income families in their transition to greater independence. One of the aims of the program is to assess and meet children's acute health care needs on site at the child-care centers, thereby helping parents to avoid missing work to care for children's minor illnesses. To achieve these goals, 2 pediatric allied practitioners (a pediatric nurse practitioner and a physician assistant) visit the child-care centers to assess, diagnose, and treat sick children, to coor-

dinate care with primary care physicians, and to determine whether children can safely stay at the center. The practitioners perform many tasks that assist in keeping parents from having to pick up their children to care for their minor illnesses or to take them to physicians unnecessarily. For instance, when a child has an illness or injury, the practitioners take histories for the child from the center staff (who are with the children for many hours each day) or from parents by telephone. They treat some conditions at the center by recommending over-the-counter medications or by writing prescriptions that parents fill at the end of the day. In addition, when they write prescriptions, they provide written permission, which the parent must also provide, as well as instructions regarding the administration of medications for center staff. They determine whether minor injuries require stitches, and, if stitches are not required, they clean, disinfect, and bandage on site. And finally, they often clarify ambiguous instructions from physicians and urgent care clinics for center staff so that they can administer drugs or provide care without requiring parents to make another trip to the provider to get clarification. On the other hand, when, after evaluating a child, they believe that a provider visit is warranted, they make a referral to the primary care physician (PCP); sometimes they call the PCP for a recommendation about whether a visit is necessary. And, when a child has a communicable condition requiring isolation, they require that the parent pick the child up.

The Healthy Beginnings Program had been in place for 18 months when the authors evaluated the program's effectiveness. The effect of the program on parents' need to take time from work to care for sick children was a principal concern of the program's designers. Therefore, to determine whether the Healthy Beginnings Program affected the amount of time parents took off from work to care for sick children or to take them to health care providers, the authors undertook a survey of parents in 6 centers participating in the Healthy Beginnings Program as well as in 2 comparison centers.

METHODS

Populations Surveyed

We surveyed parents whose children were enrolled in the Healthy Beginnings program (intervention group) and parents with children enrolled in 2 child-care centers in the same geographic area that did not have health-care programs (comparison group). Parents with children enrolled at centers participating in the Healthy Beginnings program may or may not be enrolled in the program. Enrollment consists of having the parents sign a form allowing Healthy Beginnings practitioners to evaluate and treat their children. Large majorities of parents whose children attend these centers sign these forms when they enroll the child at the center.

Questionnaires and Survey Execution

A draft questionnaire was reviewed by directors of the centers with Healthy Beginnings programs and the executive director of the parent organization of those centers, and changes were made based on their suggestions. The questionnaire for the intervention group differed in only 2 respects from the questionnaire for the comparison centers: 1) Healthy Beginnings parents were asked several questions to determine how often children had seen the program's pediatric practitioners and about the effects of the Healthy Beginnings Program on job tenure, and 2) the comparison parents were asked their opinions about the likely effect of an on-site nurse on the need for parents to take time off from work. All other questions were identical. The questionnaires focused on the experiences of parents within the past 6 months. In particular, parents were asked about the number of days they had taken from work to care for sick children, and, given the importance of paid leave to a parent's ability to provide care for sick children,1 they were asked about their employers' policies regarding paid or unpaid time off for this purpose.

Questionnaires were distributed to 6 centers with Healthy Beginnings programs (intervention centers) and to 2 comparison centers in the spring of 1999. It was the responsibility of center directors to ensure that questionnaires were distributed to parents picking up their children at the end of the day. Respondents were requested by center staff to complete the questionnaires on site and to drop them in a box placed in the lobby of each center for that purpose. A Healthy Beginnings practitioner picked up completed questionnaires.

Respondents

There were 198 families with children enrolled in Healthy Beginnings in the intervention centers and 55 families with children enrolled in the comparison centers. The overall response rate among the intervention centers was 73.7% of families (146); for the comparison centers, the overall response rate was 72.7% (40).

Because we asked respondents to recall the number of days they took off during the past 6 months to care for sick children, only responses from parents whose children had been enrolled in the Healthy Beginnings Program for at least 6 months or whose children had been enrolled at the comparison centers for at least 6 months were analyzed. The resulting sample comprised 94 families from the intervention centers and 28 families from the comparison centers. This sample size yields 66% power to find a 1.0-day difference in time taken off from work to care for a sick child; it yields 94% power to find a 1.5-day difference and 99% to find a 2-day difference (α = .05; SD = 2.0).

Analysis

We performed Chi-square tests and a Fisher exact test, when appropriate, on categorical variables and t tests on continuous variables to test for differences in characteristics of the 2 groups. A regression model including demographic and other variables was then used to investigate whether these variables were associated with time parents took from work to care for sick children. A P value of less than .05 was considered significant. All statistical analyses were performed using SAS version 8.1.6

Table 1. Characteristics of Healthy Beginnings and Comparison Populations

Variable	Healthy Beginnings Parents N = 94	Comparison Parents N = 28	P Value
	14 – 34	14 20	7 value
Respondent to survey			
Mother	.81 (86.2%)	22 (78.6%)	
All other	13 (13.8)	6 (21.4)	(0.38)
Marital status		•	
Currently married	22 (23.9%)	7 (26.9%)	
Widowed, divorced, or single	70 (76.1)	19 (73.1)	(0.75)
Poverty level			
Less than 100%	35 (39.8%)	6 (24.0%)	
100%–200%	38 (43.2)	12 (48.0)	
Greater than 200%	15 (17.1)	7 (28.0)	(0.27)
Mean length of enrollment of child enrolled longest at daycare co	n-	•	
ter in months (SD)	22.0 (13.7)	27.3 (18.3)	(0.17)
Number (%) that worked outside the home or attended school or	a		
training program	90 (95.7%)	27 (96.4%)	(0.99)
Mean hours worked or attended school per week (SD)	38.3 (8.0)	39.7 (13.4)	(0.63)
Employer leave policy	•		
Paid time off	25 (29.8%)	11 (42.3%)	
Unpaid time off	35 (41.7)	9 (34.6)	
Variable policy	16 (19.1)	6 (23.1)	
No policy	5 (6.0)	0	
Don't know	3 (3.6)	0	(0.55)

RESULTS

Demographic Characteristics

Table 1 shows characteristics of Healthy Beginnings families and comparison families. The 2 groups of respondents were similar in every respect; no significant differences were found for any of the characteristics measured.

Employers' Leave Policies

Minorities of both intervention and comparison parents reported paid time off (30% and 42%, respectively); about two fifths of the intervention group and one third of the comparison group reported having unpaid leave. (The remainder reported no policy, variable policies, or that they were unaware of leave policies.) The availability of paid leave was related to income among our sample. Households with incomes below the federal poverty level were significantly less likely to have paid leave than were those with incomes above poverty level (Table 2).

Time Taken Off From Work to Care for Sick Children

In bivariate analysis, there was a trend toward intervention group parents taking fewer days off than did comparison group parents to care for sick children, but the

difference was not significant (P = .06) (Table 3). In the same analysis, comparison parents with unpaid leave were significantly more likely to take days off to care for sick children than were those with paid leave (P = .04).

When we tested factors that could affect parents' decisions to stay home with their sick children in multivariate analysis, with age of youngest child, having paid leave versus any other employer leave policy, household poverty level, and enrollment in Healthy Beginnings as independent variables, we found only one factor to be significantly associated with the amount of time parents took off work. Enrollment in Healthy Beginnings was associated with taking off $1.72\ fewer$ days (P=.008).

DISCUSSION

Enrollment in the Healthy Beginnings Program appeared to reduce the number of days parents took off from work to care for sick children. The importance of this is underscored by the fact that only one third to two fifths of these primarily low-income parents reported having paid leave they could use to care for sick children. In this respect, the population we surveyed appeared to be similar to a population of employed mothers who had received Aid to Families with Dependent Children (AFDC), who were included in the National Longitudinal Survey of

Table 2. Employer Leave Policy According to Poverty Level of Household

Percentage of Federal _	Employer Leave Policy				
Poverty Level (FPL)	Paid Leave	Other Policy	Total	P Value	
<100% FPL	5 (15.2%)	28 (84.9)	33 (100.1%)		
100%-200% FPL	16 (32.7%)	33 (67.4)	49 (100.1%)		
>200% FPL	11 (52.4%)	10 (47.6)	21 (100%)	0.015	

Table 3. Number of Days Taken Off Work to Care for Sick Child; Intervention and Comparison Parents with Paid and Unpaid Leave

Number of Days Taken, Last 6 Months, to Care for Child	Healthy Beginnings Parents		Comparison Parents	
	Paid Time Off (n = 19)	Unpaid Time Off (n = 33)	Paid Time Off (n = 11)	Unpaid Time Off (n = 9)
1	4 (21.1%)	12 (36.4%)	6 (54.6%)	0
. 2	7 (36.8)	9 (27.3)	0	0
3	4 (21.1)	3 (9.1)	0	2 (22.2)
. 4	1 (5.3)	1 (3.0)	3 (27.3)	0
5	2 (10.5)	1 (3.0)	Ò	4 (44.4)
6	ò	2 (6.1)	0	1 (11.1)
7	0	2 (6.1)	1 (9.1)	0
8 or more	1 (5.3)	3 (9.1)	1 (9.1)	2 (22.2)
Mean days taken (SD)	2.73 (1.76)	2.97 (2.42)	3.00 (2.61)*	5.33 (1.80)*
Mean days taken (Healthy Beginnings parents as a whole and comparison parents as a whole) (SD)	, ,	(2.18)**	4.05	(2.52)**

^{*}P = .04.

Youth, analyzed in Heymann and Earle. In that analysis, 27.9% of working mothers who had received AFDC for 1–24 months and 21.4% of those who had received it for more than 24 months had paid sick leave the entire time they had been working. These figures were substantially below that for employed mothers who had never been on AFDC (51.3%).

It is interesting that, in bivariate analysis, comparison parents with unpaid time off took more days off to care for sick children than did those with paid time. In multivariate analysis, however, when other factors were controlled for, the relationship between employer leave policy and days taken off disappeared.

That availability of paid leave was not a significant contributor to the amount of time parents took from work to care for sick children in multivariate analysis was a somewhat surprising finding, given that others have found that having paid leave was significantly associated with low-income parents taking time off from work to care for sick children.² Previous work measuring the effects of paid leave on time taken off from work, however, was not performed in an environment in which a program like Healthy Beginnings existed. It may be that taking time off from work to care for sick children is not the first choice of low-income parents and that, when a reliable alternative exists, they will take advantage of it, an explanation supported by the findings of Landis and Earp.⁵

Limitations

In this study, there are several possible threats to validity. Selection bias, which would indicate that parents who enroll their children in the Healthy Beginnings Program are those least likely to be able or willing to take time off from work to care for sick children, is one such possible threat. We believe this threat to be minimal, at least as far as ability to take time off from work was concerned, however, largely because enrollment was high at the surveyed centers (71%–86%), and our analysis controlled for employer's leave policy.

Parents were asked to recall the number of days taken off from work to care for their sick children during the past 6 months. This is a fairly long period, and recall accuracy might be of concern. The first author is involved in another study in which low-income mothers, most of whom received support from public welfare programs, were asked to recall the number of months they received welfare and food stamps, first over a 6-month period, and later over a 30-month period. State administrative data on these mothers' use of welfare and food stamps were available and were compared with survey responses. For the 6-month recall period, there was no difference between survey responses and administrative data, and for the 30-month period, there was a difference of between 1/2 and 3 months (K. Cole, unpublished data, 2001).

Recall bias would exist if recall of time taken off differed between the intervention group and the comparison group as a result of the intervention. It is possible that parents whose children were enrolled in Healthy Beginnings, if they were happy with the program, would recall fewer than the actual number of days taken off, whereas parents of children in the comparison centers would not. There was, however, no source of pressure on Healthy Beginnings parents to recall fewer days taken off—the questionnaires were self-administered and were given to respondents by daycare-center personnel; no study staff were involved.

CONCLUSIONS

Given the tenuous nature of the jobs held by many lowincome parents, programs similar to Healthy Beginnings that help parents meet the health needs of their children and at the same time reduce absenteeism from work can contribute to job stability and assist them in maintaining employment and succeeding in the labor force.

ACKNOWLEDGMENTS

We thank Sherry Johnson, CHA, PA-C, who assisted us in conducting the survey, and the Mile High Child-Care Centers' staff and administration, who reviewed the questionnaire and also assisted in conducting the survey. This research was supported by the Robert Wood Johnson Foundation's Local Initiatives Funding Partners Program, grant 032306, and by the Jean and Henry Pollak Division of the Lucile and Maurice Pollak Fund.

^{**}P = .06

REFERENCES

- Heymann SJ, Earle A. The impact of welfare reform on parents' ability to care for their children's health. Am J Public Health. 1999;89:502-505.
- Heymann AJ, Toomey S, Furstenberg F. Working parents: what factors are involved in their ability to take time off from work when their children are sick? Arch Pediatr Adolesc Med. 1999; 153:870-874.
- 3. Heymann SJ, Earle A, Egleston B. Parental availability for the care of sick children. *Pediatrics*. 1996;98:226-230.
- 4. Harris KM. Work and welfare among single mothers in poverty. *Am J Sociol*. 1993;99:317–352.
- Landis SE, Earp JA. Sick child care options: what do working mothers prefer? Women & Health. 1987;12:61-77.
- SAS. Statistical Analysis Software. Version 8.1. Cary, NC: SAS Institute; 1999.