Abstract

Thirty-five post-secondary adolescents and young adult female patients were selected to participate in a job-training program conducted at a primary preventive care clinic located in a large metropolitan city in southwestern United States. Using the Social Determinant of Health (SOD) theory as a backdrop, young women enrolled in a job-training program for allied health professions. Staff qualitatively and quantitatively identified and ranked specific client characteristics. The prevalence of risk factors were documented and stratified. Successful completion of job training, certificate completion and job acquisition were also monitored. Program staff documented barriers to program complete by levels of risk and noted the types of service required to address each level. Feedback from these young women indicates that a variety of non-work related issues, sometimes gender related, functioned as barriers that determined whether these young women could successfully enroll in allied health training, complete required courses and earn the appropriate certificates to enter allied health professions. Our findings suggest that a clinic can provide a unique, safe and trusted portal for career training in allied health for inner city women in addition to functioning as their medical home. Moreover, this medical and job training service pairing provided easy access to primary care services that often were a pre-requisite to job placement.

Keywords: Adolescent and Young Adult Women; Employment Training; Medical Home; Risk Reduction; Social Determinants of Health

Introduction

In the last 25 years, the role of social determinants has emerged as a major force in driving overall population wellness [1]. Associated data [2] suggest that individual and community health are determined in part by access to social and economic opportunities and supports available in homes and communities. In addition, the quality of schools; workplace safety; water, food, and air purity; and social interactions and relationships are all-important in establishing and maintain health. This social determinant model underscores the role of non-medical infrastructure in improving overall community health. Neighborhood environment explains in part why some Americans are healthier than others supporting the observation that one’s zip code can often predict one’s health status. Social determinants often cluster into two components and include social, economic, and physical conditions and places such as workplace, and neighborhoods that enhance the quality of life and influence health status. Concepts such affordable housing, employment, education, availability of healthy foods, local health services, to name a few, are powerful forces on quality of life and life span. Supporting these observations is research [3] that suggests that only 10-15% of preventable deaths is the result of medical interventions; and half of all deaths in the US are because of behavioral causes. McKeown and his colleagues [4] provide an historical perspective by suggesting that health advancements in the 19th century [5] were the result of improved living standards not medical care. Therefore understanding the relationship between how population groups experience “place” and its impact on health is fundamental to the social determinant theory. Such evaluations support the position that these non-medical interventions have played an important role in health improvement over the last
century.

From an evidenced-based point of view, one may ask why social determinant activities are not quickly adopted by broad based health and governmental entities. Logically the cost associated with such preventive interventions is manageable especially when compared to parallel medical initiatives and or consequences. One explanation may lie in the complexity of the concepts and for this investigation, the complexity of work especially as it related to group disparities. Ahonen et al [6] suggest there are several contributing factors including the overlap with some socio-economic issues, occupational inequities and an actual dearth or precise data that actually explains the relationship between work and health status. These authors go on to suggest that leaving out the evaluation of work as a social determinant actually creates a blind spot on understanding societal level health status at several levels. Such blind spots also exist when one assesses work as it relates to gender and job acquisition. While female participation in the labor has significantly increased in the second half of the last century especially when compared to Europe [7], opportunity as well as stereotypic perceptions of jobs roles for males and female still may be an issue. While recent curricular changes has provided expanded STEM classes which has provided some entry for women into medicine, science and engineering, changes have not reached all segments of the population, especially marginalized and low income adolescent and young adult women. If the World Health Organization (2008) [8] considers employment as the most significant factors in a community and its members’ well-being, then it has far-reaching and differential impact on certain subgroups of our population. One cohort of individuals may especially benefit from access to employment opportunities. For at-risk female Adolescents and Young Adults (AYA) work prospects when appropriately designed can address a variety of unique factors that mediate ultimate employment success. These factors can include a salary that encourages independent living, a subsidized pathway to health care including contraceptive and primary care, a structured learning environment that discourages participation in risk behaviors including unintended pregnancy that can have the long-term economic consequences.

Traditional work force programs in the past have targeted high school dropouts, usually male, to reduce behavioral risks and incarceration or encourage high school completion [9]. While previous research has focused on male cohorts similar investigations for non-incarcerated females and their path to upward career opportunities has not been widely documented. The purpose of this evaluation of the application of social determinant of work, therefore, is threefold. First, it will describe a job-training program tailored to the employment needs of at-risk adolescent and young adult women emphasizing allied health and embedded in their medical home. Second, it will document three categories of barriers with increasing intensity of non-medical risks that affect program completion and subsequent job acquisition. Finally, it will discuss value-added factors associated with the use of a clinic as a possible nurturing portal for meaningful allied health employment for inner city young women.

Methods

Program description

The program was conducted at a primary preventive care clinic in an inner-city area in the Southwest United States. This clinic was selected for the program because young female patients in this area were defined as high-risk based on indicators of and high unemployment rates and health disparities [9]. The Institutional Review Board of the affiliated medical school approved the study protocol. The application of this social determinant of health focused on work and was called Project Ascend. The staff recruited adolescent and young adult women who were high school graduates and were clinic patients. Although currently unemployed, these women expressed interest in receiving job training for a career in allied health via their medical home. The project provided each enrolled participant stipends from $825-$1500 to cover community college classes based the duration and completion of job training. This subsidy was an effective incentive as very few loans or scholarships are available for certification classes in allied health. Program activities included job-training and pre-employment skill building and access to medical care and required immunizations. The staff consisted of two case managers and functioned as employment navigators who facilitated client recruitment into the program. A behavioral therapist was also on the staff that provided counseling on social and emotional learning and behavioral health issues. Program components included a comprehensive skill assessment, case management, peer support groups, mentoring, community service activities, field trips to possible job sites and life skills training. Staff also obtained demographic data that profiled health and parenting behaviors, education interests, past employment history and social and economic risk.

Subjects

The sample for this program was comprised of adolescent and young adult women who had completed post-secondary education and were enrolled via the clinic portal into job training project. Participants were also referred to clinic by staff of surrounding schools for medical care and for participation in job training. Fifty-nine expressed interest in the program and a total of thirty-five clients 18 to 24 years of age were enrolled in the program. Of this group of females, 1% were Asian, 32% were African American and 67% Hispanic. The majority of the participants resided in inner city neighborhoods. Of enrollees 74% lived with a family member and 18% were parents of at least one child. Forty percent owned a car while 60 % relied on public transportation or securing rides from family friends or a car share service. Their
mean age at entry to the program was 20.28 years. The majority (92%) of program participants were at 150% of federal poverty levels or below. Exclusionary criteria included the inability to read or speak English and documented severe behavioral health issues. Participants with non-violent or non-drug related convictions were accepted into the program.

Instrument and Procedures

At program initiation, participants completed a comprehensive intake form that assessed a variety of variables that could affect program completion. The information included personal information including age, education and employment history. Data was also collected on household information, which included members living with the participant, housing (apartment, home, rent or own) transportation, food, childcare and financial responsibilities. Relationship status, behavioral concerns, and legal issues were assessed. Another area was health care needs both physical and mental care for themselves and family members. Lastly, at intake staff queried participants about their immediate and future long-term employment goals. Staff, using thematic analysis techniques then assessed intake responses of the young women and grouped participants into three risk levels and associated support requirements as described below [10]. Any instances of disagreement were resolved with discussion among staff to arrive at consensus [11]. These three categories of potential risk generated benchmarks that could possibly predict risk for program non-completion.

- Level I: Career Counseling, which includes business and life soft skills, tuition assistance, medical services and individual personal therapy.
- Level II: Career Counseling which includes business and life soft skills, tuition assistance, medical services, assistance with one basic need (which includes transportation, housing, clothing, food, child care) and individual personal therapy.
- Level III: Career Counseling, which includes business and life soft skills, tuition assistance, medical services, case manager, assistance with two or more basic need (which includes transportation, housing, clothing, food, childcare).

Data analysis

At the completion of the first six months in post-secondary job recruitment, all participants were evaluated based on their level of risk and program non-completion. Each level documented the number of participants who successfully enrolled in the program, completed the program and those who had pending issues that needed resolution before the training was completed and jobs could be acquired. Participant assignment to program defined risk level was not equally distributed among the three categories.

Results

Following the process of risk identification and level assignment described above, participants were monitored to track component completion subsequent to their risk assignment level.

Table 1
Active Women Participants

<table>
<thead>
<tr>
<th>Level</th>
<th>Enrolled</th>
<th>Pending</th>
<th>Graduated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Level II</td>
<td>11</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Level III</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>

As seen in (Table 1), not surprisingly, the 19 adolescent and young women in Level I that had the fewest barriers were the most successful in program enrollment and completion. Participants in this first cohort were successful in matriculating the educational system and graduating from the certification course. The pending category reflected scheduling issues such as the flexible class schedules, especially those that were based on a traditional community college semesters. However, this group was better able to resolve those items and complete the training regimen. Level II had fewer participants (11) and the completion was lower when compared to Level [11]. The outcomes for Level III, the group with the most barriers and emotional issues were the lowest. Although only four students were assigned to this cohort because of their cumulative risk, none was able to complete the training, which was the criterion for job interviews, and work entry. Some the circumstances of these participants included complicated homelessness, dependency on public transportation, parental expectations for immediate employment and behavioral health issues including depression and anxiety.

Discussion

Our results, while preliminary, suggest that a job-training program embedded in a medical home is a successful application of variety of theoretical models that address risk. Such a setting and suggests a unique approach to promotes way to mitigate that risk especially for vulnerable populations. Whether it is the Youth Risk Behavior Surveillance Survey (YRBSS) [12] longitudinal data or Adverse Childhood Experiences (ACES)[13], these approaches provide evidenced based frameworks to help programs such as ours understand the timing, intensity and covariance of risk among their participants and the impact of those factors on desired outcomes. Feedback from participating youth provides
some insight as to the program’s unique success. The value added feature of the medical portal also offering job training was appealing. Although participants came to the clinic seeking medical care, these participants were pleasantly surprised that the clinic could also provide allied health job training. For vulnerable youth it was important that the recruited clients, especially young women felt safe and worked with trusted staff. Clients were expressed appreciation of the pre-employment support for meaningful careers not just jobs. Our initiative also supports the belief that programs can document various categories of risk along with the components that function as barriers that affect program completion and meaningful employment. Our findings are consistent with social determinants in that many of the barriers were non-medical. The lack of transportation poses a significant deterrent from attending school and securing a job. We acknowledge that our pilot sample was small and was not randomized. However, our data suggest that disconnected adolescents and young adult and women can benefit from an employment portal embedded in their medical home, when appropriate support is given.

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References