Rural access to vocational rehabilitation services: Minority farmers’ perspective

ARI MWACHOFI

The University of Oklahoma Health Sciences Center, Oklahoma City, USA

Abstract

Purpose. The paper documents the need for, and obstacles to effective access to rehabilitation services by minority farmers. It draws from the findings of a study conducted in the Mississippi delta.

Method. Applying community-based participatory research approach (CBPR) the study trained farmers to conduct interviews and focus group discussions. They interviewed 1308 farmers and had 18 focus group discussions with 254 farmers. The study also interviewed 290 service providers and conducted 8 focus group discussions with 72 State Vocational Rehabilitation services (VR) counselors.

Results. The study found an unmet need for VR services in this population. Farmers were not aware of VR services or how to access them and VR was not aware of farmers’ needs. Farmers felt marginalized and afraid that access to VR services would diminish their ability to earn a living on the farm.

Conclusions. Collaboration between VR and rural organizations, agencies and with rural people would help close the information and gaping service gap. One-stop service centers in rural areas could improve access to services. CBPR is an invaluable research tool especially among marginalized people.

Keywords: Rural rehabilitation needs, rural access obstacles, marginalized populations, under-served populations

Background

Minority farmers in the Mississippi Delta are among the poorest people in the U.S. Their numbers are declining at an alarming rate. In the 1980s, their decline rate was two and one half times that of white farmers [1]. In the 1930s, 15% of farms in the U.S. were operated by minorities but by 1992 minority farms represented only 2.26% of the total [2]. The decline rate of minority farmers in the Mississippi Delta is even higher than the national rate. In 1930, 33% of farms in Arkansas were operated by minorities; by 1997 their numbers had declined to less than 2% of the total [3]. Similarly in Mississippi the decline was from about 60% to 7% and in Louisiana their numbers declined from 50% to only 4% of the total [4]. These numbers suggest that minority farming in the U.S. South is near extinction (see Figure 1). They are an ‘endangered species’ in need of special attention and protection. Although many factors determine minority farmers’ sustainability on the farm, health and disability are among the more important determinants.

Minority farmers’ quadruple health jeopardy

Being a minority farmer is a quadruple health disadvantage. First, like minorities in other professions, their minority status puts them at a health disadvantage. Research documents substantial and persistent minority health disparities [5]. There are disparities throughout the spectrum of healthcare from preventive services to pain relief at the end of life [6]. The most important predictor of quality healthcare is access [7]. There are serious disparities...
in access to care [8] and to health education [9,10]. Disparities are found in all age groups. Elster et al. [11] found disparities in care received by minority adolescents. Hahn [12] found that minority children have lower access to medical services and when they gain access they receive fewer medications than do majority children. There are disease-specific disparities: African Americans have shorter cancer survival rates than whites [13], higher cardiovascular mortality rates [14] and lower cancer screening rates than whites [15]. Low-income minorities experience the most acute access barriers [16]. Despite increased attention and the numerous programs established with the sole purpose of ending health disparities, current data and reports indicate that these disparities persist [17–20].

Secondly, farmers live in rural areas where it is more difficult to provide or access services [21]. Agency for Healthcare Research and Quality (AHRQ) [22] reports that rural Americans are more likely to be older, describe their health as poor or fair, lack private health insurance, and to face longer distances to a hospital or other healthcare service than urban Americans. This report is supported by other research findings that indicate rural healthcare problems such as inadequate insurance coverage, more health problems, and lower rates of service use [23]. Rural minorities fare worse than minorities in urban areas [24]. Other research has found that urban models of service provision are inappropriate for rural clients [25].

Thirdly, minority farmers are in a hazardous profession. The National Safety Council ranks farming as one of the most hazardous occupations with high rates of job-related illnesses, injuries and disabilities that are costly to families and to the economy at large. Between 1985 and 1994, agriculture ranked as the most hazardous industry. In 1998, agriculture workers had the second highest death rate among the major industries with 140,000 disabling injuries [26]. It should be noted that this number is an under-estimate because Occupational Safety and Health Administration (OSHA) regulations exempt farms employing ten or fewer workers, and those that do not maintain labor camps from reporting work-related injuries and illnesses. Table I juxtaposes incidence rates of non-fatal illnesses in agriculture, mining, construction and manufacturing.

There are injuries from machinery, livestock, tools, and work surfaces [27,28]. Farmers are exposed to deafening noise [29,30]; long hours in the sun, concentrated toxic chemicals (such as nitrates, pesticides) gases, and fuels. Consequent to these exposures, there are excessive occurrences of some cancers among farmers such as leukemia, Hodgkin’s disease, multiple myeloma and cancers of the lip, skin, stomach, prostate and brain [31]. Farmers are also exposed to grain and hay dust, and dust from farm chemicals such as insecticides, fertilizers and animal feeds. They often work in animal enclosures, silos, and manure pits where they are exposed to high levels of toxic gases such as carbon dioxide, carbon monoxide, methane, and hydrogen sulphide. Some of the more common respiratory illnesses they suffer are organic dust toxic syndrome, chronic bronchitis, asthma, hypersensitivity pneumonitis [32] and others. They are also exposed to zoonotic diseases. Musculoskeletal syndromes are widespread among
farm workers due to repetitive trauma and vibrations from farm machinery [28,31]. Farming has one of the highest levels of occupational stress [27]. Besides the physical stress of farm work, farmers face economic stress. They work under tight deadlines taking high economic risks under great uncertainty because they have no control over factors that determine their incomes such as weather and market prices. For many minority farmers with limited resources, these risks have dealt death blows. Furthermore, racism and discrimination has exacerbated their risks and stress.

Fourthly, minority populations have higher disability rates than those of majority populations [33–35]. American Indians and African Americans have the highest disability rates in all age groups. The severe disability rate among African-Americans of all ages is 12.7% but among whites it is 9.9%. In the 55–65 year old group, the proportion with severe disability was 20% among Whites, and 35% among African-Americans [36]. Moreover, minorities receive proportionately fewer rehabilitation services than do majority populations. They are less likely to seek rehabilitation services and when they do get into rehabilitation programs, they are less likely to successfully complete the programs and to find suitable job placements [37]. There are significant cultural differences in attitudes and perceptions toward disabilities [38]. Psycho-social variables are significant predictors of adjustment and rehabilitation success [39]. Therefore it is important to create service provision/access systems on a sound understanding of the cultural, social, and psychological factors of the recipient population. Such access systems require thorough research to document the necessary information.

People with disabilities experience high unemployment [40] but minorities with disabilities face the ‘triple jeopardy’ with very high unemployment and high poverty rates, and low education levels [41]. Some 72.2% of African Americans with disabilities and 51.9% of Hispanics with disabilities are unemployed [42]. The unemployment rate among those with severe disabilities is even higher: 86% of African Americans and 75% Hispanics [42]. In the population aged 18–69, American Indians report the highest percentage of limitation in work due to chronic conditions (17.3%) followed by black Hispanics (15.7%) and non-Hispanic Blacks (14.4%). Asian Americans reported the lowest levels of limitation (5.7%) [42].

These factors raise many questions such as: Why are minority populations less likely to seek services? Why don’t they successfully complete the rehabilitation programs? What obstructs their services access? Are the obstacles cultural or systemic? How can such obstacles be overcome effectively? How can minority people with disabilities be empowered into more proactive action to seek services? How can they be trained to be effective self-advocates? Answers to these and other questions will provide directions for better more effective rehabilitation service delivery especially to rural minorities.

Project goal and methods

This study attempts to answer the questions: What is the need for VR services among minority farmers? What obstacles do they encounter in accessing VR services? What is their perception about effective service access/delivery?

The project collected data from consumers, prospective consumers and from agencies that serve farmers including, State Vocational Rehabilitation Service (VR), Farm Service Agency (FSA), Cooperative Extension Service (Extension), and Natural Resource Conservation Service (NRCS). The project applied Community Based Participatory Research (CPBR) approach.

In order to locate minority farmers, the project randomly sampled from counties and parishes that had at least ten minority farmers. Using 1997 Census of Agriculture data, the project identified 31 such counties in Arkansas, 42 in Louisiana and 65 in Mississippi (see Figure 2 for maps). The project interviewed 659 farm households (1308 Individuals) and 290 service providers including 122 people from VR, 168 field personnel from US Department of

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total cases</th>
<th>Skin diseases</th>
<th>Respiratory conditions</th>
<th>Poison</th>
<th>All other illnesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural production</td>
<td>48.2</td>
<td>21.6</td>
<td>5.2</td>
<td>1.7</td>
<td>19.8</td>
</tr>
<tr>
<td>Crop production</td>
<td>49.8</td>
<td>26.4</td>
<td>2.0</td>
<td>2.3</td>
<td>19.1</td>
</tr>
<tr>
<td>Field crops except cash grains</td>
<td>67.0</td>
<td>55.9</td>
<td>&lt;0.05</td>
<td>4.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Livestock production</td>
<td>43.9</td>
<td>9.0</td>
<td>13.5</td>
<td>&lt;0.05</td>
<td>21.5</td>
</tr>
<tr>
<td>Mining</td>
<td>17.7</td>
<td>1.5</td>
<td>2.4</td>
<td>0.5</td>
<td>13.4</td>
</tr>
<tr>
<td>Construction</td>
<td>15.8</td>
<td>3.9</td>
<td>1.5</td>
<td>0.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>81.7</td>
<td>8.4</td>
<td>2.7</td>
<td>0.7</td>
<td>69.8</td>
</tr>
</tbody>
</table>

Agriculture (USDA) agencies (FSA, NRCS, Extension) in Arkansas, Louisiana and Mississippi. After a preliminary analysis of survey data, the project gathered feedback and qualitative data, through 18 focus group discussions with 254 farmers and 8 with 72 VR counselors in Arkansas and Louisiana.

Sample statistics

Table II provides data on the number of complete interviews and the response rates. As depicted in Table III, most of the farmers are older (mean age is 53 years) married, with a high school education (mean schooling years is 12). Although they have many years of farm experience (mean is 25 years) their farm incomes are very low (mean is $2469 per year). Consequently, they are forced to take employment off the farm in order to subsidize their farm incomes. The average off-farm experience is 19 years.

Most of the farmers in the sample were married males. The majority of those in the study sample are Black (see Figure 3) because they form the larger proportion of minority farmers in the South. Although the project made an effort to include White farmers they were not responsive because there was some tension between minority and majority farmers at the time of the project. The source of the tension was that minority farmers were in the process of suing the USDA for years of discrimination against them in favor of majority farmers. Furthermore, the stated purpose of the project was to improve service access to minority farmers, the project was housed in a historically black college and research was conducted by Black researchers. CPBR was unsuccessful in building a bridge between the two population groups.

Farmers needs for VR services

Rural locations have fewer services and amenities than those available in urban settings. To get a clearer view of this population’s needs, the study looked at the ‘ruralness’ of the location of the sample households. The study applied spatial measures – the distances from the household’s location to the nearest services such as a doctor’s office, hospital, school and others. These measures, to some degree, represent availability of services to these farmers.

Table IV presents summary statistics of these measures of ‘ruralness’ of the households’ locations. Note that some farmers in the study sample live as far as 70 miles away from the nearest hospital, 50 miles from the nearest doctor and 62 miles from the nearest grocery store. These distances can be a serious service access challenge in rural areas where public transportation is lacking and the people are too poor to purchase reliable private means of transportation. Also interesting and important is that the shortest distances from farmers’ locations are to churches, which suggests that churches are an invaluable resource for one trying to communicate and to serve this population.

Figure 4 displays a summary of these farmers’ self-assessed health status at the time they were interviewed and Figure 5 shows a summary of their disabilities. It is important to note here that these underestimate health and disability needs of this
population. Farmers were reluctant to admit to having a disability even when it was visible. For example, the project found a farmer who had lost all hearing in his right ear and most in his left ear. He had lost almost all his right hand fingers to farm machinery, and he was recovering from burns on 80% of his body. Even as he strained to hear, his response was that he had no disability. Follow-up focus group discussions revealed that their reluctance to admit to having a disability stems from fears of potential economic losses that could result from, to use their terms ‘being labeled disabled’ (see focus group data in Table VII). They were afraid that they might not get credit (such as farm operating loans) insurance, health insurance and other services. Focus group discussions also revealed basic mistrust of government agencies. They approached such agencies with caution and suspicion because of past discrimination experiences.

Figure 6 summarizes severe functional limitations which impede farmers’ full employment thus reducing their earnings. Most of the impairments are health-related. The study included questions on ‘economic impairments’ such as lack of work skills or opportunities, economic and social disincentives for off-farm employment. Most small farmers with limited resources work off the farm to subsidize farm incomes. Consequently, the economic impairments are an important consideration because they affect the farmers’ income earning abilities. Low incomes have a negative effect on health and increase the probability of disabilities. The biggest impairment is reduced endurance followed closely by economic limitations. The effects of physical and mental health on the farmers’ ability to work are summarized in Figures 7a and 7b. They indicate that many farmers are forced to cut back on work and are able to accomplish less while others have stopped all work and activities.

Table V summarizes farmers’ responses to some key survey questions indicating disability rates and VR services needs. Close to 27% of those responding indicated that they had a disability. As already discussed, this number understates the disability rate

Table III. Sample demographics.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>53.1925</td>
<td>12.3393</td>
<td>20.000</td>
<td>88</td>
<td>982</td>
</tr>
<tr>
<td>Years of schooling</td>
<td>12.1247</td>
<td>3.1083</td>
<td>1.0000</td>
<td>23</td>
<td>902</td>
</tr>
<tr>
<td>Household size</td>
<td>2.7147</td>
<td>1.4386</td>
<td>1.0000</td>
<td>10</td>
<td>1041</td>
</tr>
<tr>
<td>Net farm income</td>
<td>2469.44</td>
<td>26614.66</td>
<td>-210000</td>
<td>200000</td>
<td>1051</td>
</tr>
<tr>
<td>Net farm value $*</td>
<td>97423.64</td>
<td>185926.41</td>
<td>-847000</td>
<td>1775000</td>
<td>1055</td>
</tr>
<tr>
<td>Years of farm experience</td>
<td>25.0714</td>
<td>18.7717</td>
<td>0.00000</td>
<td>76</td>
<td>784</td>
</tr>
<tr>
<td>Years of off-farm work experience</td>
<td>19.2851</td>
<td>17.281</td>
<td>0.00000</td>
<td>75</td>
<td>712</td>
</tr>
</tbody>
</table>

*Net farm value was estimated as the value of farm land, equipment and buildings less farm debt.
Figure 5. Disabilities.

Figure 6. Severe functional limitations.
because of the farmers’ fear of the economic repercussions of admitting to having a disability. Although 25% stated that they could benefit from VR services only 5.7% had contacted public or private rehabilitation agencies, 4.4% had been contacted by such agencies, only 5.6% had received services from such agencies and only 3.4% were currently being served. Some of these farmers had received medical treatment for depression, anxiety or other emotional impairments (6.6%). Only 20% of the farmers surveyed had any information about state VR. These data indicate that the majority of those in need did not receive any services from VR.

These data also indicated that minority farmers lack information about VR. This issue was explored further through focus group discussions with the farmers (see Tables VII–IX) and with VR counselors. Data from focus group discussions further confirmed lack of information. Farmers did not know what services were offered by VR, who is eligible for services or how to access such services. The discussions also revealed that those who were aware of such services were afraid that once they accessed such services they would be ‘labeled disabled’ and would lose access to farm operation loans, insurance and other services.

On the other hand, focus group discussions with VR counselors revealed lack of information or...
understanding of the needs of minority farmers. There were also some internal VR obstacles to serving farmers. In some states, eligibility criteria automatically shut out farmers. For example, in establishing financial eligibility, sometimes VR included both liquid and non-liquid assets (such as land, farm equipment and buildings). Inclusion of the non-liquid assets made it almost impossible for farmers to be eligible for services. Other obstacles were: high counselor case loads; systemic rigidity in the service delivery process leaving counselors with very little flexibility; high turn-over rates; lack of coordination or collaboration with agriculture agencies that could facilitate more effective VR communication with farmers.

Figure 8 summarizes services received. The few who were served got only three types of services, transportation, physical therapy and assistive devices. The types of services rendered relative to the types of disabilities indicate that there is unmet need in this population. Table VI summarizes the farmers’ rating of the services received. For comparison purposes, the table includes ratings of the services rendered by agriculture agencies. Close to 22% of those served by VR indicated that the services they received were not good or were very bad. The farmers’ rating of Cooperative Extension services was much better than VR. Only 6.7% rated Cooperative Extension service as not good or very bad.

**Results from focus groups data**

Focus group discussions data are summarized in Tables VII–IX. Table VII displays the farmers’ questions and concerns about VR and the services offered. It is important to note that the mood and tone of the focus group discussions indicated the farmers’ sense of desperation and despondency. The question raised most was what services VR offers, followed by who VR is. The farmers also raised concerns about the effects that VR services would have on their access to other services. Other questions raised seemed totally unrelated to VR services such as the concern about pollution from chemical plants along the Mississippi river. These questions and concerns indicate a serious lack of information about VR among these rural communities. Most of the farmers did not know anything about VR, what services they provide, who is eligible for services, or how to access these services. Furthermore, the farmers indicated their fear of the negative effects of ‘being labeled disabled’ on their ability to get loans, insurance coverage, and access to other public services. However, it was encouraging that the farmers were interested in taking a proactive role in improving access to services. The focus group discussions made it clear that this population lacks the basic information about VR and that that is a
serious access obstacle. In order to provide information to these communities, the project facilitated meetings and discussion between VR personnel and the farmers. The project also distributed VR literature among the farmers.

Table VIII summarizes the farmers’ perceptions about service access. They indicated a great deal of skepticism about services offered because of past discrimination experiences. They expressed a fear that if they tried to access services they would be subjected to a different more stringent standard to determine their eligibility for services. Some felt the whole service access process was intimidating, too complex and time consuming. They also expressed their distrust of governmental agencies and their commitment to helping rural minorities, especially those who are poor. These farmers lament their poverty and they feel marginalized.

The project asked farmers to recommend ways of improving access to VR services. Their recommendations are summarized in Table IX. Their recommendations include improving: service accessibility; communication between their communities and VR; and what VR could do to provide education training and outreach to rural communities. Most of the recommendations seem to point at the need to reduce marginalization and more collaboration with this population. For example, the weightiest recommendations were: Minority caseworkers who live in the community; minority-focused outreach programs; local radio announcements; and local newspaper ads, flyers and newsletters in local churches, hospitals and clinics. The farmers’ responses indicate that they would like VR to be more present and visible in their community.

Other discussions and recommendations indicated that the farmers did not view their service access in compartments the way service delivery is currently organized under several different agencies. For example, they recommend that VR services include farm equipment safety training and assistance in securing farm operation. These services are not part of VR programs. When informed that some of those services can be accessed from other agencies, the farmers recommended a creation of one-stop resource centers that would help with accessing all necessary services at one stop. Another indication of that lack of compartmentalization of services in the farmers’ perceptions is the concern about their exposure to hazardous chemicals from plants located in rural areas close to their farms and homes. This issue was raised at all focus group discussions among communities along the Mississippi. The project followed it up with Environmental Protection Agency and with the state department of health and later advised farmers to speak to their elected representatives.

The farmers’ recommendations also pointed out some of the unmet need. For example they recommended that they get more psychological, and alcohol counseling services. This is an important service for farmers because their profession is extremely stressful. Farmers regularly take huge economic risks. They get large farm operation loans yet they have little control over factors that determine their incomes such as the weather, and market prices. They are constantly under pressure to beat the season in order to earn a living. They are under constant stress. This profession is even more stressful for minority farmers in the South where they have
experience being marginalized and discriminated against. The data indicate that the need for psychological and other counseling is currently not being met.

Other project results

Focus group sessions proved to be fertile grounds for new ideas. They became opportunities for farmers to confront the problems with access to services. Some of these ideas became catalysts for action. There were some significant examples:

(a) Farmer-to-farmer support network

In the course of interviews and focus group discussions, the project found a farmer-to-farmer support group of six farmers in southern Arkansas. It was composed of farmers with and without disabilities. The most visible disability was the quadriplegic. Because of support for each other and working their farms as a team, pooling resources and exchanging skills and equipment, they were able to survive on the farms and to make a profit at a time when other small farmers were going out of business. At the project’s dissemination conference, this group was given an opportunity to share their experiences and techniques with other farmers. They were heard by farmers from the three states. Consequently, at the final focus group session, the farmers announced that they were forming a farmer-to-farmer support network across the three states. The organization is growing and is proactive in seeking services, supporting existing farmers and new entrants into the field. It is recognized by the USDA as representative of small limited-resource minority farmers. The formation of this organization is a good example of the seamless translation of research findings into action and of the empowerment of research subjects into active catalysts for improving the conditions in their communities.

(b) New economic eligibility criteria

The focus group discussions with VR counselors revealed that there was no uniformity in service provision across the three states especially in the eligibility criteria applied to VR consumer applicants. The project found that farmers in one state had a harder time accessing services because non-liquid farm assets were included in estimating incomes of farmers seeking services. Because VR personnel were part of the research team, they saw this requirement as a major obstacle to effective service provision in that state. Before the end of the project, those requirements were changed. Thus the project’s findings were seamlessly translated into VR practice.

Conclusions and recommendations

The study found a serious lack of information: Farmers were not aware of VR, VR services, how to access them or the illegibility criteria. On the other hand, VR counselors did not know the needs of the farmers nor did they understand the farm culture. This information gap is a big service access/delivery obstacle.
Farmers expressed fears of the effects of accessing VR services (to use their terms ‘being labeled disabled’) on their ability to earn a living. They were afraid that if they were known to have a disability that would diminish their ability to acquire farm operation loans, insurance and health insurance. Without these services, they could not earn a living. They felt marginalized and discriminated against and were deeply skeptical about a government agency’s commitment to serving them.

The farmers did not see services in compartments as they are currently organized under different agencies. They would prefer to access public services at a one-stop service center. Considering the long distances they have to travel to access basic services, poor rural transportation and their limited incomes, the one-stop service center is a logical solution to improving access to services for rural people.

The study finds a great need for rehabilitation services that is currently not being met. Close to 27% of those interviewed stated that they had a disability. Given their reluctance to admit to having a disability, the figure is probably higher than that. Although 25.3% indicated that they could benefit from rehabilitative services (the actual need might be higher) only 3.4% were receiving such services and only 5.6% had ever received such services. Only three types of services were provided. Close to 22% of those served rated the services received as not good or very bad. Although they expressed a need for psychological and alcohol counseling they were not receiving such services. There is a gaping service gap that should be filled to meet the needs of this population.

The farmers made excellent recommendations for improvements in service access/delivery (Table IX). The study agrees with those recommendations. Some of those recommendations stand out as excellent ideas. Given the travel distances and transportation difficulties in rural areas, having a one-stop resource center is an excellent idea. It will save time and simplify services access. Such a center would be more logical for farmers given their perceptions about public service agencies.

It is important to close the information gap so that when rural people experience a disability, they will know what services are available and where to access them. Such information would encourage the farmers to be more proactive in seeking services and to feel less marginalized. In order to improve communication between these farmers VR it is important for farmer organizations (such as farm cooperatives) to maintain contact with VR and vice versa. The study also supports the farmers’ recommendation about VR maintaining a presence in rural areas. Collaboration with farmer organizations and with agencies that serve rural people (such as the Cooperative Extension Service) would enhance VR’s ability to serve rural people. Collaboration with such agencies would improve VR communication with rural populations and VR would become more aware of the needs of rural populations. Collaboration with minority farmers’ civic organizations will also ensure that more information reaches this population. This recommendation is especially important because VR counselors indicated that they have trouble with rural minority culture. They indicated that they had trouble getting black males to access services.

The farmers’ recommendation that VR hire more rural minorities who understand the rural culture and people is supported by this study. Such employees will help to make VR more ‘minority-friendly’ and so reduce alienation and marginalization that this population expressed.

References
