Substance Abuse in Rural Appalachia: Responding to Community Needs

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Abstract

This paper presents the multi-year collaboration between Social Work faculty and community stakeholders in a rural Appalachian region to address the community needs generated by the high rate of substance abuse. A needs assessment was administered to substance abuse counselors, child protection workers, and intimate partner violence workers in twenty eight counties. Outcomes developed from the survey findings include: offering Substance Abuse Certification classes; developing a minor in Substance Abuse Counseling; and educating middle and high school students on the consequences of substance use/abuse.

Keywords: substance abuse, chemical dependency, needs assessment, drugs

1. Introduction

The prevalence of drug abuse and dependency has left a devastating impact on communities around the globe. In the United States, a recent survey estimates that 6.9 million individuals are dependent on or abusing illicit drugs (Substance Abuse and Mental Health Services Administration, 2014). The purpose of this Needs Assessment was to examine three components regarding drug abuse; available Certified Alcohol and Drug Counselors, available substance abuse treatment services, and the need for additional substance abuse treatment services in the communities of Northeastern and Eastern Mountain Service Regions of eastern Kentucky. Specific research questions included: What specific substance abuse prevention and treatment services are available, what services are needed to better meet the needs of the population, and is there a need for more available Certified Alcohol and Drug Counselors? For substance abuse services to be accepted and implemented, it is important that they be tailored to the values of a country and community (Allamani, 2007). In order to facilitate input and a shared vision from the local community on substance abuse needs, these research questions were raised by a committee of community partners to identify disparities in access to substance abuse treatment among counties in the study population.

The geographic focus of this needs assessment includes the twenty-eight counties comprising the Northeastern and the Eastern Mountain Service Regions ascribed by the Cabinet for Health and Family Services. Pike County, in the southeastern part of the study area, is the largest in land area comprising 786.83 square miles with Robertson County in the northeast being the smallest in land area being only 99.91 square miles (US Census Bureau, 2010). This geographic area is contained in "Central Appalachia", a classification assigned by the Appalachian Regional Commission and approved by the U.S. Office of Management and Budget (Housing Assistance Council, 2000).

Central Appalachia is predominately rural (or "non-metro"), and is largely defined by low incomes, poor health, inadequate housing, and sub-standard education (Housing Assistance Council, 2000). In 2008, Central Appalachia had the highest poverty rate reporting at 24.6% (Appalachia Regional Development, 2010). The population in this region is significantly white or Caucasian with blacks or African Americans being reported as the largest minority in population are (United States Census Bureau, 2011).

No other author more eloquently writes about the regional culture of Appalachia than Loyal Jones (1994). His original essay, "Appalachian Values" first appeared in *Twigs* in 1973 and has been reprinted many times since then. In his description of the values - religion, independence, self-reliance, pride, neighborliness, hospitality, familism, personalism, humility, love of place, patriotism, sense of beauty, and sense of humor - the reader can see the strengths and the "undoings" of the mountain people. Appalachian values are different than those of other Americans, but are similar to a value system of an earlier America.

The economies of 7 of the 28 counties included in the study are dependent on coal mining. These include: Floyd, Knott, Leslie, Letcher, Martin, Perry and Pike counties (Parker, 2005). Mining has an unstable effect on local economies, as it often results in periods of rapid growth followed by declines. Much of the wealth produced in the Appalachian region has not come back to develop the region (Appalachian Regional Commission 2010; Housing Assistance Council, 2000). The counties of Breathitt, Menifee, Morgan, Robertson and Rowan are dependent on federal and state government employment. Mason and Montgomery counties are economically dependent on manufacturing. The remaining 14 counties are classified as non- specialized economic dependence, with the majority of the jobs being in the service and retail sectors (Parker, 2005). These jobs are low paying and lead to high rates of underemployment and families needing extra assistance to meet the needs of their families (Housing Assistance Council, 2000). Twenty-two of the 28 counties are designated as low education counties, meaning that 25% or more of the residents 25-64 years of age had neither a high school diploma nor a GED in 2000 (Parker, 2005).

2. Literature Review

Forbes released a study in 2010 revealing that Kentucky was the fourth most medicated state in the nation behind West Virginia, Tennessee, and Alabama (Office of Drug Control Policy, 2010). In 2008, Bath County (part of the study population) had the second highest rate of controlled substance prescriptions dispensed per residence at 46.5% behind Breckenridge County at 48.2% (Office of Drug Policy, 2010). The Appalachian region has higher admission rates for opiates and synthetic drug than the rest of the nation, especially the central part of Appalachia and in coal-mining areas (Appalachian Regional Commission, 2008). These drugs include codeine, hydrocodone, hydromorphone, meperidine, morphine, opium, oxycodone, pentazocine, propoxyphene, tramadol, and any other morphine-like substance *except* methadone. In 2010, Kentucky was inundated with prescription drug abuse in its communities, and experienced one of the highest abuse rates of oxycodone abuse in the nation (Converse & Brohl, 2015).

The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts an annual survey of facilities providing substance abuse treatment. In Kentucky, utilization rates for both residential and impatient substance abuse treatment facilities were over 90% (Substance Abuse and Mental Health Services Administration, 2010). According to the Kentucky State Police, in 2010, there were 29,917 (8.5%) people arrested for Driving Under the Influence in the Commonwealth which was a slight decrease from 33,089 (8.8%) in 2009 (Kentucky State Police, 2010). However, the total number of narcotic drug arrests for Kentucky increased form 16.5% to 17.4% in 2010.

The Justice Policy Institute, in the *Substance Abuse Treatment and Public Safety* study brief (2008), indicates that substance abuse treatment reduces crime rates. The study found the sooner substance abuse is treated, the bigger the long-term savings and increase in public safety. The study also indicates that substance abuse treatment helps the currently incarcerated inmate transition from incarceration to independent living more successfully (Office of Drug Control Policy, 2008).

According to the Child Welfare League of America (2008), parental substance abuse is present in between 40% and 80% of all cases in the child welfare system. Children whose parents' abuse alcohol and other drugs are almost three times likelier to be abused and more than four times likelier to be neglected than children of parents who are not substance abusers. Children prenatally exposed to substances have been found to be two or three times more likely to be abused than non-exposed children and as many as 80% of prenatally drug exposed infants will come to the attention of child welfare before their first birthday.

The General Accounting Office (2003) released a report, which included a review of 27 Child and Family Service Reviews, 585 exit interviews with staff who have severed their employment, and on-site visits to four states. Kentucky was one of the states visited. The report focused on the recruitment and retention of child welfare staff. Investigators found that child welfare workers were dealing with more cases involving drug and alcohol abuse. Workers reported on-the-job training was inadequate or insufficient due to the available training not meeting their needs and/or not having the time to participate. Staff reported if training is not required, they often do not attend due to casework accumulating. The Kentucky Public Child Welfare Certification Program (PCWCP) is a unique pre-employment certification program offered collaboratively by 11 universities and the child welfare agencies in Kentucky to train, educate and offer financial incentives for social worker students to be employed in the field of child welfare upon graduation. Kentucky's PCWCP was cited in the report for increasing the retention of child welfare workers. However, with the specialized training, staff still felt unprepared to manage complex cases, such as those that involve substance abuse. The next section will examine the methodology of this needs assessment.

3. Methodology

Survey research was conducted in the twenty-eight county area with three different populations. Three surveys were developed – one for protection and permanency staff; one for substance abuse treatment providers; and one for intimate partner violence (IPV) workers. Each instrument included 17 items and two were developed using Survey Monkey with the third a paper survey. Protection and permanency staff and substance abuse counselors were given the link to the on-line survey instrument. The survey introduction included informed consent and stressed that participation was strictly voluntary. Participation remained voluntary throughout the survey as participants were not forced to answer a question before going to the next question. Data was submitted anonymously (surveys were returned without recipient email address) and posed no possible risk of physical or psychological pain or discomfort or risk of injury of any kind.

The protection and permanency staff survey link form was distributed via email to the service region administrators of the Northeastern and Eastern Mountain Service Regions. From there it was distributed to the protection and permanency staff via email to supervisors in each county.

The third community survey was distributed in paper copy to providers of five intimate partner violence shelters covering the twenty-eight county area. This survey and the Informed Consent Form were distributed to the five Executive Directors. Executive Directors distributed the surveys to staff and the completed surveys were forwarded to the Executive Director with no identifying information about the staff person. The Executive Directors mailed the completed surveys to the research team.

4. Research Results

There were a total of 144 respondents who participated in the surveys; 90 protection and permanency workers, 46 community IPV providers, and 8 substance abuse treatment providers. Fourteen of the survey items were the same for each population, with three items being unique to each population. The first two questions asked respondents to identify the Service Region and county they primarily served. This was to allow results to be filtered by Regions and County.

All survey respondents were asked to identify whether they were a Certified Alcohol and Drug Counselor. Of the 138 responses, 132 or 96% signified "no." Respondents were asked to indicate whether they were interested in receiving this certification. Sixty-seven (49%) responded "yes," 64 (47%) responded "no," and 6 (4%) responded they "already have certification."

All respondents were asked to identify first and second choices for "What do you see as the largest barrier for individuals seeking to be a Certified Alcohol and Drug Counselor?" The choices for selection were: courses not offered in your area; financial constraints; time constraints, and; other (please specify). There were a total of 266 responses on these two questions (see Table 1). "Financial constraints" was most frequently chosen, followed by: "Time constraints"; "Courses not offered in your area", and; "Other." Respondents could enter text in the "Other" category and responses included: "Protection and permanency (employers) not paying for classes." "The 300 hours of supervision at the minimum of 4 hours per month, can take years to complete." and "The availability of direct clinical experience."

Table 1. Ranking of top barriers for individuals seeking to be a Certified Alcohol and Drug Counselor

Rank	Barriers	*f* (n=266)
1	Financial constraints	102
2	Time constraints	93
3	Courses not offered in your area	59
4	Other	12

Three questions asked all participants to indicate their top three choices for services that are needed in the community they work in. They were offered eleven choices of services, ranging from prevention to treatment. There were a total of 371 responses (see Table 2). The five service needs ranked by the cumulative frequency of responses indicates that inpatient treatment (25%) was the most selected community need followed by: outreach services (14%); drug testing (14%); comprehensive substance abuse assessment (9%), and; substance abuse education (8%).

Table 2. Ranking of top choices for service needed

Rank	Service	*f* (n=371)
1	Inpatient treatment	93
2	Outreach to persons in the community that may need treatment	53
3	Drug testing	51
4	Comprehensive substance abuse assessment	36
5	Substance abuse education	33
6	Outpatient treatment	31
7	Family therapy	26
8	Individual therapy	20
9	Case Management	16
10	Group therapy	6
11	Screening for substance abuse	6

Three questions asked all participants to indicate their top three choices for what they see as the biggest barriers to people receiving needed treatment. There were a total of 370 responses (see Table 3). The top five ranked by number of responses include: lack of insurance/payment source; lack of compliance with treatment; lack of needed services, lack of transportation, and; distance to travel to need service.

Table 3. Ranking of top choices for biggest barriers to treatment

Rank	Service	*f* (n=370)
1	Lack of insurance/payment source	95
2	Lack of compliance with treatment	67
3	Lack of needed service	62
4	Lack of transportation	50
5	Distance to travel to needed service	49
6	Wait time for appointments	30
7	Other: What to do with children; funding for levels of care; testing sites are needed	9
8	Agency policies/regulations	8

The last two questions common to all survey participants asked about the average range of days it takes to get a male or female client into an inpatient facility. A total of 223 responses identified that the majority of both female and male clients had to wait more than 30 days before they were able to enter an inpatient facility (see Table 4).

Table 4. Days to wait before an admission to inpatient treatment

Male Client (n=108)		**Female Client (n=115)**	
Days	***f***	**Days**	***f***
0-5 days	4	0-5 days	5
6-10 days	4	6-10 days	3
11-15 days	7	11-15 days	9
16-20 days	5	16-20 days	9
21-25 days	11	21-25 days	3
26 – 30 days	11	26-30 days	13
More than 30 days	**70**	**More than 30 days**	**73**

4.1 Specific Population and Geographic Area Results and Findings

There was total of 90 Protection and permanency staff who participated in the on-line survey – 62 from the Northeastern Service Region and 28 from the Eastern Mountain Region. There was total of 46 Community Providers from five domestic violence shelters who participated in the survey – 32 from the Northeastern Service Region and 14 from the Eastern Mountain Service Region. Only one substance abuse treatment provider from the Northeastern Service Region participated and seven from the Eastern Mountain region, with a total of 8 staff participating in the on-line survey.

Protection and permanency staff were asked to respond to the following statement, "I am interested in receiving this certification." Of the total 85 respondents, 41 (48%) stated "yes" and 44 (52%) stated "no." In the Eastern Mountain Service Region, a small majority (54%) of staff responded, "yes." Protection and permanency staff in both service regions identified the same two largest barriers for individuals seeking to be a Certified Alcohol and Drug Counselor – time constraints (62 responses) and financial constraints (56 responses). Respondents on the Community Provider Survey also identified the same two largest barriers for individuals; however, in a different ranking. Financial constraints received the most responses at 42, with time constraints receiving 27 responses. Pathways respondents gave financial and time constraints the same number of responses followed by courses not offered in the area.

Survey respondents from Protection and Permanency, Community Providers and Substance Abuse Treatment providers were asked to select their top three choices of barriers to people receiving needed treatment. Protection and permanency staff ranked the three biggest barriers as follows:

1. A lack of insurance/payment source (n=61).
2. A lack of compliance with treatment (n=43).
3. A lack of needed service (n= 41).

When the responses are separated by service region, the same three barriers ranked the highest, although in the Eastern Mountain Service Region, lack of needed service was the second highest choice and lack of compliance with treatment and distance to travel to needed service received the same number of responses, ranking as the third choice.

Community Providers gave the same three barriers the same rankings as the protection and permanency staff. When the data is separated by service region, there is variability. In the Eastern Mountain Service Region, community providers ranked the top three barriers as 1) a lack of insurance/payment source, 2) a lack of needed service and 3) a lack of transportation. In the Northeastern Service Region, community providers ranked the top three barriers as 1) a lack of insurance/payment source, 2) a lack of compliance with treatment, and 3) a lack of transportation. Substance abuse treatment providers from the Northeastern Service Region ranked the barriers to people receiving needed treatment as 1) a lack of insurance/payment source, 2) a lack of transportation, and 3) a lack of compliance with treatment.

The substance abuse treatment survey participants from the Northeastern Service Region indicated the top three rankings of all the eleven service categories included: 1) outreach to persons in the community that may need treatment, 2) family therapy, and 3) inpatient treatment.

Survey participants from Protection and permanency, IPV community providers and substance abuse treatment providers were asked what an average waiting period is to get a male client into an inpatient facility. For Protection and permanency staff in both regions, 85% of respondents signified that the average waiting period falls within 26-30 days to more than 30 days. Responses from the community providers indicate that 75% of the respondents selected waiting periods of 21-25 days, 26-30 days, or more than 30 days.

Survey participants were also asked what an average waiting period is to get a female client into an inpatient facility. For Protection and permanency staff in both regions, 82% of the respondents signified that the average waiting period falls within 26-30 days to more than 30 days. Reponses from the community providers indicate that 73% of the respondents selected waiting periods of 21-25 days, 26-30 days, or more than 30 days.

Survey participants from protection and permanency were asked to respond to the following statement: "It would be helpful to have a protection and permanency worker in my office who is also a Certified Alcohol and Drug Counselor, who could possibly perform job functions, such as substance abuse/addiction assessment and case consultation." Of the 85 responses, 77 or 91% of survey participants from protection and permanency indicated "yes." Participants on the IPV community provider survey were asked to respond to the statement, "It would be helpful to have a protection and permanency worker in my county who is also a Certified Alcohol and Drug Counselor…" All of the 46 participants responded "yes." The Substance abuse treatment providers were asked to respond to, "There is a shortage of Certified Alcohol and Drug Counselors in my area." There were five responses of "yes" and 2 responses of "no."

Protection and permanency survey participants were asked to indicate average waiting periods for a substance abuse/addiction assessment appointment for a parent in a child abuse and neglect case. In the Eastern Mountain Service Region, 78% of the responses fell in the range of 6 to 20 days. In the Northeastern Service Region, 64% fell in this range. The substance abuse treatment survey participants from the Northeastern Service Region all responded the average waiting periods for an assessment appointment for a parent in a child abuse and neglect case was 10 days or less. The IPV community providers were asked to indicate average waiting periods for a substance abuse/addition assessment appointment for a client who has been referred. Results were distributed with 21 or 48% responding 15 days or less and 23 or 52% responding 16 to more than 30 days.

5. Discussion

5.1 Research Questions

One of the original research questions included: "What specific substance abuse prevention and treatment services are available?" Survey participants were asked to respond to the following statement, "The following chemical dependency treatment services are provided in the county/community I work in (select all that apply)." The eleven choices as mentioned previously included: screening for substance abuse, comprehensive substance abuse assessment, outreach to persons in the community that may need treatment, substance abuse education, drug testing, individual therapy, group therapy, family therapy, case management, outpatient treatment, and/or inpatient treatment. Following are the frequencies from respondents when ranking highest response rates to lowest and the number of responses in each service region (see Table 5).

Table 5. Services provided in respondent's county/community by service regions

Northeastern Service Region (n = 102)		**Eastern Mountain Service Region (n = 42)**	
Services	***f***	**Service**	***f***
Individual therapy	72	Screening for substance abuse	27
Screening for substance abuse	71	Drug testing	27
Outpatient treatment	68	Outpatient treatment	26
Group therapy	63	Individual therapy	24
Comprehensive substance abuse assessment	59	Comprehensive substance abuse assessment	18
Substance abuse education	52	Group therapy	18
Drug testing	51	Substance abuse education	15
Case management	44	Inpatient treatment	12
Family therapy	38	Case management	11
Outreach to persons in the community that may need treatment	27	Outreach to persons in the community that may need treatment	7
Inpatient treatment	27	Family therapy	4

The second research question included, "What services are needed to better meet the needs of the population?" Separating the data on the survey questions of respondents top three choices of services that are needed in their communities provides the following for each specific ADD in the two service regions.

Northeastern Mountain Service Region needed services:

FIVCO ADD:
1) Inpatient treatment
2) Outreach to persons in the community that may need treatment
3) Comprehensive substance abuse assessment and Drug testing

Gateway ADD:
1) Inpatient treatment
2) Outreach to persons in the community that may need treatment and Substance abuse education
3) Drug testing

Buffalo Trace ADD:
1) Inpatient treatment
2) Outreach to persons in the community that may need treatment
3) Comprehensive substance abuse assessment

Eastern Mountain Service Region needed services:

Big Sandy ADD:
1) Inpatient treatment
2) Outreach to persons in the community that may need treatment
3) Family therapy

Kentucky River ADD:
1) Inpatient treatment
2) Outpatient treatment
3) Comprehensive substance abuse assessment, Outreach to persons in the community that may need treatment, and substance abuse education

The third and final research question asks "Is there a need for more available Certified Alcohol and Drug Counselors?" Protection and permanency workers were asked if it would be helpful to have a worker in their office who was a Certified Alcohol and Drug Counselor. An overwhelming 91% (77 out of 85) reported "yes" to this question. Community providers were asked if it would be helpful to have a Protection and Permanency worker in their county who is also a Certified Alcohol and Drug Counselor and all 46 respondents (100%) reported "yes". Finally, chemical dependency treatment providers were asked if they felt there was a shortage of Certified Alcohol and Drug Counselor in their area and 71% (5 out of 7) responses reported "yes" there was a shortage.

5.2 Implications, Responses and Recommendations

The barriers to receiving the training needed to become certified as a substance abuse counselor were overwhelmingly the cost, the investment of time, and availability of courses in their area. During an economic recession, budget cuts are easiest to make in the areas of funding trainings and travel. Additionally, with the current political climate where large corporations are being confronted with excessive practices of using corporate jets and funding extravagant retreats while requesting financial "bail out" money, seeking funds for travel and training has come under scrutiny. This directly affects best-practice opportunities for struggling agencies providing services to vulnerable populations. Substance abuse assessment and treatment in this study population is desperately needed and requires specific certification.

The survey results show the need for additional Certified Alcohol and Drug Counselor was overwhelming. When looking at combined responses from protection and permanency workers and community providers, 95% of all respondents felt there was a need for a Certified Alcohol and Drug Counselor in their office or county (124 out of 131). In fact, 58% of the 133 respondents who were not already certified stated that they were interested in becoming certified as a substance abuse counselor. While the sample size was small, it is important to note that 25% of substance abuse treatment providers responding to the survey (2 out of 8) were not currently Certified Alcohol and Drug Counselor.

It is worth noting that Morehead State University's Department of Sociology, Social Work and Criminology has attempted to address regional needs by offering five online courses that fulfill the requirements by the Kentucky Alcohol and Drug Certification Board for chemical dependency certification. By offering the five courses online, the barrier of travel is eliminated and training time becomes more flexible. In addition, a minor in Substance Abuse Counseling is offered to students across varying majors such as, health, nursing, psychology, sociology, and social work. The hope is to attract a larger population base to increase the number of certified counselors in the region.

In terms of needed services, outreach to persons in the community was a top reported need by respondents. In 2008, 15.2% of Kentucky 12th graders reported using prescription narcotics or drugs that were not prescribed to them in the previous 12 months (Office of Drug Control policy, 2010). With this in mind educating middle and high school students about the effects of substance abuse is imperative. An analysis of mental health and substance abuse disparities in Appalachia reports that "Additional school-based interventions and prevention programs are needed in Appalachian communities" (Appalachian Regional Commission, 2008). As a result of this study, the Center for Regional Engagement at Morehead State University funded a grant aimed at educating middle and high school students on the consequences of substance use/abuse through a play performed by college students. This addressed one of the top needed services reported by respondents of the study. Implications for policy and practice include increased collaboration between community partners, possible examination of procedures for identifying and reported suspected substance abuse of students, and increased community awareness of current trends of illicit drug use in their areas.

The release of the General Accounting Office (2003) report (which included Kentucky) indicated that child welfare workers were dealing with more cases involving drug and alcohol abuse but finding that on-the-job training was inadequate or insufficient due to the available training not meeting their needs and/or not having the time to participate. Implication for policy and practice include an initial investment by the Commonwealth of Kentucky to fund protection and permanency workers to become Certified Alcohol and Drug Counselors and using these workers to conduct comprehensive substance abuse assessments in their assigned areas. Having specialized substance abuse workers in child welfare agencies will provide easy access to case-level knowledge and skills and consultation in a complex area of practice that involves the comorbid issues of child welfare and substance abuse. This would reduce several identified barriers to receiving services (comprehensive substance abuse assessments, screening for substance abuse, waiting time, lack of payment source and lack of transportation) and could ultimately reduce the financial cost of contracting this service to an already burdened treatment community. In fact, a 2008 study published in the January *Substance Abuse Treatment and Public Safety* reports that "the sooner substance abuse is treated, the bigger the long-term cost savings and increase in public safety" (Office of Drug Control Policy, 2008).

As a final discussion point, an increase in Certified Alcohol and Drug Counselors will help reduce several identified lack of services (e.g. assessment/screening) and barriers to services (e.g. wait times) but it does not address the need for additional inpatient treatment services. The opportunity presents itself for community partners to work together to apply for federal grants aimed at funding facilities for inpatient services. It is important that communities work together to identify the needs to guide prevention and intervention strategies that address the perpetual problem of chemical dependency that is destroying the lives of individuals and families in current societies.

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