UNIVERSITY OF CALIFORNIA, MERCED

Behavioral health in a rural setting: Understanding access, availability and acceptability of care and services

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy

In

Public Health

By

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This dissertation is dedicated to my family, other half, friends, colleagues, and work family for their undying support. To my parents and sister, none of this would have been possible without your unconditional love and encouragement. And most of all, to my biggest cheerleader who still cheers me on every day, my Granny.

You have all made this accomplishment possible.

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Gilger, J. W., *Allen, K.*, & Castillo, A. (2016). Reading disability and enhanced dynamic spatial reasoning: A review of the literature. *Brain and Cognition*, *105*, 55–65. http://doi.org/10.1016/j.bandc.2016.03.005

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Abstract of the Dissertation

Behavioral health outcomes are often worse in rural areas than in urban areas. Unfortunately, there is also a shortage of behavioral health professionals across the nation. Rural areas especially suffer from this shortage, coupled with their already scarce resources. Of the behavioral health services that do exist, they are often ridiculed as being low-quality and unavailable to residents. Furthermore, there is a negative stigma that surrounds behavioral health care that is only amplified in rural areas. This dissertation focuses on behavioral health and behavioral health care in rural California, as 13%of the state's population live in rural areas. First, I examine Emergency Department (ED) utilization by adolescents seeking behavioral health care. Quantitative methods are used to compared ED utilization in both urban and rural areas of California. Second, I qualitatively observe a specific behavioral health program, Behavioral Health Court, which serves incarcerated individuals in a rural Sierra Nevada county. The written program guidelines are compared to client and staff perceptions of these program guidelines. Finally, using both quantitative and qualitative methods, I survey and observe residents of a rural community to understand their perceptions of behavioral health and behavioral health care. Results indicate that access to quality behavioral health care, availability of trusted behavioral health care and acceptance of receiving behavioral health care are all of concern to rural California and its residents. Implications of improving access and availability through modern technologies (such as telemedicine), forming networks of care to address lack of funding, and the development of educative social marketing campaigns from a public health perspective are discussed. Future research should consider further assessing behavioral health care in rural areas to gain a more comprehensive understanding of such care with respect to access, availability and acceptability.

Behavioral health in a rural setting: Understanding access, availability and acceptability of care and services

Introduction

As of 2017, more than 53% of the areas that are designated by the federal government as having a shortage of behavioral health professionals are in rural areas.[1] About 20% of the United States population lives in a rural area,[2] and rural residents have been identified as a population that is especially affected by health disparities.[3] One potential contributor to rural/urban behavioral health disparities are geographic differences in access to and quality of behavioral health care.[4–10] It is estimated by the Department of Health and Human Services that in order to remedy this behavioral health professional shortage, 1,645 behavioral health professionals are needed across the nation.[1] Rural health care providers serve small population bases and generally have less funding than urban area health care providers due to the smaller population.[4–10] This federal funding is commonly used for medical equipment and to employ office staff.[9] While this lack of funding is recognized as a problem, it is encouraged by the federal government to instead network with other health care providers in the rural area to share resources (such as office equipment and staff) in an attempt to save money.[3,9] The quality of care that rural residents receive from rural behavioral health professionals may also be substandard. For example, with limited resources for follow-up care such as psychiatric and counseling services, rural behavioral health professionals are inundated with patients and either limit time patients can be seen per visit or are forced to turn patients away.[9,11]

Rural areas are more likely than urban areas to have an absence of community health centers.[12,13] Because of this, rural residents more frequently visit the ED for their health care needs, regardless of the severity of their health problem.[12–14] EDs are also being utilized as a usual source of care for behavioral health issues in rural areas because of the lack of specialty care in the area, causing emergency department personnel to be tasked with providing behavioral health care.[13–16] Past research has concluded that the lack of specialty care in rural areas negatively impacts the care that the EDs are able to offer to patients with behavioral health problems.[13] For example, this lack of specialty care resulted in 21% of patients leaving the ED with no treatment because there were no behavioral health care professionals (psychiatrists, psychologists or mental health clinicians) accessible to the rural ED.[15] With the given research, it appears that rural EDs are being over-utilized and under-funded with respect to behavioral health patients. In an attempt to remedy this problem, research should better focus on *who* is over-utilizing these services and address the gaps in behavioral health care that are causing these individuals to over-use the ED, especially in rural areas of the US.

Rural residents are also more likely than their urban counterparts to report negative stigma as a barrier to receiving behavioral health services.[16,17] This

barrier is often attributed to the general lack of privacy in rural communities.[17] A past study did find a negative association between perceived stigma and willingness to receive behavioral health care services; however, research is lacking in empirical work examining the impact.[18] Another barrier that rural residents often face is long distance to care. For example, an increase in travel time and perceived difficulty of getting to the doctor has been shown to decrease the likelihood of an individual actually going to a doctor.[5,19,20] The travel time incurred also causes rural residents to seek general care at a local ED.[5,6,21]

In an attempt to address the lack of health care services in rural areas, the face of rural health care has changed over the years, adding new technologies (like telemedicine) and clustering health care services.[5,8,9] One such service is Behavioral Health Court, which serves extreme behavioral health cases in which the individuals' behavioral health concerns led him or her to breaking the law, ending up incarcerated or on probation. Behavioral Health Court clusters services offered from the county Court, Behavioral Health Clinicians, Probation Officers, and other entities as a team to address individual behavioral health concerns. This program has recently expanded into rural areas, with a goal of providing an extremely underserved population – incarcerated individuals – with behavioral health services, while also potentially lowering crime rates. Forming this team of behavioral health clinicians, probation officers, and other providers in a rural area for a focused intervention also allows them to share their already scarce resources.[9]

While this program does cluster multiple services (Behavioral Health Clinicians, Court, Probation, and others) to share resources, little is known about the day-to-day operation and organization of Behavioral Health Court, especially in rural areas. With 25% of these Courts operating in rural areas,[22] it is important to understand how they function to address any successes or downfalls of the program. Furthermore, to understand the perspective of those involved (both the staff and the clients) would give insight to inner workings of how clustering such services actually progresses.

Previous work suggests that behavioral health care in rural areas is lacking, in general. In this dissertation, I address access, availability and acceptability of rural behavioral health services as they exist while considering the perspectives of rural residents. I focus on rural California as it offers a unique perspective of rurality, with 13% of its diverse population living in a rural area,[23] and has increasingly similar demographics to that of the U.S. (which has 20% of its population living in rural areas).[2,24] First, I examine California statewide patterns of ED utilization among adolescents seeking care for behavioral health problems, and how these patterns differ for rural residents as compared to urban residents. This will elucidate where behavioral health services may be lacking for rural adolescents, since adolescence is the life course period when most behavioral health problems onset[25] and 15% of adolescents that suffer from behavioral health issues live in rural areas.[26] Second, I consider a specific behavioral health program, Behavioral Health Court, that has been created to address the lack of behavioral health services for a specific vulnerable population

in Mariposa County, a rural Sierra Nevada county in California. I compared the written processes and goals of a Behavioral Health Court program to the perceived processes and goals of clients and staff in this newly implemented rural county Behavioral Health Court program. Finally, I seek to understand how rural residents in Mariposa County view behavioral health services, which services are preferred and/or accepted by these residents, what their perceptions of these services are, and how this rural county might improve dissemination of information regarding behavioral health services.

A more comprehensive understanding of behavioral health services offered in a rural area, and how these services are perceived by rural residents, is essential to better address access to behavioral health care, availability of behavioral health care providers, and negative behavioral health stigmas in rural areas. These three objectives may inform, and eventually improve, access, availability and acceptability of behavioral health services for rural Americans.

Impact of residence in a rural area on rates of adolescent behavioral health-related emergency department visits

Chapter One

One in every 45 adolescents aged 13 to 18 years in the US suffers from some type of behavioral health problem, such as anxiety, depression, substance abuse, or conduct disorder.[26] Over half of adolescents with behavioral health problems do not receive appropriate psychiatric services,[27] potentially leading to adverse outcomes such as illicit substance use, risky sexual behaviors, school dropout, intentional and unintentional injury, and suicide.[28,29] Alarmingly, the percentage of adolescents surveyed nationally by Youth Risk Behavior Survey that have experienced behavioral health problems has increased significantly in the last ten years (from 28.5% in 2007 to 31.5% in 2017).[29] Similarly, adolescent behavioral health emergency department (ED) visit rates have been shown to increase in the U.S. over time – between 2001 and 2011 adolescents' ED visits for a behavioral health-related concern nearly doubled from 4.4% to 7.2%.[30] Behavioral health-related ED visits account for approximately 5% of all pediatric ED visits,[31] and have increased at a faster rate than adolescent ED visits for chronic conditions.[32]

Of adolescents suffering from a behavioral health problem, epidemiologic surveys suggest that approximately 15% live in rural areas of the US.[26] Since 14.5% of U.S. adolescents overall reside in rural areas, rural adolescents do not appear to suffer substantially excess rates of behavioral health problems compared to those in urban areas.[33] However, there is a serious disparity in psychiatric services and this is only amplified in rural areas with as little as 4.9 youth psychiatrists per 100,000 youth as compared to as many as 56.9 providers per 100,000 youth in urban areas.[34] Rural areas also lack other resources such as public transportation, internet access, and availability of physicians.[5] These barriers potentially bar residents from scheduling an appointment and getting to their appointments. Poor internet access also hinders residents from accessing telemedicine when it might otherwise be available. Because rural populations suffer disproportionately from poor access to health care and a dearth of pediatric behavioral health specialists, addressing behavioral health issues among rural adolescents still poses a significant public health problem.

In addition to problems with access, individuals with behavioral health problems often face negative stigmas regarding their illness, especially in rural areas.[17,18,35] In a study examining this rural/urban difference, rural residents themselves were found to express a significantly higher level of stigma toward behavioral health concerns than residents in cities (b=1.89, b=0.89, respectively).[18] Individuals may also be less likely to seek behavioral health care in an outpatient specialty clinic where they perceive that others will know they are specifically seeking behavioral health care.[35] Because of a multitude of concerns including poor access to care and stigmatizing attitudes toward behavioral health problems, rural adolescents may not receive adequate care for their behavioral

health concerns. For example, they may seek help for their behavioral health problems at EDs in lieu of seeking outpatient care.

Rural adolescents may utilize the ED for behavioral health problems more often than urban adolescents due to the access, availability, and acceptability of behavioral health care. Access and quality of care in a rural setting may cause more adolescents to return to the ED for follow-up care more frequently than urban adolescents due to the lack of outpatient services available.[36] However, very few studies have tested whether rural communities have substantially higher rates of adolescents seeking care at the ED for behavioral health-related concerns when compared to urban communities. Furthermore, no studies have tested whether adolescents who ever present with behavioral health-related concerns in the ED are more likely to return to the ED if they live in a rural area.

In this study, we will fill this gap in the literature by addressing two aims. First, we examine whether living in a rural area is associated with differing rates of behavioral health ED visits among adolescents. Second, we will determine whether adolescents in rural areas are more likely to make return behavioral health visits compared to adolescents in urban areas. To accomplish these aims, we used statewide emergency department data from California, which has a geographically and demographically diverse population as well as comprehensive administrative health care datasets that allow for patient-level tracking over time.

Methods

Data and Sample

This study used data from the California Office of Statewide Health Planning and Development (OSHPD; http://oshpd.ca.gov/), the agency that collects data on emergency department encounters and hospital inpatient discharges for all licensed hospitals in the state. OSHPD data are widely used for population-based health research.[37–39] This study was approved by the University of California, Merced Institutional Review Board.

For the first aim, we used encounter data on all ED visits made by adolescents aged 10-19 years in 2010 with a valid California zip code. Adolescent population estimates acquired from the U.S. Census Bureau (2010)[40] were linked to the ED encounter data at the zip code level, allowing us to calculate the rate of adolescent ED visits for each California zip code.

For the second aim, we restricted our study data to only adolescent patients who presented to the ED in 2010 and provided a unique identifier based on encrypted social security numbers (approximately 78% of all behavioral health ED visits).[41] The unique identifier allows individual adolescents to be linked across multiple ED visits and across multiple EDs throughout the state. Links were made for both several years prior to the index visit (2006-2009) and subsequent years (2010-2015). Index visits were defined for adolescents as their first behavioral health related visit in 2010.

Exposure Measure

Our exposure variable was rurality of the adolescent's residential zip code at his or her index visit. Zip codes were classified as metropolitan (50,000+ population), micropolitan (10,000-49,000 population) or small town/rural (fewer than 10,000 population), as operationalized in the 2010 Rural-Urban Community Area (RUCA) codes by the United States Department of Agriculture.[42] RUCA categories are based on population density, urbanization and daily commuting patterns in each census tract. We used the measure that had been aggregated to the zip code level, as administrative health care datasets do not contain geographic information at the census tract level.[42]

Outcome Measures

Our outcome measure for aim one was the rate of adolescent behavioral health ED visits in metropolitan, micropolitan, and small town/rural zip codes. Visit rates were calculated for all zip codes in CA by determining the number of adolescent ED visits for behavioral health problems and dividing by the adolescent population in each zip code. Behavioral health ED visits were identified using Clinical Classification Software (CCS) codes for the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), which are used for diagnostic and procedure categorization purposes and are clinically meaningful categories.[43] Behavioral health codes included any of anxiety disorder, attention-deficit disorder, conduct disorder/disruptive behavior disorder, impulse control disorder, mood disorder, personality disorder, schizophrenia disorder/psychotic disorder, alcohol-related disorder, substance-related disorder, suicide/intentional self-inflicted injury, and history of mental health/substance abuse (CCS codes 651-652, 654-663) if present in the primary diagnostic position.

Our outcome measure for aim two was any repeat behavioral health-related visit from 2010 to 2015. This outcome was assessed for all adolescent patients aged 10-19 years who presented to a California ED during 2010 with a unique identifier and an index behavioral health visit. Repeat behavioral health-related visits were identified using the CCS codes as described above. Repeat visits for adolescents were defined as any behavioral health ED visit after the index visit.

Covariate Measures

The OSHPD data provides information about key adolescent characteristics that we considered potential covariates in the second aim. Covariates considered included age, sex, race (White, Black, Asian/Pacific Islander, Native American/Eskimo and Other), insurance status (private, self-pay, medical, or other/unknown), and disposition (discharged home, admitted as inpatient, left against medical advice, or other) at the index visit.

The ability to link data across many years also allowed us to assess adolescents' histories of prior ED visits in the years 2006-2009. These history

variables included adolescent histories of ED visits for anxiety disorder, mood disorder, psychotic disorder, alcohol-related disorders, and substance use disorders. A final history variable was created to capture adolescent history of any ED visit, to assess total utilization. This variable was highly right-skewed and was capped at 20 visits.

Statistical Analyses

For the first aim, analyses used linear regression to examine whether rates of adolescent behavioral health ED visits were higher in rural counties compared to urban counties.

To address our second aim, capitalizing on the longitudinal capabilities of the OSHPD data, we tracked adolescents' visits for behavioral health concerns across their visits to California EDs from their index visit through September 2015, to avoid any behavioral health misclassification issues related to the mandatory transition from ICD-9-CM to ICD-10-CM on October 1, 2015.[44] Incidence rate ratios were calculated to determine which group of adolescents (metropolitan, micropolitan and rural) were more often going back to the ED for behavioral health care after the index visit. An offset term was also included in this model and defined as (September 30, 2015 – the date of the patients' index visit date) to account for any differences in follow-up time. Covariate measures were included in the model. Because of the large sample and to remain conservative in our estimates, robust standard errors were specified in the model. All statistical analyses were conducted using Stata 14.0 (StataCorp LP).

Results

Table 1.1 displays characteristics of the 34,258 adolescents that received emergency department behavioral health care at a CA ED in 2010. Results are presented by patient rurality status at the time of their index visit. Approximately 2% of the study adolescents lived in a rural area, while 4% and 93% lived in micropolitan and metropolitan areas, respectively. Across all rurality levels, most adolescent patients were 15-19 years of age (78%). Rural and micropolitan adolescents were more often White (68% and 65%, respectively), whereas those adolescents in the metropolitan areas were equally likely to be of White (39%) or Hispanic (38%) race/ethnicity. Overall, most adolescents were insured privately (41%) or through Medi-Cal (42%); however, in rural areas, 51% of adolescent patients were insured under Medi-Cal while 30% were insured privately. In each geographic group, approximately half of patients were admitted as inpatients (40-51%).

Table 1.1: Characteristics assessed at behavioral health index visit and during 2006-2009, according to patient rurality status, among 34,258 adolescents receiving emergency department care for behavioral health in California during 2010.

	All patients (N=34,258)	Small town/ Rural (N=588)	Micropolitan (N=1,507)	Metropolitan (N=31,836)
Patient characteristics at index visit				
Age in years, mean (SD)	16.3 (2.26)	16.2 (2.25)	16.4 (2.23)	16.3 (2.27)
10-14 years, n (%)	7,422 (21.7%)	130 (22.1%)	303 (20.1%)	6,953 (21.8%)
15-19 years, n (%)	26,836 (78.3%)	458 (77.9%)	1,204 (67.8%)	24,883 (78.2%)
Female sex, n (%)	17,455 (51.0%)	294 (50.0%)	730 (48.4%)	16,293 (51.2%)
Race/ethnicity, n (%)				
White	13,946 (39.0%)	402 (68.4%)	985 (65.4%)	12,405 (39.0%)
Black	4,091 (11.9%)	20 (3.4%)	51 (3.4%)	3,971 (12.5%)
Hispanic	12,721 (37.1%)	121 (20.6%)	380 (25.2%)	12,198 (38.3%)
Asian/Pacific Islander	1,172 (3.4%)	7 (1.2%)	11 (0.73%)	1,145 (3.6%)
Other/Unknown	2,327 (6.8%)	38 (6.5%)	80 (5.3%)	2,117 (6.6%)
Insurance type, n (%)				
Private	14,170 (41.4%)	180 (30.6%)	528 (35.1%)	13,406 (42.1%)
Medicaid	14,497 (42.3%)	300 (51.0%)	748 (49.7%)	13,273 (41.7%)
Self-pay	4,032 (11.8%)	70 (11.9%)	169 (11.2%)	3,723 (11.7%)
Other	1,552 (4.5%)	38 (6.5%)	61 (4.0%)	1,428 (4.5%)
Disposition, n (%)				
Discharged home	9,661 (28.2%)	210 (35.7%)	462 (30.7%)	8,938 (28.1%)
Admitted as inpatient	17,363 (50.7%)	239 (40.7%)	617 (40.9%)	16, 335 (51.3%)
Other	7,200 (21.0%)	137 (23.3%)	425 (28.2%)	6,535 (20.9%)
Died during visit	34 (0.1%)	<0.4%[a]	<0.2%[a]	<0.1%[a]
Patient 2006-2009 history of:				
Any behavioral health ED visit, n (%)	4,674 (13.6%)	75 (12.8%)	242 (16.1%)	4,296 (13.5%)
Any anxiety ED visit, n (%)	1,308 (3.8%)	18 (3.1%)	83 (5.5%)	1,192 (3.8%)
Any mood ED visit, n (%)	1,709 (5.0%)	25 (4.3%)	83 (5.5%)	1,571 (4.9%)
Any schizo/psychotic ED visit, n (%)	611 (1.8%)	7 (1.2%)	24 (1.6%)	567 (1.8%)
Any alcohol ED visit, n (%)	767 (2.2%)	17 (2.9%)	55 (3.7%)	683 (2.2%)
Any substance ED visit, n (%)	537 (1.6%)	<0.9% [a]	32 (2.1%)	495 (1.6%)

Due to missing values for some patients, percentages do not always sum to 100.0%. [a]Exact counts and percentages suppressed to maintain patient privacy.

We then determined the rate of adolescent behavioral health ED visits for each rurality level. Overall, metropolitan areas exhibited the lowest rate (61 visits per 1,000 adolescents) followed by rural areas (71 visits per 1,000 adolescents) and micropolitan areas with the highest rate (82 visits per 1,000 adolescents). Next, we tested if this difference was statistically significant using a simple linear regression. Compared to adolescents' rate of behavioral health visits in metropolitan areas, micropolitan and rural rates were not significantly different. Results can be viewed in Table 1.2.

Table 1.2. Linear regression: Rates of visits among rurality levels

	B	SE	*t*	[95% CI]
Metropolitan	[ref]	[ref]	[ref]	[ref]
Micropolitan	-0.00	0.05	-0.06	[-0.11, 0.10]
Rural	-0.01	0.04	-0.28	[-0.10, 0.06]

We also examined adolescent history of ED visits regarding a behavioral health concern from 2006 to 2009. These results can also be seen in Table 1.1. Of all adolescent patients in this cohort, 13% of them had a history of any type of behavioral health visit before their index visit in 2010, with the majority of these visits being related to mood (3.8%) and anxiety (5%) disorders. This general pattern held true across rural, micropolitan and metropolitan areas. We then tested the effect of multiple adolescent characteristics on the likelihood of adolescents making repeat behavioral health visits to the ED after their index visit in 2010. The rurality of adolescents' zip codes had no significant effect on risk of repeat behavioral health visits to the ED – compared to metropolitan adolescents, their peers in micropolitan (IRR = 0.95; 95% CI: 0.90, 1.01) and rural (IRR = 0.93; 95% CI: 0.85, 1.03) areas were no more likely to make a subsequent visit to the ED during the follow-up period.

Age of the adolescents also showed a small effect on subsequent visits, indicating that older adolescents were less likely to have repeat visits (IRR = 0.99; 95% CI: 0.98, 0.99). Females were slightly less likely to have subsequent behavioral health ED visits as compared to males (IRR = 0.88; 95% CI: 0.86, 0.91). Hispanic adolescents (IRR = 0.88; 95% CI: 0.86, 0.91) and Asian/Pacific Islander adolescents (IRR = 0.84; 95% CI: 0.78, 0.91) were less likely than White adolescents to have subsequent visits to the ED for a behavioral health concern following their index visits in 2010. Adolescents covered by Medi-Cal were more likely than adolescents with private insurance to seek care after the 2010 index behavioral health ED visit (IRR = 1.13; 95% CI: 1.10, 1.16). Other types of insurance were not significantly associated with the rate of repeat behavioral health visits.

Lastly, we assessed the effect of a history of ED visits on the likelihood of having subsequent behavioral health ED visit after the index visit in 2010. When assessing the history of any ED visit, there was a slight increase in the effect on

adolescents to then have subsequent behavioral health ED visits (IRR = 1.04; 95% CI: 1.03, 1.04). Following the history of any ED visit, specific behavioral health visits were assessed. Adolescents with a history of ED visits for anxiety, mood disorder, psychiatric disorder, alcohol abuse or substance abuse all had increased likelihoods of having a subsequent behavioral health ED visits. Results from a model including all covariates can be seen in Table 1.3.

Table 1.3: Incident Rate Ratio (IRR) of subsequent behavioral health ED visits associated with characteristics of CA adolescents (n=34,258) with index behavioral health ED visit in 2010.

	IRR	[95% CI]	IRR_{adj}	$[95\% CI]_{adj}$
Rurality at Index				
Metropolitan	[ref]	[ref]	[ref]	[ref]
Micropolitan	0.93	[0.90, 1.01]	0.95	[0.90, 1.01]
Small Town/Rural	0.92	[0.83, 1.01]	0.93	[0.85, 1.03]
Age at Index			0.99	[0.98, 0.99]
Sex at Index				
Male			[ref]	[ref]
Female			0.88	[0.86, 0.91]
Race at Index				
White			[ref]	[ref]
Black			0.99	[0.95, 1.02]
Hispanic			0.88	[0.86, 0.91]
Asian/Pacific Islander			0.84	[0.78, 0.90]
Other			0.92	[0.86, 0.97]
Insurance at Index				
Private			[ref]	[ref]
Self-pay			0.99	[0.94, 1.03]
Medi-Cal			1.12	[1.10, 1.16]
Other/Unknown			1.02	[0.98, 1.08]
Disposition at Index				
Discharged Home			[ref]	[ref]
Admitted as inpatient			1.70	[1.64, 1.73]
Left AMA			1.30	[1.14, 1.49]
Other			1.12	[0.99, 1.26]
History of ED Visits				
Any ED Visit*			1.04	[1.03, 1.04]
Anxiety			1.15	[1.09, 1.21]
Mood Disorder			1.28	[1.24, 1.33]

Psychotic Disorder	1.34	[1.27, 1.40]
Alcohol Use	1.18	[1.10, 1.26]
Substance Use	1.25	[1.17, 1.34]

* History of ED visits capped at 20 to avoid skewed data

Discussion

It is commonly assumed that rural EDs are heavily impacted by patients seeking behavioral health care because rural areas lack the resources for behavioral health care as compared to their urban counterparts – especially follow-up care.[36,45] The results of this study, however, suggest that this is not the case, at least for adolescent patients. Rurality had no effect on adolescent care-seeking at an ED for a behavioral health-related concern after an initial (index) visit. These null results were observed in both unadjusted analyses as well as after adjustment for a wide range of individual-level covariates.

Other patient-level factors that I examined, however, did predict rate of repeat ED visits for behavioral health problems. Compared to White adolescents, Hispanic and Asian/Pacific Islander adolescents both experienced lower rates of subsequent behavioral health ED related visits in California ED's. The origins of these racial differences are unknown, but consistent with other research,[10,46,47] we suggest that this could be the result of poor access to health care for both rural and racial minority youth. While these racial differences are significant, we remain cautious in giving them too much weight as they are small effects.

Similarly, these results indicate that females are slightly less likely than males to have subsequent behavioral health related ED visits. This result was surprising because adolescent females are more often associated with having behavioral health concerns.[48–51] While this result is significant, it too should be interpreted cautiously as its magnitude was small and our sample size was large.

Results from the insurance status of adolescents are consistent with expectations. There is an increase in subsequent visits among adolescents who are insured by Medi-Cal for their visits compared to those adolescents with private health insurance. This is expected because there are fewer primary care physicians, especially in rural areas, that are willing to participate in Medi-Cal.[52] Therefore, because those covered by private health insurance are more likely to have a primary care physician they are more likely to seek care with their primary care provider than at the ED.[53–55]

Of particular interest was the effect of past behavioral health-related ED visits on subsequent behavioral health ED visits. Interestingly, the result indicated that having a history of ED use for *any* health concern slightly increased the effect of having subsequent ED visit for a behavioral health concern – this variable is indicative of overall propensity to use the ED when in need of any type of health care. It was expected that adolescents with a history of behavioral health concerns that sought care in the ED would be more likely to seek care in the future due to the inadequate behavioral health resources of EDs and lack of behavioral health resources outside of the ED for follow-up care.[30,31]

Also, adolescents having this history of ED visits might indicate that these adolescents likely have more severe behavioral health concerns which are not conditions that resolve quickly; therefore, these adolescents might be expected to return more often. Future research should consider these results and also consider the EDs resources for such visits. These results confirm that expectation and suggest that adolescents with a history of ED visits for anxiety, mood disorders, alcohol use, and substance use have a significant effect on subsequent visits.

Implications

Our results suggest that there are no differences in the rates of behavioral health ED visits by rurality, indicating that rural adolescents are no more likely than micropolitan or metropolitan adolescents to seek care at the ED for a behavioral health related concern. We acknowledge that these results might differ if outpatient care was considered; however, this was data that we did not have access to. When health care systems are deciding how best to equip their EDs it would be beneficial to provide all EDs with the necessary means to address behavioral health concerns, as it is apparent that they are being utilized by adolescents across the state.

These results also failed to show a significant difference among rurality levels for adolescent return visits to the ED for a behavioral health concern. Again, this is not implying that adolescents did not have return visits, but that there was no difference by geographic area. Policymakers should consider the findings, however, that those who were insured by Medi-Cal were more likely to have return visits to the ED. Implementing a clinic or program accepting Medi-Cal that would serve California youth with behavioral health concerns would be beneficial to the state and lessen high costs of ED visits. Of further interest was the increasing effect of an adolescent's history of ED visits on subsequent visits. Public Health departments statewide can address this issue by implementing a Whole Person Care[56] program for adolescents struggling with behavioral health concerns to ensure proper follow-up and outpatient care is obtained.

Limitations

These findings must be interpreted considering a few limitations. First, these data are self-reported from the hospitals to OSHPD which introduces the potential for entry error. OSHPD does make attempts to correct for this with routine checks for errors on all data. During this study period, ICD-9 codes were reclassified and ICD-10 was implemented; however, to avoid errors, this study did not use any data that was post implementation of ICD-10 (September 2015). Also of concern when working with ED data is the potential for inaccuracy of diagnoses made in an ED setting, along with incorrect data entry by ED staff.

Further, potential exposure misclassification could have occurred since adolescents might have relocated from a rural to a micropolitan or metropolitan area (or vice versa) during the study period. Any adolescents that may have moved out of the state during the study period would cause a loss to follow-up in

the data.[57] We believe that these limitations, however, did not introduce substantial bias to our results as 77% of the sample remained in the same geographical area throughout the study period.

A final limitation to consider is that these results only apply to California. While California is a large state with a diverse population and heterogeneous rural and urban areas, these results cannot be generalized to other states.

Conclusion

Adolescent behavioral health-related ED visits in rural areas of California account for 2% of all behavioral health ED visits in the state by adolescents. The rural status of adolescents does not affect their subsequent visits to the ED compared to their counterparts in micropolitan and metropolitan areas of California. These findings are surprising given that there are fewer behavioral health resources in rural areas of California. Public health strategies to increase services to adolescents in all areas of California, such as increases in telemedicine access, might lessen the total number of visits to the ED for a behavioral health concerns. Movements to reduce behavioral health related stigma, especially in rural areas, should consider broadening their efforts with an increase in public education. Additional research investigating specific behavioral health ED visits would be beneficial to further understand how EDs can better equip their departments to address pediatric behavioral health concerns.

Behavioral Health Court in a rural county: Processes and perspectives

Chapter Two

Behavioral Health Courts Nationwide

Behavioral Health (BH) Court is part of the 'problem-solving court' movement,[58] which aims to aid a specified problem such as drug use, mental health illness, and domestic violence with specialized treatment that incentivizes adherence to treatment plans and applies legal sanctions to nonadherence. This movement was instigated to address the growing number of criminal offenders with behavioral health concerns.[59] BH Courts in the U.S. saw their first clients in 1980 in an Indianapolis courtroom. Since then, over 350 adult BH Court programs have been launched throughout the US,[59,60] and BH Court is one of the fastest growing justice system programs today.[61]

Alternative courts, such as BH Courts, are often developed by judges who have been frustrated with the justice system and its treatment of offenders with mental disorders. These judges have some leverage to create new programs. For example, drug courts, which were established decades before BH Courts, were created when judges were not satisfied with the results of the criminal justice system on offenders who had addiction issues that needed to be handled outside of incarceration.[58,59] BH Courts, in the same way, were established for mentally-ill offenders who are not receiving the care and guidance needed to recover from, or stabilize, their mental health ailments while incarcerated.[59,62–65]

Models of BH courts across the nation vary based on local laws, population of the county, and other attributes, but they do have common features. For instance, all BH Courts are heard on a docket separate from public court hearings, are heard by a judge designated to the program, have legal counsel present, and use a team of mental/behavioral health specialists and other criminal justice professionals.[62,64] The size of BH Court varies county to county. Generally, counties with larger populations and greater resources (including more court staff) can accommodate greater enrollment numbers than smaller counties.[62,64,66,67] Nationwide, 75% of BH Courts that exist are in a non-rural jurisdiction.[22] The effectiveness of BH Courts, and other similar programs, is measured in terms of recidivism – if offenders do not re-offend within a particular time frame, then their treatment is deemed effective.[62,64,68]

Illicit drug use rates, particularly opioids and methamphetamines, have increased dramatically in the recent years, especially in the U.S., which now has the highest rate of use in the world.[69] California, in particular, has seen an increase in the use of methamphetamine. This increase is especially apparent in non-urban California populations of non-Hispanic White race.[70] Increased drug use in rural areas increases the need for behavioral health services, as drug use/dependence often co-occurs with mental and behavioral health issues.[71] With the increased recognition of this pressing public health issue by rural criminal justice systems, more rural areas are establishing BH Courts in hopes of

assisting clients with behavioral health issues coupled with other concerns, such as substance dependence and other unlawful engagements.

Processes of BH Courts

Once an offender becomes a client of the BH Court program, he or she is closely monitored by not only his/her probation officer, but the entire team involved in BH Court. The staff involved in BH Court do have increased communication with their clients that are enrolled in BH Court compared to their other clients, simply by virtue of the intensive programming. Besides the close monitoring, clients have access to services that may not have been otherwise offered to them. For example, most BH Courts require intensive counseling services, including one-on-one therapy, group therapy, Alcoholics Anonymous/Narcotics Anonymous, and/or any other specialized counseling services.[58,63] Besides these counseling sessions throughout the week, clients are required to be in court not only for their regularly scheduled criminal court hearings, but also for the weekly BH Court session. These sessions are closed court, meaning that the general public and other offenders are not allowed to be in the court room while a case is being heard – the client waives their right to a public hearing as part of the intake process. Only the BH Court team and the client are present in the courtroom for BH Court sessions, ensuring confidentiality of the client and his or her behavioral health condition(s).

While this approach is similar to a harm reduction approach, this is not the stated goal of BH Courts. The harm reduction approach is a public health strategy that aims to reduce harms associated with certain behaviors (like substance use) with the understanding that abstinence from the negative behavior is not feasible.[72] In BH Courts offenders are expected to abstain from the negative behavior while provided with resources to support them in this process. Resources, in this instance, are the intensive counseling programs and other substance use-related programming offered to clients. Failure to refrain from substance use while in a BH Court program results in various sanctions, such as filed violations of probation, retractions of incentives, and incarceration.

BH Courts: What is missing?

Very little is known about the day-to-day operation and organizational arrangements of BH Court or its participants' perceptions of the court's usefulness – especially rural settings. This is important to facilitate comparisons between the written goals of the program and the perceptions of the program by those involved. With over 350 BH Courts in operation and 25% of them being in rural areas,[22] there is a need for research that provides detailed insight into the daily operations and interactions of rural BH courts in practice. In this study we examined the practices of a new BH Court as it first began operating in a small, rural county in the Sierra Nevada foothills of California. This allowed us to better understand the process of a BH Court in a rural county, as well as understand

the goals and objectives of the program from the perspective of the staff members and the clients of the program. The overall objective of this study is to compare the Court's written processes and goals of a BH Court program to the understanding of these processes and goals from the perspective of clients and staff in a newly implemented rural county BH Court program.

This objective was completed by gathering information from the participants of the program (both clients and staff) as well as directly observing the program's unfolding through attendance at court proceedings. The written processes and goals were obtained from the Court's manual of this BH Court program, which signifies how the Court expects he BH Court program to proceed. Documentation of a program from its inception is both necessary and beneficial to a later assessment or progress review. This qualitative research study serves as a baseline to future reports for rural BH Courts. These findings may help guide and shape the BH Court program in a rural area as they are from a rural BH Court in its beginning stages of implementation. Moreover, by identifying any strengths and weaknesses now, in the earlier stages, will save time and money to improve this program for future participants and future rural BH Court programs, if necessary.

Methods

This research follows a grounded theory approach, which allows data and analyses to happen simultaneously, actively constructing theories to explain behaviors and processes.[73,74] With the use of grounded theory methodology, data were collected by way of interviews and fieldnotes recording nonverbal language, settings, and developments or changes of the program as they occurred. These data were dealt with iteratively; that is, when an interview was completed, the data from that particular interview were analyzed as an individual component, with that analysis informing the next interview. Going back and forth through this iterative process allows emerging themes to be utilized and explored further in future data collection.

Using the grounded theory approach allows for richer interviews and better-informed fieldnotes and avoids collecting repetitive data by asking the same questions in each interview. When building each interview upon the last interviews, the researcher is able to ask questions that were brought to light in previous interviews that otherwise would not have been discussed. Further, when specific topics are brought up in conversation of the interview, it might better prepare the interviewer to look for these characteristics or actions while writing fieldnotes. Adjusting each interview allows for a more extensive perspective of the research question and a more comprehensive understanding of BH Court.

Study Design

Interviews to discuss the progress of the program with each participant individually, both staff and clients, were scheduled at a mutually convenient time. Each participant provided informed consent prior to his or her interview. The same interview guide was utilized for each participant; however, interviews varied

based on the iterative approach in that not all questions were specifically asked of each participant. Specific questions and conversations varied on an individual basis. Interviews, on average, lasted at least 30 minutes but no longer than one hour.

After interviews, extensive and detailed fieldnotes were written to encompass all that happened in the interview that was not captured on the recordings. This included body language, nonverbal cues, and anything that might have been discussed when the recorder was not yet activated, or after it was turned off, including the walk from meeting to the room or place that the interview occurred. Further, fieldnotes were taken during and after each BH Court session that was attended by the researcher – a total of 43 sessions were attended. These fieldnotes encompassed what the court session looked like, who was there, what the room looked like, emotions in the room, and processes of each hearing. There were also anecdotal supplementary fieldnotes to record additional information gathered via causal conversations in the course of field work. These conversations would occur most often in the street between the courthouse and the probation office as the clients and staff would walk in this direction after a court proceeding. Fieldnotes were also recorded after any conversations with other probation officers that included discussion of a BH Court client, staff, or proceeding.

All fieldnotes and interviews were transcribed and uploaded to ATLAS.ti where they were coded for further analysis. In accordance with the grounded theory approach, the analysis builds upon each interview and each fieldnote, with alterations to study design and interview guides after each interview or when necessary.

Sample

To be included in this study, individuals must have been actively enrolled in BH Court in Mariposa County or be a staff member of the BH Court program. Clients of the program were assessed by mental health clinicians prior to enrollment to ascertain if they would benefit from BH Court. Only those that are deemed appropriate for the program could participate. The staff involved in the program were also interviewed (described in detail below). There are no minors in BH Court.

The number of participants in BH Court fluctuated. Some clients may be reprimanded and pulled out of BH Court while incarcerated or in a residential treatment program, causing the number of potential client participants to lower. Also, new clients are considered for BH Court weekly in traditional court sessions. These individuals must be evaluated by a behavioral health team and, if deemed appropriate, will then be enrolled in BH Court. On average, there are no more than 10 clients enrolled in BH Court at any one time due to the small size of the county and the court itself. There were a total of five clients interviewed.

The staff participants remain more constant than the clients; however, there is some movement in positions which caused this potential pool to

fluctuate, as well. The constant staff includes six individuals: The Judge, Deputy District Attorney (DDA), Probation Officer, Behavioral Health team (two individuals), and Case Manager. At times, there are others involved such as the client's attorney, staff from the Probation Department, and staff from the Behavioral Health Department. I did not observe a consistent pattern as to when these other staff were included in the court session, or with the client outside of court. There was a total of five staff members interviewed.

Data collection and analysis

After the interviews were completed, I replayed the recording and transcribed the interview using Microsoft Word. I read the transcriptions through multiple times while listening to the recording to ensure accuracy and clarity. Any changes that needed to be made to the interview transcript were made at this point in the process: any structural changes in the transcription or alterations to the original transcription due to errors. All participants were anonymized by using pseudonyms. All interviews were saved as Word documents.

After transcription, all interview transcripts were uploaded into ATLAS.ti and coded for content. I utilized a line-by-line coding approach, meaning that each line in the interview or fieldnote was analyzed separately and coded appropriately. These codes developed over time and I kept a working codebook for organizational and reference purposes. The codes that I have utilized thus far are listed in Table 2.1. Of these 38 codes, there are some that I used more often than others which are the codes that are often compared across interviews. I further analyzed code groups to determine any that could be combined or needed to be expanded to multiple codes to better understand the BH Court system in this rural community in the most logical way possible.

Table 2.1: Codes developed

Code	Code
A developing program	Barrier to services
Comparison	Conflicting ideas
Consequence	Dependability
Despair	Developing reason for BH Court
Ease of access	Establishing Rapport
Experience	Extra support
Flaws in system	Grateful
Helpful	High-Risk Situation
Hopeful	Identifying obstacles
Intensive monitoring	Justice
Justification for Behavior	Meeting needs
Process	Providing a solution
Realization	Relationship
Right Direction	Self-workload
Snarky	Staffing Problems
Stigma	Success

Teamwork Transportation Trust	Tough Transitions Trauma

BH Court in a rural county

Mariposa Behavioral Health Court, one of the Mariposa County Collaborative Court Programs, is part of the 'problem-solving court' movement. As stated in the program guidelines, the Mariposa BH Court is an intensive program designed to evaluate, monitor and provide coordinated and comprehensive mental health services, integrated treatment for mental health and substance use disorders, and ancillary services for adults who have broken the law but also struggle with a mental health disorder. In addition, its stated goals are to improve outcomes for individuals and the community, including increased public safety, a reduction in recidivism, a reduction in drug and alcohol abuse, and a reduction in the burden on law enforcement and other resources.[75]

BH Court in Mariposa County, which made its debut in February 2017, is the newest of the Mariposa County Collaborative Court Programs. Mariposa Behavioral Health Court, according to the BH Court guidelines, is viewed as a "promising approach to bringing stability, sobriety, and safety to offenders with mental illnesses while attempting to ensure the security and well-being of the entire community."[75] BH Court is run by the Mariposa Superior Court along with the Mariposa Probation Department and collaborates with the District Attorney and Behavioral Health Department. The program includes weekly court dates for the client to attend along with a behavioral health team (consisting of a Mental Health Clinician and Drug and Alcohol Counselor), Probation Officer, District Attorney (DA), Judge, and Defense Counsel, if necessary. These meetings are weekly check-ins in a formal setting to ensure the client is attending and completing tasks that were part of their sentencing, such as Alcoholics Anonymous or Narcotics Anonymous meetings, probation check-ins, drug testing, meetings with clinicians/therapists, etc. If these tasks and/or appointments are not complete as ordered, the client is aware that sanctions will be imposed and jail time is an option.

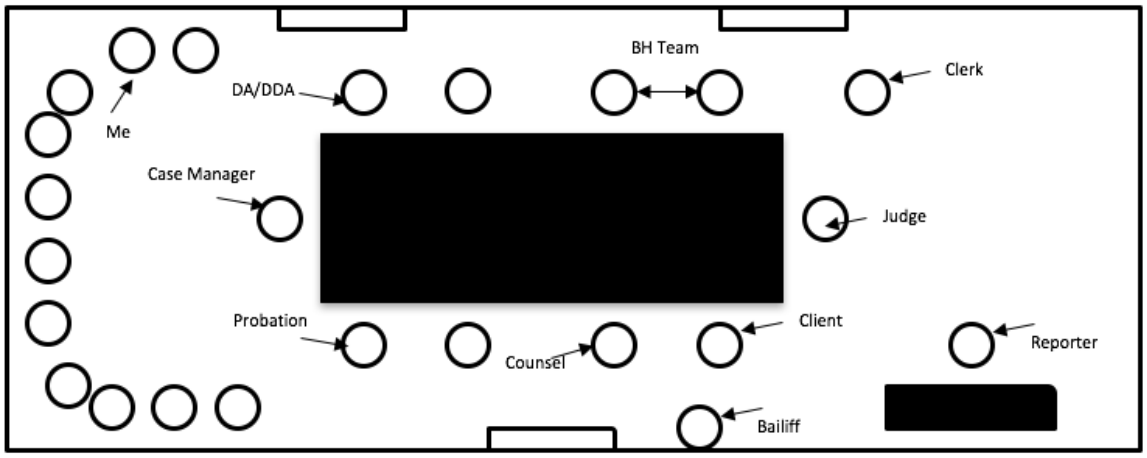
Individuals who have committed a crime, been arrested, and have either been charged with a crime or are pending sentencing can be referred to participate in BH Court. If the Judge, DA, or the client's attorney believes the client would benefit from behavioral health services and that their criminal case would be better addressed if their behavioral health was a priority, then the client is referred to be evaluated for participation in BH Court. The mental health assessment is completed by the Mental Health Clinician who then decides if the client is amenable to BH Court. If so, the client is to appear in BH Court the next week to begin the program. Ultimately it is up to the Behavioral Health team to decide if a client would benefit from the structure that BH Court provides.

Success of this program, as defined by the program guidelines, decreases incarcerations for those with behavioral health issues.

The Court Room

BH Court takes place in the Law Library of the Mariposa County Courthouse, making BH Court sessions less formal and more private compared to criminal proceedings held in the traditional open court room. This courthouse was erected in 1854, and is a very old, creaking building. The room is a large rectangular shape filled with law books on every wall. There are two windows on one side with wooden shutters on them. There is a large rectangular table in the middle of the room with 10 chairs – four on each side and one at each head. There are more chairs that wrap the wall on the short end of the room but are not at the table – this is where the researcher sits for BH Court sessions and any others that might show up to a session who are not part of the core BH team. Another chair sits at the door of the room and this is where the bailiff sits when court is in session. At the other end of the room there is a small rectangular desk that the court reporter uses to set her equipment on and works at this desk while court is in session. At the corner of the main table to the right of the head (where the Judge sits) is another chair where the court clerk sits and takes the minutes. See Figure 2.1 for a visual layout of the room.

Figure 2.1: Layout of Law Library, Mariposa County Courthouse



Relationships: developing rapport to build teamwork

Creating relationships

Clients involved in the court system or with law enforcement may not regularly be viewed as building a relationship with the authorities involved in the process, however, BH Court works to change that and to encourage clients to confide in the team members, build professional relations with each member, and

to communicate that they are welcome to talk to them at any time. In all court sessions the Judge encourages clients to confide in the team to enhance the involvement of the BH Court team in the life of the client to best serve them and their needs.

Not all clients are open to talking about personal matters with all of the team members, but all clients reported that they understood that this program was implemented specifically to better serve those in the criminal justice system with mental health needs. Most of the participant clients are also aware that the services they receive through this program offer them a unique opportunity to become productive citizens of the community once again, a stated goal of many clients and a stated goal of the program, regardless of their past. One participant, for example, noted that she has someone to talk to now and that she is not alone in her recovery: she has the BH Court team alongside her.

> *"It gets me a little bit more humble and not in a position where I'm just feel like I'm alone in this." – Client 2, interview*

She goes on to discuss how she can contribute to society since she has been in the program and is no long a burden, as she has felt in the past.

> *"I'm not used to being in society like this, being able to help others now. So this is helping me slowly learn how to live in a society of normal people. Because when I was drunk all the time, I wasn't learning to live…I get help out here, learning to live out here." – Client 2, interview*

Another participant offered her gratitude toward the team and how much they have assisted her in staying out of jail, and most importantly, staying sober. This client also discussed how she felt every person in the BH court room was there for her and only wanted her to be successful – she had built relationships with each person that aided in her sobriety.

> *"This was the best -- I have the most support, the most counselors, you know, everybody seems to pay more attention, that it's more of a, I have been through a lot of trauma, the reason why I drink and being in jail isn't help, doesn't help. I just feel -- I'm so glad I'm in. I really like it." --Client 1, interview*

On the contrary, a third participant expressed feeling alone and not having anybody to talk to about her personal problems. In this case, the client relapsed and started to use methamphetamines again.

> *"I relapsed…I was stressed and I don't have anyone to talk to. There is no one there for me and I was freaking out" - Client 3 in a court session [from fieldnotes]*

While she expressed that she does not have anyone to talk to, she also stated that she came to this court room with trust that what she would have to say would remain confidential and immediately started to describe what she was feeling and why she thought she had relapsed. It appeared that she had trust in her team while in the court room and wanted to get help for her anxiety which she said drives her to abuse drugs, but she still feels that she is alone. In an earlier one on one interview she expressed the opposite opinion about the BH Court team. When asked if she believed BH Court was useful for her and her recovery, she stated,

> *"Absolutely. Uhm, because it offers more one-on-one guidance. I feel that say -- more than drug court or some other, even meetings or programs that I've been too. And it's kind of nice out in the [waiting] room because we [clients] support each other and we talk to each other. And I've even got a couple phone numbers, you know, from people, and, you know, realizing hey, you know, anybody's -- it's ok to be here, I don't have to be so embarrassed.*
>
> *And they're [the BH Court team] just kind of like, that's why they're kind of like family to me because they're kind of coming full circle for me."*
> *Client 3, interview*

Later in the interview, I asked about the tools she has learned from being in the program on how to cope with her behavioral health problems. She responded that she has learned something from the program (journaling) but, more importantly, she also pointed out that she has access to the team at any time she feels she is in crisis or needs somebody to talk to – this is a tool that she otherwise reported not having before entering this program which she believes ultimately led to her relapse.

> *"I've learned more how to journal. Since I'm doing, you know, the medication yellow brick road, I've learned how to -- cause I have paranoid thinking anyway which sometimes is beneficial, cause it's like, well, I better do this so this doesn't happen. But it helps me to journal, keep track of my emotions and my behaviors and coping skills. If I'm having an anxiety attack, with Behavioral Health Court, I can call a Behavioral Health Crisis Line. And I'll dial it on my cell phone, if I have too much anxiety or when I'm walking around because I don't have a car right now,* ***they talk to me, they're right there, they get me through.*** *That's a really important coping skill for me right now. Not really having any cravings for drugs and alcohol, so far. It's really been awesome."*
> *Client 3, interview*

After the relapse, I wanted to interview this client again and talk to her about what she had gone through, but she had since left the area and was unreachable. The participant clients' relationships with the BH Court team are not uniform or linear.

One challenge the program faces is how to measure success in a way that recognizes non-linear relationships and trajectories.

Staff members of the BH Court team expressed similar perspectives about what it meant to be a team in this setting. Collaborating with other staff members to encourage success among the clients can be difficult, especially because every client has different needs and requirements. BH Court gives the staff members a different perspective of the criminal justice system whereby the client is opening up to them with sensitive information, and in some cases, where they might usually be sanctioned in some way, the team is there to listen and help them through the problem the client might be facing. Keeping an open and honest relationship between staff members and clients encourages clients to confide in the staff members. One of the probation officers involved in BH Court discussed her experiences of teamwork in an interview:

> *"… it gives [the clients] the opportunity to share with us what's going on rather than, you know, the once a month appointment with Probation, the disconnect between Probation and therapist where therapist is doing one thing and probation officer is doing another thing, we may be duplicating services -- having that team, much more collaborative approach we can all be working toward the same goals – getting them healthy and functional on their own as well as all other court ordered requirements." Staff member 1, interview*

The case manager works most closely and spends the most one-on-one time with BH court clients. This person is responsible for giving the client rides, taking them to appointments, or anything else they might need. Unfortunately, this is the position that also has had the most turnover since the beginning of the program. Since its inception in 2017, there have been four different case managers, each lasting an average of six months in the position. A new case manager joined the team in the course of my research. He was the second of four case managers that the BH Court program has seen – and he was involved the longest. The strong relationship he built with clients came across in our interview, as well as in interviews I conducted with his clients. This case manager was interviewed twice: once when he first started with the program and again about six months later. In the first interview, he was nervous to talk to me but still willing. He discussed what his responsibilities were as he saw them, noting that he never received formal training for his position. During this initial interview he acknowledged that he already had a rapport built with some clients and that the clients seemed to trust him more than the other team members.

> *"But I think they confide a little bit more in us because we can't really say too much about, as long as they're not wanting to hurt themselves or others. Then I try not to say too much to probation and stuff because I want to still have that confidence, that trust. So, unless they're doing*

> *something totally out of line, yeah, I have to say something, so." Staff member 2, interview 1*

The relationships he built with clients included practical support, providing transportation, sitting in on doctor appointments, and other day-to-day activities. Client participant also reported the value of this relationship. Some expressed this in court sessions.

> *"[Joe] takes me anywhere I need to go, so, that is good. I think I have an appointment with [Mary] today actually, and, well, can you take me?" Client 4, in a court session (from fieldnotes)*

The importance of this position was acknowledged by other staff members when introducing the team members to a new client.

> *"This is [Joe], he will be your greatest resource. He takes care of the clients here in BH Court. Call him if you need a ride, or anything, really." Staff member 5, in a court session (from fieldnotes)*

There are many relationships being constructed throughout the program with each client and among the staff members. The staff members reported that they are collaborating in a way that they have never done in the past with staff members from other departments. The clients are utilizing services through behavioral health that they otherwise might not have because either they were unaware they existed, or they would choose to ignore any behavioral health issue that they had, as some of the participant clients reported their unwillingness to seek help in the past. While some clients are choosing not to use the tools they are being offered, they still acknowledge that they are learning new ways to handle their mental illness. It is also clear that some clients are only participating because it is court-ordered and they wish to avoid sanctions such as jail time. For instance, during a court session I observed, the clinician pointed out to the Judge that there is a particular client that is completing the minimum requirements of the program that will keep him out of jail.

> *Clinician: "He is coming to sessions with me and as far as I know he makes it to his appointment with [Probation Officer] but that is all I see from him – he, uhm, hasn't been as engaged as he was in the beginning. He is just –*
> *Judge: "Just doing enough to get through this?'*
> *Clinician: "Yeah, bare minimum to avoid jail and keep his job."*
> *Judge: "Ok, that is what I, uhm, presumed, [laughing] but I will address that with him today."*

While meeting the minimum requirement to avoid jail time is not the intention of the program, staff members report that by first making appointments

and other programming mandatory for the clients they hope clients will make attending these a habit. Staff report that their intentions are for the clients to begin to understand the positive effect of appointments and other programming so that the clients will want to be at these appointments. This is what the Judge emphasizes to clients, as well.

Constructing a team to encourage success

The BH Court team commits a great amount of time to this emerging program. Working with others, especially those in different fields of work, can pose difficulties. BH Court staff members make it clear to each other that while they may disagree at times, clients' health and safety are a priority. For instance, when discussing where a client should go for inpatient care, the Probation Officer and Clinician did not agree on a program in the beginning, but ultimately came to a common understanding acknowledging that they must turn their focus on the needs of the client.

> *Probation Officer (PO): "I really don't think that [Jane] will benefit from anything at that program…it's just…the whole program is faith based and she has made it clear that she does not want to be in any program that is centered around religion. I know she won't do well there – she will find a way to use [drugs] or something just to get out."*
> *Clinician: "I know she doesn't prefer a faith-based program, but this is our only option right now. I don't think I can get approval from anyone in my department to pay for another program when this is available."*
> *PO: "I won't agree to send her there – I know she won't do well. I will see what my supervisors will agree to and maybe we can consider other options."*
> *Clinician: "Ok, if you can find the funding for something else, I would be ok to find another program that Jane will agree to go to."*

These team members would disagree many times, but together would compromise on a plan of action for the client. While making these decisions on how to move forward, each staff member also recognizes their teammates' roles from the perspective of the clients. For instance, the Probation Officer understands that the client-clinician relationship is a relationship that is very important to maintain for the clients' mental health to continue to progress in a positive direction. This understanding is shared and appreciated by the clinicians as well.

> *"So they're [the probation officers] really the kind of enforcers, the heavy handers as far as following through on their drug testing, whether or not they're showing up for court, following up on warrants. But they do a lot more than that, too. I think they've done a really good job of being a therapeutic probation officer in Behavioral Health Court. But I think when it comes down to it and something needs to be enforced legally,*

> *we try to have them do it because otherwise the clinical rapport is just eroded if I do it." Staff member 3, interview*

The clients who were interviewed also reported their observations of these evolving relationships in their discussions with me. Each client that was interviewed praised the members of the team and how helpful each one of them was to their recovery.

> *"Just able to talk with [Susan] about things that are going on at home that I can't talk to [my boyfriend] about." Client 2, interview*

> *"[BH Court is] just different than Drug Court, it's just more personal, seems like they all care more. And so it's more one-on-one, you know, what I mean?" Client 3, interview*

The clients describe how the team works together for the clients' benefit. In the excerpt below, the client describes how this team works with her and who they are, as well as how she believes this team has seen her in the past compared to how they see her now. She feels that she is being seen in a different, more positive, capacity because of this program. This portrays how the team has worked together, including herself, to better her life and to help her toward her sobriety and stabilizing her mental health.

> *"Yeah, I like [the court sessions] because probation's there, the DA is there. Like, people are there that like we're always -- I mean, I think, I got a lot of breaks being who I was. People felt more like, [she's] just sick, you know, she's not a convict, she's just very sick. I like how they're all there, because I'm really upfront and honest when I come and they ask what's going on in my life. I tell them you know, like if I'm having problems at home with [my boyfriend] or whatever is going on and, you know, if I feel like drinking or whatever, so I like that they're all there so they all know me as me, sober, sober me. Sober [Me]." Client 1, interview*

While this is only one example, other clients expressed changes in the way they were treated by the team as compared to how they were treated by the judicial system prior to being enrolled in BH Court. For example, one male client sat at the table in his first session with the team looking down, arms crossed, stating 'whatever' when he was asked a question or asked if he understood. He also expressed his distaste for the court and distaste for law enforcement, stating that *"everyone was out to get him."* After three weeks of appearing with the BH Court team in BH Court, his demeanor changed and he began smiling and making eye contact with the clinicians and other team members. He was no longer ignoring questions and began actively engaging in conversation. He was more willing to discuss how his recovery was doing, the successes he achieved

each week and even the hard times he might have had during the week, too. For example, he struggled with a relationship with his mother and he reported that this was the most difficult thing for him to discuss, but after six weeks in the program, this relationship was one he talked about openly – even something he would bring up on his own. By the time he reached the final phase of the program he asked to address the court and the team. He stood up at the end of the table and said, *"I really appreciate each thing you all did for me…I wouldn't be in my job or back on my own without the help you gave to me. Thank you."*

Watching closely: Monitoring and Meeting Needs

Literal monitoring

It is the probation officer's job to supervise and monitor the whereabouts of clients who have broken the law and are sentenced to probation. In the case of BH Court, it is the job of the whole team to monitor every aspect of the clients' lives, including medications, jobs, appointments and any other tasks. From the perspective of the BH Court, this intensive monitoring aids in getting behavioral health services more immediately, prevents them from running out of medications, and fosters accountability. One staff member elucidated the intensive monitoring of the clients and her role in this monitoring:

> *"It gives them, uhm, additional support that they wouldn't, uhm, necessarily have on receiving just traditional behavioral health service and probation services. It's beneficial for them because they're on an intensive, uhm, service track where I meet with them at least -- I see them at least weekly and there is a case manager -- if they can financial somewhat on their own but just need some assistance, there's a case manager to keep their calendar in order so that they, uhm, make their therapy appointments, they make their medication evaluation, they make their probation appointments, uhm, they keep track of the calendar to make sure they don't miss anything -- uhm, we help facilitate getting them in to see psychiatrist because that sometimes can be a long and cumbersome process." Staff member 1, interview*

In the first few days as part of the team, the case manager had already taken a few clients to appointments, grocery shopping, and to court hearings. His interview took place in his second week on the job. When he was asked about a typical day with a client he said,

> *"You have to keep them focused. You have to remind them they're within a budget. Some of them you have to remind them they need to eat healthy because they're diabetic or have some kind of medical condition. So, I guess they haven't been trained and so you have to*

> *train them, things we take for granted, like living within a budget or eating healthy. So it's kind of like teaching a little kid again. Stuff that we take advantage, don't think of in everyday life, they don't have the skills, I guess, to know about, so." Staff member 2, interview 1*

He notes that even a task as simple as grocery shopping with some of the clients has to be so closely monitored because of the choices they try to make. Later in the interview he states that ultimately, the choices while grocery shopping are not up to him, but that he felt he needed to be the voice of reason, or the 'adult,' and urge them to make better choices for their health. This is just an example of how meticulous the monitoring of these clients can be, as well as the power differential that is in this relationship – the case manager views his role as teaching the clients.

Some clients are monitored so closely throughout the program that they are ordered to wear either an electronic location monitoring device, or an alcohol monitoring device that detects if they have ingested any amount of alcohol. This device sends a signal to the Probation Officer if alcohol is detected. For some clients, this device was a tool that kept them sober.

> *"Well, the judge put the ankle thing on me so I don't drink. It's been four months. That's the longest I've ever gone in my entire drinking career without being in jail. Not drinking out in the street." Client 1, interview*

Just knowing that something was keeping her accountable deterred this client from drinking. She went on to talk about how much she truly depended on this monitor. She was anxious about the day that it would come off because she perceived it to be the only thing keeping her from drinking – she even considered asking the probation officer if she could keep it on longer than she was sentenced to have it because she did not trust herself without it. This was something that she also expressed to the team during BH Court proceedings. The clinicians expressed their admiration of her to recognize this flaw in herself and to know what she needed at the time.

> *"So I have to trust in myself and be honest with myself. You know, like this monitor, I could of already had it off, I'd like to have it on for two more months, I think six months would be good and I told [my probation officer], I said, [officer], you know, I don't know what it's going to be like once I get off this monitor, she said well, if you drink on it, we can put it right back on. You just call me and tell me you can't do it and we'll put it right back on. And that makes me feel safe. That I know I'm not going to get into that alcoholic thing that I used to get on because, I don't want to go back to jail at all. I'm sick of it. Sick of it. I've been in there 57 times for 'drunk in publics'." Client 1, interview*

From the prospective of the Court, the close monitoring of the clients enrolled in BH Court seems to be the only way that client problems can be addressed in a timely manner. If a staff member can recognize a problem that a client is facing and is able to address it immediately, they feel that they are able to prevent a relapse, or injury. Staff members reported in BH Court proceedings that when the clients reach out to them outside of BH Court, either by phone or in therapy sessions, they are impressed and welcome the contact, as this was not 'normal' for these clients before they were in enrolled in BH Court. Staff members encourage the clients to reach out at any time and make the clients aware that they, as staff members, are always a phone call away especially in a time of crisis in an attempt to avoid the client from relapsing. Having this close monitoring builds a relationship between the client and the staff members that most report is a positive factor in their recovery. One staff member, in the excerpt below, explains that it is best to monitor the clients in this way to avoid later crisis in court and/or in jail.

> *"I think this program benefits them because, like I said, they get a more intensive amount of services it helps hold everything together when they're seen more often, problems or issues can be identified right at the beginning rather than seeing them when they've been arrested, and everything is falling apart in court." Staff member 1, interview*

Facing obstacles

There were many obstacles to consider that became apparent while conducting this research. The program was in its first few months of operation when the study began, so there were logistical problems like staff member turnover, the layout of the program still being determined, and other program-level issues one might expect with any new endeavor. The obstacles that I discuss herein, however, are those that were brought forward by the staff and clients in terms of what they perceived as missing or challenging while being involved in this program. For example, one client faced the obstacle (as many also described) of learning how to function in society as a healthy human being. Her 'new normal' was a huge obstacle that she was still learning how to conquer.

> *"Oh, yeah, my, well, my relationship with myself has changed. I take care of myself whereas before, I mean, I don't know if you knew me when I was really out there; did you? You did. See, I don't remember you at all. So you know how bad I was. I take care of myself. I sleep, because when you drink you just pass out and you wake up in the middle of the night and you need another drink. I sleep like a normal person. I stopped -- because I'm bulimic, I have bulimia. I seemed to have stopped throwing up. I don't know why which is awesome. I got a car. I got a license. I mean, isn't that enough? For me it is…I'm still not happy. I'm still very uncomfortable at all the -- because I'm used to being intoxicated, so this -- my normal state of being is being drunk. And*

> *so being sober is very weird to me. Because it's very touchy, feely, you know. And now that I look out from the outside and how people viewed me then and now how they view me now, I changed so much. I didn't realize how bad I really was." Client 1, interview*

This client had an extensive history with law enforcement in this rural county. She is aware that she is known, and her behavior has defined her in the past – it's a small town. Being sober and getting well psychically and mentally is a challenge for her. This was also a challenge that she failed, as she dropped out of the program. At the time of this writing she is living on the streets of this rural community once again.

Staff members recognize obstacles that clients face on a daily basis. As part of the BH Court team, they work together to assist clients through these tough times and better their mental health. A large focus of the program is finding alternative ways to help clients break the cycle of committing new crimes resulting from relapse. As noted below, staff recognizes that not every client will succeed in the program, but at least as a team they can help the client as best they can – acknowledging, too, that jail time does not fix these clients.

> *"So I don't know if they'll ever get all the way through it. But hopefully we can get them through probation. And we've also found ones that violate probation that are in Behavioral Health, but we treat differently, because it's sort of okay, you know, you stopped seeing your PO or you did this because we know you stopped -- going to counseling and stopped taking your meds and we know from all the counselors and everything else what else is going on in your life which is different than what the typical violation would be. So jail time is not going to fix some of that." Staff member 4, interview*

> *"Unfortunately, jail is not therapeutic. It's not treatment. So pretty much the only thing I can do is visit and look at what next -- if a placement is appropriate or just touch base with them." Staff member 3, interview*

The obstacle of geography also plays a role and is often a topic of conversation in the court room when transportation or missed appointments hinder clients from accessing assigned services. Living in a rural area poses a problem for clients who do not drive (the majority). There were some clients enrolled in BH Court during this study who lived in the northern part of the county, which meant a 60-mile round trip to make it to court, counselling and other medical appointments. For someone without adequate transportation, this is a huge obstacle to receiving services, even if they were court-ordered.

Finding a provider who has time to see BH Court clients is another obstacle. With only one psychiatrist to serve the entire population of Mariposa County, it is nearly impossible to expect that one doctor to serve the clients of BH Court on a regular basis. The mental health clinicians on the BH team serve as a buffer to

this problem, but they are only expected by the program to provide therapy (individually and in groups), and refer clients to other programs. For instance, they are not able to prescribe the psychotropic medications that most BH clients need, but they do assist in getting the clients other assistance such as admittance to a residential treatment program, enrollment in a therapy group, or invitation to a twelve-step program. At times, clinicians reported getting clients in to see the doctor sooner than scheduled if the client was a priority – with only one doctor, wait times could be upwards of one month.

> *"The shrink that Behavioral Health uses he only has a certain amount of time he's available because he is not 24-7 or full-time. So if they miss an appointment, he may not be able to have another one for a few weeks. So Behavioral Health Court, if it's working right, we've got the aid to provide transportation…" Staff member 4, interview*

These obstacles are hard to avoid, but the BH team does appear to make efforts to assist in getting clients where they need to be and not let the rurality of the county significantly impede the clients' progress. There are those obstacles that cannot be changed, like the geography of the county, that act as another problem that the clients have to learn to navigate as part of their recovery.

Discussion

This research illuminates themes that emerged among staff members and clients of the BH Court system in Mariposa County. It is apparent that the participants involved in this research (staff and clients) work toward building relationships and encouraging teamwork, but that there are challenges related to scheduling, commitment and feeling comfortable among a new team. These strengths and challenges exist while the program strives to move toward the stated goal of bringing stability, sobriety, and safety to offenders with mental illnesses while attempting to ensure the security and well-being of the entire community. Through these interactions and interviews, it is clear that the clients are learning new coping mechanisms such as journaling and accessing the team to call on in a time of need, accessing more services than they would have on their own, and finding ways to communicate more effectively. Furthermore, the open dialogue that was observed between the staff of the court and the clients was compelling because it is a relationship that is rarely seen in a formal court setting. This shift in dynamic elucidates the goals of the BH Court to create a healthy team environment while engaging those with mental illness in appropriate treatment.

Observing the process of BH Court while simultaneously hearing the perceived process from clients and staff highlighted the structural challenges – staffing, resources, and rurality – that posed obstacles to client success. The process of BH Court, according to the manual of the Court, the staff members, and the clients, was similar: there are treatment steps to follow, client goals to

meet each week, and phases to progress through after a defined amount of time. However, the observations of the BH Court modeled a *slightly* different process. While goals were discussed, such as milestones to achieve each week to progress toward the next phase of the program, there was fluctuation in the timing that these goals were met which conflicted with the written guidelines of the program. For instance, a client was on schedule to graduate to the next phase of the program, but then failed to meet a goal and consequentially the team made the decision to postpone the promotion until the client met said goals. Alternatively, there were clients who were succeeding quickly past their goals and were promoted through the program much faster than the guidelines stated they should. There was also a client that seemed to be thriving in the program but then relapsed and returned to living on the streets with no intervention from the team, primarily because the client was unable to be found.

Challenges that the program appeared to have were not only a fault of the Mariposa County BH Court being a new program in the collaborative court system. It is worth noting that the population of clients is inherently going to be challenging. These clients all had diagnosed mental health disorders alongside a criminal record (substance use, alcohol use, and domestic violence were among the most common). While the BH Court team is working to remedy the behavioral issues, there are still legal actions against the clients that also had to be addressed. Both of these challenges (behavioral health and criminal proceedings) were difficult for clients to navigate on their own. One client stated that being in BH Court was “a full-time job in itself” claiming that the meetings and court dates consumed all of her time. Most clients were unable to work while they were participants of the BH Court program, which in turn made it challenging for them to find stable housing. This obstacle also encouraged some participants to engage in further criminal behaviors, like trespassing to find a place to pitch a tent for the night. While that was the case for some, other clients understood that the BH Court team was there to help them and they just had to ask. Those that were comfortable to share, or reach out to their team, were able to get meetings with the County Housing Assistant to get help in finding a stable place to reside.

Social disorganization theory, which holds that positive client behavior changes can be attributed to the physical and social environments that the client is immersed in,[76] can be used to explain the positive changes in the clients of behavioral health court in this rural jurisdiction. Keeping the clients in the BH Court program, in lieu of incarceration, appears to have been a positive, more successful route. The dual-diagnoses services that the clients receive by being a part of this program were well-received by the clients. The programming that is received from BH Court is far more than any programming that is offered in the county jail if the client were to be incarcerated instead. Socially, some clients stated that having others in the program that they knew made the processes easier as they felt they had a friend to talk to about their experiences. It appeared at times that a harm reduction approach was being taken; however, it is made clear that there are consequences for adverse behaviors and that these behaviors would not be tolerated. For instance, if a client had a positive drug test,

he or she would be remanded and taken into custody. The team made it clear to clients that drug use in the program would not be tolerated and if this was violated, the clients were held accountable.

Interacting with the criminal justice system, specifically, the BH Court program offered challenges as a researcher, as well. The most challenging obstacle faced by this interaction was the natural fluctuation of the participants. There were times when clients had left the BH court program by the time of our interview appointment. I faced the same issue with staff involved in BH Court due to turnover. Some staff members were no longer part of the BH court team by the time I was able to interview them. Along with that staffing problem is the issue of staff members not consistently being involved. For example, one Deputy District Attorney (DDA) will be in BH Court for a session one week and the next, a different DDA. The fluctuation and change of those that participate in BH Court pose a challenge; therefore, staying involved and prepared are both necessary.

This BH Court research project provided useful information both to program staff and to policy-makers. The staff of this problem-solving court movement can utilize this research to guide the future of this program. Policy-makers can gain valuable information about the degree to which each client poses a different challenge and that all clients should, therefore, not be treated in the same way. Improvements can be made to better the stated goals of the program, understanding that success can be measured in a non-linear trajectory and varies by individual. For example, treatment of clients can incorporate surveys, documentation, or other assessments more often than the stated milestone markers to alter any treatment plan to better suit the individual. Furthermore, for BH Courts to effectively address the needs of its participants, consideration to identify appropriate therapeutic milestones as markers of success alongside the criminal justice measures already used (recidivism) is necessary.

This work is the first to consider the process of BH Court in a rural county and the perceptions of the staff and clients involved in the program. While this is beneficial to understand BH Courts' processes in more depth, further research is necessary to develop evaluative processes of the BH Court system, its effectiveness, and how that can be measured across counties. It is recommended that the evaluative processes include all staff members involved, as they each play a significant role in client progress. It would be valuable to assess the effectiveness of this BH Court program in the future.

Perceptions of behavioral health and behavioral health care in a rural county

Chapter Three

Rural Behavioral Health Care

Access and Availability

Health outcomes in geographically rural areas are often worse than health outcomes in urban areas.[4,9,77] One potential contributor to these rural/urban health disparities are geographic differences in access to and quality of health care.[4–10] Rural health care providers serve small population bases, and with that comes limited resources.[9] For example, rural residents are less likely than urban residents to receive preventive health services (such as mammograms, fecal occult blood tests, influenza vaccines, and others)[4,6,78] because there are not clinics or specialists nearby that offer such services. Furthermore, the lack of public transportation in rural areas can pose yet another obstacle in receiving appropriate health services.[5] Without these preventive services, rural residents can be at greater risk for worse health outcomes in the future, especially with a lack of access to specialty care.

One of the largest disparities in physician supply across urbanization levels in the US exists in behavioral health specialists, such as psychiatrists, psychologists, social workers, and counselors.[1] In large US urban counties there are approximately 263 specialists (including psychiatrists) per 100,000 population, compared to a mere 30 specialists per 100,000 population in the most rural areas of the nation.[45] In California, specifically, there are fewer physicians and behavioral health providers per capita in rural areas as compared to more urban areas of the state.[79] Because of this disparity, small rural communities of the US rely heavily on local public health departments for specialty care; however, these are often understaffed and underfunded, affecting the services offered.[80] Residents of rural places may find it easier and more straightforward to travel to an ED to receive immediate behavioral health care, instead of waiting months and traveling hours to find specialty care. Researchers in rural Ontario, Canada interviewed 30 families who had a loved one with a behavioral health issue and concluded that the process of obtaining behavioral health care in rural areas is complex, and it was much simpler to take the loved one to the ED for care than to cope with the hassle of accessing outpatient services.[81]

Acceptability

One important barrier in behavioral health care that rural residents often face is the negative stigma of receiving such services. Rural residents are more likely than their urban counterparts to report negative stigma as a barrier to behavioral health services due to the general lack of privacy which is a characteristic of living in a rural area.[16,17] One study has found a negative

association between perceived stigma and willingness to receive behavioral health care service; however, the field is lacking in empirical work to further assess this impact.[18] This association was found to be strongest for men and was greater for rural residents as compared to urban residents. In lieu of receiving behavioral health care in an outpatient setting, or any other clinic-type facility, rural residents tend to use the ED as a resource for such services.[82–84] Rural residents may feel more comfortable seeking care in a neutral setting, such as the ED, for a behavioral health problem for which they perceive they would otherwise be negatively stigmatized.

Current research objectives

Due to the lack of the existing literature of the residents' perceptions of behavioral health services in rural areas and acceptability of such services from rural residents, the field would benefit from work examining these gaps. This study sought to determine how residents in a rural county of California viewed behavioral health services, which services are preferred and/or accepted by these residents, what their perceptions of these services are, and how this rural county might improve dissemination of information regarding behavioral health services. To accomplish this, I used a mixed-methods study to examine access to and knowledge about behavioral health services in a rural county in the Sierra Nevada foothills of California. Specifically, the study used a survey questionnaire to collect information on the utilization of behavioral health services and knowledge of behavioral health services by rural community members. Then, I used key informant interviews with community members to understand how these rural community members view the behavioral health system in this rural community. This gave a deeper understanding of how this rural community utilizes the behavioral health care system, and how these services may or may not be accepted into the community and/or individuals' personal lives.

Methods

This research utilized a mixed methods approach, using both qualitative and quantitative methods. Using a mixed methods approach allowed for a broader perspective of the research questions and corroboration. The use of both quantitative data (from the survey) and the perspective of rural residents (from the interviews) offers a unique understanding of behavioral health and behavioral health care from the that otherwise might not be captured by just one method alone.

Survey

Sample: To participate in the survey, individuals had to be a rural resident with a Mariposa County zip code. There were a total of 77 respondents to the survey. Minors were not able to participate in the survey.

Data collection and analysis: Survey responses were automatically recorded by the use of Google Forms online. Residents were reached via

Facebook and E-mail. E-mails were distributed to county employees; whose email addresses are publicly available on the county's website. The survey was also printed for those residents that do not have internet access. Any surveys that were administered as a paper copy were later recorded on Google Forms. Participants provided informed consent prior to completing the survey. There was a total of 24 questions analyzed from this survey and can be seen in its entirety in Appendix 1.

With the use of a survey, respondents were able to remain anonymous (no identifiers were present) and more community members were able to be reached than by interviews alone. The survey asked questions regarding where residents seek behavioral health services, either in county or out of county. Respondents were asked which behavioral health services were available to them and where they get information regarding these services, if at all. The Staff Services Analyst from the County Human Services Department (who collects and analyzes data on utilization of county behavioral health services that are offered through this department) shared information on the behavioral health services offered for the purposes of this research. This information was used in the survey to assess which services residents had knowledge of at the time of the survey. Finally, the respondents were also asked questions regarding stigmas that might exist around behavioral health and if such stigmas would deter them from seeking behavioral health services. The stigma-related questions were informed by literature in the field of stigma and mental health.[17,85] Key demographic information such as age, race, gender, and income level were collected. Participants were also given the option to express interest in being interviewed and could then provide his or her contact information.

Interviews

Sample: To participate in an interview, individuals had to be a rural resident, specifically in a Mariposa County zip code. There were a total of 11 interviews conducted. There were no minors involved in the interviews.

Data collection and analysis: Interviews with key informants of the rural community were conducted by using a grounded theory approach. With the use of grounded theory methodology, data were collected by way of interviews and fieldnotes. These data were dealt with iteratively; that is, when an interview was completed, the data from that particular interview were analyzed as an individual component, with that analysis informing the next interview. Adjusting each interview allowed for a more extensive perspective of the research questions and a more comprehensive understanding of rural community members' perspectives of behavioral health care.

Interviews with rural residents discussing behavioral health and behavioral health care were scheduled at mutually convenient times. Participants were recruited from the survey and social media sites. A snowball approach was utilized as well, meaning that interviewees would refer other residents to be interviewed.[86,87] Each participant provided informed consent prior to his or her interview. The same interview guide was utilized for each participant; however,

specific interview content varied based on the iterative approach, meaning that not all questions were asked of each participant. Interviews, on average, lasted at least 45 minutes but no longer than 90 minutes.

After each interview, extensive and detailed fieldnotes were written to encompass all that happened in the interview that was not captured on the recordings. This included body language, nonverbal cues, and anything that might have been discussed when the recorder was not yet activated, or after it was turned off. There were also anecdotal supplementary fieldnotes to record additional information gathered via casual conversations in the course of field work.

Interview recordings were replayed the and transcribed using Microsoft Word. I read the transcriptions through multiple times while listening to the recording to ensure accuracy and clarity. Any changes that needed to be made to the interview transcript were made at this point in the process: any structural changes in the transcription or alterations to the original transcription due to errors. All interviews were saved as Word documents.

After transcription, all interview transcripts were uploaded into ATLAS.ti and coded for content. I utilized a line-by-line coding approach, meaning that each line in the interview or fieldnote was analyzed separately and coded appropriately. A total of 27 codes were developed through this process and can be seen in Table 3.1. These codes developed over time and I kept a working codebook for organizational and reference purposes. In accordance with the grounded theory approach, the analysis builds upon each interview and each fieldnote, with alterations to study design and interview guides after each interview or when necessary.

Table 3.1: Codes used	
Acceptability	Legal
Access	Location
Accessing Services	Normalcy
Advertising	Overworked
Availability	Privacy
Community	Quality of Care
Death	Rural
Defining BH	Stigma
Education	Telehealth
Evolving	Transportation
Family	Unaware of Services
Generational	Underserved
Labels	Understanding care is needed
Lack of Services	

Results

Survey results

Table 3.2 displays the characteristics of the 77 respondents to the survey. Results are presented with the raw data as well as the percentage of each characteristic represented. Of the survey respondents, 73% were female. Approximately 86% of respondents indicated a race/ethnicity of White, while 6% were Hispanic, 3% were Native American, and 5% indicated “other” and included races such as “Jewish American” and “Mixed Race” as their answers. Respondents were primarily between the ages of 20 and 65 with the largest proportion indicating they were 20-35 years of age (36%). All respondents specified English as their primary language. Overall, most respondents had a four-year degree (30%) or some college (29%). The majority of respondents claimed a household income of $50,000-$99,000 or greater than $100,000 (36% and 40%, respectively). Finally, private insurance was most common among survey respondents (70%); however, this number might be greater after reviewing the answers for those that indicated “Other”, which will be discussed below as it may have other implications.

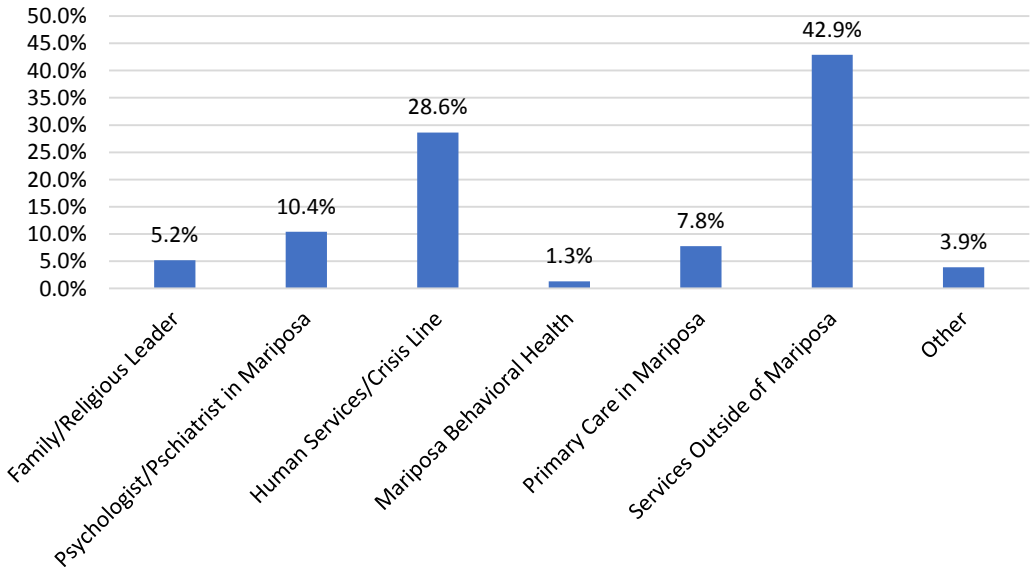
Table 2: Survey Demographics		
	N	%
Gender		
Male	21	27%
Female	56	73%
Race		
White	66	86%
Black	0	-
Hispanic	5	6%
Asian/Pacific Islander	0	-
Native American	2	3%
Other	4	5%
Age		
10-19	1	1%
20-35	28	36%
36-50	20	26%
50-65	22	29%
65+	6	8%
Primarily speak English		
Yes	77	100%
No	0	-
Education		
Some High School	1	1%
High School Diploma	6	8%
GED	1	1%
Some College	22	29%
Two Year Degree	13	17%

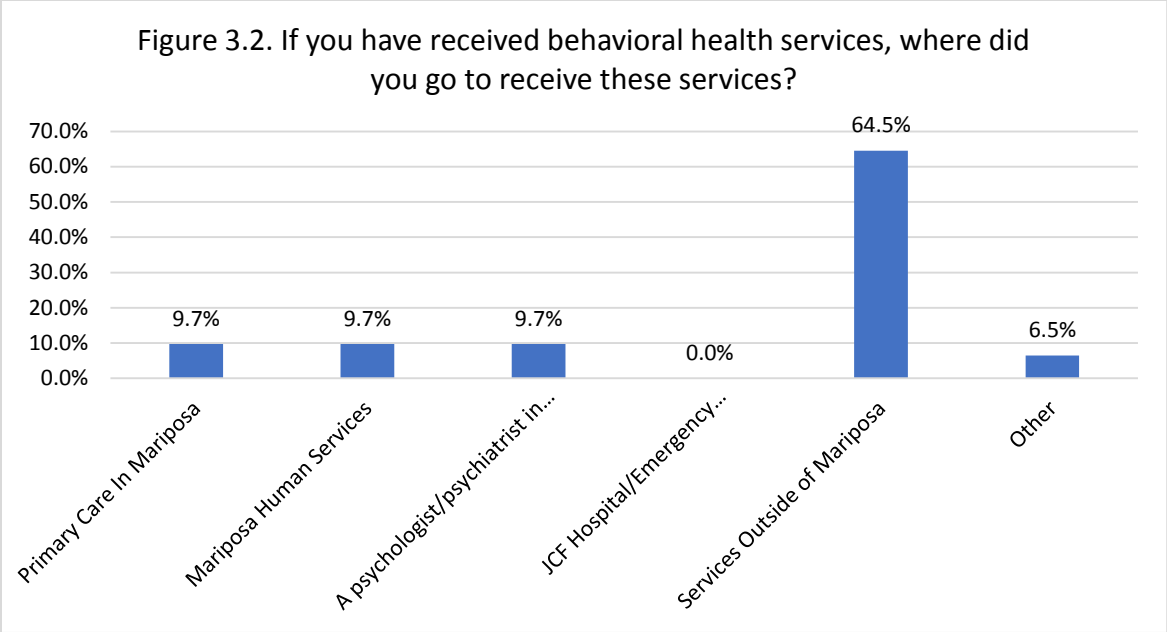
Four Year Degree	23	30%
Professional Degree	11	14%
Household Income		
Less than $30,000	8	10%
$30,000-$49,000	10	13%
$50,000-$99,000	28	36%
Greater than $100,000	31	40%
Insurance Status		
Private	54	70%
Medi-Cal/Medicaid	6	8%
Medicare	8	10%
Military Insurance	3	4%
Not Insured	3	4%
Other	3	4%
*Some categories may not equal 100% due to rounding		

Access/Availability

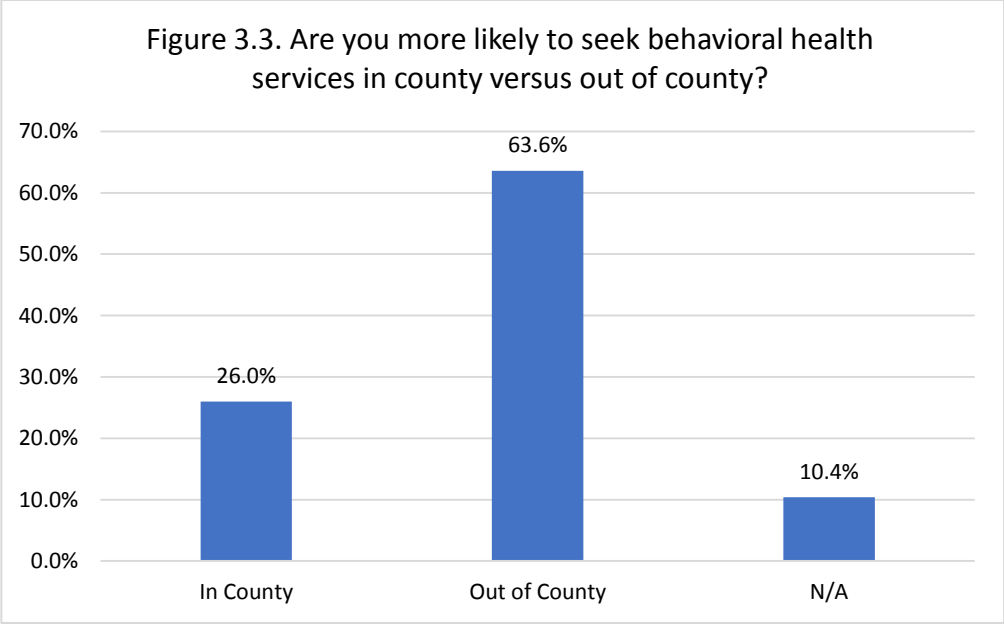
Following the basic demographic questions, the survey then asked respondents some specific questions about their knowledge of behavioral health and behavioral health services in Mariposa County. Respondents were asked where they would seek services if they or someone they knew needed behavioral health services. As seen in Figure 3.1, nearly half of the respondents said they would prefer to seek services outside of Mariposa County (42.9%)

Figure 3.1. If you or someone you know needed behavioral health services for issues like emotional difficulties, substance use, depression and other psychological problems, where would you go?





As a follow-up to that question, respondents were asked if they had ever received behavioral health services. About 40% answered that they had received behavioral health services. Of the respondents that stated that they had received behavioral health services in the past, 64.5% of them said that they sought these behavioral health services outside of Mariposa County (see results of this in Figure 3.2).

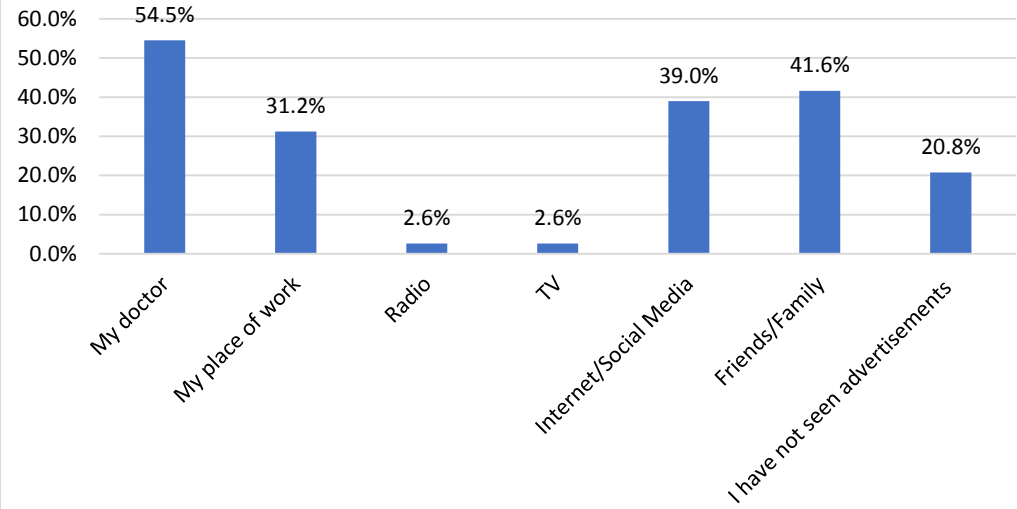


To assess where all respondents would prefer to go for behavioral health services, the next question asked if they were more likely to seek behavioral

health services in Mariposa County versus going outside of the county. As seen in Figure 3.3, 63.6% of survey respondents said no, indicating they would *not* be more likely to stay in Mariposa County for behavioral health services. The following question asked if the respondent would have adequate transportation to get to behavioral health services. Nearly all of the respondents (97.5%) indicated that they did have transportation if it was needed. To have a better understanding of what the respondents knew about their health insurance besides the type of insurance, the next question asked if their health insurance covered behavioral health care. The majority responded that their health insurance does cover behavioral health needs (64.9%).

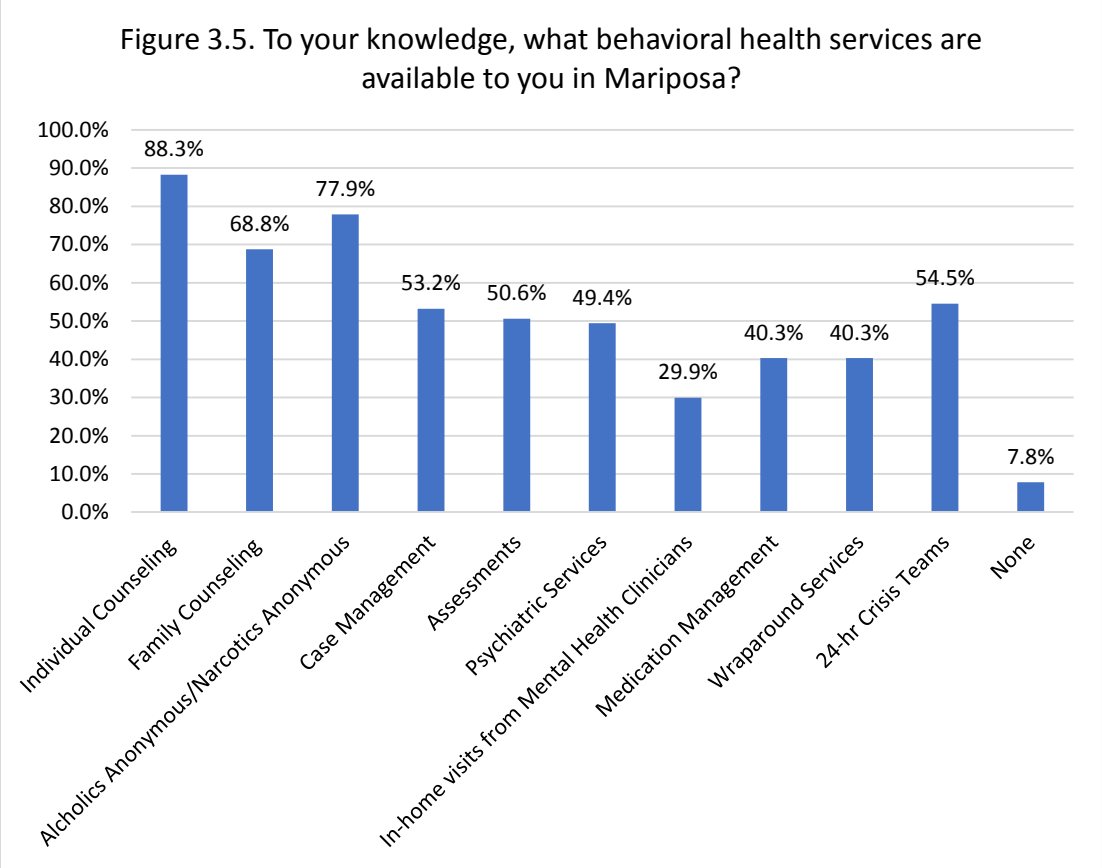
The next section of the survey asked questions regarding what respondents knew about behavioral health services in the area, and how they would learn about these services. For these questions, respondents were asked to select all the answers that applied to indicate which of the options they had knowledge about. Figure 3.4 shows results about where respondents would learn about behavioral health services offered in the Mariposa area – the most common responses being “from my doctor” and “from friends/family.”

Figure 3.4. Where would you learn about behavioral health services that are offered in your area?



Interestingly, 20.8% of responses indicated that they had never seen any advertisement for such services. Finally, after collecting a list of services that are available to residents of Mariposa County, the last question regarding access and availability to behavioral health care asked responded which behavioral health services are available to them. Respondents were asked to select as many services that they were aware of. Figure 3.5 depicts how responses to this question were answered. The majority of respondents (88.3%) said that they are aware of individual counseling services, followed by Alcoholics Anonymous/Narcotics Anonymous meetings at 77.9%. Of the respondents,

however, 7.9% indicated that there were no behavioral health services available in Mariposa County.



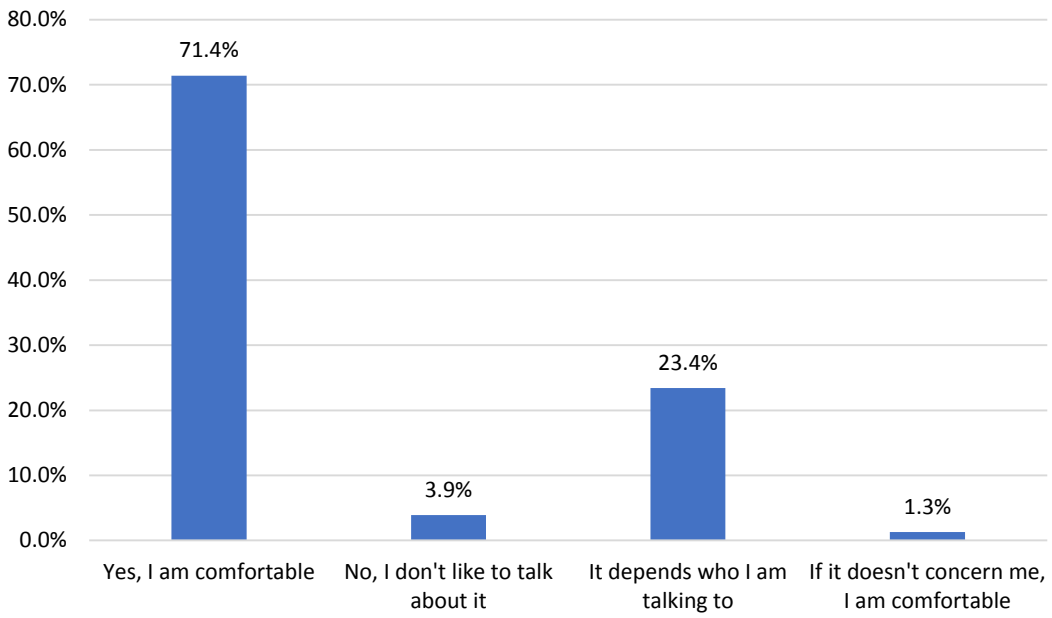
To follow up to this question, respondents were asked what type of services they would like to see in Mariposa. Responses varied, and many respondents did not answer the question, but those that did indicated the County would benefit from more psychiatric services, wraparound-type services, services that accepted a wider range of insurance, psychologists/behavioral health specialists in the schools, and more services in the northern (even more rural) areas of the county.

Acceptability

This survey also asked five questions regarding the stigma associated with behavioral health and receiving behavioral health services. The first asked if the respondent felt that behavioral health problems were easily discussed with his or her friends and family. About half (49.4%) of the respondents said that they could discuss such problems with friends and family. 40.0% of respondents said that these discussions would happen sometimes, but they did not happen regularly, and 11.7% said that this topic was one that was never discussed. Next, respondents were asked if they were comfortable discussing behavioral health

and behavioral health services in general. Results are seen in Figure 3.6 and indicate that 71.4% of respondents are comfortable discussing behavioral health in general.

Figure 3.7. Do you feel comfortable talking about behavioral health and/or mental health, in general?



The last three questions asked more specifically about perceptions of stigma related to behavioral health. Answer choices for these three questions were “yes,” “no,” “prefer not to answer,” or “Other: (responses typed).” Respondents were asked if they had ever been affected by a behavioral health stigma. 41.6% of respondents answered yes, that they had been affected by a behavioral health stigma. When then asked if they had ever been treated differently because of a behavioral health problem, 15.6% indicated yes, that they had been treated differently. Finally, respondents were asked if a negative stigma of behavioral health has stopped them from seeking services needed for behavioral health concerns. Of the respondents, 14.3% indicated yes, that a stigma has deterred them from receiving adequate services.

Qualitative Interview Results

Access/Availability

Of the 11 interviews of rural community members, all stated some degree of dissatisfaction with access to or availability of behavioral health services in their rural community. It was a common among those interviewed to hear that the poor access to such services was due to the rural status of the community. The lack of availability was stated at times to be due to the interviewees’ own lack of

knowledge of services offered in the community. For example, when discussing access and availability concerns with those that were interviewed, I heard statements such as:

> *"We're [residents of Mariposa] ridiculously underserved"*
> *"Maybe they [services] are available. They [those with mental health issues] don't know how to access them. If they are available to them, they're not aware that they're available so they may as well not be available."*
>
> *"I've never heard anyone say that they've accessed services. I've not looked for those services but I feel like because I was involved in schools for so long and because of what I used to do if they were there I would have some recollection of that and I don't."*
>
> *"It [Mariposa] is an island."*
>
> *"Not a lot actually, I know that there's some counseling services up there [pointing to the direction of the human services building]. I know, uhm,-- I don't know how much they're involved with the drug court program over at the court here. I assume they are somehow. I know, uhm,--they have the Heritage House that I understand is horrific and doesn't do any good anyway. I know, uh--we have the public guardian that conserves people when necessary. I know we've got some psych doctors that do different things with people that are in the jails and prescribe medications."*

This sense of dissatisfaction even came from individuals who use the services offered in Mariposa or knew someone that did. In one interview of a man that has utilized alcohol and substance use disorder services for years, and then later accessed similar services to help others with their addictions, talked about how well-informed he was and still acknowledged the gaps in services that he observed:

> *"Oh well - I'm aware of probably most everything that happens in this community with the mental health services…We do try to find doctors…in four of five counties [that the respondent has worked with], which are all considered rural, its one of the hardest things for us to do. You know, it's really very difficult to get a trained professional say for counseling, you know?…Even when I worked with County… to just to get a psychologist or anybody to come up here, they had to pay them an incredible amount of money just for travel. I mean, it's an issue. It's very hard because there's not enough trained professionals willing to come up to the rural area -- and you can't blame them, they're getting paid more [elsewhere]."*

Another participant recalls the process she went through to try to find services for a close family friend in a time of crisis:

> *Participant: "I've tried to get information for people but it's pretty hard to get."*
>
> *Researcher: "Oh, what have you tried?"*
>
> *Participant: "Well you know, I know some people out there [referring to the Behavioral Health Department] and contacted them and asked 'hey, what's the right avenue to get help for this person?' 'cause I don't know what to do. But I never heard back."*

She goes on to say that she was frustrated because she really did not know who to contact. Her next step was contacting the local law enforcement, but she was reluctant to do so because she knew that the person she was trying to help would be resistant to law enforcement helping him. In the end, she decided to inform the persons mother and left it at that. At the time of the interview, she was not sure if her friend had ever received adequate help for his behavioral health needs.

In the case of another interviewee who is currently using the behavioral health services the county has to offer, and struggles with a multitude of behavioral health issues, he stated that while the programs he goes to are great he wished they met more than just on a weekly basis. He felt that having more meetings to attend throughout the week would be beneficial for him in his recovery. He also made statements about getting help in other aspects of his life, like going grocery shopping and managing his finances. For example, when I asked him what he would like to see differently in the behavioral health services offered he said:

> *"Well I really like the programs I go to – well I guess I would like someone to drive me to [the town neighboring Mariposa] and go grocery shopping where it is cheaper, it's too expensive here at this grocery store and I don't work. My step dad helps me when he can but he is busy."*

While these services are not specifically targeting his behavioral health related problems, he found them as a barrier in his own care. He felt that he needed help in other parts of his life that would also help with his behavioral health problems. I also asked him about rides that are offered to him through the Heritage House (a day reporting center). He stated that they do help him out at times to get to a from behavioral health appointments or meetings but going out of county for groceries was not something they could assist with.

Further, when speaking to a mother of two young boys who had endured traumatic brain injury in a car accident, she discussed the lack of resources she had when recovering. She also discussed how this is not a problem that she only

saw in her recovery, but she sees it as a problem in the schools, where she volunteers often.

> *"I think it's very hard to get up here for people [providers] and even in the schools, because I volunteer in the schools a lot. And to see the kids that have issues that even just a counselor would help. But they don't have a counselor. And I mean, I can't blame people because the pay isn't there. You know, even just in Fresno they make twice as much. So yeah, it's very hard to get the treatment they need up here [in Mariposa]."*

She goes on to express her concerns with the lack of assistance in schools. She mentions that the schools have no services for kids with behavioral health concerns and that, from her experience as a volunteer, it is needed for many children.

For many, seeking services meant that they would have to travel long distances. From the interviews, it was clear that traveling for any services, behavioral health or otherwise, was 'normal' for residents of this rural town. Some even indicated that this travel was a weekly occurrence for doctor's appointments, grocery shopping, and any other necessities. While it was the norm for these residents, it was also apparent that traveling was not something that they wanted to do. For instance, when discussing the services available in Mariposa, one participant noted that while she might start her search for services in Mariposa it would be inevitable to have to end up outside of the county to receive the necessary care:

> *"I don't want to drive Fresno. I want to be able to do things here [in Mariposa]-- and I get that you can't do everything here. It's just not possible."*

Another participant reflected on her experiences getting the specialty care she needed and how far she had to travel:

> *"I had to go to the Bay Area, then tried to find something like in Fresno, or Sacramento, but ended up back in the Bay Area. I still couldn't find what I needed. I tried again in, uhm, Fresno – but then – I just gave up."*

Besides having to travel for services, some of the participants indicated a lack of quality care in their community. Community members recognized that not only was there a lack of behavioral health services, but that the quality of those services that *did* exist was poor. Some participants touched on this issue and did not have much to say, but for those that had more to say, they were not blaming the lack of quality on the provider, but on the County itself. They were implying that the County does not pay these providers enough. Some participants acknowledged, too, that the available providers are overworked.

> *"I think they're overworked. I don't think they have enough qualified staff, I think they're trying. But they're, uhm, the environment is very touch and go, everyone is very on edge, uhm, everybody is overworked, they're probably underpaid – I don't know, I have no idea."*

> *"I used to work where I would have to call over there [behavioral health department] for something and I would call and get my head bitten off cause it was just too much to ask cause their [behavioral health workers'] caseloads are all too big, you know what I mean?"*

On the contrary, there were two interviewees that stated that they are satisfied with the care that is offered for them (or other community members). These people still acknowledged that there is a lack of providers but were overall content with the quality of those that were available. For instance, one of these participants recognized that she had never personally received services but that if she were to need services that she would be comfortable seeing a provider in the county. However, in stating this, she still makes references to the low pay she assumes these providers are receiving.

> *"I would access care here first…I would start right here. And yeah, I think there are-- I know several people who use either private or public counselors here. They're fine. You can argue that that's another pay raise and pay grade kind of thing, but yeah."*

The other individual with similar views also feels that he would try the services in his community first if he or a loved one needed to access them, but he also has never had to do this. When discussing this thought he does acknowledge that although he would be inclined to stay in his community for services, he predicts that he would also be more involved in care than he might be if he were to go elsewhere. He said this with the attitude that staying in county for services would mean more work for him as he would have to watch with a closer eye in case services were not adequate.

> *"Yeah, I would [go to services in this community] initially I would. I would reach out to the local services here and, even if some of our professionals aren't necessarily the most qualified around – I really do feel like they care and that's what I've seen. So, I would still take my loved one here. But I would be a bit more active, and kind of hands on, following the way – see what's going on. If it seems like it's not working…I would go elsewhere. I would try here first because it is good."*

Acceptability

As with the surveys, the interviews asked participants about whether stigma towards people with behavioral health problems existed in their community. All of the participants interviewed indicated that this stigma was something that the

whole community has a problem with, making it unacceptable to have a behavioral health problem or to seek services for these problems. One interviewee offered her perspective of how she and other community people might perceive those with behavioral health problems and why she believes there is a stigma around this in her community:

> *"I think people who are perceived as mentally ill are looked down upon, thought lesser of, thought of to be unemployable. Thought of to be dangerous, a threat to children, lazy, drug addicts, the whole host of things that we like to pigeonhole people into. And I don't necessarily think that's the case. There are lots of people who have mental illness who do just fine. Whether they're managing it because they have access to services or whatever, but yeah, I think there's definitely a stigma, a negative stigma here… I think that this population, in particular --because young men are expected to be producing, right? Producing something, doing something, and so that's a hard thing for them to say, 'I need help.'"*

Of most concern to those that I interviewed was that other community members would recognize them or their vehicle at a building that was known for offering behavioral health services. To the those I interviewed, this was a characteristic of living in a small, rural town – everybody knows everybody and their business. For those interviewed, their behavioral health was not business that they wanted known across the town. One participant explains his feelings about this lack of privacy:

> *"It's a very small community. There's no secrets in this town. And so those things do affect people, they might keep things quiet, you know, but more in fear of others finding out, you know, if they go into the local hospital. So there's a good chance they're going to know one of the employees there and are going to say 'oh, what are you doing here?' 'oh trying not to kill myself, right?' There is no anonymity. There's no secrets."*

While his example of suicidal ideations might seem extreme, it was a clear problem that he saw in his community that needed to be addressed. He didn't feel that people (including himself) would be comfortable going to get help for suicidal thoughts or other behavioral health-related concerns due to the lack of privacy that was inherent in his rural community.

Another participant recalls her own experience of the stigma she felt was cast on her when she walked into the Human Services Department for a meeting she was attending as part of her job. She also makes the comparison of her perceptions of living in a rural town to what it would be like to live in an urbanized setting and the increased anonymity that would bring.

> *"The second you walk into the front door the people at the front desk know who your mom and your grandma are, you know what I mean? I mean I walked in for a meeting and I'm like 'oh, I wonder what they think I'm in here for?' I mean its Mariposa! We could write a book, like a huge book on the, you know, microenvironment of Mariposa – having to live in a small town and what that feels like – the lack of anonymity. Go to L.A. – you won't see the same person twice!"*

Her concern of what others thought of her was something that she noticed right away. In our discussion, she laughed about her feelings and wondered why she really did care what others felt but acknowledged that because she cared this was a problem. She did not want others to see her in the building for fear they might go tell someone she was seeking behavioral health services, when in reality she was there for a meeting as part of her job.

Some of the participants that shared their experiences noted that until something extreme happened, like crisis, suicide attempts or suicide, they most often were not aware of a behavioral health concerns their friends or family members had. This was attributed to the stigma that is associated with behavioral health in this community by those that I interviewed. Another credited reason for not coming forward about behavioral health concerns to receive services was the fear of losing certain rights, which were noted by this interviewee as very important in this politically conservative community:

> *"I'll deal with calls of people that have committed suicide and their family – they don't understand it. They're like 'I had I had no idea. They never said anything.' They didn't, you know. In addition to just everybody knowing your business -- It's a very conservative community and stuff, and when you do need help to where you know you might get hospitalized for mental health evaluation, you start losing certain rights too. And communities like this -- that's, that's everything to them is their rights to firearms or this denied, or have you start taking those things away because it might be for their best interests for their safety, but they don't look at it that way. And they just see it as a punishment. And so it makes it so they might not reach us when they need it."*

Another common idea that was recurrent throughout the interviews was that education was needed throughout the community. If an interviewee would acknowledge that they believed there was a negative stigma affecting behavioral health care in this community, I would then ask a version of "How can we fix the negative stigma that you've acknowledged is apparent in this rural area?" Of the interviewees that were asked this, all had a similar answer: education. Not only was education the most common answer, but most also stated that this education needed to start in the schools. The interviewees believed that teaching the children at school that it is ok to be sad and it is ok to ask for help was

something that needed to happen. Participants suggested that the normalization of behavioral health care at a young age would cause the stigma to eventually dissipate.

> *"Educate a bit more you particularly with the youth and stuff -- and I think those programs are out there. You know, whether or not how successful they are. I don't know."*

> *"I think education. Education is the core foundation for everything in terms of the way we view people."*

> *"And I think if we made that more regular if there were behavioral health counselors on campuses that were always-- there, multiple, that maybe we could fix this problem in society that we're having as adults with this stigma. Because, hey, while I was first grade, I went and talked to somebody every three days because I was sad and is normal."*

Finally, while there was so much rich conversation about the negative stigma that is surrounding this community, there was also a sense of hope from the interviewees. They all seemed to believe that someday this community would combat this stigma. There were expectations that both children and adults could discuss behavioral health as they would their physical health someday and be accepted by their peers while doing so. One participant, after asked what this community could do to combat this stigma also stated that education in the schools would be the best avenue. She then went on to compare it to another social movement that she said is slowly being accepted in this rural community: gay marriage. She remained hopeful that, someday, this community would be as accepting of behavioral health care as they are becoming of gay marriage.

> *"I hope in time that we could talk about mental health like we do gay marriage. That would be great."*

Discussion

This research elucidates how residents from a rural county in California perceive behavioral health and access to behavioral health care services in their community. Findings from this mixed-methods study reveal that the community member respondents have concerns regarding behavioral health services offered to them, would prefer to seek such services outside of the county, and recognize that there is a negative stigma that surrounds behavioral health issues in their community deterring people from seeking services. Specifically, participants expressed their concerns with travel time to behavioral health care, quality of behavioral health care available to them in their county, and the judgement from others that might be cast upon them from their fellow community members if they were to seek behavioral health care.

While most were concerned about the state of behavioral health care in their community, there were some that expressed their gratitude to have the services that did exist, even if such services were minimal. The discussion in the interviews regarding a negative stigma that surrounds receiving behavioral health care in a rural area that was observed was interesting because most recognized that it existed but also were hopeful that its existence would be short-lived. Furthermore, survey respondents acknowledged that there was a negative stigma, but the majority (71%) of them also agreed that they were comfortable to talk about behavioral health concerns. These findings suggest that the community members involved in this research had some confidence that the stigma might not be long-lived. The common solution to ridding this negative stigma in both the survey and interviews was to offer more education to the public and in schools. Beginning this education with the youth of this rural community was a popular solution.

Structural discrimination, the idea that people with mental illnesses have less opportunity or rights due to societal policies – either intentionally or unintentionally[35,88] – may be playing a large role in this rural community. Participants who took the survey and those that were interviewed largely agreed that there was a negative stigma associated with behavioral health. Moreover, this stigma was also associated with people in the community not seeking services that might be necessary to assist them with their behavioral health concerns. In the interviews especially, community members expressed their concerns about discrimination against those with behavioral health issues and that, unfortunately, this was a characteristic of living in a small, rural community. While this structural discrimination was recognized, there was also a sense of hope from the interviewees that their community would overcome this negative stigma toward behavioral health.

Hearing the perceived outlook on behavioral health and behavioral health care from the residents in this rural community illustrated how the disparity regarding behavioral health care access in rural areas might be happening. After collecting information from the Behavioral Health Department of programs available to the community, it was apparent from both the surveys and the interviews that the community members are not all adequately aware of such services. The survey explicitly asked this question with all the services offered listed as answers. Most of the respondents were aware of the availability of individual counseling, family counselling and Alcoholics/Narcotics Anonymous, but knowledge about services other than those was much less common. The interviews revealed less than the survey in regard to known services offered. Most often when asked what services were available to them interviewees would answer with a version of “I’m not sure exactly” or “there is some type of drug and alcohol counseling.” This discrepancy between survey and interview responses is attributed to the difference of an explicit list of services in the survey and the open-ended question of the interview. It is possible that respondents to the survey were more likely to acknowledge their awareness of services offered when a list was provided to choose from. This suggests that these residents,

when faced with a behavioral health crisis, might not know where to go. This finding is concerning and amplifies the need for an increase in public awareness of behavioral health care available to these rural residents.

It was also clear that there was a lack of trust in the programs that did exist. In the survey this lack of trust was seen through the question of where the respondent would seek services, with the majority (63%) answering that they would go out of county. In the interviews, this lack of trust was attributed to either the quality of care people would receive, or availability of such care to the rural residents. The interviewees that were concerned with quality of care often expressed skepticism of the qualifications of behavioral health care staff, suggesting that many were not qualified to be in the positions that they were (i.e., psychologists, clinicians, etc.). Other residents were not certain of the type of care that was available to them in their county and if this care would be sufficient to them if needed; whereas, they were confident that they could go to a nearby city and find quality care for their concerns.

Besides trust and quality of being of concern to these residents, some were also concerned about the negative stigma of receiving behavioral health services. The lack of anonymity that these rural residents described was of great concern to them; most residents even indicated that they would not receive services in their county in fear that someone they know would see them. Alternatively, there were a few interview participants who expressed their willingness to stay in county and receive the services they could, when needed. These residents that indicated that they would stay in their county for behavioral health services also made it clear that if they had any concerns regarding the care they were receiving, they would not hesitate to go out of county.

While previous research suggests that transportation is a barrier to care for rural residents,[5] this was not the case for residents of Mariposa that were interviewed and surveyed. Nearly all (97%) of the residents involved in this study indicated that transportation was not of concern to them and that they could get to behavioral health appointments out of county, if needed. It appears that because the residents expressed trepidations with quality of behavioral health care, availability of care, and stigmas associated with care, finding transportation to seek care elsewhere was not a barrier that they were concerned with. This finding should be interpreted with caution, however, since this sample was not representative of every socio-economic status (SES) level but was heavily weighted by a higher SES sample.

Interacting with these community members posed an interesting challenge as a researcher, as well. The most challenging obstacle faced by these interactions was the topic of conversation: behavioral health. From my interactions with these community members I could tell that this was an uncomfortable topic and not one that they are accustomed to discussing. With the exception of a few participants that work in the behavioral health field in some capacity, discussing behavioral health proved difficult for most, which was attributed to the infrequency of behavioral health as a commonly discussed topic of among these rural residents. Interestingly, when discussing behavioral health

care and access or availability of such care, that difficulty was not as apparent. Participants did not seem to care about discussions of their knowledge of care available, but only when it got increasingly personal did they exhibit more discomfort.

Implications

This work is the first to consider the perspective of rural residents on behavioral health and behavioral health care services through interviews and surveys while also considering the actual services that were available to these residents. There are three clear gaps in rural behavioral health care that this research revealed. First, efforts to increase outreach in the rural community would increase awareness of services and, ideally, increase access to behavioral health care. Specifically, social marketing campaigns that target explicit groups that are otherwise not reached through current communication channels should be implemented.

Second, the quality of behavioral health care that is offered should be addressed through intervention programs and adequate training of staff members in this field. Although funding these professionals is a clear issue brought up by the interviewees, there are budget-friendly options to address training of behavioral health staff such as joint training efforts. Sharing costs among several entities (i.e., schools, local government and non-profits) should be considered. Furthermore, successful behavioral health management programs have been proven cost-effective in the past and should be considered in this rural area.[89,90] Continuing education for professionals in behavioral health is necessary and rural health care policy should support this essential need for education. Telemedicine is another recent advance in rural health care that can address the concerns of the quality of behavioral health professionals that these data demonstrate. Information gathered from the Mariposa Behavioral Health Department indicated that telemedicine services are available to residents but are limited and by appointment only. Behavioral health staff should also consider encouraging residents to utilize telemedicine features through their insurance companies, since the majority of the survey participants (64.9%) indicated that their insurance covered behavioral health services.

Third, behavioral health care staff should consider peer support/education programs to the local schools. These types of youth programs have been proven effective for tobacco and drug cessation programs as youth are more attentive to their peers than in a lecturer setting hearing from teachers/authorities.[91,92] Data gathered from Mariposa residents and the Behavioral Health Department indicate that a peer support/education program does not exist however, the desire is present. Nearly all the participants in the interviews indicated a need for behavioral health education in schools, for both teachers and students. Residents recognized that teachers needed more education from the Behavioral Health Department about referring students to behavioral health services and that students were in need of something as simple as somebody to talk to about behavioral health concerns. The availability of a peer support program that also

educated students on behavioral health and behavioral health care could offer students with a comfortable option to discuss such concerns.

While this research was beneficial to better understand how community members perceive the services in their town, further research is necessary in both this rural area and other rural areas to develop a plan to address issues of access, availability and acceptability surrounding behavioral health and behavioral health care. It would be valuable to continue this research in rural areas across the nation.

Conclusion

This research is part of the growing literature addressing disparities in rural behavioral health. Emergency department utilization for behavioral health concerns by adolescents in California were examined while comparing rural and urban areas. A specialized behavioral health program in a rural California county for a specific vulnerable population – incarcerated individuals – was observed while considering the perspective of those involved in this newly implemented program. And finally, residents of a rural California community were surveyed and interviewed to better understand the perspective of this unique population on behavioral health and behavioral health care in their community.

Three main findings emerged from this research: (1) Rurality had no effect on adolescent care-seeking at an ED for behavioral health-related concerns after an initial visit; (2) specific behavioral health programming in a rural community created a healthy team environment while engaging incarcerated individuals and those recently released from incarceration in appropriate behavioral health treatment, as stated in program goals; and (3) rural residents have concerns regarding access to behavioral health services offered to them, would prefer to seek such services outside of the rural county, and recognize that there is a negative stigma that surrounds behavioral health issues in their community which deters people from seeking services.

This research suggests that access to care can be improved by increasing outreach and education of behavioral health services to the California communities. While ED utilization for rural adolescents was no different from those in urban areas, the ED is nonetheless being accessed by adolescents to address behavioral health issues across California. Past research suggests that rural EDs should see an increase of utilization due to a shortage of available behavioral health services in rural areas,[5,34,36] however, this does not appear to be the case for California. The EDs across all urbanization levels in California exhibit no difference in access by adolescents for behavioral health concerns. This suggests that outreach of available outpatient behavioral health services to the youth of rural and urban California are inadequate. The absence of knowledge regarding behavioral health services was further highlighted in interviews of rural adult community members, who were largely unaware of specific behavioral health services available to them in their rural community. To address this gap in information dissemination, communication to California residents and health professionals by public health educators and policymakers should provide evidence-based information about the results of epidemiologic research. For example, social marketing campaign strategies can target key audiences (such as rural populations that are commonly hard-to-reach) and convey the importance of behavioral health care. While disseminating such information, educators should also be prepared to refer residents to local behavioral health resources.

In areas of limited behavioral health care resources, such as rural California, creating partnerships of existing behavioral health programs can capitalize smaller budgets. Another budget-friendly option is to offer joint training. Joint training efforts of behavioral health staff, public health workers, health care providers, and other groups that are likely to encounter behavioral health concerns (i.e., teachers) will address availability and acceptability of behavioral health and behavioral health care in rural areas. For example, trainings for these professionals should address trauma-informed care and make them aware of signs and symptoms of behavioral health issues, as well as how to treat common behavioral health disorders. Trainings such as these would also benefit in educating professionals of available behavioral health services and how to direct an individual to access such services, a need recognized by rural residents in this research. Of common concern of rural residents and highlighted by the use of EDs for behavioral health issues, was that the schools are not aware of services for their youth. Mandating training to school educators with respect to behavioral health services in their communities, and especially, how to refer students in need is a resource that this research suggests is absent.

The rich data gathered from Behavioral Health Court program provided powerful information to consider in the future structure and expansion of Behavioral Health Court programs, especially in rural areas. For example, the staff learned through experience that although there are program guidelines, each client is unique and will have different needs than other clients. It was recognized by staff that specific program goals and outcomes are not exactly the same for each client. Program guidelines can be improved to include the notion that success has differing trajectories and each client should be assessed with this in mind. Continuing dual-diagnoses services is encouraged as these services were well-received by the clients and presented positive results. Forming this network of care through the Behavioral Health Court program revealed the benefits of amalgamating resources to increase health outcomes in a population.

The face of rural behavioral health and behavioral health care is continually evolving. While there has been an increase in behavioral health services implemented in the past years (i.e., use of telemedicine, networks of care), there is still much improvement needed regarding access, availability and acceptability of behavioral health in rural communities. Public health policy and education implementation can address all three barriers to care. Encouraging access to outpatient behavioral health care and behavioral health education to California youth is necessary to normalize receiving behavioral health care. This early exposure highlighting the importance of maintaining behavioral health will also reduce negative stigmas associated with behavioral health, especially in rural areas, making behavioral health care a common health care channel. This dissertation presents a comprehensive understanding of California ED utilization by adolescents for behavioral health care, a specific behavioral health service offered to incarcerated individuals and those recently released from incarceration in a rural California community, and how behavioral health and behavioral health services are perceived by rural residents in California community. Finally, this

work informs access, availability and acceptability of behavioral health services for rural Americans.

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Appendix 1: Survey

Perceptions of Behavioral Health and Behavioral Health Services in Mariposa County

This survey is intended to understand how you perceive behavioral health problems and behavioral health services in your community. The goal of this survey is to understand barriers to behavioral health care for people in a rural community. There are no wrong answers to any of these questions. Your answers will be kept completely confidential. Responses will remain anonymous, unless you choose to provide your contact information for future participation. If you have any questions, please do not hesitate to email Kristina Allen at kallen22@ucmerced.edu.

* Required

Consent to Participate

CONSENT TO PARTICIPATE IN A RESEARCH STUDY UNIVERSITY OF CALIFORNIA, MERCED Title of the Study: Perceptions of behavioral health and behavioral health services in a rural county. Investigator's Name(s), Department(s), email(s): Kristina Allen, SSHA, kallen22@ucmerced.edu PURPOSE You are being asked to participate in a research study. We hope to learn how people in a rural county view behavioral health and any behavioral health programs that exist in Mariposa County. Having your insight will help better understand how behavioral health is perceived in a rural county. PROCEDURES If you decide to volunteer, you will be asked to complete a brief survey regarding your thoughts about behavioral health and behavioral health services. This will consist of no more than 20 minutes of your time. This survey will ask for your perspective of these services and how you may or may not interact with them. Each survey is done individually and remains confidential. Your total time commitment to this study will be 20 minutes or less. RISKS Participants could undergo minimal stress while recollecting their experiences regarding behavioral health topics, if these experiences are viewed as a negative event, however, this risk is minimal and not anticipated. BENEFITS It is possible that you will not benefit directly by participating in this study. CONFIDENTIALITY All surveys will remain confidential in that no identifiers will be present. Each participant will be assigned a number (ex: "Participant 1") to ensure appropriate county of the surveys completed. In no way will answers to survey questions be shared except in the final report where they continue to remain anonymous. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena. COSTS/COMPENSATION There is no cost to you beyond the time and effort required to complete the procedure(s) described above. EMERGENCY CARE AND TREATMENT FOR INJURY It is important that you promptly tell the person in charge of the research if you believe that

you have been injured because of taking part in this study. If you are injured as a result of being in this study, the University of California will provide necessary medical treatment. Depending on the circumstances, the costs of the treatment may be covered by University or the study sponsor or may be billed to your insurance company just like other medical costs. The University and the study sponsor do not normally provide any other form of compensation for injury. For more information about compensation, you may call the IRB Office at (209) 383-8655 or email at IRBoffice@ucmerced.edu. RIGHT TO REFUSE OR WITHDRAW You may refuse to participate in this study. You may change your mind about being in the study and quit after the study has started. QUESTIONS If you have any questions about this research project please contact Kristina Allen who will answer them at kallen22@ucmerced.edu. For questions about your rights while taking part in this study call the Office of Research at (209) 383-8655 or write to the Office of Research, 5200 North Lake Rd, UC Merced, Merced, CA 95343. The Office of Research will inform the Institutional Review Board which is a group of people who review the research to protect your rights. If you have any complaints or concerns about this study, you may address them to Ramesh Balasubramaniam, Chair of the IRB at (209) 383-8655, irbchair@ucmerced.edu.

Do you agree to participate in this survey? *

Mark only one oval.

- Yes
- No *Stop filling out this form.*

Demographic information

Please answer the following questions. You may skip any question you do not want to provide an answer for.

What is your zip code?

What is your gender?

Mark only one oval.

- Female
- Male
- Prefer not to say
- Other:

What is your race/ethnicity?

Mark only one oval.

- White
- Black
- Hispanic
- Asian/Pacific Islander
- Native American
- Other:

What is your age?

Mark only one oval.

- 10-19
- 20-35
- 36-50
- 51-65
- 65+

Do you primarily speak english?

Mark only one oval.

- Yes
- No

Highest level of education completed

Mark only one oval.

- Some high school
- High school diploma
- GED
- Some college
- Two-year degree
- Four-year degree
- Professional degree

Household annual income

Mark only one oval.

- Less than $30,000
- $30,000 - $49,000
- $50,000 - $99,000
- Greater than or equal to $100,000

Insurance status

Mark only one oval.

- Private
- Medi-Cal/Medicaid
- Medicare
- Military Insurance
- Not insured
- Other:

Behavioral health and services

Please answer all questions, although you may skip questions that you are not comfortable answering.

1. If you or someone you know needed behavioral health services, would you be able to tell them where to go?

Mark only one oval.

- Yes
- No
- Maybe

2. If you or someone you know needed behavioral health services for issues like emotional difficulties, substance use, depression and other psychological problems, where would you go? Please choose one.

Mark only one oval.

- Primary care doctor in Mariposa
- Mariposa County Human Services Department
- A psychologist/psychiatrist in Mariposa
- John C. Fremont Emergency Room or Hospital
- A family member, friend or religious leader
- Services outside of Mariposa County
- I would not seek services
- Other:

3. Have you ever seen a health professional for help with behavioral health problems like emotional difficulties, substance use, depression, or other psychological problems?

Mark only one oval.

- Yes
- No

4. If you answered yes to the above question, where did you go to receive these services? If you answered No, select "Not applicable"

Mark only one oval.

- Primary care in Mariposa
- Mariposa County Human Services Department
- A psychologist/psychiatrist in Mariposa
- John C. Fremont emergency room/hospital
- Service outside of Mariposa
- Not applicable
- Other:

5. Are you more likely to seek behavioral health services in county versus out of county?

Mark only one oval.

- Yes
- No
- Not applicable

6. If you wanted to receive behavioral health services, would you have adequate transportation to get you there?

Mark only one oval.

- Yes
- No

7. Does your health insurance cover behavioral health care?

Mark only one oval.

- Yes
- No
- I don't know
- I don't have health insurance

8. Are behavioral health problems like emotional difficulties, substance use, depression, or other psychological problems easily discussed amongst your family and/or friends?

Mark only one oval.

- Yes, I can discuss concerns about behavioral health with my family or friends
- No, we don't talk about behavioral health in my family or amongst my friends
- Sometimes we discuss concerns about behavioral health, but not regularly.

9. Do you feel comfortable talking about behavioral health and/or mental health, in general?

Mark only one oval.

- Yes, I am comfortable talking about behavioral health/mental health.
- No, I do not like to talk about behavioral health/mental health, this topic makes me uncomfortable.
- It depends on who I am talking to
- If it does not concern me, I am comfortable talking about behavioral health/mental health.
- I prefer not to answer this question.

10. Do you know someone (besides yourself) who receives behavioral health treatment?

Mark only one oval.

- Yes
- No

11. Have you ever been affected by behavioral health stigmas? "Stigmas" referring to members of the general population endorsing prejudice and discrimination against individuals with mental health difficulties (Wright et al., 2009)

Mark only one oval.

- Yes
- No
- Other:

12. Have you been treated differently because of behavioral health problems?

Mark only one oval.

- Yes
- No
- Prefer not to answer
- Other:

13. Has a negative stigma stopped you from seeking services for a behavioral health problem?

Mark only one oval.

- Yes
- No
- Prefer not to answer
- Other:

14. Where would you learn about behavioral health services that are offered in your area? (Check all that apply)

Check all that apply.

- My doctor
- My place of work
- Radio
- TV
- Internet/social media
- Friends/family
- I have not seen advertisement for any behavioral health services

15. To your knowledge, what behavioral health services are available to you in Mariposa? (Check all that apply)

Check all that apply.

- Individual counseling
- Family counseling
- Alcoholics Anonymous (AA)/Narcotics Anonymous (NA) Meetings
- Case management
- Assessments
- Psychiatric services
- In-home visits from mental health clinicians
- Medication management
- Wraparound services (child-focused, team meetings)
- 24-hour crisis teams
- Other:

16. What type of behavioral health services would you like to see in your community?

Interviews

As part of this research, I would also like to interview some people in person. If you are willing to sit down in an interview with me, please provide a contact email or phone number below. Interviews also remain anonymous and confidential.

Are you interested in an interview?

Mark only one oval.

- Yes
- No *After the last question in this section, skip to "Thank you!."*

Email

Phone number

Thank you!

Thank you for your participation in this survey. Please share this survey with others in your community.