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Substance Abuse Patients and Integrated Care

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Abstract

There is clear evidence that chronic medical diseases are more prevalent among individuals who suffer from a substance abuse (SA) disorder than those without. Several studies have found that patients with history of SA are often hospitalized than those whose do not. Chronic medical diseases co-existing with SA can lead to impaired physical functioning and decreased quality of life. Studies have however, demonstrated that managing chronic medical diseases may improve treatment outcomes and enhance physical functioning and quality of life. Yet, despite the fact that SA has a high prevalence of chronic medical conditions, many SA treatment facilities do not address these conditions. This study applies chronic care model to reviewed patients' chart augmented with focus group interviews to determine the percentage of patients in SA treatment North Carolina facilities that have chronic medical diseases that receive treatment in the same facility. In all the 62 charts were reviewed, all patients, at least had a major chronic disease which include hepatitis C, hypertension, pain, obesity, arthritis, and diabetes; and as much as (92.3%) do get treatment in that facility but are referred out. The results of the study highlight the need for integrated care for Substance abuse patients.

Keywords: Integrated Care; Substance Abuse; Chronic Care Model; Major Chronic Diseases

Abbreviations: SA: Substance Abuse; TB: Tuberculosis; STD: Sexually Transmitted Disease; ED: Emergency Department; CCM: Chronic Care Model; HER: Electronic Health Record; WSSU: Winston-Salem State University; PI: Principal Investigator; BMI: Body Mass Index; BP: Blood Pressure; COPD: Chronic Obstructive Pulmonary Disease; SPSS: Statistical Package For The Social Science; VA: Veterans Affairs

Introduction and Objectives

Substance abuse (SA) patients are nine times more likely to develop congestive heart failure and 12 times more likely to develop cirrhosis [1]. Moreover, patients with narcotic addiction have 12 times higher risk of developing pneumonia than do persons in the general population [2,3]. Patients who are injection-drug users are approximately 10 times more likely to become HIV positive and those who use crack cocaine are twice as likely to become HIV positive, compared with non-drug users [4].

Chronic medical diseases, co-existing with substance abuse can lead to impaired physical functioning and decreased quality of life [5]. Evidence suggests that individuals with mental health and substance abuse disorders tend to die seven to 24 years earlier than the general population [6]. Studies have demonstrated, however, that managing chronic medical diseases may improve treatment outcomes and enhance physical functioning and quality of life [7]. Yet, despite the fact that substance abusers have a high prevalence of chronic medical conditions, many substance abuse treatment centers do not address these conditions [7,8].

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One also has to consider that many patients in SA treatment facilities are part of the underserved population and have no health insurance coverage. Therefore, for these people the most preferred places to seek primary care are either free or community clinics, which means that it frequently takes an individual three months or longer to obtain an appointment. Many who seek treatment for their physical conditions also do so through a hospital emergency department, an urgent care facility, or another health care facility, including a facility devoted to primary care. If there is no primary care provider in a substance abuse treatment center, the wait time to receive non-urgent healthcare from another facility may be as long as three to six months, further compromising the physical health of these patients [9,10]. Further, when patients are referred for follow-up care, many patients do not follow through.

Oslin et al. [11], found that 80% of patients referred to a primary-care facility from a substance abuse facility do not follow through with the referrals. All these factors contribute to the development and poor management of chronic medical diseases. So, there is a great need for an effective approach to the treatment of chronic medical disease among patients with SA disorders. To address the lack of primary care for persons with SA disorders, a number of studies have recommended providing integrated health care. The term integrated care is used to describe an approach to care in which patients may obtain both medical care and mental health (MH) care at a single health facility. Care integration improves accessibility to health care services, and does so with the goal of achieving early detection of health conditions and/or promoting the effective management of chronic health conditions. There is a growing body of literature on integrating mental health care into primary care services, but there are few studies focused on the integration of primary care into substance-abuse treatment centers.

While integrating SA or MH care into primary care has been described extensively, its opposite that is integrating primary care into SA and MH care is a relatively new concept, and its effectiveness has not been well studied. According to Alakeson, Frank and Katz [12], each year, MH facilities in the U.S. serve over 3.5 million patients with mental health and substance use disorders. Providing integrated care in mental health or substance abuse facilities has the potential to improve accessibility to primary care services for a large number of patients who might otherwise not receive such services, despite their being vulnerable. Moreover, an integrated-care format has the potential to increase the delivery of preventive, early detection, and treatment services for chronic medical diseases. All of these efforts can decrease the prevalence of chronic medical diseases and promote effective disease management, ultimately improving the health status of millions of people. Therefore, integrating primary care into mental health and substance abuse treatment facilities can serve as a comprehensive, cost-effective and medically effective method of care delivery for clients with substance abuse disorders.

This paper employs Chronic Care model (CCM), developed by Wagner, Austin and von Korf [13] to demonstrate how chronic medical diseases affecting patients with substance abuse disorders are being managed in one substance abuse facility. Specifically, statistical tools are employed to determine the percentage of patients in SA treatment facilities that have chronic medical diseases and are receiving treatment in the same facility. We address the following two research questions: (a) what percentages of patients in a substance abuse treatment facility have chronic medical diseases? And (b) which provider interventions are used to treat and manage chronic medical? The rest of the paper is organized into five sections. Section 2 is a brief reviewed literature on integrated care. Section 3 presents the theoretical framework of the Chronic Care model. Section 4 describes the methods and procedures; while Results of the analysis and 2discussions are presented in Section 5; and Section 6 presents the Summary and Conclusions.

Reviewed Literature on Integrated Care

Integrating primary care into a mental health model of care can lead to early identification of chronic medical diseases, prevention, wellness support and treatment [14]. Pirraglia et al. [15], employed 2007 crossectional data to examine whether veterans with serious mental illness that were being treated in an integrated general medical care facility had fewer hospitalizations for ambulatory care-sensitive conditions as compared with veterans receiving treatment in other settings. In this study, 9,662 (10.5%) of the patients received care at ten sites providing integrated care and 82,604 (89.5%) received care at 98 sites not providing integrated care. At sites without integrated care, 5.1% of the patients had a hospitalization for an ambulatory care-sensitive condition, compared with 4.3% at sites with integrated care. The authors concluded that integration of primary care and mental health services helped prevent frequent hospitalizations for certain conditions.

Similarly, Kilbourne et al. [16], conducted a retrospective chart review of 107 Veterans Affairs (VA) mental health clinics with existing integrated primary care. The purpose of the study was to determine whether patients with serious mental illness receiving care in VA mental health

programs that incorporated integrated general medical clinics were more likely to receive adequate medical care in comparison with patients in programs that did not incorporate such integrated clinics. The results showed that patients from integrated clinics were more likely to receive foot exams at these significant Odd Ratios (OR = 1.87, $p < .05$), colorectal cancer screenings (OR = 1.54, $p < .01$), and alcohol misuse screenings (OR = 2.92, $p < .01$). They were also more likely to have adequate blood pressure control (<140/90 mmHg; OR = 1.32, $p <. 05$). They concluded that patients treated at facilities lacking integrated care had more health problems than those in the integrated care program, a finding that encompassed all medical care with the exception of control of diabetes mellitus.

One of the factors found to be associated with the lack of integrated health care for behavioral health patients is geography. Cunningham [17] surveyed 6,600 primary care physicians in the United States and found that two thirds of them were unable to refer patients to mental health services due to a lack of mental health providers located within a reasonable radius.

Miller et al. [18] studied the proximity of primary care and behavioral health service delivery sites in the United States as well as factors influencing their integration. These authors found a strong association with rural locations in relation to where primary care physicians were integrated with behavioral health providers. In urban areas, 40.2% of primary care physicians were able to integrate with behavioral health providers, compared with 22.8% in isolated rural areas and 26.5% in frontier areas. However, controlling for the number of primary care physicians at a location led to the conclusion that the odds of integration was higher for physicians in a frontier area than those in urban areas (OR = 1.289; $p < .01$). The authors also identified some common problems affecting integration, specifically practice size and the proximity of providers to the locations in which it was relatively more convenient for integration to take place.

Druss, von Esenwein, Compton, Rask, Zhao and Parker [19], used a sample of 407 to test a population-based medical care management intervention designed to improve primary medical care in a community mental health setting. After a 12-month follow-up evaluation, the authors found that the intervention group received 58.7% of recommended preventive services compared with 21.8% in the usual care group. The intervention group also received a significantly high proportion of evidence-based services for cardio-metabolic conditions (34.9% compared to 27.7%) and was more likely to have a primary care provider (71.2% versus 51.9%). In addition, the intervention group showed significant improvement on the [1]SF*-36 mental component (8% as compared to 1.1%), compared with the usual care group. Among those who had laboratory data values from the Framingham Cardiovascular Risk Index, there was significantly greater improvement for the intervention group than for the usual care group. The authors concluded that medical care management provides another effective method of enhancing medical care for patients who are being treated in community mental health settings.

Samet et al. [20] assessed the effectiveness of a novel multi-disciplinary clinic that was linking patients in a residential detoxification program to primary medical care. In this study, 470 persons were treated for alcohol, heroin and cocaine addiction were included. The sample was primarily African American males; and47% had one or more chronic medical conditions, 40% had health insurance, and 47% were homeless. The researchers examined outcomes for patients participating in a multidisciplinary HELP clinic in a residential detoxification facility. The clinic conducted a single comprehensive initial evaluation at the substance abuse treatment unit and arranged subsequent follow-up with a primary care physician. Staffing for the clinic included a nurse internist and a social worker. The findings revealed greater linkages to primary care, however, there was no significant difference in number of patient visits. The study did not find significant differences between the groups on reducing risky behaviors, and the use of medical and addiction services was not significantly different. There was no follow-up to determine subsequent primary care utilization.

Umbricht-Schneiter et al. [21] examined the prevalence of four target medical conditions in a population of intravenous drug users seeking treatment for their addiction. The study compared the effectiveness of two methods for addressing these conditions: direct medical treatment at the addiction treatment clinic site and referral to a medical clinic. Included in the study were 51 patients attending a Methadone Clinic that also required medical care for hypertension, tuberculosis (TB) exposure, and positive HIV serology but without symptoms, and acute sexually transmitted disease (STD). Patients were excluded if they had a primary care provider. Patients who received on-site care for medical conditions were compared to those who received no on-site care but were referred instead to a medical clinic on

[1]The Short Form (36) Health Survey is a 36-item, patient-reported survey of patient health. The SF-36 is a measure of health status and an abbreviated variant of it, the SF-6D, is commonly used in health economics as a variable in the quality-adjusted life year calculation to determine the cost-effectiveness of a health treatment.

the same campus. The findings revealed that patients at the on-site primary care treatment facility were significantly more likely to be enrolled in medical treatment, had more medical visits, and were more likely to receive treatment. A limitation of the study was the small sample size and the fact that the two treatment conditions did not include an equal number of patients.

Finally, Parthasarathy et al. [3] and Weisner et al. [22] examined differences in treatment outcomes and costs between integrated and independent models of medical and substance abuse care. In addition, this study evaluated at the effects of integrated care in a subgroup of patients with substance abuse-related medical conditions. The study was conducted with the patient population at the Kaiser Permanente Chemical Dependency Recovery Program. Of the 654 patients participating in the study, 318 patents received integrated care via an on-site clinic; and 336 received substance abuse treatment while their primary care was provided by the HMO's primary care clinics, which were located close to the on-site clinic. The findings of the study revealed no significant differences between the two groups on the level of abstinence achieved. The study also revealed a downtrend in hospitalization and emergency department (ED) use and costs over 12 months but no statically significant difference between the two groups.

In summary, few current studies in the published literature address the integration of physical and mental health care. Based on the published literature on integrating primary care with behavioral health and/or substance abuse treatment, there are clear benefits to be obtained through such integration. Most of the studies that have been conducted in this area suggest that patients are more likely to receive preventive health care and that chronic health conditions are better managed with an integrative health care model. Yet, the studies have also identified barriers to integrated care. One such barrier is geography. The literature suggests that the prevalence of integrated care may be higher in urban areas. However, this finding may actually be a function of the type of community studied, in other words, whether the community might be categorized as being rural, urban, or frontier, whether the practice was of one or another size, and whether providers were in a reasonable proximity to the locations. Reimbursement rates and billing restrictions are additional barriers.

Theoretical Framework of the Chronic Care Model (CCM)

The model guiding the project was the Chronic Care model (CCM), developed by Wagner, Austin and von Korf [13] (see Figure 1). The CCM is a multifaceted framework for enhancing health care delivery. The model, based on a paradigm shift from the current framework of dealing with acute care issues to a prevention-based system, was developed to improve primary care for people with chronic health conditions. The premise of the model is that quality health care occurs at community and health systems levels. Community resources refer to those services in the community, including the family and neighborhood, available to patients to help manage chronic medical diseases.

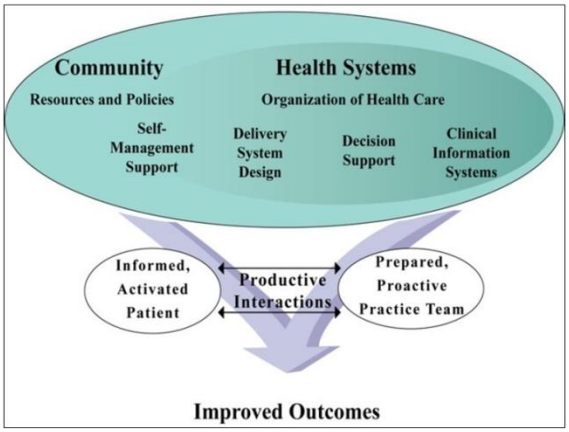

Figure 1: The Chronic Care Model.

Health care organizations include all those functioning in all clinical settings. Quality health care, as promoted by the CCM, can be enhanced by four elements, and these have been incorporated into the model. These elements are:

1) Self-management support,

2) Delivery system design,
3) Decision support and,
4) Clinical information systems.

Self-management support involves education to empower and prepare patients to manage their health. Delivery system redesign involves planning and organizing the roles of the provider team to ensure effective, efficient care and self-management support. Decision support is designed to support care based on evidence-based treatment algorithms and provider education strategies. Clinical information systems, such as the electronic health record (EHR), organize patient and population data to facilitate effective care. Notably, these four elements are interrelated, providing support to one another to enhance patient-provider interactions (Figure 1).

Substance abuse patients with chronic medical diseases conditions need safe, high quality primary care to manage their physical conditions. The CCM framework offers a guide to substance abuse treatment facilities in their efforts to integrate primary care into treatment goals and interventions. Efforts to provide a delivery system and self-management support for patients being treated in a substance abuse facility may enhance health outcomes. Integrated health care, including shared clinical information systems, offer a viable option. The CCM model supports the use of health care, evidence-based practice, self-management support and electronic data base to improve the health of substance abuse patients. The four elements of the model are essential for effective integration of care.

Methods and Procedures

The study employs a retrospective cross-sectional descriptive design. The charts review documented the presence and management of chronic medical diseases among substance abuse patients at a substance abuse treatment facility. Data for the study were retrieved through a chart review from the period January 2014 through December 2014. In addition, a single focus group session was held to assess barriers to primary care services by patients in the treatment facility. The charts review and focus group interviews were all conducted at a substance abuse treatment facility in the Southeastern United States. The chart review comprised a sample of 62 patients with chronic medical conditions who were receiving substance abuse treatment at a local Substance Abuse Treatment Center. A chart was selected if there were documented chronic medical disease history. Those without a documented chronic medical disease were excluded from the analysis. The focus group interviews were conducted on nine patients who were being treated at the Center. They included the following: seven white females; one African American female; and White male; with mean age of 36.11 years and range of 24-50 years. In addition to a history of chronic medical conditions, patients were selected to participate only if they were able to understand and speak English.

Approval to conduct the study was obtained from the substance abuse treatment facility and the Institutional Review Board at Winston-Salem State University (WSSU). Informed consent forms were distributed and signed by participants. All prospective participants of the focus group interviews were notified of the study at various groups therapy sessions held at the treatment facility and through posted flyers. Participants were recruited to participate by invitation from the principal investigator (PI). Permission to participate in the focus group was provided by participants. Interviews were conducted by the PI while an employee from the substance abuse treatment facility took notes. Participants were told to answer questions at their comfort level. To minimize the risk that confidential information might be released, the anonymity of participants was maintained. A semi-structured interview questionnaire which was administered to identify patient's perception of barriers to primary care services for chronic medical disease management lasted for about 30 minutes. Participants were asked to respond to questions such as: Has a usual place for health care? Doctor visit in the past 12 months? Emergency room visit in past 12 months. The questionnaire was adapted from Kirzinger, Cohen and Gindi format. The authors used the tool to examined health access and utilization. At the beginning of the interview, the PI explained the objective of the focus group session as well as the ground rules. Participants introduced themselves.

A thematic-content-analysis method was used to identify, analyze, and report patterns within the transcribed data [23,24]. This process was developed to determine and extract major themes. The interviews were audio-recorded and transcribed word for word and were checked by the PI. Some of the major themes that emerged out of the discussions were cost, lack of insurance, long wait times, problems surrounding transportation, and issues of stigma. Once the themes were determined, the marked text was coded, using predetermined themes as described by Vaismoradi, Turunen and Bondas [25].

The chart reviews were also conducted by the PI using a data extraction tool originally used by Barber, Gary, McDonald, Andrew, Barber and Xu, [26]. The extraction tool was modified for this study so that it would cover

chronic medical diseases. A test of inter-rater reliability was performed on the revised questions by randomly selecting 10 charts and using the extraction tool to extract data from those charts. Reassessment of the tool was done five weeks after the initial assessment, with the kappa value for test-retest being 0.86. The data extracted included information such areas as socio-demographics; chronic medical diseases; medical data; and provider intervention. The socio-demographic data extracted included age, gender, and ethnicity, marital status, level of education, health coverage, and employment history. Medical data included height, weight, body mass index (BMI), waist circumference, and systolic and diastolic blood pressure (BP). The chronic medical diseases included are diabetes, hypertension, obesity, herpes, pain, COPD, thyroid, hepatitis A, hepatitis B, hepatitis C, asthma, cholesterol, MRSA, cirrhosis, neuropathy, arthritis, GERD, cancer, seizure, stomach problems, heart problems, migraine, stroke, scoliosis, cystic fibrosis, and pancreatitis. Provider interventions listed on the charts included on the data extraction tool included education level, diet, physical activity level, medications, referral history, and other interventions.

Descriptive statistics (mean, standard deviation, frequency and percentage) were performed on demographic, personal health and other study variables; and also, to addressing the two research questions using Statistical Package for the Social Science (SPSS). A nonparametric McNemar-Bowker test was employed to determine the number of chronic medical diseases an individual patient suffered from related to provider interventions instituted. Statistical significance level was set at p <0.05%; while Content analysis was used in addressing the barriers to primary care.

Results and Discussions

Table 1 presents the social and demographic characteristics of the participants while "Table 2 illustrates health characteristics. Overall, the mean age of study participants was 41.74 years (SD=11.89). Mean BMI was 31.49 (SD=9.02). Mean waist circumference was 37.4 (SD = 68). Mean SBP was 129.76 (SD 22.78), while mean BP was 80.82 (SD =7.4; "Table 2"). Table 3 presents female personal health characteristics. The mean age was 42.76 years (SD = 12.43); mean BMI was 32.45 (SD = 9.65); mean waist circumference, 36.53 (7.38); mean SBP, 124.62 (SD = 22.27); mean BP, 78.88 (SD = 11.65. Characteristics of male participants are presented in Table 4. The mean age was 40.5 (11.29); mean BMI was 30.33 (SD = 8.2); mean waist circumference, 38.46 (7.41); mean SBP, 136 (SD = 22.19); mean DBP, 83.28 (SD = 11.21).

Table 5 presents the results of medical diseases and provider interventions. A total of 26 chronic conditions were identified from chart reviews, with a total of 25 chronic medical diseases reported among those seeking services at the mental health clinic. All of the patients had a history of chronic medical diseases: hepatitis C (41.9%, n=26), hypertension (32.3%, n=20), pain (24.2%, n=15), a history of obesity (19.4%, n=12), arthritis (17.7%, n=11), diabetes (16.1%, n=10), and GERD (14.5%, n=9). The most common provider interventions among this group of patients were referral (92.3%), education (23.1%), and diet (15.4%).

The chronic medical diseases for which a referral was made most frequently were hepatitis C (41.9 %), hypertension (32.3%), pain (24.2 %), obesity (19.4%), arthritis (17.7 %), and diabetes (16.1%). Association between chronic medical disease and provider intervention is presented in table 6. The interventions conducted or recommended by providers differed in relation to whether a patient had only a few or more than a few chronic medical diseases. Providers were more likely to favor education (53.2%) for all patients but at a higher rate for those with 2 to 3 (40.3%) chronic medical diseases (McNemar-Bowker test=22.62, df=3, p=0.0001 "Table 6".

Study characteristics	n(62)	%
Marital Status		
Single	28	45.2
Married	19	30.6
Divorced	13	21
Widow/Widower	2	3.2
Highest Education Level		
High school Completed	56	90.3
2 yrs. college completed	6	9.7
4 yrs. college completed	—	—
BA/BS degree obtained	—	—

Study characteristics	n(62)	%
MS/MN/MA degree obtained	—	—
Employment Status		
Full time	13	21
Part time	11	17.7
Unemployed	23	37.1
Retired/disabled	15	24.2
Gender		
Female	34	54.8
Male	28	45.2
Source of Payment		
Private	—	—
Medicaid	19	30.6
Medicare	—	—
Out of pocket	—	—
Other (IPRS)	43	69.4
Race/Ethnicity		
White	55	88.7
Black	7	11.3
Hispanic	—	—
Asian	—	—
Who made referral to clinic		
Primary Care Doctor	1	1.6
Emergency Department	—	—
Local Mental Department	8	12.9
Detox Program	—	—
Nurse Practitioner	—	—
Self-referred	34	54.8
Hospital inpatient unit	9	14.5
DSS/Court	2	3.2
Other	8	12.9

Table 1: Social and Demographic Characteristics of Participants.

Study characteristics	n	M	SD	Min.	Max.
Age	62	41.74	11.89	21	68
BMI	62	31.49	9.02	18.17	66.63
Waist circumference	62	37.4	7.4	27	61
Systolic blood pressure	62	129.76	22.78	93	190
Diastolic blood pressure	62	80.82	11.56	61	110

Table 2: Personal Health Characteristics of Study Participants.

Study characteristics	n	M	SD	Min.	Max.
Age	34	42.76	12.43	26	68
BMI	34	32.45	9.65	21.09	66.63
Waist circumference	34	36.53	7.38	28	54
Systolic blood pressure	34	124.62	22.27	93	190
Diastolic blood pressure	34	78.88	11.65	61	108

Table 3: Female Personal Health Characteristics.

Study characteristics	n	M	SD	Min.	Max.
Age	28	40.5	11.29	21	64
BMI	28	30.33	8.2	18.17	60.8
Waist circumference	28	38.46	7.41	27	61
Systolic blood pressure	28	136	22.19	98	190
Diastolic blood pressure	28	83.28	11.21	61	110

Table 4: Male Personal Health Characteristics.

Chronic conditions	Provider interventions							
	n	%	Edu.	Diet	Phy. Act	Med.	Ref.	None
Diabetes	10	16.1	10	10	—	—	10	—
Hypertension	20	32.3	20	20	—	—	20	—
Obesity	12	19.4	12	12	—	—	12	—
Herpes	3	4.8	—	—	—	—	3	—
Pain	15	24.2	—	—	—	—	15	—
COPD	7	11.3	—	—	—	—	7	—
Thyroid	8	12.9	—	—	—	—	8	—
Hepatitis A	1	1.6	1	—	—	—	—	—
Hepatitis B	—	—	—	—	—	—	—	—
Hepatitis C	26	41.9	—	—	—	—	26	—
Asthma	4	6.5	—	—	—	—	4	—
Cholesterol	3	4.8	3	1	—	—	3	—
MRSA	7	11.3	—	—	—	—	7	—
Cirrhosis	6	9.7	—	—	—	—	6	—
Neuropathy	3	4.8	—	—	—	—	3	—
Arthritis	11	17.7	—	—	—	—	11	—
GERD	9	14.5	—	—	—	—	9	—
Cancer	5	8.1	—	—	—	—	5	—
Seizure	3	4.8	—	—	—	—	3	—
Stomach problem	2	3.2	—	—	—	—	2	—
Heart Problem	7	11.3	5	—	—	—	7	—
Migraine	6	9.7	—	—	—	—	6	—
Stroke	2	3.2	—	—	—	—	2	—
Scoliosis	2	3.2	—	—	—	—	2	—
Cystic fibrosis	2	3.2	—	—	—	—	2	—
Pancreatitis	1	1.6	—	—	—	—	1	—

Note. *Edu. = Education, Phy. Act. = Physical Activity, Med. = Medication, Ref. = Referral, OInt. = Intervention.
Table 5: Chronic Conditions and Provider Interventions.

Number of interventions		Education	Diet	Referral	Total
Chronic Conditions	One	12.2	0.7	10	37.1%
	Two-Three	13.3	0.8	10.9	40.3%
	≥ Four	7.5	0.5	6.1	22.6%
Total		53.2%	3.2%	43.5%	

McNemar-Bowker Test = 22.62, df. = 3, p = 0.0001
Table 6: Provider Initiated Interventions for Chronic Diseases by Number of Different Chronic Diseases.

Usual Source of Care

The outcomes of the focus group interviews included seven (78%) of the participants identified the emergency department as their usual source of care. These participants also reported each had visited the emergency department from four to six times within the past 12 months. Reasons for going to the emergency department

ranged from anxiety and withdrawal symptoms to management of symptoms related to chronic medical conditions, such as diabetes. The findings from the charts reviewed also demonstrated that a considerable number of patients enrolled in the substance abuse treatment program have chronic medical diseases, many of which are not well managed. In fact, 37.1% of the patients in the study had at least one chronic condition; 40.3% had two or three chronic medical diseases; 22.6% had greater than four chronic medical diseases. Specific chronic conditions reported included hepatitis C, hypertension, pain, obesity, diabetes, arthritis, and gastroesophageal. Combined with the evidence in the published literature, the results of the study provide documentation to the administrators of the substance abuse treatment facility of the need for chronic disease management among their population of patients.

Finally, the study also demonstrated that patients at the SA treatment facility who have chronic medical diseases were able to receive some type of intervention. There were six specific provider interventions identified: education, diet, medications, physical activity, referral and other interventions. The association between chronic medical diseases and provider interventions showed that education was used significantly more than other interventions, including referrals; and it was more likely to be used when a patient had multiple chronic medical diseases.

Summary and Conclusion

In summary, the findings of this study demonstrated that patients are dealing with physical, psychosocial, chronic medical diseases, which present a common set of challenges to them. Unfortunately, as much as (92.3%) do not get treatment in that facility but are referred out. Moreover, for those who received care, it was not sufficient to address their health care needs. The care sought was often from emergency departments and all too often there was no follow up care from primary care providers. Many of them do not receive needed care because of perceived barriers. The results of the study highlight the need for integrated care for Substance abuse patients and the need to address the chronic medical diseases of patients in the treatment facility. It also highlights the need for setting up primary care services in the substance abuse treatment facility. Establishing such services would permit patients to receive primary care services and, at the same time, overcome some of the barriers that make it difficult for patients to receive chronic disease management. The findings from this project add to the growing body of evidence for the need for integration of substance abuse and treatment and primary.

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