



Full length article

## Substance abuse treatment engagement, completion and short-term outcomes in the Western Cape province, South Africa: Findings from the Service Quality Measures Initiative



Bronwyn Myers<sup>a,b,f,\*</sup>, Petal Petersen Williams<sup>a,b,f</sup>, Rajen Govender<sup>c,d,f</sup>, Ron Manderscheid<sup>e,f</sup>, J. Randy Koch<sup>g,f</sup>

<sup>a</sup> Alcohol, Tobacco and Other Drug Research Unit, South African Medical Research Council, Cape Town, South Africa

<sup>b</sup> Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa

<sup>c</sup> Department of Sociology, University of Cape Town, Cape Town, South Africa

<sup>d</sup> Violence Prevention Research Unit, South African Medical Research Council, Cape Town, South Africa

<sup>e</sup> National Association of County Behavioral Health and Developmental Disability Directors, Washington DC, USA

<sup>f</sup> Department of Psychiatry, Stellenbosch University, Cape Town, South Africa

<sup>g</sup> Department of Psychology, Virginia Commonwealth University, Richmond, VA, USA

### ARTICLE INFO

#### Keywords:

Substance use disorder  
Treatment quality  
South Africa  
Treatment completion  
Treatment engagement

### ABSTRACT

**Background:** Optimizing the effectiveness of substance use disorder (SUD) treatment is critical in low- and middle-income countries (LMICs) with limited opportunities for SUD treatment. This is the first study to identify targets for interventions to improve the quality of SUD treatment in a LMIC.

**Method:** We explored correlates of three indicators of treatment quality (treatment engagement, completion and abstinence at treatment exit) using data from a SUD performance measurement system implemented in the Western Cape Province of South Africa. The sample included data from 1094 adult treatment episodes representing 53% of the treatment episodes in 2016. Using multivariate logistic regression analyses, we modeled socio-demographic, substance use and program correlates of treatment engagement, completion, and abstinence at treatment exit.

**Results:** Overall, 59% of patients completed treatment (48% of patients from outpatient services). Treatment completion was associated with greater likelihood of abstinence at treatment exit. Patients were more likely to complete treatment if they engaged in treatment, were older, and had more severe drug problems (characterized by daily drug use and heroin problems) and attended programs of shorter duration. Residential treatment was associated with greater likelihood of treatment engagement, completion, and abstinence at treatment exit.

**Conclusion:** Improving rates of outpatient treatment completion will enhance the effectiveness of South Africa's SUD treatment system. Interventions that promote engagement in treatment, particularly among younger patients; reduce program length through referral to step-down continuing care; and ensure better matching of drug problem to treatment level and type could improve rates of treatment completion.

### 1. Introduction

The prevalence of substance use disorders (SUDs) in South Africa is high, with an estimated 13% of the general population meeting diagnostic criteria for a lifetime SUD (Herman et al., 2009). Although a substantial proportion of people with SUDs recognize the need for treatment, less than 5% ever access treatment in South Africa (Meade et al., 2015; Myers et al., 2010a; Myers et al., 2014a). This treatment gap is largely due to structural barriers, such as limited availability of services in relation to need, large patient caseloads, long waiting

periods for treatment, and geographic access barriers (Magidson et al., 2017a,b; Myers et al., 2010a). Given the limited opportunities for SUD treatment in this context, it is important to optimize the impact of this scarce resource by ensuring that available services are effective and of high quality (Myers et al., 2016).

To identify areas in which to strengthen the South African SUD treatment system, a better understanding of system performance on key indicators of treatment quality and effectiveness is required. At present, there is little information available on the performance of the South African SUD treatment system. While some treatment programs in the

\* Corresponding author at: Alcohol, Tobacco and Other Drug Research Unit, South African Medical Research Council, PO Box 19070, Tygerberg, 7505, South Africa.  
E-mail address: [bmyers@mrc.ac.za](mailto:bmyers@mrc.ac.za) (B. Myers).

Western Cape province have been evaluated (Bosman, 2014; Duffett, 2013; Gouse et al., 2016; Strebel et al., 2013), these evaluations have been restricted to individual facilities. The applicability of these evaluation findings to the broader SUD treatment system is arguably limited, given the considerable between-program variation in patient demographic and substance use characteristics as well as program structure and resourcing (Magidson et al., 2017a,b). System-level data on treatment effectiveness and quality (rather than program-specific information) are needed for the design of interventions to enhance SUD treatment system functioning.

In other settings, the performance and quality of SUD treatment systems is often assessed using data on rates of engagement in treatment, completion of treatment, and abstinence on treatment exit (Garnick et al., 2012; Harris et al., 2010; McLellan et al., 2007). Data on these performance indicators are easy and affordable to collect from facilities' routine patient information systems, and there is substantial evidence that performance on these indicators is predictive of short and long-term treatment outcomes (Garnick et al., 2007; Garnick et al., 2012; Harris et al., 2010; Simpson et al., 2002).

In order to identify targets for interventions to improve SUD treatment system performance, a better understanding of the correlates of treatment engagement, completion and drug abstinence in the South African context is required. Studies conducted in the USA have shown that patient demographic and substance use characteristics and treatment program attributes influence whether a patient engages in treatment (Simpson, 2004; Simpson and Joe, 2004) which, in turn, enhances the likelihood of treatment completion (Hser et al., 2004; Simpson and Joe, 2004). Patient characteristics such as age, race, gender, and employment status (Jacobson et al., 2007; Krawczyk et al., 2017; Mutter et al., 2015); severity of SUD, as indicated by more frequent use (Bluthenthal et al., 2007; Guerrero et al., 2017); and intensity of treatment provided (Stahler et al., 2016) all appear to influence whether people complete treatment. Patients with more severe SUDs who are receiving outpatient care seem less likely to complete treatment (Bluthenthal et al., 2007; Guerrero et al., 2017; Stahler et al., 2016).

These findings have informed the design of interventions to enhance treatment outcomes in the USA (for example Knight et al., 2016), but it is unclear whether the patient and program correlates of treatment engagement and completion are similar in South Africa, a low-and middle-income country (LMIC). South Africa has considerably less resources for SUD treatment than the USA, with significantly fewer service providers and treatment facilities per 100,000 patient population (Myers et al., 2014b). As such, there may be correlates of treatment engagement and completion that are specific to South Africa. In order to guide the design of contextually relevant SUD treatment system strengthening initiatives, information on the patient and program factors associated with treatment engagement, treatment completion and short-term treatment outcomes among South African populations is required. Only two studies have explored engagement in and completion of SUD treatment in South Africa (Gouse et al., 2016; Myers et al., 2010b; Pasche et al., 2010). As these studies were limited in terms of their geographic, treatment program and patient population coverage, additional cohort studies that are representative of the SUD treatment landscape and patient population are needed to identify possible targets for SUD treatment system strengthening activities in South Africa.

This study aims to respond to this information need by examining the patient and program correlates of treatment engagement, treatment completion and abstinence at treatment exit within the SUD treatment system in the Western Cape Province of South Africa.

## 2. Method

For this paper, we analyzed data collected as part of the routine implementation of the Service Quality Measures (SQM) performance measurement system in 2016. Implementation of this system occurred at 31 treatment sites in the Western Cape, representing more than 80%

of available outpatient and residential SUD treatment sites for adults in the province (Myers et al., 2017). The South African Medical Research Council's (SAMRC) Ethics Committee approved the study (EC 001-2/2014).

### 2.1. Selection and recruitment of treatment facilities

We invited SUD treatment sites in the Western Cape participating in the South African Community Epidemiology Network on Drug Use (SACENDU) to implement the SQM system. Project staff approached treatment managers at each of the facilities, described the SQM initiative to them and assessed their interest in implementing the system. To implement the SQM system, facilities had to provide SUD treatment to adult patients ( $\geq 18$  years of age) and agree to (i) release staff for initial and ongoing training in the implementation protocols, (ii) adopt and implement the performance measurement protocols, and (iii) implement the SQM system from 1 August through 31 October each year.

### 2.2. Implementation procedures

During the implementation period, staff responsible for conducting intake assessments briefly described the SQM initiative to all adult patients initiating treatment and asked them if they were willing to participate in the system. To be eligible for participation, patients had to be at least 18 years old and enrolled into the facility's substance abuse treatment program. There were no exclusion criteria. Patients provided verbal consent to participate in the initiative; the SAMRC ethics committee waived the need for written consent. For consenting patients, the intake worker completed the SACENDU treatment admission form for patients enrolled into the treatment program. This is a standardized, one-page data collection form completed for each patient enrolled into treatment. It comprises 22 forced choice questions on patient's socio-demographic characteristics and their substance use history (see Parry et al., 2002). After three to four weeks of treatment (depending on treatment program duration), the patient completed the South African Addiction Treatment Services Assessment (SAATSA; Myers et al., 2015). This validated tool (Myers et al., 2015) collects patient-reported data on perceived outcomes of treatment and quality of services. Finally, the patient's caseworker completed the SQM discharge form after the patient left the program. This standardized one-page form is completed for each patient on his or her discharge from the treatment program. It comprises forced-choice questions on treatment duration, treatment response, and type of discharge (Myers et al., 2017). A unique patient identifier was used to link data across these various forms.

### 2.3. Measures

#### 2.3.1. Sociodemographic characteristics

We extracted data from the SACENDU form on patients' age (18–24 or  $\geq 25$  years of age), gender (male versus female), ethnicity (black African, Coloured or White descent), education (completed high school versus not completed high school), and employment status (yes/no).

#### 2.3.2. Substance use and type of treatment

We extracted data from the SACENDU form and the SQM discharge form on primary substance of abuse, frequency of use (daily, 2–6 times per week, weekly, monthly), chronicity of substance use (number of years used), history of prior treatment episodes (yes/no), whether treatment was provided in an outpatient or residential setting, and duration of treatment program (in weeks).

#### 2.3.3. Treatment response

Data on engagement and completion were extracted from the SQM discharge form. We defined engagement in treatment as being enrolled in the program for at least 14 days; we categorized patients whose

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات