Pedersen et al., J Addict Behav Ther Rehabil 2021, 10 :1
DOI: 10.37532/abtr.2021.10(1).189

Journal of Addictive Behaviors,Therapy & Rehabilitation

Research Article A SCITECHNOL JOURNAL

Drug use and recovery among male heroin users in Zanzibar

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Received Date: December 22, 2020; **Accepted Date:** January 04, 2021; **Published Date:** January 11, 2021

Abstract

This article is based on a study about drug use and recovery efforts among male heroin users in Zanzibar. The objective of the study was to explore the impact of sober houses in Zanzibar and examine the progress made by heroin users who attended the first sober house program in 2009. Data was collected during autumn 2019 and generated from 89 structured interviews and 18 follow-up in-depth interviews with the recovering heroin users. The aim was to track details about the individual drug use and recovery story. Focus of our attention was if and how they experienced support from the sober house program and from the wider recovery community that grew in Zanzibar over these years, based on volunteer work. In addition, the study tried to identify other sources of recovery capital important to the heroin user's success in recovery. In the study 16% of the informants reported having been drug-free throughout the 10 years since attending the first program. The most successful one-third reported to have on average 9, 1 years total drug-free time. These figures for the middle-range and lower one-third was 5, 1 and 1, 9 years. Characteristics of the more successful was that they responded positively to the first sober house program, they stayed longer, rated the support higher and had more drug free time related to their first sober house program. Important was also that they to a larger degree avoided injection of heroin, engaged more in volunteer work and had a stronger family support.

Keywords
Sober House; Heroin; Addiction; Recovery; Zanzibar; Tanzania

Introduction

Zanzibar has the last decades experienced an increase in drug trafficking and social problems related to drug addiction [1]. This led to Zanzibar being included in The Global Initiative on Primary Prevention of Substance Abuse, a project implemented jointly by the United Nations International Drug Control Programme (UNDCP) and the World Health Organization (WHO)-starting in June 1997 and completed 2003 (WHO/UNDCP 2003). Results from research carried out in three different countries in South and East Africa confirmed the worries about easy access to and increased use of heroin in Zanzibar:

> The expanding range of substances used, including injectable substances (e.g., heroin), is also a cause for concern, particularly in Zanzibar in Tanzania, where access to illicit substances is especially easy, considering that Zanzibar is a transit point for trade in these substances. The respondents particularly indicated that it was easy to obtain the substances they commonly used [2].

The first interventions targeting drug use in Tanzania and Zanzibar were clinical oriented, with the HIV/AIDS epidemic in focus. The aim was to get this epidemic under control by outreach programs, medical support, and education of drug users injecting heroin [1-7] [8-10]. The sober house initiative emerged from the need for a recovery approach as supplementary to medical. The concept of sober houses and the 12-step model was introduced in Zanzibar during the late 2000'. Considerable work was done to bring Zanzibarian authorities on board in support of the recovery concept by people form the College of Social Work, University of Illinois, Department of Substance Abuse Prevention and Rehabilitation in Zanzibar, and people in Zanzibar who already had experience from sober house recovery using the 12-step model [10,11].

The 12-step model was first used as an approach to alcohol addiction by Anonymous Alcoholics, later Narcotics Anonymous have used the basic model in recovery from hard drugs like heroin. At the core of this model, we find the human therapeutic approach to addiction where the aim is to retain dignity through behavioural change and with the support of a therapeutic community of self-help groups. The first sober house in Zanzibar, Detroit Sober House, was established in 2009, later more houses were opened by recovering drug users applying the same 12-step model. This was a new concept in Zanzibar which the drug user and recovery community in Zanzibar seem to have responded well to. Still, data on the impact has been inadequate and this article addresses this need by examining recovering drug user's experience with recovery during the last ten years.

The 'capital' concept is applied, as introduced by Pierre Bourdieu, defined as social forces shaping social fields and interaction between social agents (Bourdieu 1977). Recovery capital then refers to the set of resources, internal and external, available to initiate and sustain recovery from addiction problems [4,6]. Personal recovery capital includes physical as well as human capital, a person's physical and mental health, income/financial assets, access to shelter, food, transportation, etc. Human recovery capital includes according to White and Cloud (2008 p. 2) ...a client's values, knowledge, educational/vocational skills and credentials, problem-solving capacities, self-awareness, self-esteem, self-efficacy (self-confidence in managing high-risk situations), hopefulness/optimism, perception of one's past/present/future, sense of meaning and purpose in life, and interpersonal skills.

Social network recovery capital contains intimate relationships, like family and friends that are supportive in recovery efforts. To serve as a capital, a willingness is required from intimate partners and family members, to participate in and support the recovery process of the person suffering from addiction. Community recovery capital refers to community attitudes, the policies, and resources provided for recovery efforts, as well as efforts to reduce addiction and recovery-related stigma [12-14]. In the reality, the above forms of capital interact and play together in complex ways in the context. Access to the community recovery capital sober house, as well as the usefulness of this capital to the individual drug user, depends on the social agent's total access to capital.

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Material and Methods

Data presented in this article is generated from 89 structured interviews and 18 follow-up in-depth interviews with informants having experience from sober house recovery in Zanzibar. Data were collected in September - November 2019 and selected informants had two things in common; 1) They all attended the program at Detroit Sober House in Zanzibar during the two first years, 2009 or 2010, and 2) They still lived in Zanzibar. Identifying informants was done with the support of leaders of the Zanzibar Recovery Community, who had been present at Detroit Sober House during the two first years, doing recovery and/or service.

In structured interviews informants were asked about their drug use, age and time factors, sober house recovery history, clean time and relapses, as well as attendance in other sober houses and alternative treatment for their drug problem. The aim was to track details about the individual recovery histories during the 10 years. Questions in the structured interview had mostly a quantitative character, but with qualitative follow-up questions. While asked to estimate the helpfulness of sober houses and family support to their recovery, informants were also asked what they found the most helpful (if these were found to be helpful) and if there was something else in their life, they found particularly helpful or considered an obstacle to their struggle for recovery.

Results

Recovery success was measured as reported total 'drug-free time' (TDFT) starting from first attendance in the Detroit Sober House program until the time of the interview. The quantitative data analysis looks at the characteristics of informants with different levels of TDFT. Level 1 A group contains informants who reported 'no relapse' over the ten years and Level 1-3 groups represent 'upper third', 'mid-third', and 'bottom third' levels of TDFT. A comparison is made between characteristics of groups with different levels of success in Table 1. The correlation r between some variables and TDFT and the p value for significance of these correlations at α=5% is also presented in Table 1. Differences between the younger and older half of informants were looked at to reveal potential differences over time.

Defining and measuring 'drug-free time' and recovery success

Measuring 'drug-free time' is not straightforward in self - reporting studies about drug addiction and recovery. Challenges in maintaining accuracy will be present as there will be grey zones and complexity. Some informants in our study would for instants claim to be drug-free, even if they sometimes used substitutes like marihuana and alcohol. There was also an issue about methadone us: if being on methadone treatment should be considered 'drug-free time' or 'being on drugs'. It added to the complexity that answers to this question defined ideological positions in the recovery community in Zanzibar, a consensus was found only at one point: 'drug-free time' implies 'absence of heroin use'. Facing this complexity, we asked informants to define if they consider a specific period as 'drug-free time' the members of Narcotics Anonymous (NA) would report their drug free or 'a relapse'. Time referred to as 'drug-free time' refers to 'no heroin use' but could sometimes include use of other drugs and/or methadone use. Concerning drug free time related to methadone use this was possible to specify as it was related to attendance the methadone program (Table 1). Defining 'drug-free' and measuring 'drug-free time' is important to drug users in recovery, because becoming drug-free and sustain a drug-free condition are major goals. over time (Figure 1).

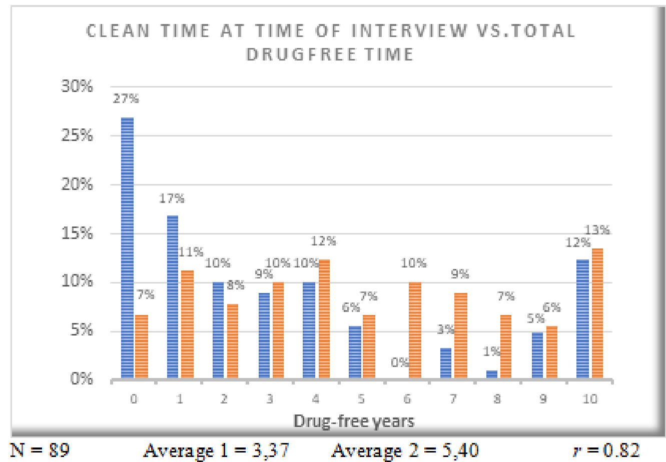

Figure 1: Clean time at the time of interview vs. total drug free time among drug users who started recovery in Detroit Sober House in 2009/2010.

	Level - 1A Informants with no relapses	Level - 1 One third with highest TDFT	Level - 2 One third middle range TDFT	Level - 3 One third with lowest TDFT	Total Average	Correlation with TDFT and significance
Number of informants (N)	14	30	30	29		α = 5%
Level group's TDFT intervals (years)	10-Sep	10-Jul	3,5 - 7	0 - 3,5		
TDFT average (years)	9,95	9,1	5,1	1,9	5,4	
Age start drug use	15,6	16,7	17,7	16,7	16,8	$r = -0.05$, $p = 0.65$
Age start heroin use	18,8	19,8	22,3	20,9	20,8	$r = -0.14$, $p = 0.21$
Informants who had Injected heroin	47%	43%	80%	83%	66%	$r = -0.34$, $p < 0.002$
Age when realizing heroin addiction	24,1	25,1	27,1	26,2	25,84	$r = -0.14$, $p = 0.20$
Age first time sober house recovery attendance	34,28	34	33,5	30,4	32,3	$r = 0.14$, $p = 0.20$
Time from onset drug use to onset heroin use (years)	3,2	3,1	4,6	4,2	3,9	$r = -0.14$, $p = 0.21$
Time from onset heroin to realize addiction (years)	5,28	5,3	4,6	5,8	5,2	$r = -0.05$, $p = 0.62$
Time on heroin before first sober house recovery (years)	15,5	14,23	11,23	9,5	11,6	$r = 0.27$, $p < 0.01$
Time spent first time in Detroit sober house recovery (months)	6,57	6,7	6,15	3,3	5,4	$r = 0.37$, $p < 0.001$

Drug-free time related to first sober house recovery (years)	9,95	5,9	1,33	0,6	2,6	$r = 0.72$, $p < 0.001$
Engaged in volunteer work	79%	63%	17%	3,5%	28%	$r = 0.61$, $p < 0.001$
Self-estimated sober house support (scale 1-5)	4,7	4,5	4,2	3,5	4,1	$r = 0.41$, $p < 0.001$
Informants who had a job/ income after first sober house recovery	43%	43%	53%	48%	48%	$r = 0.01$, $p < 0.9$
Informants who had a place to stay after first sober house recovery	86%	90%	73%	76%	80%	$r = 0.25$, $p < 0.02$
Self-estimated family support (scale 1-5)	4	3,5	3,4	2,8	3,2	$r = 0.22$, $p < 0.04$
Informants who had been in the methadone program	0	20%	77%	82%	0,6	$r = -0.49$, $p < 0.001$
Drug free time related to methadone program attendance	0	6%	38%	53%	22%	$r = 0.10$, $p = 0.36$
Clean time at the time of interview (years)	9,95	6,9	2,4	0,78	3,3	$r = 0.82$, $p < 0.001$

Table 1: Characteristics of informants in relation to recovery success levels among drug users who started recovery in Detroit Sober House in 2009/2010. (TDFT=Total Drug-Free Time).

When being asked the question ‘do you consider yourself as drug-free today’ 85 % of the informants answered ‘yes’, 9% answered ‘no’ and 6% found it difficult to decide. These answers should be seen in connection with: a) what informants meant by being ‘drug-free’ (as referred to above) and b) the follow-up question ‘for long have you been drug-free?’. Figure 1 below show informants’ clean time in both the above understandings of drug-free time. In the upper end with 9- and 10 years drug-free time, we find the Level 1A group with no relapses, containing 16 % of the informants and we see that 27% had 5 years drug free or more. In the lower end, we see that 27% had less than a year drug-free and that 73% less than five years drug-free at the time of the interview. The figure also illustrates how these informants move up the scale when their total drug-free time over ten years is included.

Drug use, age and time factors related to recovery success

Informants reported their onset age for drug use to be from 12 to 35 years. The median onset age for drug use was 16 years, the average 17 years. ‘Bangi’, the Swahili for marijuana, was the far most frequent onset drug, 93% reported marihuana as either their only onset drug or used in combination with other drugs. Three informants reported heroin to be their only onset drug, eight reported that heroin was among their onset drugs.

All informants proceeded to use of heroin and on average it took four years form starting drug use to heroin use. The median onset age for heroin was 20 years, the average 20, 8 years. Heroin use normally started with smoking the drug, 66% reported to have been injecting the drug. Informants reported that it took on average 5, 2 years from starting heroin use to realizing their addiction problem and at this time they were on average 26 years old. It took on average 11, 6 years from starting heroin use to attendance in their first recovery program, at an average age of 32, 3 years (Table 1). Having heroin as your onset drug is rear, and when as many as 9% mentioned heroin among their onset drugs this could be due to some characteristics of the user environment in Zanzibar. At the time when heroin started to flow into Zanzibar in larger quantities (the 1990s and 2000s), the environment of drug users, or the “ghettos” as they are called in Zanzibar, seemed to be a mix containing both heroin users and marijuana users. The so-called ‘cocktails’ were popular, a mix of marijuana and heroin which was smoked. Youth were easily exposed to heroin use and informants tell about episodes where they believed to be smoking marihuana, just to find out that joints had been mixed with heroin. It seems like the danger of heroin at this time was not well known to young people or ignored. One informant put it this way:

I did not know how it was going to be dangerous later. I was thinking that to smoke heroin was like ordinary smoking, like smoking marihuana, like if I wanted to stop smoking marihuana it was just to stop, but it was not like that.

In addition, comes the easy access and cheap price. Informants who were involved in smuggling and dealing drugs into Zanzibar describe a time where heroin was “given out like candy, sometimes even for free”. Heroin at this time, according to the same informants “was everywhere”, “to a cheap price”, and “hit the ghettoes hard”. Thus, mixed environments, easy access, cheap prices, and limited knowledge about the addictive danger of heroin seem to have been key factors, lowering the threshold for young people to engage in heroin use during these decades.

Table 1 show some drug use, age, and time factors and how these relates to the informant’s recovery success. Those successful in recovery reported on average a slightly lower onset age for drugs and for heroin use, they were younger when realizing their drug addiction, had a faster transition from onset drug use to heroin use and had more years on heroin before starting their first recovery. Those less successful had a lower age while attending the first sober house program, they also reported more often having injected the drug. Looking closed at the strength and significance of the above mentioned veriables correlations with TDFT only ‘years on heroin before attending sober house recovery’ ($r=0.27$, $p<0.01$) and “injection of drugs” ($r=-0.34$, $p<0.002$) were found to be significant at $\alpha=5\%$ level. Years on heroin before attending the first sober house recovery as a success factor, could indicate a maturing process, in the sense becoming ready for a change. A common saying among recovering heroin users in Zanzibar was that: ‘you are not ready to quit drugs before you hit the bottom.’ The understanding was that ‘hitting the bottom’ implies reaching a point where drug users are forced to ask themselves the existential question: ‘do I want to live?’. Answering this question with a ”yes” demands fundamental change, a wish to live or change your life will not be enough. Motivation is required for this change to happen ‘hitting the bottom’ was thought of as a turning point boosting the motivation to become drug-free. Informants had different ways of describing this point:

“I was sick and tired”; “I became aware destruction of drugs”, “I was hitting the bottom”, “I was stuck, reached the bottom, sleeping outside”, “I wanted my life back, drugs almost killed me”.

If we anticipate a relation between ‘time on heroin’ and the likeliness of hitting the bottom and sees ‘hitting the bottom’ as a potential turning point in motivation to quit, ‘time on heroin’ could affect a recovery success. There is a difference though, between claiming that drug users need to reach the bottom to become ready for recovery and to claim that when drug users reach this point, it might be a turning point in their

motivation to quit.

The first understanding, that things have to get worse before it gets better might lead to contra-productive approaches in recovery.

As our sample had informants with an age range of 29-61 years we had the opportunity to compare "younger" and "older" generations of drug users concerning drug use, age, and time factors. The oldest half of our informants had 1989 and 1993 as their average onset years for drug use and heroin use. The respective years for the youngest half were 1998 and 2001. Data suggest a drop in onset age, the youngest half of our informants on average started earlier with drugs (-3, 33 years), and with heroin (-5, 10 years). They also used less time from starting drug use to the onset of heroin use (-1, 80 years) and a higher percentage had been injecting heroin (84% vs. 57%). The average TDFT was 1, 2 years less compared to the older generation. These findings show that the heroin users became younger during these years but also support studies referred to above, which suggest a general increase in heroin use and an increase in injection of drugs during the 1990s and 2000s in Zanzibar.

Access to housing and family support

Family support as social network recovery capital was important to informants and could be reported as financial, social, as well as emotional support. For informants to estimate or indicate the level of family support had some complexity to it. Some parts of the family could be supportive and the other not, the family could be supportive in one phase of the drug user's career but not in other phases. A dimension here is that families could not only deny help, but sometimes contribute to the burden by being hostile, violent, and oppressive. Some had experienced a traumatic childhood with abuse and violence which also could contribute to a high conflict level. Family relations interacted in complex ways with drug abuse and recovery success, as they many times were both a part of the problem and represented a potential important recovery capital. This was a two-way thing because informants' life as a heroin user brought often brought challenges to the family making it difficult to be supportive.

Concerning their first stay in Detroit Sober House, informants were asked if they had a place to stay at the time of leaving the sober house. They were also asked to estimate the support they got from their families in their recovery efforts on a scale from 1-5. Table 1 shows that 'having a place to stay after first recovery attempt' and 'experiencing family support' are characteristics of success in recovery, they also correlate significantly with TDFT at $r=0.25$, $p<0.02$ and $r=0.22$, $p<0.04$. More exact we could say that not having shelter and a low score on family support seems to negatively affect recovery success. A closer look shows that the 20% who reported no place to stay after leaving the sober house program had a TDFT of 1, 5 years below average. Important to notice here is that 'having a place to stay after first recovery' very often was reported to be staying with their family. Thus, having a place to stay could also indicate something about family relations.

When informants were asked open questions about the most important supportive factors in their recovery, family related support was among the most frequently mentioned. This could be expressed like:

"My parents, they got me out", "My family, my parents - they helped me a lot, they pushed me a lot", "My wife and my parents"," My family helped me a lot, my father is himself a recovered addict and he is always there when I need him."

This could be direct support like shelter, meals, medicines, a job, emotional and moral support. Other times family issues were mentioned as helpful because they triggered a desire to quit drugs and make changes, like to restore family relations, maintain family relations, or start their own family:

"I wanted to return to my family", "I want my family to get together, I plan to have my family back", "My family, my kids, when I get the motivation to quit and go to the sober house it is because of my children.", "I have got a family and children to care for", "I wanted to get married, that's why I quit", "I wanted to marry and get work".

These kinds of concessions can become turning points in a drug user's career. Even if family relations could be complex and complicated it was a general understanding that good family relations are important to recovery and that broken family relations and being rejected by their own family have a negative impact.

Access to job/income

Access to job/income is considered important in a recovery capital perspective. One could claim that 'having a job/income' contributes to stability in terms of regular income, having a place to go to on regular basis, receiving recognition, and have someplace of belonging. Our informants were asked if they had a job or income at the time of leaving their first recovery program at Detroit Sober House. Table 1 shows that 48% confirmed that they had job/income, 52% reported no job/income. Surprisingly one could say, 'having a job/income' while leaving the sober house was not a characteristic of the successful, and no correlation was found between having a job/income and TDFT ($r=0,01$, $p=0.9$). One explanation to this could be that many jobs and businesses were temporary and did not necessarily represent social and financial stability. 'Having a job' at the time of leaving the sober house was not necessarily a permanent job, 'having an income' was not necessarily a permanent or substantial income. Many sources of income were small businesses, which could target the tourist industry like; tour guiding, food business, selling in the street, artists, or other tourist-related activities. Other targeted local markets like running a local bar, a hairdressing salon, shoemaking, farming, selling secondhand items, selling food locally in parks, or markets. Finally, those employed as drivers, conductors, fishermen, sailors, loaders, hairdressers, mechanics, in building, or painting works. These jobs and sources of income were often seasonal, and/or temporary, and/or low paid.

A part of the complexity was that work/income-related activities not necessarily played a protective role against drug abuse. Work/income-generating activities and drug use could also be intervened and getting good money from well-paid jobs could have an encouraging effect on drug use as illustrated below:

"What prevents me (to stay clean) is friendship, I am running a barbershop and drug-using friends come to me every day, they encourage me to continue using".

This was also the case for informants working in places like construction sites, in heavy-duty transport, fishing boats, ships, markets, street sales, and artistic work. A musician expressed his dilemma this way:

"I need drugs for my musician work, I get confidence, every note I can play then, and it helps my breathing system to work properly - the music is a trigger, also because other musicians use drugs, it is a part of coming together. From music work, I get money in my pocket that I can use for drugs. I am like a candle burning out while people applaud my music."

The lack statistic correlation between job/income and TDFT, in this case, could also be affected by the fact that many of those who started volunteer work in the recovery community just after finalizing their first program would answer "no" while asked if they had any job or income at the time of leaving the program. These informants also had a high total drug-free time.

Methadone program attendance

The methadone program in Zanzibar was started in 2015 and 53 (60%) of our informants had been in the program and 49 (55%) were still attending the program at the time of interview. Table 1 shows that in the Level 1 group 20% of the informants had been in the methadone program and the drug-free time related to methadone treatment accounted for 6% of their total TDFT. In the Level 2 middle range success group the respective figures were 77% and 38%, and for Level 3 less successful group the figures were 83% and 53%. A significant negative correlation at $r=-49$, $p<0.001$ was found between having attended the methadone program and TDFT. The above findings should be expected, taken into consideration that the goal of the methadone program is harm reduction amongst people who inject drugs, targeting improved health and reduction of crime. When the methadone program came to Zanzibar it represented another chance for many drug users to stop using heroin. Among them we find both 'the

frequent triers' who had been in and out of sober houses and those with one or no returns to sober houses. Data also shows that twice as many from the 'younger' generation in our sample had been attending the methadone program (80% vs. 41%), which logically follow from the findings about a dropping onset age for heroin use and increased injection in the younger generation.

Sober house attendance and recovery success

An important aim of this study was to explore the impact of sober houses on drug user's recovery in Zanzibar. During the collection of data about attendance in sober house programs, we soon found that measuring this had some complexity to it. Attending a sober house program, you could do as a drug user in immediate recovery, but also as a volunteer, doing service in the house after finishing your program. Informants did not necessarily make a sharp distinction between 'being in recovery' and 'doing service' in sober houses. Recovering was always going on, since; "one time and addict, always an addict" was a common understanding, and recovering also contained maintaining your drug-free condition. Working in peers with fellow recovering addicts, was not only seen as a help to others but also as a part of own recovery. Methodically, this left us with some challenges as we wanted to measure the time informants spent in recovery in sober houses and if we included the service time this would largely affect the figures. In this situation, we asked informants to, as far as possible, distinguish their own recovery time from the service/volunteer time.

The first Detroit Sober House recovery program in Zanzibar contained a basic program of four months and an aftercare option of two extra months. Table 1 shows that informants on average stayed 5, 4 months in this program and had 2, 6 years drug-free time related to this stay. There is a significant correlation between time spent in Detroit Sober House first time and TDFT at r=0.37, p<0.001. Data suggest that dropping out before finalizing the basic program of four months affects recovery success negatively. The Level 3 one third less successful spent on average only 3, 3 months in their first program while the more successful two-third spent more than 6 months.

The 38 informants, who left before finalizing their basic sober house program gave explanations like; 'lack of money to continue' (8), 'started a business' or 'got a job' (3), 'conflicts in the sober house' (4), and 'family obligations/illness' (4). Frequently the phenomenon of 'not being ready to quit' or 'having believed that they had recovered' were mentioned. In total 21 of the 38 informants mentioned this as their reason in statements like:

"I relapsed and ran away"; "I was not ready"; "I just escaped, thought that I was fine now"; "I was tired of being locked up"; "I was no ready, forced by mother and father to be there"; "I felt trapped and had paranoia"; "I thought I would make it, but.."; "I thought this was enough for me, the drug is out of my body, but it was not out of my brain".

Among informants with a lot of experience from recovery, it was a common understanding that drug users early in their career tend to underestimate the effort needed to become drug-free. One informant with long experience in managing sober houses expressed it this way:

My experience is; physically you gain quick and most of the users they think the problem is only using, after not using they think the problem is over. They believe so themselves. They think now they are fine. And if they are fine now, why should they stay more? That is the most common experience that I have. And there are different other reasons, but this is the most common one.

Staying long in the first sober house program is likely to have increased the recovering drug users' chances of connecting deeper with the recovery community long-term, something which seems to be an important success factor. Participating in volunteer work is found to go together with success in recovery, the same is a high drug-free time related to the first sober house stay. Both have a strong correlation with the TDFT at respectively r=0.61 p<0.001 and r=0.72, p<0.001 (Table 1). Informants' self-estimate on the degree of support from the sober house program add to this impression, groups with recovery success on average rate the support higher and informants rating correlates significant with TDFT at r=0.41, p<0.001.

Figure 2 shows in detail the informant's drug-free time in connection with their first sober house program, related to their TDFT. We see that 47% reported having relapsed within the first year after starting their sober house program, 64 % relapsed within the two first years and 83% relapsed before five years had gone. In the upper end of Figure 2, we find the Level 1A group of 16% who managed to stay drug-free throughout, following their first attempt.

Figure 2 illustrates that most drug users need time and several attempts to recover. During this journey of ten years many kept moving and succeeded at some points they managed to quit and remain drug-free for a certain period of time. Sober houses, together with the rest of the recovery community in Zanzibar, were important to make such turning points more likely. When valuing their stay in Detroit Sober House in terms of how helpful it was to them in fighting their addiction informants confirmed this, 73% answered much or very much helpful. Only 6% expressed that they got no help or very little help from the sober house program.

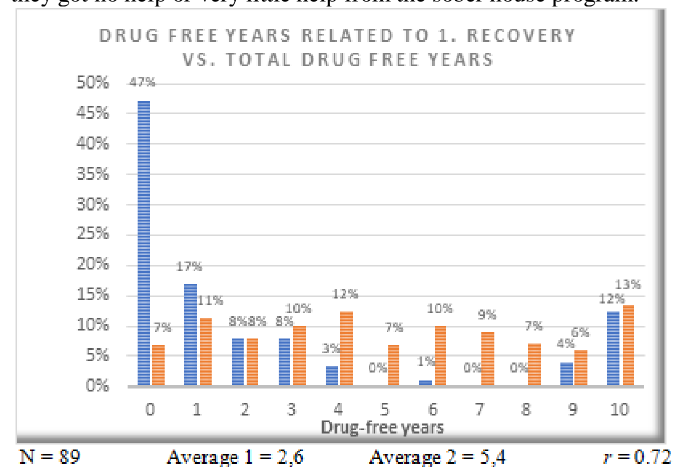

Figure 2: Drug-free time connected to the first sober house recovery attempt vs. total drug free time among drug users who started recovery in Detroit Sober House in 2009/2010.

In our study 85% reported that they during the ten years returned to Detroit Sober House or to other sober houses for recovery, to do service or both. Table 3 sums up returns to sober houses and illustrates how the sober houses in Zanzibar worked together. This was the case in offering recovery to drug users, but also in support of each other through volunteering. Data shows that 20% of all returns were service-related. In addition to service in sober houses, informants were volunteering in external NA group sessions, outreach programs, drop-in centers, etc. which was extensive. This strong network of sober houses and recovery activities sharing clients as well as volunteers seemed to be very useful to drug users seeking recovery. Data suggest that drug users sometimes did not prefer to go back to the same sober house, because they were embarrassed having relapsed or had a conflict with someone in the house. They could also have preferences because they knew people in a certain house whom they trusted, or someone they trusted recommended a certain house. Other times it was important for them to choose a house far from their "ghettos" in Stone Town, not to be tempted or to better concentrate on their recovery. The network of houses was important because it gave them alternatives.

Returns to sober houses	1. ret.	2. ret.	3. ret.	4. ret.	Total
Returns to Detroit Sober House	53	8	1		62
Returns to other sober houses	59	15	8	8	90
Total	112	23	9	8	152

Table 2: Total number of returns to sober houses among drug users who started recovery in Detroit Sober House in 2009/2010.

When asked what they found the most helpful during their stay in Detroit Sober House the answers were given along four lines. These we have called protection, - emotional support, - knowledge support, and behavioral change oriented answers. Protection-oriented answers would focus on the usefulness of access to shelter and basic care like, food, medicines, a bath, a bed, clean clothes, good sleep, rest, and being protected from the drug-using environment of the street. Emotional support-oriented answers could be expressed like:
"getting a family feeling", "experience unity", "togetherness", "the company of others", "respect from others", "belonging", "friendship", and "started to believe in myself".
Informants expressed that staying with others also: "gave hope", it helped emotionally to be with and be seen by others, not to mention to see that others had the same problem, some the expressions used were:

"I am not alone", "kindness of others", "to experience acceptance and trust from others", "watch others recover also gave strength", "got a weak up call", "seeing others who were able to quit drugs, "I could start to see myself like a human", "I started to hope"
Knowledge support-oriented answers emphasized how knowledge became a tool in understanding their drug problem, themselves, and their struggle to quit drugs. Most helpful to them could be expressed as;
"knowledge, meetings, to be educated", "I started to understand my problem", "I understood that I am sick", "I understood myself as an addict", "I understood why I am using drugs", "learned how I could live my life", "helped me to stay away from former friends", "helped me stay clean and organize my life", "it taught me to understand myself, who am I, what problem do I have, how to deal with the problems", "learn from others experiences", "I realized that I have a problem, it helped my self-awareness", "it thought me that I have a choice", "I learned how to open up my mind, to stay without using", "I understood that I have to stay away from all drugs", "learned how to take care of myself, the lectures about how to live without drugs and how drugs affect you, it is staying in my head."
Behavioral change-oriented answers focused on how the sober house program changed them as persons:
"the sharing made me change, I learned to listen and to share ideas", "being more open-minded", "started to believe and hope that I could stop", "I changed my attitude and wanted to take responsibility without drugs", "it increased willingness to stop using", "I learned to be more tolerant, patient and tell the truth", "I became more aware what I want to do and don't want to do, it helped me to build identity", "I understood myself better and that I have a choice, I became wiser and more humble."
The above categories could of course overlap and appear together. The point here is to illustrate how informants could emphasize support from the sober house program differently. Among 85 informants we found that 55% could be considered knowledge-oriented, 16% emotional support-oriented, 11% behavioral change-oriented, and 17% protection-oriented. Data suggest a significantly lower TDFT among informants with the protection-oriented answers (2, 6 years) compared to all the other orientations (6-6, 8 years). It seems like these informants to a less degree connected to the sober house recovery community, stayed shorter than average in the program, had less drug-free time in connection with their stay and none of them participated in volunteer work.
In total 25 informants reported having participated in service or volunteer work in sober houses during the ten years. These informants had an average TDFT of 8, 4 years. This relation between volunteering and recovery success seemed to be a two-way process, or a working spiral, where drug users successful in recovery involved themselves in volunteering and through volunteering became stronger in maintaining their recovery success.
The reminding effect, to see how people were struggling with addiction was frequently mentioned as a source of motivation to stay clean. They were constantly reminded about the harm of addiction and the importance of avoiding a relapse. To stay vigilant, to know yourself, your problem, and your triggers are essential in NA philosophy and were very much in the consciousness of people participating in volunteer work. Motivation was also found in the last step in the 12-step program, which emphasizes doing service, as you now have reached the final step. Doing service was connected both to a making up for yourself and building our community reasoning. It could be making up concerning the individuals you have hurt and done damage to, but also as 'making a sacrifice', in general so to say, by investing your time and effort in helping others. This sacrifice should be in support of others but was in NA philosophy also seen as self-support or a way to "ease your pain", meaning reduce the pain connected to live with yourself after being aware of how others have suffered because of you, making it easier to forgive yourself.
It is illustrated above how recovery capital works and at the same time constantly is built through sober house recovery activities, in all aspects. The network of sober houses and volunteers represents a strong community recovery capital to Zanzibar. The activity also offers social network recovery capital to drug users in recovery, as a place to belong, be respected, get, and give support. To some, it compensates for the family they lost or were excluded from. This social inclusion is also expressed in the way informants talked about sober houses and NA groups as a "family" and other drug users in recovery as "brothers". It is also illustrated above how personal recovery capital is built in sober house recovery as individuals grow by gaining access to knowledge, problem-solving capacities, and self-awareness, by getting a boost of their self-esteem, become hopeful, and develop a sense of meaning, to mention a few.

Conclusion

The steep increase in heroin addiction hitting Zanzibar during the 1990s and 2000s is well documented. Findings presented in this article suggest that we also had a dramatic drop in the onset age for heroin, a faster transaction from softer drug use to heroin use, and an increase in injections of heroin. This situation triggered a community mobilization in Zanzibar in which heroin users themselves played the main part and where one initiative was to establish sober houses as recovery support options. This article concludes that this concept has been of great support to many of the drug users who attended the first sober house program in Zanzibar in 2009/2010. It also concludes that the network of sober houses that was established the following years represents an important recovery capital in Zanzibar, at personal, network, and community level. More research is needed to get a deeper understanding of how this bottom-up movement challenged the heroin addiction problem in Zanzibar, how it is organized, and works. Heroin addiction is an increasing problem in African countries while recovery options are still rear. To any nation looking for ways to meet this challenge, it will be useful to study and learn from the Zanzibar experiences.

Funding

This study has been funded by Volda University College.

References

1. Beckerleg S, Telfer M, Hundt GL (2005) The rise of injecting drug use in east Africa: a case study from Kenya. Harm Reduct J 2: 12.
2. Beckerleg S, Sadiq A, Telfer M (2006) Heroin use in Zanzibar: a survey. Drugs and Alcohol Today 6: 42-45.
3. Bourdieu P (1977): Outline of a Theory of Practice. Cambridge University Press: Cambridge UK.
4. Cloud W, Granfield R (2004) A life course perspective on exiting addiction: The relevance of RC in treatment. NAD Publication 44: 185-202.