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Internet-based, continuously available Narcotics Anonymous meetings: a new resource for access to Twelve Step support for abstinence

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ABSTRACT

Background: A Zoom-based website was developed in 2020 that offers continuous access to online Narcotics Anonymous (NA) meetings for the first time. This website provides immediate access for persons with substance use disorder to support abstinence from substance-related addictive disorders.

Objectives: This study is designed to characterize attendees employing this online format; to evaluate their experiences for gaining support to maintain abstinence; and to compare the 24/7 experience to face-to-face (FF) meetings they attend.

Methods: An anonymous 33-item survey was made available on the 24/7 NA website that links to the 24/7 meetings. Persons accessing the site could choose to fill out the survey.

Results: 530 respondents completed the survey (64.9% female/35.1% male). Most had stable prior involvement in NA. They had attended more 24/7 meetings (14.9, SD 19.7) than FF meetings (4.6, SD 7.8) in the previous month. 86% had previously attended FF meetings, 48% had served as sponsors, and 92% reported that the 24/7 meetings were more comfortable for them than the FF meetings ($p < .001$, Cohen's $d = 0.65$) and more supportive of abstinence ($p < .001$, Cohen's $d = 0.91$). Of the respondents, 8% were still using drugs, of whom 52% had previously completed some of the Twelve Steps.

Conclusions: The 24/7 format provides a new and easily accessible way for NA members to gain support for abstinence and is positively rated by attendees seeking support for recovery from substance use disorders. It may serve as a valuable adjunct to the traditional FF format.

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Introduction

Narcotics Anonymous (NA) is a Twelve-Step (TS) based fellowship that supports abstinence-based recovery from substance use disorders (SUD). It reports over 72,000 weekly meetings in 143 countries (1). Individual NA meetings are available as both traditional face-to-face and fixed-time virtual meetings. In March 2020, NA members developed a website for accessing hourly online Zoom-based meetings on a 24-hour continuous basis. The 24/7 resource provides persons with SUD to have the option to easily enter a virtual NA meeting whenever they choose. Participants can access this resource through the NA website, which they may have heard of from a variety of resources, such as face-to-face NA meetings, contact with NA members they encounter, or clinicians' recommendations. This study is designed to evaluate this recently developed Internet-based recovery support format.

Use of the Internet for communication between patients and professional caregivers has been found to

be a useful option for clinical management for both general medical disorders (2) and for decreased economic cost (3). In the mental health domain, teletherapy has been found to yield clinical results similar to those of face-to-face meetings (4).

Access to face-to-face TS recovery support meetings is reported to be at least as effective as other recovery-oriented psychotherapeutic modalities (5). With regard to long-term outcome, TS meeting attendance over as long as nine years has been associated with long-term abstinence (6). Virtual (online) TS meetings have recently been found to be useful for providing abstinence-based support for recovery from SUD in settings where access to treatment is limited (7). Telehealth appointments have also been found effective in initiating and supporting buprenorphine treatment for opioid maintenance (8).

At the onset of the COVID-19 pandemic, members of NA in Nassau County, NY established an online service on Zoom, accessible through a website, for the

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NA 24/7 Marathon Meeting. Online meetings are scheduled on an hourly basis and chaired by a rotation of established NA members. The objective was to make continuous (24/7) online NA access available during a period of social isolation, and this format has since continued to be available. A review on teletherapy for substance use disorder overall has revealed satisfaction among patients where it has been applied (9). Additionally, distinctions between experiences in AA and NA merit consideration as well (10,11).

Objective

The objective of the current study is to characterize the 24/7 meetings and their participants, and to compare their internet-based experience to that of the established format of face-to-face (FF) NA meetings they have attended. This is being undertaken to provide a better understanding of the way the online format can help to address the recovery needs of persons with SUDs and to aid clinicians in making use of this emerging format for their patients.

Materials and methods

The NA 24/7 website has a link for interested persons who have accessed it to go to an ongoing 24/7 meeting. After pressing the meeting link on the website, the respondent can enter an ongoing Zoom meeting where participants have the option of making their faces visible. The meeting chairperson selects a participant who volunteers to speak for up to 5 minutes, and then others are selected to speak until the end of the meeting hour. Stably abstinent meeting chairs are changed on the hour. Respondents are also provided with the option of volunteering to complete an anonymous survey, described as a product of a collaboration between “the national NA office and a medical professional” in order to collect data on the effectiveness of the 24/7 meetings. The survey consists of a set of 33 multiple-choice items. Typical items from the survey included “How many of the Twelve Steps have you ever worked with a sponsor? 1 - All, 2 - Some of them, 3 - None of them” and “over the last two weeks, have you been bothered by feeling down, depressed, or hopeless?” No incentives were provided for survey completion, in order to avoid the impact of potential bias for self-selection on respondents’ choice to participate. Responses to the survey in January and February of 2023 were accessed and analyzed. This project was approved by the Institutional Review Board of the Chestnut Health System. The survey was completed anonymously and does not

include items that allow for obtaining respondents’ respective identities.

Measures

Information was solicited on geographics, demographics, and specific drug use. Clinically relevant survey items were scored, such as, “Do you feel more comfortable in a 24/7 online meeting than you would in a face-to-face meeting?” and “How effective have you found each of these meeting types: virtual; face to face.” The following items were scored for respondents to answer relative to the last two weeks on a Likert scale ranging from 0–4, with 4 indicating full agreement: comfort at meetings; convenience of meetings; feeling distressed (mean of four items: anxious, worrying, depressed, no pleasure); social anxiety (five items from DSM-5 based social anxiety diagnosis); Twelve-Step belief scale (four items from the Twelve Steps (12)); relief of distress (mean of four items: lonely, craving, depressed, uncertainty); and perceived effectiveness of meetings to support abstinence. Additionally, there are items asking whether the respondent had experienced a spiritual awakening; had worked at least some of the 12 Steps; the number of 24/7 meetings attended last month; and the number of FF meetings attended last month. Last drug use is the number of years since their last use; this was subsequently dichotomized into still using in the past month versus abstinent for one month or longer.

Analysis

Rates of missing data ranged from 0% to 4.3% across all items included in the analysis. Given the low rate of missing data, it is likely that data were missing at random and suitable to being replaced. Records included in the analysis were first sorted on key variables related to the variable where missing data was being replaced. Then missing values were replaced using the Replace Missing Values (RMV) function in SPSS, where missing values were imputed from the median of the nearest ten observations. This method can replace missing data without influencing the mean or variance term, whereas other methods, such as simple substitution or listwise deletion, may impact the distribution (13). This procedure indicates that the appropriate analysis was undertaken to address the issue of missing data.

All measures were analyzed via independent samples t-tests. The first set of analyses compared respondents who attended more 24/7 meetings last month to respondents who attended more FF meetings last month. The second set of analyses compared respondents who

perceived 24/7 meetings to be more supportive of their abstinence to respondents who perceived FF meetings to be more supportive of their abstinence. The third set of analyses compared respondents who reported drug use in the past month to those who had been abstinent for one month or longer. Effect sizes were calculated to assess the magnitude of the comparisons between groups (Cohen's *d* or, for smaller samples, Hedge's *g*). All analyses were conducted using SPSS Statistics version 29.0.1.

Results

Over the course of the two months that the survey was offered, 530 respondents completed it, and data from these respondents were analyzed. (In Table 1, data from respondents who scored 24/7 and FF as equivalent were not included). The website was visited by persons from remote settings, as only 10% ($N = 53$) of attendees lived in the local area where the meetings originated (NY or CT), 76.6% ($N = 406$) were from other parts of the US, and 13.4% ($N = 71$) from outside the US. Their mean age was 44.3 (SD 12.5) years, and 64.9% ($N = 344$) were female. They designated cocaine or crack-cocaine as their "biggest" drug problem (20.8%, $N = 110$), followed by methamphetamine (20.6%, $N = 109$), alcohol (16.2%, $N = 86$), heroin (11.5%, $N = 61$), other opioids (10.6%, $N = 56$), marijuana (7.2%, $N = 38$), fentanyl, (5.3%, $N = 28$), stimulants (3.8%, $N = 20$), benzodiazepines (3.8%, $N = 20$) and methadone or buprenorphine (0.4%, $N = 2$).

Respondents reported having attended an average of 14.9 (SD 19.7) 24/7 meetings and 4.55 (SD 7.83) FF meetings in the previous month for a median period of time of 60 minutes at each of the 24/7 meetings. Almost all respondents (96%, $N = 509$) had previous exposure to one of three NA-related meeting formats: 74.5% ($N = 395$) had attended 24/7 meetings, 86% ($N = 456$) had attended an FF meeting, and 76.4% ($N = 405$) had attended other online

NA meetings. 82% ($N = 435$) reported having experienced a spiritual awakening, 51.5% ($N = 273$) had a sponsor, and 28.9% ($N = 153$) had served as sponsors themselves.

One way to distinguish the difference in experiences among attendees to the new 24/7 format is to calculate comparisons between the scores on items listed in the Measures section for the 24/7 and FF items, respectively. These responses were compared relative to two key aspects of the two formats: number of meetings attended in the last month and respondents' perception of the degree of support for abstinence that the two respective formats provided.

Meeting attendance

Table 1: In Table 1, respondents who scored 24/7 and FF as equivalent were not included. Of the total 530 respondents, 308 (58.1%) attended more 24/7 meetings, and 115 (21.7%) attended more FF meetings. Respondents who attended more 24/7 meetings reported feeling that 24/7 meetings were more convenient and comfortable than FF meetings. They also reported that the 24/7 meetings provided higher levels of relief from distress and more support for their abstinence, and they had more years of abstinence prior to completing the survey. Their reported scores for craving for substances of misuse were no different between FF and reported 24/7 attendees.

Support for abstinence

Table 2 compares the respondents who perceived 24/7 to be more supportive of their abstinence than FF meetings. Respondents who perceived 24/7 to be more supportive of their abstinence found 24/7 meetings to be more convenient and more comfortable to attend. They reported higher rates of relief from distress, greater social anxiety, and fewer years of abstinence. There was no difference between the two formats regarding

Table 1. Results of independent samples t-tests comparing respondents who attended more 24/7 meetings to respondents who attended more face-to-face meetings.

	24/7 ($n = 308$)		F-to-F ($n = 115$)		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	Mean	SD	Mean	SD			
Comfort at meeting	2.61	1.38	1.70	1.42	5.98	<.001	0.65
Convenience of meeting	3.71	0.77	3.19	1.10	4.63	<.001	0.59
Feeling Distressed	1.91	1.30	1.95	1.32	−0.32	.752	−0.03
Relief of Distress	2.93	1.09	2.57	1.23	2.80	.006	0.32
24/7 promotes abstinence	3.57	0.89	3.00	1.08	5.07	<.001	0.61
FF promotes abstinence	2.73	1.51	3.48	0.83	−6.38	<.001	−0.55
Age	46.67	12.03	41.25	12.70	4.06	<.001	0.44
Last drug use	5.65	8.89	3.67	6.59	2.49	.013	0.24
Social Anxiety	1.85	1.21	1.78	1.23	0.47	.636	0.05
Worked Any Steps	1.11	0.75	0.97	0.77	1.75	.081	0.19
Drug craving	2.50	3.30	2.89	3.45	−1.06	.29	−0.12

Table 2. Results of independent samples *t*-tests comparing respondents who perceived 24/7 to be more supportive of their abstinence to respondents who perceived face-to-face to be more supportive of their abstinence.

	24/7 (<i>n</i> = 164)		F-to-F (<i>n</i> = 86)		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	Mean	SD	Mean	SD			
Comfort at meeting	3.34	0.99	1.48	1.33	11.48	<.001	1.67
Convenience of meeting	3.86	0.54	2.93	1.24	6.608	<.001	1.09
Feeling Distressed	2.34	1.25	2.07	1.24	1.606	.110	0.21
Relief of Distress	2.98	0.95	2.21	1.13	5.41	<.001	0.76
24/7 meetings last month	20.05	23.45	5.86	10.69	6.44	<.001	0.71
FF meetings last month	1.29	3.92	8.10	8.44	-7.09	<.001	-1.16
Age	45.32	12.22	41.58	13.01	2.249	.025	0.30
Last drug use	2.98	5.16	4.28	7.47	-1.447	.150	-0.22
Social anxiety	2.30	1.12	1.70	1.13	4.005	<.001	0.53
Worked Any Steps	0.87	0.73	0.99	0.77	-1.233	.219	-0.16
Drug craving	3.52	3.81	3.48	3.76	0.094	.925	0.01

Table 3. Results of independent samples *t*-tests comparing current drug users and non-users.

	Using (<i>n</i> = 42)		Not Using (<i>n</i> = 488)		<i>t</i>	<i>p</i>	Hedge's <i>g</i>
	Mean	SD	Mean	SD			
24/7 meetings last month	4.93	8.69	15.87	20.33	-6.71	<.001	-0.56
FF meetings last month	1.10	2.42	4.72	7.99	-6.98	<.001	-0.47
24/7 promotes abstinence	2.68	1.46	3.35	1.06	-2.87	.006	-0.61
FF promotes abstinence	2.25	1.45	2.87	1.42	-2.65	.008	-0.44
Comfort at meeting	2.31	1.46	2.38	1.45	-0.20	.839	-0.05
Convenience of meeting	3.52	0.92	3.55	0.90	-0.28	.779	-0.03
Worked Any Steps	0.64	0.76	1.03	0.77	-3.13	.002	-0.50
Has sponsored others	0.45	2.48	2.78	8.91	-4.20	<.001	-0.27
Drug craving	6.43	3.53	2.70	3.48	6.66	<.001	1.07
Social anxiety	2.29	1.18	1.88	1.23	2.09	.037	0.34
Feeling Distressed	2.90	1.18	1.96	1.31	4.49	<.001	0.72
12-Step Belief Scale	3.27	0.96	3.64	0.67	-2.41	.020	-0.52

the number of Steps worked, feeling distressed, or craving.

Respondents who are active drug users

Table 3 contrasts the characteristics of those respondents who were currently using substances in the month they completed the survey compared to those who were currently abstinent. Many respondents were relatively new to abstinence, as (41%, *N* = 217) were abstinent only within the last year, but (7.9%, *N* = 42) had been using drugs within the previous month. Many (47.6%, *N* = 20) of those still using had completed some of the Steps and (21.4%, *N* = 9) had a sponsor; most (54.8%, *N* = 23) of those still using had experienced a spiritual awakening. Those still using had attended fewer meetings (either 24/7 or FF) in the last month and felt more distress, but also viewed the 24/7 meetings as more supportive of their abstinence. Some had served as sponsors (but less than the abstinent respondents). Their craving scores were much higher than those who were currently abstinent. There was, however, no significant difference between the two groups as to whether they reported having had a spiritual awakening or felt 24/7 to be more convenient or comfortable.

Discussion

Our findings indicate that there is now a resource whereby people with SUD can access NA meetings from any location and at any time of day by employing a web-based Zoom format. This option was initiated early during the COVID-19 pandemic but is currently accessed well beyond the local area where this format was initiated, and with flexibility at any time of day (or night) for attending. It is reported by the survey respondents to provide relatively more comfort and convenience of access than the FF meetings they have attended.

It is worth noting that the diversity of primary substances of misuse reported by respondents includes methamphetamine and marijuana, for which there are no established pharmacologic approaches to treatment, and alcohol, which illustrates access that parallels that provided by Alcoholics Anonymous.

Many TS members are encouraged to attend a "home group," i.e. choosing a regularly scheduled FF group which they attend with regularity. These meetings establish familiarity and mutual support with other members they can meet locally outside the FF scheduled meeting times themselves. The 24/7 format does not make this approach to engagement a practical option, as 24/7 attendees encounter a larger number of anonymous attendees from different

locales whom they are not likely to personally know. Because of this, this new format may not offer the familiarity and mutuality that may be important for achieving or sustaining recovery that FF groups provide.

Personal psychology and TS engagement

Studies on the impact of TS attendance on the psychology of established members are typically undertaken after a period of membership (11,14,15). The moderating role that personal characteristics can play relative to TS effectiveness has been considered from a theoretical perspective (16), and a variety of issues have been reported to have an impact on the TS experience: the recovery capital that a given person may have (17,18), as well as their cultural context (19,20). Affective (21) and cognitive (22) aspects and the acquisition of the program's overall ethos (23) over an extended period of TS membership (6) have been reported. Additionally, individual long-term TS members have been shown on fMRI to have acquired the capacity to achieve diminished craving in response to alcohol-related cues upon reciting TS-related prayer (12). Most such research has been done primarily on AA attendees, but two studies have addressed these issues in relation to NA itself (10,11).

We compared respondents who attended more 24/7 than FF meetings as an indicator of how the new format was experienced by them. Convenience and comfort were greater for the 24/7 meetings than for the FF meetings, reflecting key advantages for certain NA members. We also compared the experience of attendees who are still actively using SUD substances with those who were currently abstinent. For both those who were currently using drugs and those abstinent, the new format was on average more convenient and felt more comfortable than the FF meetings. The 24/7 attendees were not necessarily recently abstinent members, as they were no different in having worked any of the Steps or reporting a difference in craving, suggesting that the 24/7 format may serve as a means for relapsed members to re-access the fellowship.

Data were analyzed for which format respondents found more supportive of their abstinence. The 24/7 attendees predominated for social anxiety, suggesting that persons with social anxiety can turn to 24/7 and experience support to a greater extent than in the FF situation. In terms of support for abstinence and relief from distress, those who attended the 24/7 meetings found them preferable to the FF option.

Structure of the health care system

The 24/7 format has emerged at a time when the provision of medical care has experienced similar

changes. To date, the format of telemedicine has been evaluated most extensively with regard to changes undertaken during the COVID-19 pandemic, mostly with a focus on primary care medicine (24,25). This includes studies regarding treatment in remote settings with limited access to onsite care (26), changes that may be needed for follow-up (24), access to populations in lower-income countries (7), and cost savings derived (27).

Extensive use of videoconferencing for psychotherapy was introduced long before the COVID-19 pandemic emerged (4). More recently, it has been applied to respective patients in the domain of SUD (28) and initiating and promoting retention of patients on buprenorphine maintenance (8).

The video-based approach studied here illustrates how the 24/7 format can strengthen the overall structure of the NA fellowship. It provides access for established attendees whose previous relationship with the fellowship was strong: 87% of them had attended FF meetings in the past, 52% of them had sponsors, and 29% had even served as sponsors themselves. Respondents were now 3.2 times as likely to have attended 24/7 rather than FF meetings in the previous month, suggesting that some veteran NA members might now make greater use of the 24/7 format. This format was also a resource for respondents who had relapsed, as 50% had experience in working the Steps and 55% of them reported having had a spiritual awakening. It also serves to underline NA members' participation in a national and international cooperative system.

Cost savings of telehealth have been calculated relative to in-person professional care (29–31). It is notable that our respondents accessed almost three times as many 24/7 meetings as FF meetings in a given month, and this may now reflect an added benefit for them within the NA system of recovery support. It can therefore potentially serve as a multiplier for such savings. A large number of TS sessions are often available in residential rehabilitation settings, but the cost of such settings may be obviated given the large number of 24/7 meetings accessible at home. 24/7 meetings' cost savings can also be considered relative to the drugs for which more costly, professionally-funded treatments can be employed, particularly, as noted above, for substances for which pharmacologic treatments are found to have limited impact.

Limitations

The sample of respondents reported on here does not provide the option of employing a comparison group

of NA members who have not attended 24/7 meetings and whose views may be quite different. The results of this study may be biased in that respondents who engaged more with online meetings may be self-selected because they find the 24/7 meetings more supportive of their abstinence than do those respondents who respond less favorably to online meetings. Further study of the 24/7 format with a larger unselected sample of NA members would be necessary to address this issue. Many persons accessing the 24/7 site may not have chosen to complete the survey for reasons such as the necessary time commitment or the survey response literacy required. This also raises the issue of response bias among respondents, as potential respondents who might see 24/7 as disadvantageous to themselves would be reluctant to answer the survey. The 24/7 format studied here has continued for a relatively limited time since its inception during the COVID-19 pandemic period, and future developments for its use cannot be inferred from the findings reported here. There needs to be further research to address the 24/7 role over a longer term.

Conclusion

The introduction of the 24/7 format has provided a new option for NA members to access other persons seeking recovery from SUD. This is taking place at a time when many patients and healthcare providers have also come to employ Internet-based communication. The findings reported here suggest that the 24/7 format can allow NA members comfort and immediate access to NA support for support of abstinence. The emergence of the 24/7 format for NA attendees therefore offers a new and potentially influential option for the TS format in supporting abstinence for persons with SUD and can be useful for clinicians working with such patients. Future research in this area is therefore useful in clarifying the role that this new format can play in the utility of the TS approach. With more experience with the 24/7 format, it may become clear that particular subgroups of those with substance use disorder may differ in suitability for 24/7 meetings. This can be further clarified with a sample of NA members, overall, and not only those who turn to the NA website.

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