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Manuscript title: Self-Help Groups for Alcohol Dependency: A Scoping Review

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Thomas James Parkman

(Corresponding Author)

Institute of Psychiatry, Psychology and Neuroscience, Addictions Department, 4 Windsor Walk,

Denmark Hill, London, SE8 5BB United Kingdom. Email: thomas.parkman@kcl.ac.uk

Charlie Lloyd

University of York, Health Sciences, Room 208a, Health Sciences, York, YO10 5DD United

Kingdom. Email: charlie.lloyd@york.ac.uk

Karen Splisbury

University of York, Health Sciences, Area 5, Health Sciences, York, YO10 5DD United

Kingdom. Email: karen.spilsbury@york.ac.uk

Abstract

The aim of this literature review was to scope and present evidence on self-help groups that aim to facilitate recovery from alcohol addiction. A threefold search strategy was deployed. Within the 25 identified quantitative studies, three themes were identified: attendance, involvement and location, each of which impacted on recovery. Nine qualitative studies were also identified, five of these focusing on Alcoholics Anonymous. This international review of self-help groups in recovery from alcohol dependency demonstrates them to be an important and effective component of recovery. However, this review demonstrates that more research is needed into 'non-AA, non-12-step' affiliated self-help groups.

Keywords

Alcohol, recovery, review, alcoholics anonymous, self-help groups

Introduction

In recent years, there has been a re-emergence of interest of recovery in the addictions world (Berridge, 2012; Laudet & Humphreys, 2013; Roberts & Bell, 2013). This has been accompanied by a shift in how treatment and care is delivered (Substance Abuse and Mental Health Services Administration, 2008) (SAMHSA), with recovery support services emerging as a key intervention to help people maintain recovery (Laudet & Humphreys, 2013). However, treatment for those with addiction is not a "one-shot" intervention (SAMHSA, 2008, p. 2), and international research evidence indicates that ongoing care is critically important for long-term recovery from alcohol addiction (Jason, Davis, & Ferrari, 2007). This care can be provided in a variety of ways but one way is through self-help groups (SHGs). There is a body of evidence that suggests peer-recovery support and mutual aid is effective for those in recovery (Humphreys, 2004; Humphreys et al., 2004), as well as involving those non-addicted family members as a form of support in recovery (Gruber & Fleetwood, 2004). SHGs therefore, are considered an effective and cost efficient way of supporting long term recovery (Zarkin, Bray, Mitra, Cisler, & Kivlahan, 2005).

In both the US and the UK, aftercare and long-term recovery is gaining in popularity, and is being given a central focus in UK government policy (Roberts & Bell, 2013). 'Aftercare', a concept which to date, has no widely recognised definition, is broadly defined by the National Treatment Agency for Substance Misuse as continued support after a service user has left structured treatment, with its primary goal to sustain treatment gains made during structured treatment and to further develop community reintegration (National Treatment Agency for Substance Misuse, 2006). Aftercare is seen as a vital component of recovery, as it is considered

to significantly contribute to effective treatment (Ito & Donovan, 1986), as well as having a significant influence on long-term recovery outcomes (Moos, Finney, & Cronkite, 1990).

Despite policy and a number of international commentators implicating the importance of SHGs for alcohol addiction recovery, little appears to be known of the association between SHG and recovery. Presently, there are a number of literature reviews regarding SHGs that cover a range of research areas. For example, there are literature reviews that have investigated key research findings specifically related to Alcohol Anonymous (AA) (Straussner & Byrne, 2009) and the effectiveness of AA and other 12-step programmes in reducing alcohol intake (Ferri, Amato, & Davoli, 2006). There is a meta-analysis of the quality of studies that investigate AA outcomes and their statistical power (Tonigan, Toscova, & Miller, 1999) and the effectiveness of 12-step programs for maintaining abstinence (Fiorentine, 1999). Furthermore, there are literature reviews on the spread of SHGs globally (Humphreys, 2004), the benefit of the social networks formed within SHGs for alcohol addiction recovery (Groh, Jason, & Keys, 2008) and the need for SHGs for adolescents with alcohol addiction problems (Sussman, 2010).

To date, there is no review that amalgamates and scrutinises the different mechanisms as to why and how SHGs might be beneficial for alcohol addiction recovery. This represents a significant gap in this research area. This paper aims to address this by reviewing the existing international research literature on self-groups for alcohol dependency. In particular, the paper seeks to bring together all the existing studies that explore why and how SHGs influence alcohol addiction recovery and to scrutinise how and why SHGs might be beneficial for alcohol addiction recovery.

Methods

This scoping review has used a rigorous and comprehensive approach to identifying relevant studies for the review (Centre for Reviews and Dissemination, 2001). A scoping review is considered the best approach to map the literature, summarise findings and to explore the extent to which a given area has been researched (Armstrong, Hall, Doyle, & Waters, 2011). This approach has been followed to promote transparency and thoroughness (Mays, Roberts, & Popay, 2001). To identify relevant studies, a threefold approach was taken in conjunction with predefined inclusion and exclusion criteria. Table 1 illustrates the inclusion and exclusion criteria.

[Insert table 1]

Identifying relevant studies

The first search strategy involved searching relevant electronic databases. The search strategy was constructed with a systematic review specialist from a Centre for Reviews and Dissemination (CRD) to ensure comprehensiveness of the search string. The search string included 45 lines that covered any alcohol based SHG (gained from (Humphreys, 2004)), as well as alcohol, dependency, abstinence, moderated use and SHG related terms. The electronic databases were selected to ensure comprehensive coverage of relevant databases.

- Medline (1946 February Week 3 2013);
- PsycINFO (1806 February week 2013);

- EMBASE (1974 February 22nd 2013);
- CINAHL Plus (1937 February 2013);
- The Cochrane Database of Systematic Reviews;
- Database of Abstracts and Reviews of Effect (DARE);
- Web of Knowledge;
- Google Scholar

The total number of papers located via electronic database searches was 1,900. The second search strategy was hand searching of key journals. Hand-searching of the following journals were undertaken: Addiction; Alcohol and Alcoholism; Journal of Substance Abuse Treatment; Drug and Alcohol Dependence; and Alcoholism Treatment Quarterly. These journals were selected, as they were the top five journals where the vast majority of the papers from electronic database search could be found. Each journal was searched back to 1980. This was because the oldest paper located during the electronic database search was 1983 (Hoffman, Harrison, & Belille, 1983). This process generated one new study.

The final search strategy was to hand-search the references and bibliographies of located studies. Relevant studies were identified based on predefined inclusion and exclusion criteria (see table 1) that were applied to the 61 studies located via the electronic databases and hand searching of journals. Seven new references were identified. Having employed this threefold approach to searching for relevant studies, 68 papers were requested in full. Figure 1 represents an overview of the complete search strategy. Upon further inspection, a further 34 studies were excluded,

leaving 34 studies included in this review. Table 2 represents demographic and design details of the included studies.

[Insert figure 1]

[Insert table 2]

Results

A thematic analysis approach (Miles & Huberman, 1994) was used to analyse the data from each of the studies. A thematic framework approach was taken as it provided the most robust and efficient method of analysis to ensure all the data from the included studies was used during the analysis. This was particularly helpful given the large number of studies identified during this review. Table 3 represents the methodology used by each study, as well as the primary outcome of investigation. This is to promote clarity for the reader in relation to studies included in the scoping review.

[Insert table 3]

The results will be split into three sections: the quantitative studies that explore AA and/or 12-step programs, the quantitative studies that explore 'non-AA, non-12-step-affiliated' SHGs and finally, the qualitative studies identified during this review. It is important to state that '12-step programme' refers to any study that investigated a SHG that utilised the '12-steps and 12-traditions' conceptual approach akin to that of AA, but is not a specific investigation of an AA SHG.

AA and/or 12-step programmes

The identified studies suggest that an association exists between AA and improved recovery for three reasons: attendance; involvement and location.

Attendance

Of the 25 studies evaluating the impact of AA and/or 12-step programmes on abstinence, 16 primarily investigate the impact of 'attendance' on abstinence. 'Attendance' provides an assessment of the studies that investigated the effect of attending (or not) a SHG for alcohol addiction.

Early studies located during this review (Hoffman et al., 1983; McBride, 1991; Thurstin, Alfano, & Nerviano, 1987) typically only demonstrate a straightforward association between those who attend. For example, Hoffman et al. (1983) found a significant association (n = 900, p < 0.0001) between those who attend AA and abstinence, as did Thurstin et al. (1987) (n = 145, p < 0.05) and McBride (1991) (n = 50, p < 0.001). These studies however, should be interpreted with caution, as all three used self-designed questionnaires. Later studies on attendance used more sophisticated methodologies that disaggregated attendance into more refined timeframes.

Regular AA attendance was found to be a moderately significant predictor of the number of years of abstinence over a ten-year period of follow ups (n = 158; p < 0.05) (Cross, Morgan, Mooney, Martin, & Rafter, 1990). Snow, Prochaska, and Rossi (1994) also found an association between frequency of AA attendance (low, medium or high) and long-term abstinence (n = 191;

p < 0.01). A further study found that those who attended AA on a weekly or more frequent basis reported drinking less frequently than those who attended less frequently or not at all (n = 150; weekly or more often: mean = 8.8 days; less than weekly: 17.3 days; not at all: 19.2 days; p < 0.05) and reported drinking less (p < 0.05) during the 30 day period prior to follow up at six months (Gossop et al., 2003).

Several studies found a temporal relationship between 12-step attendance and substance use. In a sample of 189 AA attenders, 81.5% (n = 154) attended a 12-step meeting between 0-3 months; 70.4% (n = 133) attended between 3-6 months; 61.9% (n = 116) attended between 6-9 months and 56.6% (n = 106) over 12 months. Reported alcohol use fell from 100% (n = 189) at baseline to 56.1% at 12 months (n = 106). Attendance also significantly predicted reductions in percentage days of alcohol use (p < 0.001) and drinks per day (p < 0.018) over 12 months. Frequency of attendance also predicted alcohol abstinence (p < 0.001) (Tonigan & Beatty, 2011). Project MATCH data also confirmed that increased attendance at AA meetings was associated with reduced alcohol use (n = 226; p < 0.01) (Pagano, White, Kelly, Stout, & Tonigan, 2013).

Kissin, McLeod, and McKay (2003) divided SHG attendees into 5 categories: 'continuous attendees' (16%, n = 121); 'starters' (26%, n = 199) (those who did not meet attendance criteria at baseline, but did at endpoint); 'stoppers' (13%, n = 103); 'non-attendees' (19%, n = 146) and 'intermittent attendees' (26%, n = 203). 'Continuous attendees' and 'starters' were the only groups to significantly decrease alcohol use at 6-months (total n = 722 p < 0.005). This suggests the importance of starting a SHG immediately after inpatient treatment ('continuous attenders'), as well maintaining attendance over time ('continuous attenders' and 'starters').

Kaskutas et al. (2005) divided SHG attenders into four categories: 'low' (n = 174), 'medium' (n = 63), 'high' (n = 71) and 'declining' (n = 41) based on people in recovery at 1-year following treatment. At 5-year follow up, the 'low' group had significantly lower abstinence rates than the 'medium' group (p < 0.002), the 'declining' group (p < 0.003) and the 'high' group (p < 0.001). In a comparative longitudinal follow up study over seven years, Kaskutas, Bond, and Ammon Avalos (2009) found that abstinence was lowest amongst the 'low AA group' (n = 371) and highest amongst the 'high AA group' (n = 58). These two studies suggest that those who attend AA more frequently, and for longer periods of time, are associated with better rates of abstinence. McKellar, Stewart, and Humphreys (2003) also found a significant effect of one-year AA involvement on 2-year alcohol problems (n = 2,319; p < 0.001) suggesting that more alcohol-related problems could be the consequence of decreased AA attendance.

An international comparison of a Swedish and US sample attending AA, found that in both populations, SHG attendance was positively correlated with abstinence (total n=2,451; Sweden: p < 0.0001; USA: p < 0.0001) (Witbrodt & Romelsjo, 2010). These findings were corroborated in a comparative study, but also found that men were less likely to be abstinent over 7 years (men verses women coefficient = -0.057; n=926) (Witbrodt & Delucchi, 2011). Finally, Witbrodt et al. (2012) divided their participants into six attendance trajectories: 'high' (n=457); 'descending' (n=220); 'rising' (n=93); 'early-drop' (n=291); 'low' (n=154; and 'no' (n=608) attendance. Approximately 75% of those in the 'high' attendance group reported abstinence in the 30 days prior to each follow up and had significantly better abstinence outcomes than all other groups (p < 0.003).

Meuller, Petitjean, Boening, and Wiesbeck (2007) found no effect of SHG attendance on rates of abstinence in a sample of 50 participants. However, the small sample size suggests that the results are less likely to be statistically significant.

Overall, the studies examining attendance indicate that attendance at AA is associated with improved recovery outcomes. This may be because active attendance provides access to resources that are perhaps lacking elsewhere. For example, attendance provides access to increased structural support (Groh et al., 2008), in a social environment comprised of others who provide first experience of addiction and recovery, as well as a support network that promotes pro-abstinent values (Best & Lubman, 2012; Hibbert & Best, 2011). This may not be the case for all however, as AA groups often vary considerably in terms of their social network and approach to delivering the 12-step programme. This, in turn, will likely mean there are many AA groups that are not appropriate for many, thus meaning attendance may not always be beneficial for recovery efforts.

Involvement

Three studies explored the impact of active involvement when at AA and/or a 12-step SHG. 'Involvement' relates specifically to actively getting involved in activities at meetings and participating in group discussion when attending a SHG.

Sheeran (1988) divided the participants into two groups: those who reported less than 2 years continued abstinence (group 1; n = 10) and those who reported more than 2 years continuous

abstinence (group 2; n = 37). Group 2 scored better in all measures of involvement, in particular - having a sponsor (p < 0.001) and reaching out for help (p < 0.05).

Similarly, Kingree and Thompson (2011) found that for a sample of 268 participants, those who had a sponsor at three months were 2.69 times more likely to be abstinent than those without a sponsor. These findings have been confirmed elsewhere in specific investigations looking at the effect of having a sponsor in AA (Tonigan & Rice, 2010). Finally, Kelly, Stout, and Slaymaker (2013) found that in a sample of 303 'emerging adults' (aged between 18-24) the greatest predictor of alcohol abstinence was active involvement at AA in the form of active verbal participation during meetings (F = 7.85; P < 0.002) and considering oneself a member of the group (P = 9.17; P < 0.005). Furthermore, Kelly et al. (2013) found that meeting with others outside the group (P = 6.58 P < 0.01) and working the twelve steps (P = 5.40; P < 0.02) were the greatest predictors of reduced heavy days drinking.

In summary, these studies indicate that greater AA involvement is associated with improved recovery outcomes. In particular, having a sponsor, reaching out for help, being verbally active and reading the literature correlate with significantly better outcomes. We suggest that in addition to active functional support (Groh et al., 2008), active involvement gives attenders the chance to practice their recovery in an environment comprised of other supportive people.

Location

Two studies investigated the impact of AA or 12-step programmes locality in relation to abstinence rates. 'Location' refers specifically to the geographical location of AA and/or 12-step and their effects on recovery and abstinence. In a study of men attending AA in India, Kuruvilla, Vijaykumar, and Jacob (2004) found that distance from AA (n = 174; p < 0.030) and the presence of a keyworker in the area (p < 0.011) were significant predictors of abstinence. Relative risk calculations also found that males who lived closer to the location where AA was conducted were 1.27 times more likely to be abstinent and 1.35 times more likely to be abstinent if a keyworker lived in their area.

Laudet, Stanick, and Sands (2007) found similar results when comparing those who attended a 12-step group 'on-site' at a US hospital where individuals received outpatient treatment compared to those who attended a 12-step program off-site. Laudet et al. (2007) found that those 'on site' had significantly higher rates of attendance and higher rates of involvement at each of the follow up timepoints (n = 122; 3 months: 66% versus 45.1%, p < 0.01; 6 months: 50% versus 33.3%, p < 0.05; 12 months: 36.1% versus 24.6%, not significant) than those who attended 12-step groups 'off site'. (n = 97). Furthermore, the 'on site' group had significantly higher rates of abstinence since their previous interview at all follow ups than 'off site' participants (p < 0.001). 'On site' participants were also 5.79 times more likely than the 'off site' group to have maintained abstinence for the entire year (p < 0.001).

The studies on location suggest that more conveniently located SHGs are associated with greater attendance and involvement, and greater levels of abstinence. However, given that there are only two studies exploring location, the findings should be interpreted with caution.

Whilst the quantitative findings on AA groups do suggest a good correlation with improved outcomes, it is important to state that a direct causal link is difficult to infer. People attending AA less regularly are likely to differ in a number of ways from people who do not attend and it may be these dissimilarities that are associated with the different levels of abstinence rather than the level of their attendance. In the future, more multivariate analyses are needed that can take account of other potentially influential factors that may lie behind the relationship between the level of AA attendance and the level of alcohol-related problems,

Furthermore, whilst AA suggest that attendance, involvement and location may help people in recovery, there is also a significant group of people who do not wish to attend AA or adhere to the 12-steps and 12 traditions. For this group of people, attending AA may not only be unhelpful to recovery, but could be potentially harmful. The following section reviews studies that have focussed on 'non-AA, non-12-step-affilated' SHGs.

'Non-AA, non-12-step-affiliated' SHGs

Of the 34 quantitative studies, 4 explored a SHG that is neither AA nor 12-step affiliated.

Curzio et al. (2012) found that those who had extended attendance at 'Clubs of Alcoholics in Treatment' (CATs) (> 3 years) were more likely to be abstinent than those with less than 3 years

attendance (n = 7,522; p < 0.0001). Curzio et al. (2012) attributed this finding to the involvement of non-addicted family members.

Galanter, Egelko, and Edwards (1993) found that since joining Rational Recovery, 73% of 'engaged members' (those with an average of 8 months membership) were abstinent from all substances compared to 38% of 'recruits' (those who had only attended for the first time in the past month). Furthermore, those more engaged with Rational Recovery also had lower AA attendance scores in the past month (p < 0.01).

While only these two studies focussed on the association between attendance and abstinence, they point in the same direction as the 12-step evaluations: longer attendance is associated with better outcomes. However, again, there is the quite plausible explanation that those who remain in such projects differ in fundamental ways from those who do not.

The final two studies compared SMART (self management and recovery training) recovery with AA on a number of factors, including locus of control and religiosity.

In a pilot study exploring the locus of control (the degree to which an individual attributes their success or failures to individual behaviour) at AA and SMART recovery, Li, Feifer, and Strohm (2000) found significant differences between AA (n = 48) and SMART recovery participants (n = 33). Li et al. (2000) found that AA attenders exhibited significantly greater external locus of control (p < 0.00003) and spiritual beliefs (p < 0.05) than SMART attenders. Li et al. (2000) concluded that SMART recovery was a more palatable self-help for some, as it focuses more on

internal locus of control (outcomes are the result of behaviour), and less on the spiritual side of surrendering to a 'Higher Power' (an example of external locus of control).

Atkins and Hawdon (2007) found similar findings in a sample of 822 participants attending AA based mutual aid groups or 'non-AA' groups such as SMART recovery, SOS (Secular Organisations for Sobriety) and WFS (Women for Sobriety). For AA, religiosity (β = 0.384; p < 0.001) and having friends in recovery (β = 0.368; p < 0.001) were all positively related to programme participation, whereas for non-AA based groups, these factors predicted less programme participation (WFS: β = -0.211; p < 0.05; SOS: β = -0.191; p < 0.05; SMART: β = -0.193; p < 0.05). Furthermore, the interaction between SMART recovery and religiosity (β = -0.158, p < 0.01) and SOS and religiosity (β = -0.163; p < 0.05) were statistically significant suggesting that religiosity was less effective at stimulating participation. Atkins and Hawdon (2007) also found that for every 1 unit increase in religiosity at SMART, attendance only increased by 0.91 at SMART (compared to 2.94 at AA) and for SOS members, every 1 unit increase in religiosity actually resulted in a 0.71 decrease in participation.

These findings suggest that non-AA groups could be just as valuable as AA group attendance, if not more for some, as the religious and spiritual orientation of AA could be unpalatable for those who do not possess congruent values.

The quantitative studies demonstrate a strong body of evidence to suggest that attendance and involvement at conveniently located AA (and possibly 'non-AA') SHGs are associated with greater levels of abstinence. However, the findings should be treated with caution, as no study

demonstrates a direct causal link with recovery and several studies (Curzio et al., 2012; Galanter et al., 1993; Li et al., 2000; McBride, 1991; Sheeran, 1988; Snow et al., 1994) were cross-sectional and therefore unable to detect any change over time.

Qualitative studies located during this review

There were nine qualitative studies located during this review, five of which, explored AA and four that explored 'non-AA' affiliated SHGs.

Alcoholics Anonymous

Using a feminist ethnographic methodology, Hall (1994) was interested in understanding the experiences of 35 lesbians in AA, as it was thought being a homosexual female in AA had implications for healthcare interaction and attendance at AA. Hall (1994) identified three areas of tension embedded in AA attendance: assimilation verses differentiation, authority verses autonomy and false consciousness verses politicisation. Hall (1994) concluded that such tensions impact on AA involvement as the tensions reveal fault lines among ideologies and experiences in lesbian communities.

Through the use of semi-structured interviews with ten women, Davis (1997) found that a lack of support from friends and family, feelings of 'invisibility' and isolation were significant factors that seemed to prevent women from attending and participating in AA groups. Davis (1997) concluded that the experiences of men and women in recovery at AA are almost totally unique from one another, primarily due to societal expectations attributed to both genders.

In contrast, a UK based study conducted by Dyson (2007) found that eight women in a more conventional, mixed AA group could still benefit from AA. First, the stories that people heard at AA acted as a deterrent from further drinking and second, the supportive nature of AA was significant for recovery, regardless of gender.

In another UK-based study, Whelan, Marshall, Ball, and Humphreys (2009) further investigated the importance of sponsors (people considered to be primary sources of peer support in AA recovery circles) and peer support. Whelan et al. (2009) identified two main roles of the sponsor: 'working the programme' and the provision of emotional and practical 'support'. Whelan et al. (2009) in turn, found that by carrying out these roles, the sponsor also benefitted, as it provides them with a source of 'giving back'.

Finally, Kubicek, Morgan, and Morrison (2002) explored the experiences of seven AA members with six spontaneous remitters. Five key themes were identified across both groups: the support from others; acceptance of a Higher Power; a genuine desire to recover; a reconstruction of the 'self' and remembering the negative consequences of their addiction. Kubicek et al. (2002) made two important conclusions. First, given that the themes were applicable to both AA members and spontaneous remitters, it highlights an overlap between two qualitatively different recovery trajectories. Second, Kubicek et al. (2002) acknowledge the importance of interviewing those in recovery, as they can provide useful information on how to sustain long-term sobriety and abstinence.

'Non-AA' affiliated studies

In a sample of four women, Kaskutas (1989) found that 'Women for Sobriety' (WFS) was beneficial for some in recovery, as it does not require the re-telling of tragic stories, does not 'compete' individuals against one another in terms of sobriety, does not require individuals to 'work the steps', downplays the role of a Higher Power and facilitates social cohesion of WFS members. Kaskutas (1989) concluded that WFS offers a potentially attractive alternative for those women who consider AA unpalatable.

In an exploration of an adapted AA program, Rayburn and Wright (2010) found that 'First Steps' (the SHG) had three key components: 'excessive twelfth-stepping', 'aggregated religious and recovery principles' and 'unrealistic expectations'. However, those who engaged in 'excessive twelfth-stepping' (giving 'something' back) often experienced detrimental effects in their recovery, as it resulted in service users being worse off because of their desire to continually help others at the detriment to their own wellbeing. Rayburn and Wright (2010) also found that being able to choose 'how to recover' was particularly beneficial, as it allowed flexibility to tackle their addiction. Finally, First Steps helped to encourage service users to aim for realistic goals and that "going broke on perfection" (Rayburn & Wright, 2010, p. 335) could result in a failure to realise a dream, a precursor to re-commencing their drinking.

In a qualitative exploration of SMART recovery, MacGregor and Herring (2010) found that SMART recovery was particularly appealing to service users because it focused on "moving on and not repeating 'war stories'" (p. 29), was perceived as non-hierarchical (everyone treated as equal) and focused on encouraging individuals to take control of their own resources to further

their recovery. This study provides qualitative support for the quantitative findings on SMART recovery.

The final qualitative study found was the most recent (Parkman, 2014). It was a phenomenology of a mutual aid group in Leeds, which concluded two important points. First it provided supporting evidence that mutual aid attendance can reduce boredom, stress and anxiety, as well as making significant contributions to recovery capital and access to supportive social networks. However, it also found that there are some service users, typically those with a lack of recovery capital and fairly isolated lives that can potentially develop a dependency on mutual aid. The practical repercussions of this dependence are that it could leave service users without any support structure at all if the mutual aid group ceased to exist – a potentially dangerous situation that could precipitate relapse.

These exploratory qualitative studies provide further understanding of SHGs. They provide alternative, and at times, alternative points of view to the quantitative findings.

Discussion

This review set out to explore why and how SHGs impact on recovery from alcohol dependency. The studies identified in this review demonstrate that SHGs impact positively in a number of ways. Active attendance and involvement at AA and 12-step groups, as well as 'non-AA, non-12-step' affiliated groups were beneficial for recovery, as they allowed for recovery to be maintained beyond structured support, and provided access to a social environment within which, they could practice their recovery. The review also concluded that SHGs within close

proximity had positive outcomes for recovery, as it encouraged attendance and involvement. In contrast, the qualitative studies demonstrate that in some cases, there are potential barriers such as gender or philosophical orientation of the SHG that could impact on attendance. One qualitative study (Parkman, 2014) also found that there is the potential for some service users with access to very little recovery capital and social support to become dependent on mutual aid. Whilst they broadly support the positive impact of SHGs, these studies also demonstrate that there are issues that could detrimentally impact SHG attendance and involvement.

This review contributes to the existing knowledge base, as it is the first scoping review of international studies exploring the impact of SHGs on alcohol dependency. Furthermore, it is the first known review that incorporates qualitative studies. As such, the review addresses an important gap in knowledge. Based on the findings of this review, there are several important conclusions to be made.

First, there is a great need to explore those SHGs that are not AA and/or 12-step related, as they have been proven to produce favourable outcomes with regards to abstinence and recovery. Second, the vast majority of quantitative and qualitative studies in this review were conducted in the US (see table 2), which is most likely the result of the US being the birthplace of AA, thus making it the most widely sought source of non-professional help for alcohol problems in the US (Miller & McCrady, 1993). Research outside the US therefore, is needed to understand how SHGs facilitate recovery in different recovery contexts. This is supported by the ACMD report (2012) that concluded there is a need for more UK based evidence that considers key issues in the UK.

Third, not only is there a paucity of evidence-based knowledge with regards to addiction research in general in the UK, but there is a significant dearth of evidence with regards to SHGs and other recovery communities in the UK (Advisory Council on the Misuse of Drugs, 2012). It has been found that communities of recovery are beneficial, as they are replete with individuals who have firsthand experience of addiction and addiction recovery, and can therefore provide more in-depth support and advice based on personal experience (Zemore, Kaskutas, & Ammon Avalos, 2004). In-depth exploration and analysis is needed therefore, to understand how such communities of recovery impact on addiction recovery.

Finally, the scoping review highlights that in comparison to quantitative studies, there are very few qualitative studies that investigate the impact of SHGs on alcohol addiction recovery. Whilst quantitative studies are important to statistically and objectively highlight the importance of SHGs, qualitative studies are also important as they access the feelings, emotions and testimonies of people who have experienced firsthand of what it is like to not only access SHGs, but also what it is like being in recovery more generally. Furthermore, qualitative research can unpack processes that are perhaps not easily addressed by quantitative analysis or that can help explain quantitative findings.

Limitations

The most significant limitation is that this review focuses solely on SHGs for alcohol dependency: other substance addiction literature has not been considered. Second, whist this scoping review is considered to have been conducted in a comprehensive and rigorous manner, it

is not a systematic review. There is therefore a possibility that some studies may have been overlooked. This is potentially an important consideration for any future reviews with a more focused question on the effectiveness of SHGs. However, the reader will be able to judge the comprehensiveness of the review and appreciate how it contributes to understanding of the breadth of SHGs that currently exist for alcohol dependency and how SHGs impact on recovery.

Conclusions

This scoping review makes an important contribution to the debates and existing knowledge base by offering a comprehensive review of how and why SHGs might impact on alcohol dependency. This in turn, has shed light on potential performance issues surrounding SHGs, identified potential strengths and weaknesses and provided a foundation on which future research on SHGs may be conducted.

Table 1: Inclusion and exclusion criteria for the literature review

Inclusion criteria Exclusion criteria

Study Type: empirical work (quantitative or qualitative) that explored the impact of SHGs for people suffering with alcohol addiction.

Study Type: any study that was not assessing alcohol as its primary outcome.

Any study design was included.

Intervention type: 12-step, SHG or any aftercare program that is led by recovering alcohol users and has no professional involvement. If the SHG is embedded in another intervention (for example, AA at an Oxford House), they will be *excluded*. This is because it is difficult to decipher if improved outcomes are due to the SHG or other intervention.

Outcome: any study that did not assess abstinence as its primary outcome. Any study investigating mutual aid groups that addressed mental health and alcohol dependence comorbidity were excluded.

Outcome: only studies that investigated abstinence from alcohol addiction as their primary outcome. Other outcomes such as quality of life were excluded.

Nature of the reference: policy papers, reviews (both systematic and scoping), theoretical papers, commentaries, dissertations or theses.

of 18 of any race of ethnicity, in any geographical location that was attending a SHG

Recipient group: any individual above the age Language: non-English speaking papers.

for alcohol	addiction.
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Language: only English speaking languages

Table 2: Selected demographic and design details of the included studies

ns & don (2007)	USA	Cross-sectional	Size	
	USA	Cross-sectional		
don (2007)			822	Questionnaire created by
				authors
s et al.	Georgia, USA	Longitudinal (10	158	Questionnaire created by
0)		year follow up)		authors
io et al.	Florence, Italy	Cross-sectional	7,522	Self-administered
2)				questionnaire assessing
				lifestyle and alcohol
				consumption.
s (1997)	USA (no city	Qualitative study –	4	Participant observation of
	given)	not applicable		one WFS meeting a week
				for 4 months; semi-
				structured interviews
on (2007)	USA (no city	Qualitative study –	35	Semi-structured
	given)	not applicable		interviews
nter, Egelko	USA (no city	Cross-sectional	425	Self report questionnaire;
lwards	given)			Substance Abuse Severity
3)				Index; Group Cohesiveness
				Scale; RR Belief Scale;
				Neurotic Distress Scale
	io et al. 2) s (1997) on (2007) onter, Egelko	s (1997) USA (no city given) on (2007) USA (no city given) nter, Egelko USA (no city given)	s (1997) USA (no city Qualitative study – given) not applicable On (2007) USA (no city Qualitative study – not applicable on ter, Egelko USA (no city Cross-sectional given)	io et al. Florence, Italy Cross-sectional 7,522 S (1997) USA (no city Qualitative study – 4 given) not applicable On (2007) USA (no city Qualitative study – 35 given) not applicable Inter, Egelko USA (no city Cross-sectional 425 dwards given)

7	Gossop et al.	London, UK	Longitudinal	150	The Alcoholics Problem
	(2003)		(follow up at 6		Questionnaire; The Severity
			months)		of Alcohol Dependence; The
					Symptoms Checklist; Life
					Situation Survey
8	Hall (1994)	San Fransisco,	Qualitative study –	10	Semi-structured
		USA	not applicable		interviews
9	Hoffman,	Minneapolis,	Longitudinal	900	Questionnaire created by
	Harrison &	USA	(follow up at 6		authors
	Belille (1983)		months)		
10	Kaskutas (1989)	Maryville,	Qualitative study –	13	Semi-structured
		USA	not applicable		interviews

Study	Authors	Location	Research Design	Sample	Instrument of Assessment
Number				Size	
11	Kaskutas et al.	California,	Longitudinal	349	Questionnaire created by
	(2005)	USA	(follow up at 1, 3		authors
			and 5 years)		
12	Kaskutas, Bond	California,	Longitudinal	926	Addiction Severity Index;
	& Amman	USA	(follow up at 1, 3,		questions from the
	Avalos, (2009)		5 and 7 years)		Diagnostic Interview
					Schedule for Psychoactive
					Substance Dependence;
					questions from AA
					Affiliation Scale/Religious
					Beliefs and Behaviours
					Scale
13	Kelly, Stout &	Midwest, USA	Longitudinal	303	Global Severity Index;
	Slaymaker		(follow up at 0, 3,		Multidimensional Mutual-
	(2013)		6 and 12 months)		help Meeting Activity Scale;
					Form 90; Commitment to
					Sobriety Scale; Leeds
					Dependence Questionnaire;
					Alcohol/Drug Efficacy Scale
14	Kingree &	South	Longitudinal	268	Drug Use Frequency
	Thompson	Carolina, USA	(follow up at 3 and		Questionnaire; Alcoholics
	(2011)		6 months)		Anonymous Affiliation
					Scale

15	Kissin, McLeod	Ohio, USA	Longitudinal	722	Computer Assisted Central
	& McKay		(follow up at 6, 30		Intake Assessment
	(2003)		months)		Instrument-Cleveland
					(CIAI-C)
16	Kubicek,	USA (no city	Qualitative study –	8	Semi-structured
	Morgan &	given)	not applicable		interviews
	Morrison (2002)				
17	Kuruvilla,	India	Longitudinal	174	Questionnaire created by
	Vijayakumar &		(follow up at 1		authors
	Jacob (2004)		year)		
18	Laudet, Stanick	New York,	Longitudinal	219	Lifetime Non-alcohol
	& Sands (2007)	USA	(follow up at 3, 6		Psychoactive Substance Use
			and 12 months)		Disorders subscale of the
					Mini International
					Neuropsychiatric Interview
					Addiction Severity Index
19	Li, Feifer &	California,	Cross-sectional	81	Spiritual Beliefs
	Strohm (2000)	USA			Questionnaire; Drinking
					related locus of control scale

Study	Authors	Location	Research Design	Sample	Instrument of Assessment
Number				Size	
20	MacGregor &	UK	Qualitative study –	Not	Semi-structured interviews
	Herring (2010)		not applicable	stated	
21	McBride (1991)	Florida and	Cross-sectional	50	Questionnaire created by
		Georgia, USA			author
22	McKellar,	USA (no city	Longitudinal	2,319	Health and Daily Living
	Stewart &	given)	(follow up at 1 and		Form; Problems From
	Humphreys		2 years)		Substance Use Scale; Stages
	(2003)				of Change Readiness and
					Treatment Eagerness Scale
23	Mueller et al.	Germany (no	Longitudinal	78	Munich Alcoholism Test;
	(2007)	city given)	(follow up at 3, 6		Hamilton Depression Scale;
			and 12 months)		Social Functioning
					Questionnaire;
24	Pagano et al.	USA	Longitudinal	226	Alcoholics Anonymous
	(2013)	(Albuquerque,	(follow up at 3, 15.		Involvement questionnaire;
		Buffalo,	39 and 120		Form 90
		Farmington,	months)		
		Milwaukee			
		and West			
		Haven)			
25	Parkman (2014)	Leeds, UK	Qualitative study –	19	Semi-structured interviews
			not applicable		

26	Rayburn &	Florida, USA	Qualitative study –	28	Semi-structured
	Wright (2010)		not applicable		interviews
27	Sheeran (1988)	Chicago, USA	Cross-sectional	59	Likert Scale assessing AA involvement and abstinence
28	Snow, Prochaska & Rossi (1994)	Rhode Island, USA	Cross-sectional	191	Process and Change Questionnaire; The Self- Efficacy Questionnaire
29	Thurstin, Alfano & Nerviano (1987)	Alabama, USA	Longitudinal (follow up at 6, 12 and 18 months)	145	Not reported
30	Tonigan & Beatty (2011)	USA (no city given)	Longitudinal (follow up at 1, 3, 5 and 7 years)	189	Form 90; iCassette Drug Screen-4 Panel Test; Stages of Change Readiness and Treatment Eagerness Scale
31	Whelan et al. (2009)	London, UK	Qualitative study – not applicable	Not reported	Semi-structured interviews

Study	Authors	Location	Research Design	Sample	Instrument of Assessment
Number				Size	

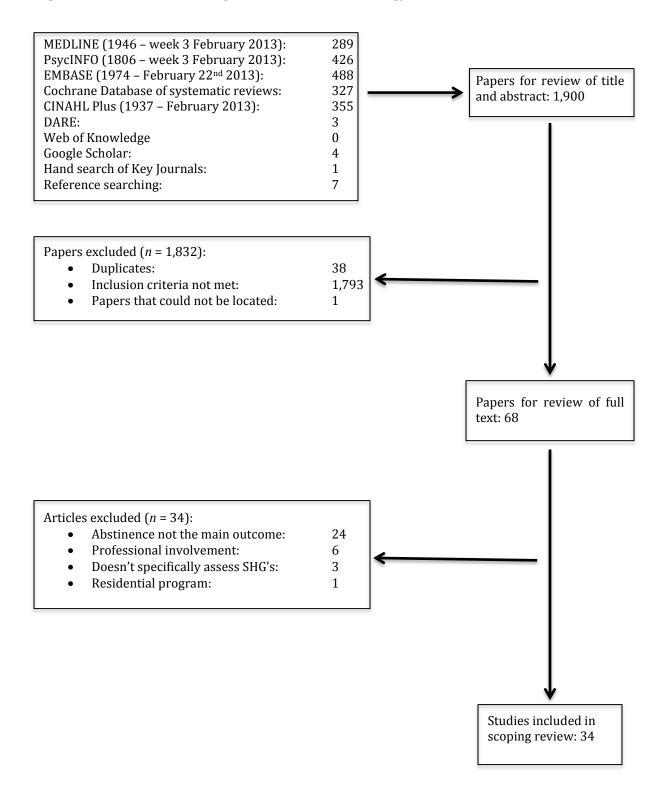
32	Witbrodt &	California,	Longitudinal	926	Social Network Assessment;
	Delucchi (2011)	USA	(follow up at 1, 5,		Addiction Severity Indices;
			7 and 9 years)		Graduated Frequency Scale
33	Witbrodt et al.	California,	Longitudinal	1,825	Addiction Severity Indices;
	(2012)	USA	(follow up at 1		self-assessed questionnaires
			year)		
34	Witbrodt &	Stockholm and	Longitudinal	2,451	Addiction Severity Indices;
	Romelsjo (2010)	California	(follow up at 6		self-assessed questionnaires
			months)		

Table 3: The methodology and outcomes of studies in this scoping review

Methodology			Primary Outcome Investigated			
Study Number	Quantitative	Qualitative	Attendance	Involvement	Location	No effect
1	•		•			
2	•		•			
3	•		•			
4		•	•			
5		•	•			
6	•		•			
7	•		•			
8		•	•			
9	•		•			
10		•	•			
11	•		•			
12	•		•			
13	•			•		
14	•			•		
15	•		•			
16		•	•			
17	•				•	
18	•				•	
19	•		•			
20		•	•			
21	•		•			
22	•		•			
23	•					•

24	•		•		
25		•	•		
26		•	•		
27	•			•	
28	•		•		
29	•		•		
30	•		•		
31		•	•		
32	•		•		
33	•		•		
34	•		•		

Figure 1: A consort flow diagram of the search strategy



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