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The efficient intervention to young Australian adults of risky alcohol consumption: SMART recovery or alcoholics anonymous

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Abstract. Risky Alcohol consumption arouses the large attention of the public because of its social burden and further side effects on young people in Australia. Alcoholics Anonymous is an older and better-known peer-led intervention against risky alcohol consumption depending on the religion in Australia. Since participants are difficult to adhere to, and the successful withdrawal rate is affected by many factors, such as attendance, adherence, etc., many people have questioned the effectiveness of Alcoholics Anonymous. This paper presents another intervention, SMART Recovery, to compare the effectiveness, acceptability, side effect and further impact to find a better way for young people living with risky alcohol consumption in Australia. Although Alcoholics Anonymous enjoys a distinct advantage of a longer history and wider acceptance, the effectiveness of SMART Recovery is preferable depending on its professional implementation, precision, causality of effectiveness and fidelity. Despite of the data and research on attendance and adherence of SMART Recovery is less, the low acceptability of Alcoholics Anonymous has indicated the preponderance of SMART Recovery, especially for nonreligious. Meanwhile, more professional treatment of side effects and longer lasting positive effects for young people living with RAC are other advantages of SMART Recovery. SMART Recovery is a more effective intervention for young people living with RAC rather than Alcoholics Anonymous.

Keywords: SMART Recovery, Alcoholics Anonymous, Risky alcohol consumption, Comparative study.

1. Introduction

In 2022-2023, nearly 1 in 3 people aged 14 and over who consumed alcohol have risky alcohol consumption in Australia, which has aroused the attention of the government and society [1]. Risky alcohol consumption (RAC) in young adults (18-25 years old) refers to young people's alcohol consumption exceeding the recommended limit (more than 10 standard drinks per week or more than 4 standard drinks per day) [2]. Bill and Bob set up Alcoholics Anonymous(AA), a peer-led support program, in 1935 to help people reduce risky alcohol consumption [3]. AA is based on a disease model of addiction and requires complete abstinence from risky alcohol consumption, which was considered as a formal treatment for alcohol-addicted people in Australia [4]. However, in 2009 Dr. Kaskutas published a review raising a query about the effectiveness of AA to people with RAC [5]. He thought there was no evidence of causality between AA and the reduction of RAC, and the faith of AA had a

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deep impact on participants rather than a scientific effect [5]. Therefore, the effectiveness of AA for RAC arouses doubts among young Australian people.

This paper put forward a new program, SMART Recovery(SMART Recovery), to compare with AA in the efficacy of reducing risky alcohol consumption. On the basis of the intervention, it indicated strong evidence to support RS for young Australian people living with RAC by comparing efficacy, acceptability, side effect and further impact of the two interventions.

2. Necessity of efficient intervention of RAC

2.1. Excessive social burden

RAC has caused huge social burdens on public health, social safety and economy in Australia. According to the report from the Australian government, more than 36.1% young adults (18-25 years old) have risky alcohol drinking [6]. RAC is the risk factor for many physical diseases (e.g. cardiovascular diseases and cirrhosis of the liver) [7]. Anita has proved that young adults (18-25 years old) who are in a highly plastic neurodevelopmental period would be influenced by risky alcohol consumption in their neural function and structure [8]. At the same time, in 2022, there were 1742 alcohol-induced deaths and 311.4 alcohol-related hospitalisations per 100,000 population in Australia [9]. Moreover, in the report of Elissa, who put emphasis on the correlation between poor mental health and alcohol, she believed that poor mental health and RAC were mutually reinforcing [10]. In addition, for the safety of society, there were 1,900 alcohol-related injury deaths and 11% of them were traffic accidents after alcohol in 2020 [11]. Last but not least, alcohol brings a huge economic burden to society, for example, the per capita cost of RAC is $359.8, equivalent to 0.5% of GDP [12].

2.2. Ascendant incidence of Risky alcohol consumption for young adults

The prevalence of young adults at the age of 18-25 who have risky alcohol consumption increased from 58% in 2001 to 83% in 2022-2023 [13].

According to the research of Bethancy, the peak time of prevalence of infrequent episodic and extreme drinkers is at the age of 24. While the peak time of prevalences of frequent RAC and extreme drinkers is at the age of 49 [14]. On the one hand, it is in need to restrain the development of the huge RAC population in young adults. On the other hand, the government and society should make a joint effort to reduce the proportion of young adults who have RAC to prevent the shift from infrequence to frequency.

Compared to underage alcohol, whose incidence decreased from 69% in 2001 to 31% in 2022-2023 and, on average, only 17.34% of people at the age of 25-60 have RAC in 2022, young adults at the age of 18-25 in Australia is a group that they have the most repaid-increased incidence, the largest side effect and the maximum likelihood to be changed [13].

2.3. The rise in low self-efficacy among young adults

Young adults (18-25 years old) are in the transition in their lives and society. On the one hand, it is a special time for them, including entering the university and first work. RAC is both a social psychological activity and a way to pursue the pleasurable feeling [15]. On the other hand, under the circumstance of social transformation, the pressure led by social instability caused an increase in RAC (RR=1.60 (0.87–2.95) [16]. During the period, young adults (18-25 years old) are easier to be in low-efficacy and believe they can’t control their lives, or they are a loser. The low self-efficacy will promote them to be immersed in the pleasurable feelings by RAC rather than overcoming the obstacles that stand in their lives. Indeed, risky alcohol consumption is influenced by social and mental necessary, and external environment. However, returning to the source, the root risk factor is low self-efficacy of young adults (18-25 years old).

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3. Procedure of smart recovery and alcoholics anonymous

3.1. SMART Recovery

SMART Recovery is a peer-support programme set up in 1994 in Australia for people living with RAC to get rid of risky alcohol consumption through self-manage and recovery train [17]. It is based on cognitive behavioral therapy(CBT), motivational enhancement therapy(MET), rational emotive behavior therapy(REBT) and motivational interviewing by trained professionals 60-90 minutes each [17]. CBT and MET are both types of socio-psychotherapy that approach changing the negative way of thinking and behaving and removing the injurious behaviors in daily life [18-19]. SMART Recovery helps people build motivation, cope with Urges, solve problems and balance lifestyles, under the basic brief and concept that personal choice is fundamental and motivational for people to be free from addictive behaviors, for example, risky alcohol consumption [20].

3.2. Alcoholics Anonymous

Alcoholics Anonymous(AA) is a peer-led intervention in which members self-identified RAC and shared their stories of why their lives lost control on account of alcohol. Then, they expressed their will to dispose of alcohol and back to peaceful lives. Through talking to each other and being encouraged, they felt understood and found the support and experience to reduce their risky alcohol consumption. AA mainly consists of 12 steps, which are shown in Table 1 [21].

Table 1. twelves steps of Alcoholics Anonymous [21]

Step 1	Participants admitted their lives become unmanageable because of alcohol.
Step 2	They believed there was a greater Power than ego strength to help them recover from high risky alcohol.
Step 3	They made up their minds to give their will and their lives to God.
Step 4	Take a moral inventory of their past alcoholism.
Step 5	Admitted the essential nature of their mistakes to God, themselves and another people.
Step 6	Be prepared on a psychological level for God to remove the moral flaw or the flaw that their life is out of control.
Step 7	Devoutly asked God to remove our flaws.
Step 8	Make a list of all the people who were hurt by them, and apologize and ask for forgiveness of the hurt people.
Step 9	Try to make it right for those they hurt, without hurting others.
Step 10	Continued to take personal inventory and admit flaws when finding.
Step 11	Through prayer and meditation to seek knowledge of God's will for participants and the power to carry that out.
Step 12	Depends on these steps, participants have been spiritually enhanced, and they hope to pass on their experiences and inspirations to other people living with risky alcohol consumption, and most importantly, to practice these principles in their daily lives.

4. Contrast of smart recovery and alcoholics anonymous

With the framework of the World Health Organization(WHO) released in 2023, reducing the harmful use of alcohol by effective and evidence-based intervention, SMART Recovery is a prior intervention for young people in Australia [22].

4.1. Effectiveness

From the perspective of the effectiveness of SMART Recovery and AA, it could be concluded that SMART enjoyed distinct advantages over AA in implementation, precision, heterogeneity, causality and fidelity. SMART Recovery bears striking resemblances to AA since they are both peer-led interventions. However, SMART Recovery is under the guidance of professionals, for example,

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psychotherapists and psychologists, and they would employ individual treatments after assessments. Yet, AA is a purely self-involved intervention for alcoholics. Especially, the most noticeable characteristic is the self-determination of whether or not they have RAC, which could arouse over-treatment or specificity. Therefore, the effectiveness gained in SMART Recovery for RAC outweighs greater than the effectiveness we gain from AA under this maximum divergence.

On the other hand, the precision of evidence should be taken into account. Groh published a literature review, which included 24 studies, that proved the effectiveness of AA for people living with RAC, mainly in the social supports [23]. Nevertheless, the sample size of 24 studies varied widely and their confidence intervals lack overlap, which means this review exists heterogeneity. For that reason, we could deduce that the evidence of the effectiveness of AA for RAC is short of precision and low quality. While, in the review including 12 studies from Alison, it excluded the selection bias and detection bias, and testified the effectiveness of RS for RAC [24]. Despite lacking the single standard of assessments and training of professionals, the precision of effectiveness was insurable.

What's more, Dr. Kaskutas's review raised a query about the effectiveness of AA to people with RAC [5]. He thought there was no evidence of causality between AA and the reduction of RAC, and that faith in AA had a deep impact on participants rather than a scientific effect [5]. At the same time, there is no following study of the causality of AA and reduction of RAC. Therefore, the effectiveness of AA is doubtful.

Last but not least, Kelly's systematic review in 2020, a total number of 10565 participants from 27 studies indicated that 12 out of 27 studies are part/non-manualized, which means the same treatment could not be delivered across time and different places, in other words, these studies are non-repeatable [25]. Consequently, the fidelity of AA for RAC is wonky due to unclear treatment procedures, assessments and training of professionals.

In conclusion, although AA enjoys a distinct advantage of a longer history and wider acceptance, the effectiveness of SMART Recovery is preferable depending on its professional implementation, precision, causality of effectiveness and fidelity.

4.2. Acceptability

In spite of effectiveness, acceptability is another essential factor that should be taken into account, mainly in attendance, adherence, flexibility and economic benefit. AA has a high dependency on attendance. In Lee's 7-year cohort study and randomized trials of attendance of AA, 3 out 4 people in high AA group (in the first year, they took part in the meetings more than 200 times) could totally withdraw from risky alcohol consumption, while only 35% people getting rid of RAC in low AA group (in the first year, they took part in the meetings less than 5 times) [26]. And in this study, Lee claimed that there was a piece of strong evidence that exposure to incidence has a negative correlation. However, SMART Recovery is a periodic treatment, so in the present studies nearly 100% attendance of it [27]. Therefore, Smart Recovery is more conducive to getting rid of RAC for young people rather than AA.

In the study of 300 participants living with RAC, adherence to AA is less than 20% by the reason of the lack of identification with the method, needs and credibility [28]. Moreover, Lee also mentioned that more than 40% of participants withdrew from the treatment of AA in the first year, and he thought AA was an intervention that attracted people to join but did not make them stick [26]. The above results indicated that AA has low adherence, which means the acceptability is low in the participants living with RAC.

John conducted a Randomized controlled trial of SMART Recovery on young people living with RAC, and he got the result that participants in the SMART Recovery had more economic foundation and more stable psychological state, so they had better withdrawal effects [29]. From the perspective of basis, SMART Recovery is a better alternative to AA [29]. What's more, for non-religious people, SMART Recovery based on professional theory will make them feel more comfortable and trusted than AA based on religious belief. Therefore, the acceptability of SMART recovery is higher than AA for young people.

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4.3. Side effect

Moreover, most people will care about the side effects of the two interventions. The side effects of AA and SMART Recovery are similar, for example, under the treatment, participants need to recall their experience of risky alcohol consumption and try to find the deep reasons why negative emotion, thoughts and physical reactions are triggered. However, AA, a purely self-involved intervention for alcoholics, lacks of knowledge to deal with the potential accidents and side effects, such as psychological trauma and emotional breakdown. While the treatments of SMART Recovery are under the guide of trained professionals, the chances of side effects decrease.

4.4. Further impact

SMART Recovery carries more weight than AA for RAC when further impact is considered. SMART Recovery mainly depends on cognitive behavioral therapy(CBT), motivational enhancement therapy(MET), rational emotive behavior therapy(REBT), and motivational interviewing to change the negative way of thinking and behaving and remove the injurious behaviors, which would have a deep change in the lives of people living with RAC. However, AA just provides a chance for participants to pour out and find support and encouragement from each other, which is temporary. The aim of intervention for young people living with RAC is to reduce risky alcohol consumption and the likelihood of recurrence. Therefore SMART Recovery is a more proper intervention.

5. Conclusion

This paper analyzed the social burden, affected group and risk factors of risky alcohol consumption in Australia to reveal the necessity of efficient intervention of RAC. Prior research have indicated AA could reduce RAC for young people. However, despite the fact that participants are difficult to adhere to, and the successful withdrawal rate is affected by many factors, such as attendance, adherence, etc., many people have questioned the effectiveness of AA. This research presented a new intervention for young people living with RAC in Australia and multi-dimensionally compared two interventions. Depending on serious systematic reviews and randomized controlled trials, this paper indicated that SMART Recovery was more effective, acceptable, low side-effect and long-lasting than AA in reducing RAC. However, the procedure for training professionals in SMART Recovery is unclear. Therefore, further work of this study is to ensure the specific operations of SMART Recovery, for example, more clear and orthonormal assessments and training of professionals, and more standardized and unified auxiliary means during the treatments.

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