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EFFECTIVENESS OF RELAPSE PREVENTION THERAPY ON PSYCHO–SOCIAL PARAMETERS AMONG INDIVIDUAL AND DYADIC GROUP ALCOHOL DEPENDENTS

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ABSTRACT

The effectiveness of RPT on bio-psycho –social parameters among 240 alcohol dependents were done in selected de-addiction centres at Thanjavur district. The 120 samples were in experiment and 120 were in control group. Samples were selected by using the consecutive sampling Technique. Quasi- experimental pre test – post test control group design were used. Data collected through interview method using 1 standardized Questionnaires and 1 semi – structured questionnaire was then used to assess the psycho-social parameters. The obtained paired 'T' test score had significant effect on 'P' Value < 0.05 in psycho-social parameters in experimental group. It indicates the given RPT was effective in both IAD & DAD. There was a highly positive significant correlation in experimental group. The obtained unpaired 'T' test score for comparison between experimental and control groups showed a significant difference in Psycho-Social parameters of the experimental group alone .The comparison between IAD & DAD group had significant difference in psycho-social parameters of the experimental groups. Hence the study result revealed that RPT was effective for the experimental groups. And RPT with Care givers support was more effective in DAD experimental group. So RPT with care givers support was more effective on psycho-social parameters of alcohol dependents.

KEYWORDS: IAD – Individual Alcohol Dependents, DAD- Dyadic Alcohol Dependents, RPT – Relapse Prevention Therapy.

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INTRODUCTION

Alcohol is a natural substance formed by the reaction of fermenting sugar with yeast spores. By strict definition, alcohol is classified as a food because it contains calories; however, it has no nutritional value. Different alcoholic beverages are produced by using different sources of sugar by fermentation process. For example, beer is made from malted barley, wine from grapes or berries, whiskey from malted grains, and rum from molasses. Distilled beverages (e.g., whiskey, scotch, gin, vodka and other "hard" liquors) derive their names from further concentration of the alcohol through a process called distillation. The alcohol content varies by type of beverage. For example, most American beers contain 3 to 6 percent alcohol, wines average 10 to 20 percent, and distilled beverages range from 40 to 50 percent alcohol[1].The effects of alcohol are dependent on a variety of factors, including a person's size, weight, age, and sex, as well as the amount of food and alcohol consumed. The effects of alcohol include dizziness and talkativeness. The immediate effect of a larger amount of alcohol Includes slurred speech, disturbed sleep, nausea, and vomiting. Alcohol even at low doses may significantly have impaired judgment and coordination. Low to moderate doses of alcohol can also increase the incidence of variety of aggressive acts, including domestic violence and child abuse [2].Alcoholic beverages have been used in human societies since the beginning of recorded history. The patterns of alcohol intake around the world are constantly evolving, and alcohol is ubiquitous today. Research has contributed substantially to our understanding of the relation of drinking to specific disorders, and has shown that the relation between alcohol consumption and health outcomes is complex and multidimensional. Increases in the average volume of drinking are predicted for the most populous regions of the world in Southeast Asia including India. Cultural differences apparently influence the pattern of alcohol consumption. In addition, alcohol is linked to categories of disease whose relative impact on the global burden is predicted to increase. Therefore, it is appropriate to implement policies with targeted harm reduction strategies [3].Alcohol is used by people around the world irrespective of age or ethnicity. Although alcohol consumption has occurred for thousands of years, many of the varied health effects have been discovered fairly recently. Alcohol consumption has health and social consequences due to intoxication (drunkenness), dependence (habitual, compulsive and long-term drinking), and other biochemical effects. About 2 billion people worldwide consume alcoholic drinks, which can have immediate and long term consequences on health and social life. Over 76 million people are currently affected by alcohol use disorders, such as alcohol dependence and abuse. Worldwide alcohol causes 1.8 million deaths (3.2% of total) and 58.3 million (4% of total) of Disability-Adjusted Life Years (DALYs). Unintentional injuries alone account for about one third of the 1.8 million deaths, while neuro-psychiatric conditions account for close to 40% of the 58.3 million DALYs. Alcohol is the third most common cause of death in developed countries [4].Alcoholism encompasses a variety of problems associated with various areas of functioning of an individual, in physical and mental health, social, economical and legal issues. Because of stigma, discrimination, and disturbed cognitive function, these people are removed from jobs, isolated in families and are out casted in the society. There are evidences (genetic studies and reward pathway studies) to prove that the consequences are due to biological factors. All these directly or indirectly contribute to quality of life and cause disability in terms of morbidity and mortality[5].The contribution of the family in the development and maintenance of substance abuse has been the focus of considerable research and is now widely accepted by both researchers and practitioners alike. As such, an increasing number of investigators and treatment providers are exploring the interrelationship of family factors and substance abuse, with the clinical applications of marital and family therapy to the treatment of alcoholism and drug abuse[6]. The need to identify the effect of relapse prevention therapy for the individuals and dyadic individuals to eliminate the alcohol abuse behaviour is very much needed in pre test day circumstances.

MATERIALS ANS METHODS

The ethical clearance was obtained from the ethical committee of Saveetha University, Chennai with the registration number 002/10/2013/IEC/SU dated 15.10.13. Permission was obtained from the de-addiction centres to conduct the study. Assurance was given to the subjects that the anonymity, confidentiality and subject privacy would be maintained. True experimental design (pre and post test Control group design) was used in this study. The main study was conducted at the selected de- addiction centres at Thanjavur. Probability random sampling technique (lottery) method was used to select the de-addiction centres. Again cluster sampling Technique was used to select the 240 samples; 60 samples in each group such as experimental and control group of IAD and DAD groups. The Data were collected through interview technique by using standardized Questionnaire (AUDIT scale) and semi –structured Questionnaire (Alcohol Related Problems) to assess the psycho-social parameters. The pre test was done by using the afore mentioned 2 tools to all the 240 samples, 60 sessions (2 sessions per week for 3 weeks) of Relapse Prevention Therapy were provided to the samples of experimental group in IAD and DAD groups. After 15 days of the intervention the post test was conducted by using the same tools to both the experimental and control groups before discharge and on fourth month. Then the collected data were complied and analyzed by using the descriptive and inferential statistics through Sigmaplot 12 (Systat System, USA) package and figured out according to the hypotheses.

Findings

Alcohol dependence is one of the major problem globally. There are many reasons for the person becoming an alcohol addict. They are not only addicted psychologically but also physically. It was the main reason for them to quit from the dependents. This problem not only affect their health and well being but affects the family (Wife, Children, relations), neighbours

and lot of social and legal problems may occur due to this. People living with this dependence shows various complications physically, mentally and socially which often leads to premature death. Increased morbidity and mortality also result. The present study was undertaken with the aim of comparing the effectiveness of Relapse Prevention therapy among the IAD and DAD. The caregivers were included in the treatment. The intervention (RPT) was developed and tested for its effectiveness in terms of specific outcome measures over 3 months follow-up period.

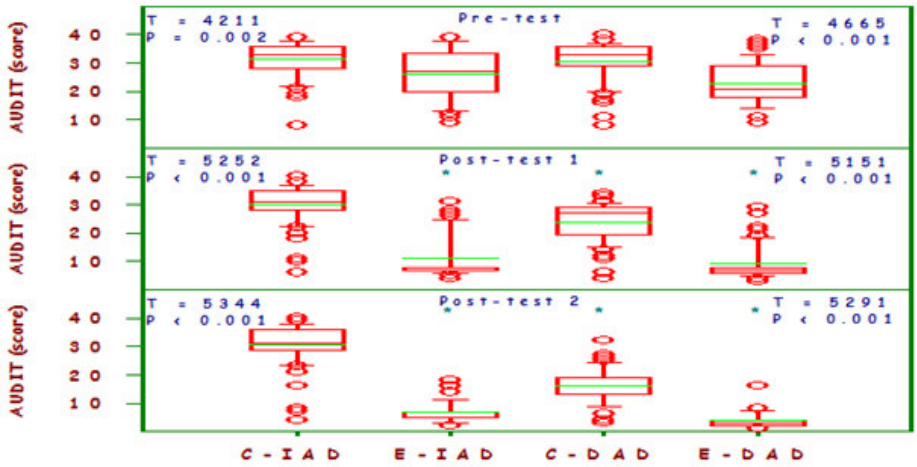

Figure1.1

The effect of relapse prevention therapy on psychological parameter (AUDIT score) among the IAD and DAD groups:. C-IAD, individual alcohol dependents; E-IAD, individual alcohol dependents; C-DAD, dyadic ; E-DAD, dyadic.

The middle red line is median and green line is mean.The 'T' and 'p' values (Mann Whitney rank sum test) on the left side are comparing C-IAD and E-IAD and on the right side are comparing C-DAD and E-DAD. The χ^2 and 'p' values comparing pre-test, post-test 1 and post-test 2 (Friedman repeated measures analysis of variance on ranks) for C-IAD are 4.9 and P=0.088, for E-IAD are 116.8 and < 0.001, C-DAD are 120.0 and < 0.001, and E-DAD are 117.0 and < 0.001. The '*' shows significant from pre-test.

Figure 1.1, shows the box plot of AUDIT score of alcohol dependents. The box plot shows median, mean, 25 percentile, 75 percentile minimum value, maximum value and outliers. The mean value of C-IAD and E-IAD for pre test 31.5 and 26.3 (table 6.1). The mean value of C-DAD and E- DAD for pre test was 30.7 and 22.8 respectively. Since the data is a scored data and also a discrete variable, non parametric statistics was used. The median C-IAD and E-IAD for pre test were 33.0 and 27.0 respectively and the difference (Mann Whitney rank sum test ; unpaired test) was statistically significant (P<0.002). Similarly the C-DAD and E-DAD for pre test median were 33.5 and 21.0 respectively and the difference (Mann Whitney rank sum test ; unpaired test) was also statistically significant (P<0.001). After intervention C-IAD and E- IAD for post test 1 median were 31.0 and 8.0 respectively and the difference was significant (P<0.001). The C-DAD and E-DAD for post test 1 were 27.0 and 7.0 was also statistically significant (P<0.001). After three months reinforcement the C-IAD, D-IAD, C-DAD and E-DAD for post test 2 median were 31.0, 7.0, 16.0 and 3.0 respectively and the difference was highly significant (P<0.001). The AUDIT score of C-IAD pre test , post test 1, post test 2, were analysed by (Friedman repeated measure ANOVA on ranks) and was not significant (P=0.088). Contrarily in E-IAD pre test, post test 1, post test 2 Friedman repeated measure ANOVA on ranks showed statistical significance (P<0.001). In C-DAD pre test, post test 1, post test 2, (Friedman repeated measure ANOVA on ranks) and was significant (P<0.001). Similarly E-DAD pre test , post test 1, post test 2, (Friedman repeated measure ANOVA on ranks) and was also significant (P<0.001). The pre test AUDIT score was compared with post test 1 and post test 2. The pre test, post test 1, post test 2 of C-IAD was significant post test 1 and post test 2 of E-IAD, post test 1 and post test 2 of C-DAD and post test 1 and post test 2 of E-DAD were also significant.

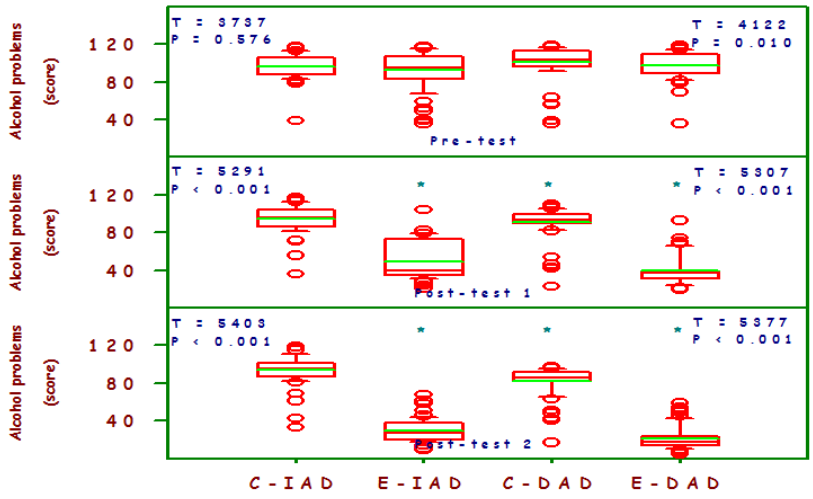

Figure 1.2

The effect of relapse prevention therapy on psychological parameter (Alcohol related problems) among the IAD and DAD groups:. C-IAD, individual alcohol dependents; E-IAD, individual alcohol dependents; C-DAD, dyadic ; E-DAD, dyadic.The middle red line is median and green line is mean.

The 'T' and 'p' values (Mann Whitney rank sum test) on the left side are comparing C-IAD and E-IAD and on the right side are comparing C-DAD and E-DAD. The $\chi 2$ and 'p' values comparing pre-test, post-test 1 and post-test 2 (Friedman repeated measures analysis of variance on ranks) for C-IAD are 5.4 and P=0.068, for E-IAD are 118.0 and < 0.001, C-DAD are 110.2 and < 0.001, and E-DAD are 116.1 and < 0.001. The '*' shows significant from pre-test.Figure 1.2 shows the box plot of Alcohol Related Problems of alcohol dependents. The mean value of C-IAD and E-IAD for pre test 96.5 and 92.8 (table 6.1). The mean value of C-DAD and E- DAD for pre test were 101.3 and 97.3 (table 6.1) since the data is a scored data and also a discrete variable, non parametric statistics was used. The median C-IAD and E-IAD for pre test were 96.5 and 95.0 respectively and the difference (Mann Whitney rank sum test; unpaired test) was statistically not significant (P=0.576). Similarly the C-DAD and E-DAD for pre test median were 103.0 and 98.0 respectively and the difference was statistically not significant (P=0.010). After intervention C-IAD and E- IAD for post test 1 median were 96.0 and 39.0 respectively and a difference was significant (P<0.001) . The C-DAD and E-DAD for post test 1 median were 93.0 and 37.0 was also statistically significant (P<0.001) than the pre test. After three months reinforcement the C-IAD, D-IAD, C-DAD and E-DAD for post test 2 median were 95.0, 27.0, 85.5 and 18.0 respectively and the difference was highly significant (P<0.001). The Alcohol Related Problems scores of C-IAD pre test , post test 1, post test 2, (Friedman repeated measure ANOVA) and was not significant (P=0.068) contrarily in E-IAD pre test, post test 1, post test 2 and was statistically significant (P<0.001). In C-DAD pre test, post test 1, post test 2, was significant (P<0.001). Similarly E-DAD pre test, post test 1, post test 2 was also significant (P<0.001). The pre test Alcohol related problems score was compared with post test 1 and post test 2. The pre test, post test 1, post test 2 of C-IAD was not statistically significant but the post test 1 and post test 2 of E-IAD, post test 1 and post test 2 of C-DAD and post test 1 and post test 2 of E-DAD were significant. Figure 2.1 shows regression graph of AUDIT and Alcohol related problems in alcohol dependents in pre-test. A positive correlation was observed between AUDIT score and Alcohol related problems score in the E-DAD, C-IAD and C-DAD in pre test .Where as in E-IAD no significant correlation was observed. Pre test shows statistically significant (p<0.001). The result revealed that an AUDIT score is increased the problems score is also increased. Figure 2.2 shows regression graph of AUDIT and Alcohol related problems in alcohol dependents in post-test 1. A positive correlation was observed between AUDIT score and Alcohol related problems score in the experimental groups and control groups in post-test 1. Post-test 1 shows statistically significant (p<0.001). The result revealed that an AUDIT score is increased the Problems score is also increased. Figure 2.3 shows regression graph of AUDIT and Alcohol related problems in alcohol dependents in post-test 2. A positive correlation was observed between AUDIT score and Alcohol related problems score in the experimental groups and control groups in post-test 1. post-test 2 shows statistically significant (p<0.001). The result revealed that an AUDIT score is increased the Problems score is also increased. According to the hypothesis, there was a significant difference between the pre, post1 and post test 2 scores of psycho- social parameters among the experimental groups (IAD&DAD). So hypothesis is accepted. Hence the given RPT therapy was effective in experimental group. In a study by Miller et al, (1983), the individual life problems of 93 problem drinkers were assessed at intake to treatment and at 6-12 and 24 months follow up. It was found that anxiety and family problems frequently reported at intake, significantly reduced in those whose drinking decreased. To conclude, the importance of ensuring regular follow-up to ensure better treatment effectiveness has been advocated by several researchers. Better management requires longer periods of continued contact with the patient. Assessing the relationship between dependence and other types of alcohol – related problems helps in understanding the impact of dependence on individuals and society. This in turn is important to assess the

extent to which public health intervention aimed at alcohol – dependent individuals will minimize alcohol problems in society[8]. A study by Moos et al, (2006) found that individuals who relapsed were likely to see their drinking as a significant problem, reported less self-efficacy and relied more on drinking to reduce tension. Also, several authors have reported that fewer personal resources, such as lack of self-efficacy and coping skills, have been associated with relapse. These findings are in accordance with a large body of earlier research which was documented that family support is related positively to better outcomes. Studies conducted as long as more than two decades ago found that treatment that included family members had better outcomes than treatment without family involvement[9].The t test has shown that alcoholics in IAD and DAD groups remain abstinent after treatment and also they differed significantly with control group. It was found that care givers of alcoholics had more stress before intervention than after intervention for the participants. Alcoholics who remain abstinent after treatment were found to experience more support from family, friends and other people. It was also found that follow-up visits and reinforcement by the investigator at the treatment centre and support from family and other care givers facilitated abstinence in alcoholic subjects. Sufficient emphasis should be given to factors like stress tolerance, social support, participation in alcoholics anonymous meetings and activities. Patients' spouse, family, friends and work place associates should be involved in the treatment programme as far as possible. During the treatment and follow-up period, the patients are to be trained in the areas like skills in family budgeting and management of income and expenditure, effective use of time, use of leisure, skills of effective inter personal relationship, social involvement etc. Based on the findings of this study, it is recommended that relapse prevention interventions should be included in treatment and rehabilitation programs of alcohol dependent patients in de-addiction centres. It would be more helpful if future study should look into the role of factors like age, education level, socioeconomic status and employment in alcohol dependence. It would be useful to identify the reasons/factors for relapse in alcohol dependent subjects.

CONCLUSION

It was inferred that the Relapse Prevention Therapy was independently effective in psycho-social parameters for alcohol dependents of experimental groups whereas the Relapse prevention therapy with care givers' support was more effective in psycho-social parameters among the alcohol dependents of dyadic experimental group when compared with the Individual experimental group. In Nursing Practice the findings of this study will help the nurses to understand the importance of Relapse Prevention Therapy and the role of caregivers in the treatment of alcohol – dependents. It will be useful to understand the importance of follow-up and reinforcement to prevent the relapse among alcohol dependents. In Nursing Education this study will help to create awareness among the nursing students regarding the relapse prevention in alcohol – dependents. In Nursing Research the study findings will – help the nurse researchers to do many research on relapse prevention therapy among alcohol - dependents using different types of interventions like IAD, (Individual Alcohol Dependents) DAD (Dyadic Alcohol Dependents) etc., they can gain in-depth knowledge regarding the importance of follow-up care in alcohol – dependents after taking treatment in de-addiction centres

CONFLICT OF INTEREST

Conflict of interest declared none.

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