

## Assessment of Quality of Life in Latent Alcoholics

Steffi. P. Mascarenhas<sup>1</sup>, Dnyanesh Pramod Patil<sup>1</sup>, Manali Jain<sup>2</sup>, Unnati Pandit<sup>3</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Physiotherapist, <sup>3</sup>Professor & Director,  
D Y Patil University, School of Physiotherapy, Navi Mumbai

Corresponding Author: Steffi. P. Mascarenhas

### ABSTRACT

**Background:** Alcohol being termed as a depressant slows down the body's function. Alcohol dependency consists of symptoms like craving, loss of control, physical dependence and tolerance. Alcohol withdrawal symptoms (AWS) like nausea, vomiting, tremors, anxiety, tactile, auditory & visual disturbances, headaches, agitation, clouding of sensorium are seen after heavy alcohol intake mainly 1-3 days after the last drink. The aim of the study was to assess the quality of life in latent alcoholics using Clinical Institute Of Withdrawal Assessment Alcohol Revised (CIWA-Ar) and Life Situation Survey (LSS).

**Methodology:** 100 latent alcoholics since 4 weeks between 21-60 years were selected for the study. The subjects were assessed using the CIWA-Ar and LSS questionnaire.

**Results:** 69% of subjects scored less than 10 and 31% scored more than 10 on the CIWA-Ar scale. 76% of subjects have a very good quality of life followed by 9% having good quality of life and 15% having poor quality of life after alcohol withdrawal.

**Conclusion:** Anxiety followed by paroxysmal sweats & headaches were some of the common symptoms persisting after 4 weeks. But on the whole their quality of life was found to be very good.

**Key words:** Alcohol withdrawal symptoms, CIWA-Ar scale, LSS

### INTRODUCTION

When prolonged alcohol consumption is ceased or reduced, dependency with withdrawal syndrome starts to develop which consists of physical signs and psychological symptoms contributing to distress and discomfort. The relationship between withdrawal, stress and relapse has an impact on the treatment of alcoholic symptoms. One of the causes for relapse is withdrawal related anxiety that reflects the changes in the brain to continuous alcohol consumption. [1] From the periods of 2008 to 2012, the amount of alcohol consumption has risen in India as per stated in the Global Status report on alcohol and health 2014, released by WHO. According to the 'years of life lost' scale, India is rated 4 on a scale of 1 to 5, which is

based on alcohol-attributable years of life lost, thus indicating that drinking & its consequences is the reason why the alcoholics of our country lose most years of their life. India consumes spirits on a higher average. In males in majority, alcohol use disorders and alcohol dependence are prevalent, especially among the lower middle income group of the population. [2] Alcoholism is a worldwide social problem with severe effects on public health. [3] The effects of alcohol on human body are upper gastro-intestinal pain, haemorrhagic gastritis, acute and chronic pancreatitis, inflammation and ulceration of small intestine diabetes, fatty liver, alcoholic hepatitis, hepatic encephalopathy, cirrhosis, osteoporosis, acute and chronic myopathy, depression, hallucinations, psychosis, mild

to moderate hypertension, increased risk for haemorrhagic stroke, cardiomyopathy, erectile dysfunction, withdrawal seizures, memory impairment, wernicke's korsakoff's syndrome. [4] Alcohol is found to be the co-morbid factor for cardiovascular diseases as majority of the alcohol-attributable deaths are due to cardiovascular diseases and diabetes. [2]

Alcohol Withdrawal Syndrome (AWS) is a condition that occurs after shorter or longer periods of heavy alcohol intake and is caused by neurophysiological changes in the brain. It consists of cluster of symptoms that develop 1-3 days after last drink. Studies on based Alcohol withdrawal syndrome symptoms have concluded that the symptoms mostly seen in alcoholics are anxious, feeling confused restless, nausea, heart pounding, feeling miserable, problems with memory, tremors, sleep disturbances, sweating. [5]

Many scales are available for assessing the severity of the withdrawal symptoms. One among them is Clinical Institute Of Withdrawal Assessment Alcohol Revised (CIWA-Ar) scale. The symptoms included in the scale are nausea and vomiting, tremors, anxiety, tactile disturbances, auditory disturbances, visual disturbances, headache, fullness in head, agitation, orientation and clouding of sensorium. [3]

Detoxification methods can be designed by medical professionals to help manage AWS. This helps to remove the toxins from a body which are accumulated due to chronic alcohol abuse. It works on the psychological aspect of an individual and group therapy led by psychiatrists and certified addiction professionals. [6] The ways of detoxification are medications, alcohol anonymous groups, short stay in hospital, long stay in hospital, motivational treatment programme. [5, 7, 8]

Increase in age, increases the AWS severity, which further leads to longer in patient care with higher costs. [9] As alcohol can have a destructive effect on an individual's body. Studies have concluded

that Rehabilitation programme can help addicts change their habits and become free of addiction. Restorative physiotherapy can help them repair their bodies as well.

Researchers have also studied the lifestyle and quality of life of alcoholics using the Lifestyle Situation Survey (LSS). LSS can play an important role in monitoring the alcohol-dependency in subjects. [10]

It is very much important to control the habit, before the habit controls you.

Thus, this study aimed to determine the quality of life in latent alcoholics' using CIWA-Ar and Life Situation Survey by identifying the commonest alcohol withdrawal symptoms, age groups undergoing detoxification & symptoms present even after detoxification.

## MATERIALS AND METHODS

A cross-sectional study was carried out to determine the quality of life among latent alcoholics. Ethical approval to conduct the study was obtained from the DY Patil University, Navi Mumbai. Prior consent was obtained from the subjects and the study subjects gave their signed informed consent form before participating in the study. The study subjects were ensured about their anonymity of the data. The participants comprised of 100 male latent alcoholics for a minimum of 4 weeks between the age group of 21-70 years from alcohol anonymous centres at Vikhroli and Bandra churches, G.S.KEM Hospital, Detoxification centre at D.Y. Patil Hospital, Psychiatry Department. Non-alcoholics, those presently consuming alcohol and those with any other medical conditions were excluded. The quality of life of the subjects were assessed using Clinical Institute Withdrawal Assessment of Alcohol Scale revised (CIWA-Ar) and Life Situation Survey (LSS) questionnaire.

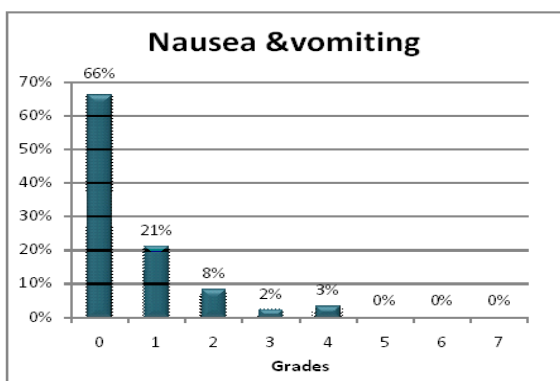
a) "Clinical Institute of Withdrawal Assessment-Alcohol revised" for alcohol withdrawal symptoms. The symptoms on the scale were based on subjective observation by the study investigator. The

scale has 10 AWS and the maximum scoring is 67. [3]

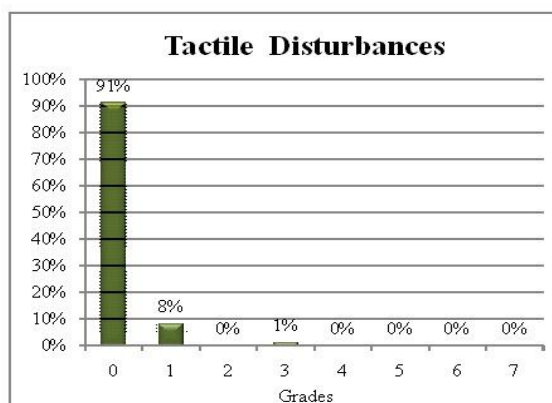
b) "Life Situation Survey questionnaire" for assessing the Quality Of Life (QOL) in latent alcoholics. It has 20 questions the item scores range from 1 to 7 following a likert-type format. This question was filled by the subject himself. The midpoint rating of 4 has been omitted for dealing with missing data as items for which no response has been made can be assigned this value. The total score is calculated by adding the rating values of the 20 items on the LSS. The possible range of scores is from 20 to 140, with the lower end of the scoring continuum representing poorer life quality. Generally, scores of 100 or more reflects perception of a very good quality of life and that of 80's and lower are associated with a relatively poor quality of life [10, 11]

## RESULTS

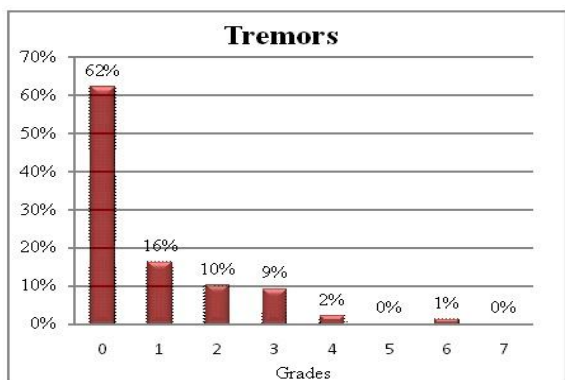
The study included males of 47% subjects are in the age group of 41-50 years, 23% in 31- 40, 19% in 51-60, 8% in 21-30 and 3% in 61-70. The age for starting alcohol consumption was 21-20 years for 63% of subjects & below of 21 years for 37%. The duration of absence of alcohol was 1-3 months for 57% of subjects, 4-12 months for 26%, <1 month for 12% and > 1 year and above for 5%. The common reasons for alcohol consumption were out of curiosity (44%), depression (19%), influence (18%), stress (11%) due to, peer pressure (7%) and because they felt like an adult (1%). The common types of detoxification techniques included motivational treatment (64%), short stay in hospital (16%), medications (15%) and by long stay in hospital(0%) and none (5%).



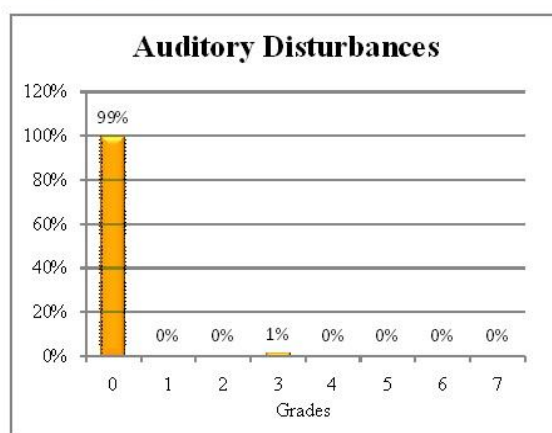
**Figure 1:** 66% subjects had no symptoms of nausea or vomiting, 21% had mild nausea but no vomiting, 10% showed mixed symptoms of mild to intermittent nausea with dry heaves but no vomiting and 3% had intermittent nausea with dry heaves.



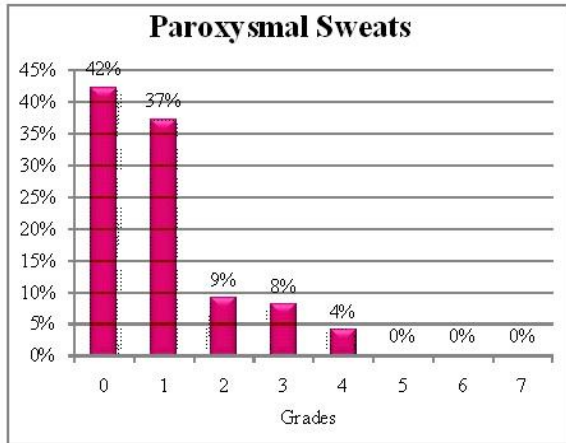
**Figure 2:** 91% of subjects had no symptoms of tactile disturbances, 8% had very mild itching, pins and needles, burning or numbness and 1% had moderate symptoms of tactile disturbances.



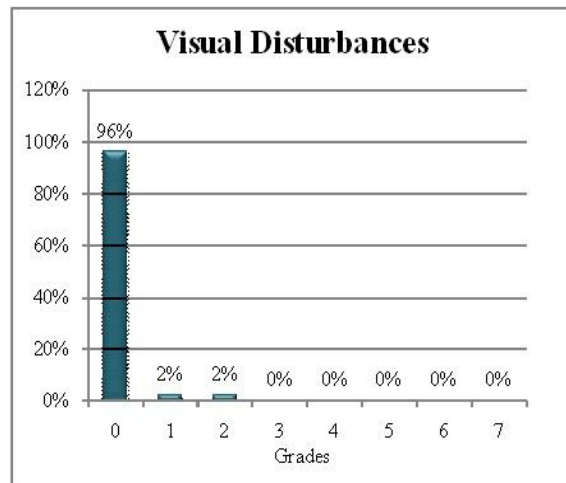
**Figure 3:** 62% of subjects had no symptoms of tremors, 16% had no visible tremors but could be felt on fingertip, 19% had mixed symptoms of no visible tremors to moderate tremors on extended arms, 2% had moderate tremors, 1% had mixed symptoms of moderate to severe tremors.



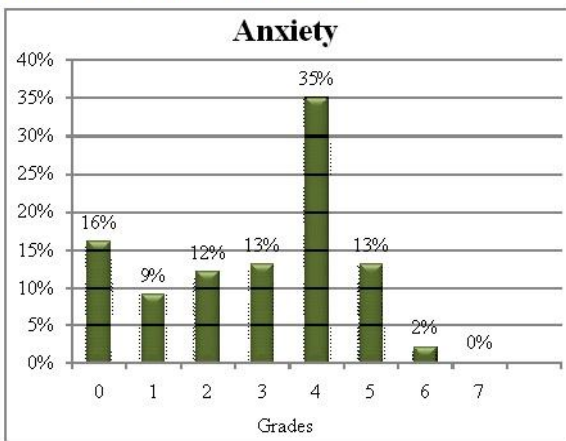
**Figure 4:** 91% of subjects had no symptoms of auditory disturbance, 1% had moderate harshness or ability to frighten.



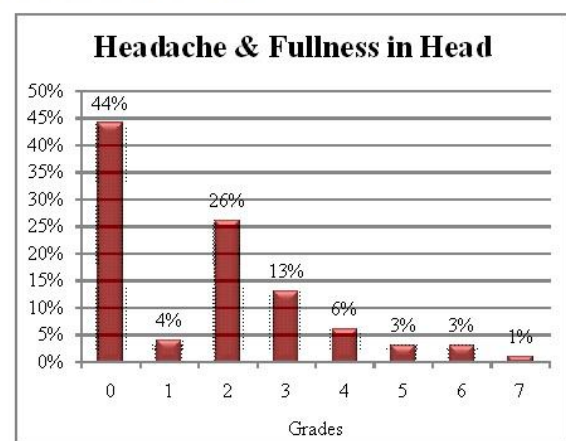
**Figure 5:** 42% of subjects had no symptoms of visible sweats, 37% barely had perceptible sweating & moist palms, 17% had mixed symptoms of having barely perceptible sweats to beads of sweat obvious on head, 4% had beads of sweat obvious on head.



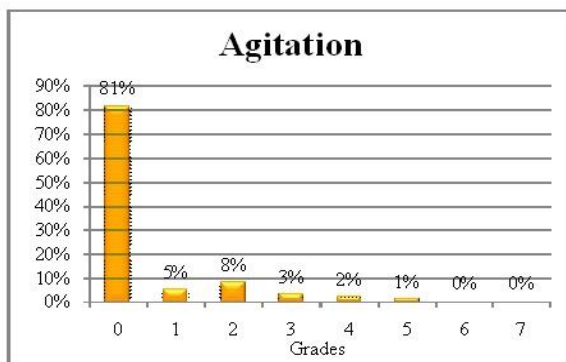
**Figure 6:** 96% of subjects had no symptoms of visual disturbance, 2% had very mild sensitivity and 2% had mild harshness sensitivity.



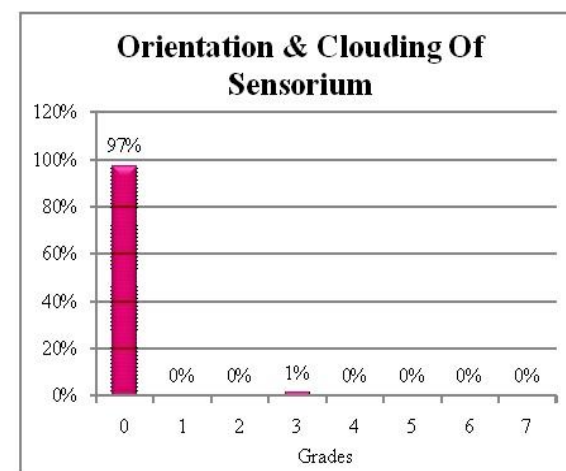
**Figure 7:** 35% showed moderate anxiousness, 25% showed mixed symptoms of mild to moderate anxiety, 16% of subjects had no anxiety, 15% had mixed symptoms of moderate to acute panic attacks and 9% were mild anxious.



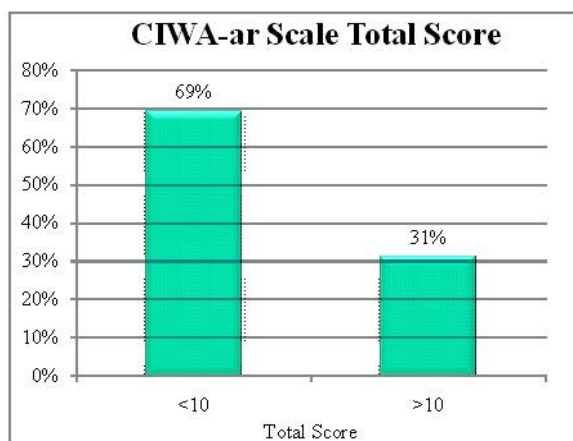
**Figure 8:** 44% of subjects had no symptoms of headache or fullness, 26% had mild headache, 13% had moderate headache, 6% had moderately severe headache, 4% had very mild headache, 3% had severe headache, 3% had very severe headache, 1% had extremely severe headache.



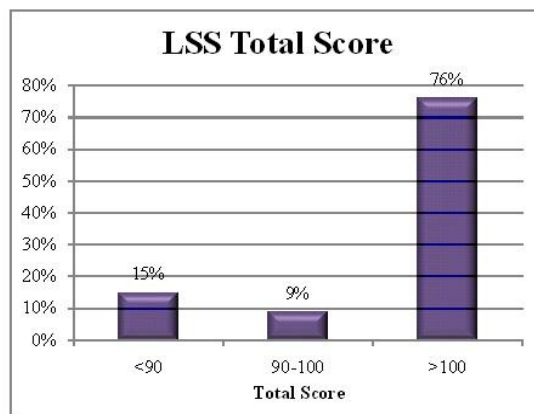
**Figure 9:** 81% of subjects had no symptoms of agitation, 11% showed mixed symptoms of somewhat more than normal activity to moderately fidgety and restless, 5% had somewhat more than normal activity, 2% were moderately fidgety and restless, 1% showed mixed symptoms of moderately fidgety and restless to paces back and forth throughout the interview or constant thrashes about



**Figure 10:** 97% were oriented, 1% were disoriented for date by more than 2 calendar days.



**Figure 11:** 69% of subjects scored less than 10 and 31% scored more than 10 on the CIWA-Ar scale.



**Figure 12:** 76% of subjects have a very good quality of life followed by 15% having poor quality of life and 9% having good quality of life after alcohol withdrawal.

## DISCUSSION

This study assessed the common alcohol withdrawal symptoms (AWS) i.e. nausea & vomiting, tactile disturbances, tremors, auditory disturbances, paroxysmal sweats, visual disturbances, anxiety, headache and fullness in head, agitation and orientation and clouding of sensorium on the basis of the questionnaires-“Clinical Institute of Withdrawal Assessment-Alcohol revised scale” and quality of life using “Life Situation Survey” in latent alcoholics undergoing detoxification or have stopped alcohol completely.

Age is assumed to be one of the factors affecting the severity of AWS. Hence it is expected that with advancing age, subjects are at a higher risk of developing the withdrawal symptoms due to longer exposure to alcohol consumption, medical co morbidities, cognitive defects and higher sensitivity to drug treatment leading to longer duration & higher of detoxification treatment. In contrast to this, few studies have shown that the severity of each symptom was equal in all age groups. But elderly age group had more symptoms, thus longer duration of treatment. [9,12] Studies have shown that post traumatic stress, affective and anxiety disorders were most frequent and are associated with the course and severity of alcoholism. Alcoholics undergoing detoxification often suffered withdrawal symptoms at earlier age. [13] Decrease in depression & anxiety

are seen within initial 4 weeks of the detoxification phase. Six weeks after cessation the anxiety and depression levels were the same as that seen in general population. Furthermore, the follow-up of detoxification period showed no change in anxiety scores but mild increase in depression scores, thus indicating that the post detoxification is a risk period for beginning of depression. But high degrees of anxiety and depression are seen more in relapse cases than those who have been abstained for more than 6 months. [8]

Our study also showed that among the 10 alcohol withdrawal symptoms observed, anxiety was the most prominent symptom perceived by latent alcoholics. The other withdrawal symptoms studies were either absent or in reduced amount. On the whole, 69% of the subjects scored <10 on the CIWA-Ar scale, hence do not need an additional treatment for detoxification while, whereas, 31% scored >10 indicating additional need for detoxification treatment.

Life Situation Survey (LSS) has items derived from several quality of life indicator areas which are applicable to general population and those with chronic illness and permanent disabilities. The variables it measures includes work, leisure, nutrition, sleep, social nurturance, earnings, health, love, affection, environment, self-esteem, security, public support, stress, mobility, autonomy, energy level, social

support, mood affect, outlook and egalitarianism. [11,14]

Baseline alcohol intake and good somatic status determined the Improvements in physical component of quality of life and drug abuse/dependency determined the improvements in mental component of quality of life. QOL depends on various factors ranging from the alcohol disease itself to its consequences and also somatic and psychiatric co-morbidities. Mode of alcohol consumption has an impact on the QOL, e.g. heavy drinkers had poor QOL where as small regular drinkers had better QOL. Socio-demographic variables like > 45 years, female gender, emotional loneliness or absence of close support, low level of education, socio-professional category of employee, socio-economic insecurity, psychiatric and somatic co-morbidities have negative impact on the QOL. Low QOL on admission showed improvements by 3 week of inpatient treatment. The factors causing such improvements are abstinence of alcohol, resolution of withdrawal symptoms, resocialisation of patients, therapeutic environment, restoration of self-image by improving personal care. [6]

Individuals who underwent detoxification treatment showed significant changes in the LSS scores in the relapse & non-relapse group. At 3 months follow-up there was deterioration in the LSS score of the relapse subjects and improvement in the scores of the non- relapse subjects. Reemission from heavy drinking was associated with improvements in appetite, sleep and self-esteem whereas relapse to drinking was associated with deterioration in mood and affect, public support and work and life roles. [10]

Extensive brain damage, cognitive impairment and depression are suspected as the causative factors for affection of quality of life. [14]

Hypertension is common health related problem. Alcohol is considered to be a vasodilator, whose effect is suppressed by the sympathetic reaction to excess alcohol

intake. The reasons of hypertension in alcoholics are increase in sympathetic activity and complete suppression of vasodilator effect, altered vascular smooth muscle contractility, insulin resistance and hyper-dynamic circulation with high cardiac output. Blood pressure when checked over a period of eighteen days in latent alcoholics showed that BP may have increased due to risk of drinking, AWS related hypertension, and age related hypertension. But a weak co-relation was seen between BP and CIWA-Ar values over the period of eighteen days; with Diastolic BP being more correlated than systolic BP. AW induces transient alcohol is not dangerous and abstinence leads to complete recovery from hypertension, thus complete abstinence from alcohol must be recommended. [3] Alcohol reduction should be recommended as an important component of lifestyle modification for the prevention and treatment of hypertension among heavy drinkers. [15]

Thus we can conclude that giving up alcohol can have positive effects on the body & its functioning. Alcohol being a co-morbid factor for various cardiovascular conditions especially atherosclerosis can be taken care of by controlling such addiction.

From the above study we can conclude that 47% of subjects undergoing detoxification were in the age group of 41-50 years. The AWS assessed in the latent alcoholics by CIWA-Ar scale, anxiety was perceived more among the subjects scoring 4 on the scale showing moderate anxiousness followed by paroxysmal sweats and headache & fullness in head respectively. Quality of life in latent alcoholics was found to be very good with majority of subjects having no psychological, social and medical problems.

## REFERENCES

1. Becker HC. Alcohol dependence, withdrawal, and relapse. Alcohol Health & Research World. 2008 Dec 22; 31(4):348.

2. [Internet]. 2017. Available from: <http://Global status report on alcohol and health 2014 -WHO>.
3. Ceccanti. M, Sasso. F. G, Nocente. R, Balducci. G, Prastaro. A, Ticchi. C, Bertazzoni. G, Santini. P and Attilia. L. M. Hypertension in early alcohol withdrawal in chronic alcoholics. *Alcohol Alcohol*. 2006 Jan-Feb;41(1):5-10.
4. Channabasavanna. M. S and Murthy. P Alcohol and substance abuse. In: Dr. Siddharth. N. Shah(Ed) API textbook of medicine, 7<sup>th</sup> edition revised print. India, The Associations of Physicians of India, 2006, 1389-1394.
5. Bjarne. E, Klaus. L, Nete. H, Finn. Z, Ulrick. B. Alcohol withdrawal syndrome: symptom-triggered versus fixed schedule treatment in an outpatient setting. *Alcohol Alcohol*. 2011. 46(3) 318-323.
6. Lahmek. P, Berlin. I, Michel. L, Berghout. C, Meunier. N and Aubin. H. Determinants of improvement in quality of life of alcohol dependent patients during an inpatient withdrawal programme. *Int J Med Sci* 2009. 6(4) 160-167.
7. J. H. Foster, E. J. Marshall, and T. J. Peters. Outcome after in-patient detoxification for alcohol dependence: A Naturalistic comparisons of 7 versus 28 days stay. *Alcohol Alcohol*. 2000 November. 35(6) 580-6.
8. Driessen. M, Meier. S, Hill. A, Wetterling. T, Lange. W, Junghanns. K. The course of anxiety, depression and drinking behaviours after completed detoxification in alcoholics with and without Comorbid anxiety and depressive disorders. *Alcohol Alcohol*. 2001 May-Jun;36(3):249-55.
9. Wetterling. T, Driessen. M, Kanitz. D. R, Junghanns. K. The severity of alcohol withdrawal is not age dependent. *Alcohol Alcohol*. 2001 Jan-Feb;36(1):75-8.
10. Foster. J. H, Marshall. J. E and Peters. J. T. Application of quality of life measure, the Life Situation Survey (LSS), to alcohol-dependent subjects in relapse and remission. *Alcohol Clin Exp Res*. 2000 Nov;24(11):1687-92.
11. [Internet]. 2017. Available from: <http://rchubon.tripod.com/lssman.pdf>
12. Brower KJ, Mudd S, Blow FC, Young JP, Hill EM. Severity and treatment of alcohol withdrawal in elderly versus younger patients. *Alcoholism: Clinical and Experimental Research*. 1994 Feb 1;18(1):196-201
13. Schneider U, Altmann A, Baumann M et al. Comorbid anxiety and affective disorder in alcohol- dependent patients seeking treatment: the first Multicentre study in Germany. *Alcohol Alcohol*. 2001 May-Jun;36(3):219-23.
14. Peters TJ, Millward LM, Foster J. Quality of life in alcohol misuse: comparison of men and women. *Archives of women's mental health*. 2003 Nov 1;6(4):239-43
15. Xin X, He J, Frontini MG, Ogden LG, Motsamai OI, Whelton PK. Effects of alcohol reduction on blood pressure. *Hypertension*. 2001 Nov 1;38(5):1112-7

How to cite this article: Mascarenhas SP, Patil DP, Jain M et al. Assessment of quality of life in latent alcoholics. *Int J Health Sci Res*. 2017; 7(6):211-217.

\*\*\*\*\*