

## COMBINING THE RELATIONSHIP BETWEEN CONSUMPTION OF ALCOHOL AND POVERTY IN INDIA (A case Study of Varanasi District)

*Dr. Inu Mehta,*

*Professor, Department of Economics, Mahila Maha Vidyalaya, BHU, Varanasi (Uttar Pradesh)*

*Email ID : imehta319@gmail.com.*

*Sandeep Singh,*

*Research Scholar , Department of Economics, BHU, Varanasi, U.P.*

### ABSTRACT

***Drug abuse affects society in many ways. In the workplace it is costly in terms of lost work time and inefficiency. Drug users are more likely than nonusers to have occupational accidents, endangering themselves and those around them. Over half of the highway deaths in India involve alcohol. Drug-related crime can disrupt neighborhoods due to violence among drug dealers, threats to residents, and the crimes of the addicts themselves. In some neighborhoods, younger children are recruited as lookouts and helpers because of the lighter sentences given to juvenile offenders, and guns have become commonplace among children and adolescents***

### Introduction

Alcoholic beverages have been in India for several centuries. The production, availability, consumption and drinking patterns have all been undergoing phenomenal changes and have been influenced by the combined effects of globalization, market forces, vacillating government policies, media promotion and changing values of Indian society. The hazards associated with drinking are also known since ancient times, but only in recent years, it has been acknowledged as a human and a public health problem. Undoubtedly, the increasing body of knowledge from both global and Indian studies, as well as anecdotal reports from both print and visual media has brought the harmful and hazardous effects of alcohol to the forefront. However, this has still not made intended impact on our health and related systems. Emerging debates in various forms highlight the necessity for reducing and minimizing the harmful effects of alcohol on all aspects of our

lives. This Study is beginning to make inroads into a better understanding of the seriousness of the problem.

The word 'alcohol' means different things to different people in our society. In both the past and present, alcohol has been used for a number of reasons and has become a common source of pleasure seeking. For the common man, it has different meanings.

Recent data from India (NFHS 2 & 3, Ray 2004a) and data from international health repositories (WHO 2004a) indicate increasing consumption of alcohol and its accompanying harmful effects across all sections of Indian society. These effects have been more noticeable among youth. Other changes include emerging use among women, spread to more transitional, periurban and rural areas, early age of starting consumption and importantly a greater acceptance of drinking by Indian families. Alcohol consumption is also seen as an enhancement of social status among people of

different socioeconomic backgrounds. The current scenario in India has been a cumulative effect of several factors. These include easy availability of alcohol, liberalized values of society, and aggressive marketing strategies by the alcohol industry through print and visual media, shortsighted economic benefit perspective of Governments, the health researcher's failure to give directions and the absence of a rational alcohol control policy. This is compounded by a lack of coordination between several concerned ministries.

Alcohol consumption has been identified as a risk factors to the occurrence of non-communicable diseases. Behaviour and lifestyle linked factors could be psychosocial factors (e.g. psychological stress), increased tobacco use, alcohol abuse, lack of physical activity, high-risk sexual behaviour and many others. These contribute substantially to the morbidity, disability and diminished quality of life.

## Reason for selection of the area for present study

In Uttar Pradesh at Varanasi District, Alcoholic family is facing the problem of income, Decline their social value, low employability, hire dependency & main sources of their livelihood. So most of the family in the presence of stress to start taken the alcohol. And alcohol tend to divert then in the poverty this circular is continue. Keeping mind in this fact, the present study came to existence with the following objectives:

## Objectives of the present study

The study was undertaken to bring together available information on the different dimensions of alcohol use (production, consumption) and its consequences (health related and others) in India, along with previous policy responses, in order to guide and support future rational and scientific policies.

### Objective

- To identify the socio-economic impact of alcohol use – both direct and indirect, on the individual and families.
- To identify the factor that is causes for Becoming Poor due to Alcohol

### Hypothesis

- ⊙ Uses of Alcohol having not any types of the impact on the individual and families.
- ⊙ There is not any factor that is causes for Becoming Poor due to Alcohol

## Methodology

This Study is based on Primary sources of data collection was undertaken from any specified populations for this study. Published Indian literature was gathered. Literature was collected from different Indian and international journals and also unpublished grey literature. Literature search was undertaken with the following keywords (in isolation and combination): alcohol, production, distribution, taxation, consumption, socio-economic status, regional distribution, drinking patterns, consequences, health effects (individual key words for various disorders were used), social effects, policy, intervention, program and India.

## Research Approach

In order to bring up the theoretical base of the contractual relationship and what so far have been written about it and empirical evidence, to back the theoretical aspects, the research approach was based on the following founding principles:

- A triangulation of positivism, post positivism and logical empiricism; and
- Econometrics;

These are now discussed.

## Econometric approach

Positivism assumes an objective world which scientific methods can more or less readily represent and measure, and it seeks to predict and explain causal relations among key variables (Gephart, 1999). Here the role of Econometrics becomes important, since it is, at a broad level, the science and art of using economic theory and statistical techniques to analyze economic data (Stock and Watson, 2003). It helps in decision making process in economics, when it involves understanding relationships among variables in the world around us, just as in the case of this study. Here the decision problem is whether the CF scheme can be considered as an alternative, to the other credit sources, in the sense that can be used in coordination to overcoming its market failure problems.

Specifically the econometric instruments to be used here are characterized as follows. In terms of the econometric model, the maximum likelihood Probit and Logit models are the ones mostly relied on to assess the type of decision problem stated. Probit regression is nonlinear regression model specifically designed for binary dependent variables. It uses the standard normal cumulative probability distribution function. Logit regression is, also as Probit, a nonlinear regression model specifically designed for binary dependent variables, with the difference of using the logistic cumulative probability distribution function (Stock and Watson, 2003). The previous one, Logit, is the one that will be used as the main econometric tool for the assessment of the main hypothesis. The use of probabilistic models is justified by the main idea to be tested, whether higher is the probability of the adoption behavior of the CF, for Providing Better income & employability and reducing their poverty to other sources.

## Data collection

---

Fieldwork was carried out during the period from March to May 2014. Data were collected through informal interviews and informal meetings with head of the family who can be the Alcoholic family and non Alcoholic family. The interviews or conversations were

informal and semi-structured, due to the fact of being located in rural areas, using the modern input tools, near to the smallholders, and continuously working. In addition, several informal conversations and discussions also took place with senior staff at the administrative and operational levels.

The present study aims at analyzing the factor which forces a family to consume alcohol. The study focuses on Varanasi District in Uttar Pradesh economy the entire District forms as the study area. Purposive sampling was used to select a area with a number of Alcoholic family. Snowball sampling was later employed in the process of selecting a sample using networks. A blend of qualitative and quantitative data was collected. To understand behavior, attitudes, opinions and perceptions, this design was flexible and allowed respondents to freely express their views and opinions.

We select the village where Alcoholic family held then in this village and classify the family in two groups first which is Alcoholic family and Not alcoholic family. Control Groups is the Family who do not Taken the Alcohol Regular we compare with them to it.

## Data analysis

---

All the data was captured in Microsoft Excel, SPSS 16 for Windows 7, 8.0 & 8.1. The analysis of the data was aided, also, by the Microsoft Excel, SPSS 16 for Windows 7, 8.0 & 8.1. The assessment of whether the adoption behavior of the CF, for Providing Better income & employability and reducing their poverty as an alternative approach relatively to other farming method, in order to get a higher outreach and *real* effects on the real economy, was realized with the use of econometric analysis tools, specifically the Logit model and the Linear regression model.

## Logit Analysis

---

### ***Combining the relationship between Alcohol and Poverty***

Output is for a model that includes only the intercept (which SPSS calls the constant). Given the base rates of the two decision options (51/100 = 51 % decided to Not taken the alcohol, and 49/100 = 49 % decided to Taken the alcohol regularly and no

other information, the best strategy is to predict, for every case, that the subject will accept to not taken the alcohol. Using that strategy, you would be correct 51 % of the time.

**Table 01 Classification table**  
**Classification Table<sup>a,b</sup>**

Observed			Predicted		
			Taken the Alcohol		Percentage Correct
			No	Yes	
Step 0	Taken the Alcohol	No	51	0	100.0
		Yes	49	0	.0
	Overall Percentage				51.0

a. Constant is included in the model.

b. The cut value is .500

Under **Variables in the Equation** you see that the intercept-only model is in **(odds) = - .040**. If we exponentiation both sides of this expression we find that our predicted odds [Exp (B)] = 0.961. That is, the predicted odds of deciding to continue the research

are 0.961. Since 51 of our subjects accepted that not taken alcohol and 49 accepted they are taken alcohol regularly, our **observed odds are 51/49 = 1.04**.

**Table 02 Variable in the Equation**  
**Variables in the Equation**

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.040	.200	.040	1	.841	.961

Now look at the **Block 1** output. Here SPSS has added the gender variable as a predictor. **Omnibus Tests of Model Coefficients** gives us a Chi-Square of 38.519 on 1 *df*, significant beyond .000. This is a test

of the null hypothesis that adding the gender variable to the model has not significantly increased our ability to predict the decisions made by our subjects.

**Table 03 Variable not in the Equation**

**Variables not in the Equation**

			Score	df	Sig.
Step 0	Variables	q2	35.981	1	.000
	Overall Statistics		35.981	1	.000

Under **Model Summary** we see that the **-2 Log Likelihood** statistics is 100.07. This statistic **measures how poorly the model predicts the decisions** -- the smaller the statistic the better the model. Although SPSS does not give us this statistic

for the model that had only the intercept, I know it to be 100.070. The **Cox & Snell R2** can be interpreted like R2 in a multiple regression, but cannot reach a maximum value of 1. The **Nagelkerke R2** can reach a maximum of 1.

**Table 4 Omnibus Test of the Model Coefficients**

**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	38.519	1	.000
	Block	38.519	1	.000
	Model	38.519	1	.000

**Table 05 Model Summary**

**Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	100.070 <sup>a</sup>	.320	.426

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

**Table 06 Variable in the Equation**

**Variables in the Equation**

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
								Lower	Upper
Step 1 <sup>a</sup>	q2	2.772	.500	30.731	1	.000	15.990	6.001	42.606
	Constant	-1.411	.353	16.005	1	.000	.244		

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup> q2	2.772	.500	30.731	1	.000	15.990	6.001	42.606

a. Variable(s) entered on step 1: q2.

The **Variables in the Equation** output shows us that the regression equation is

ODDS=a + b x , **ODDs= - 1.411 + 2.772** Economic Status of the Alcoholic family.

We can now use this model to **predict the odds** that a subject of a given the economic status will decide to continue the Taken Alcohol. The odds prediction equation is **ODDS = e<sup>a+ bx</sup>**

If our subject is Economic status of the Alcoholic family (APL = 0), then the **ODDS = e<sup>-1.411 + 2.772 (0)</sup> = e<sup>-1.411</sup> = 0.9866** That is, APL is only .9866 as likely to Accept that Not taken the Alcohol Regularly.

If our subject is Belonging to BPL Family (BPL = 1) then the **ODDS = e<sup>-1.411 + 2.772 (1)</sup> = e<sup>-1.411</sup> = 1.361** that is, Poorer family 1.0324 as likely to accept that they are taken the alcohol regularly.

We can easily **convert odds to probabilities**. For our Older age farmers

$$Y = \text{ODDS} / (1 + \text{ODDS})$$

The **Variables in the Equation** output also gives us the **Exp (B)**. This is better known as **the odds ratio** predicted by the model. This odds ratio can be computed by **raising the base of the natural log to the b<sup>th</sup> power, where b is the slope from our logistic regression equation**. For our model **15.990** that tells

us that the model predicts that the odds of Accepting to drinking due to properness.

## Regression Model

### Becoming Poor due to Alcohol

For estimating the Alcohol leads the Poverty we generate a multiple regression model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + u$$

Y= Alcohol leads the Poverty (Dependent Variable)

X<sub>1</sub> = Alcohol Decline Working Efficiency (Independent variable)

B<sub>1</sub>=Parameters attached to the variable X<sub>1</sub>

X<sub>2</sub>= Alcoholic Family Loss their Social Value

B<sub>2</sub>=Parameters attached to the variable X<sub>2</sub>

X<sub>3</sub>= Alcoholic Family Expenses Most of their Income on Illness

B<sub>3</sub>=Parameters attached to the variable X<sub>3</sub>

X<sub>4</sub> = Alcoholic family facing stress

B<sub>4</sub>= Parameters attached to the variable X<sub>4</sub>

X<sub>5</sub> = Alcoholic family facing the problem of income for family needs

B<sub>5</sub>=Parameters attached to the variable X<sub>5</sub>

X<sub>1</sub>

**Table 07 Model Summaries**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.930 <sup>a</sup>	.865	.858	.23683	.865	120.267	5	94	.000

a. Predictors: (Constant), Alcoholic family facing the problem of income of family needs, Alcoholic family facing stress, Alcoholic Family Expenses Most of their Income on Illness

b. Dependent Variable: Alcoholic leads to poverty

The coefficient of multiple determinations is 0.86; therefore, about 86.50 % of the variation in the Poverty of the Alcoholic family is explained by net changing of the drinking habits, Alcoholic family facing the problem of income of family needs, Alcoholic family facing stress, Alcoholic Family Expenses Most of their Income on Illness

Social Value, Alcoholic family facing stress, Alcoholic Family Expenses Most of their Income on Illness. The regression equation appears to be very useful for making predictions since the value of  $R^2$  is close to 1.

**Table: 08 ANOVA**  
**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.728	5	6.746	120.267	.000 <sup>a</sup>
	Residual	5.272	94	.056		
	Total	39.000	99			

a. Predictors: (Constant), Alcoholic family facing the problem of expenditure of family needs, Alcoholic family facing stress, Alcoholic Family Expenses Most of their Income on Illness

b. Dependent Variable: Alcoholic leads to poverty

### Hypotheses

$$H_0: \beta_1 = \beta_2 = \dots = \beta_n = 0$$

$$H_a: \text{at least one } \beta_i \neq 0$$

- **Significance Level**

$$\alpha = 0.05$$

- **Rejection Region**

Reject the null hypothesis if  $p\text{-value} \leq 0.05$

- **ANOVA Table (Test Statistic and  $p$ -value)**

(See above)  $F = 120.267$ ,  $p\text{-value} < 0.0001$

- **Conclusion**

Since  $p\text{-value} < 0.0001 \leq 0.05$ , we shall reject the null hypothesis.

- **State conclusion in words**

At the  $\alpha = 0.05$  level of significance, there exists enough evidence to conclude that at least one of the predictors is useful for predicting Alcoholic leads the poverty of the family; therefore the model is useful.

**Table 09 Coefficient Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.158	.105		1.504	.136		
Alcohol Decline Working Efficiency	.227	.026	.539	8.712	.000	.376	2.660
Alcoholic Family Loss their Social Value	.093	.036	.177	2.606	.011	.314	3.189
Alcoholic Family Expenses Most of their Income on Illness	.181	.064	.317	2.827	.006	.115	8.719
Alcoholic family facing stress	.106	.066	.163	1.605	.002	.139	7.187
Alcoholic family facing the problem of income for family needs	-.144	.055	-.209	-2.62	.010	.225	4.442

a. Dependent Variable: Alcohol leads to poverty

For estimating the Poverty generation of the Alcoholic, we generate a multiple regression models:-

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5$$

And putting the value of all coefficient, we can get a multiple regression models, thus the model will be:

$$\hat{y} = 0.158 + 0.227x_1 + 0.093x_2 + 0.181x_3 + 0.106x_4 - 0.144x_5$$

- **Multicollinearity Problems:**

- Since neither of the predictor variables has a variance inflation factor (VIF) greater than ten (both VIFs are less than 8.71), there are no apparent multicollinearity problems; in other words, there is no variable in the model that is measuring the same relationship/quantity as is measured by another variable or group of variables.

**Obtain and interpret 95% confidence intervals for the slopes,  $\beta_i$ , of the population regression line that relates net revenues and number of branches to profit margin. Obtain and interpret 95% confidence intervals for the slopes,  $\beta_i$ , of the population regression line that relates Alcoholic family facing stress, Alcohol Decline Working Efficiency, Alcoholic family loss their social value, Alcoholic family expenses more of their income on illness to Alcohol Leads to poverty.**

- We are 95% confident that the slope for Alcohol decline the working efficiency is somewhere between -0.051 and 0.366. In other words, we are 95% confident that for every single-unit increase in Alcohol declines the working efficiency, the average



poverty of Alcoholic family leads between - 0.051 and 0.366.

- We are 95% confident that the slope for Alcoholic family loss their social value is somewhere between 0.176 and 0.279. In other words, we are 95% confident that for every additional of Alcoholic family loss their social value, the average poverty of Alcoholic family leads between 0.176 and 0.279.
- We are 95% confident that the slope for Alcoholic family expenses most of the income on their illness is somewhere between 0.054 and 0.238. In other words, we are 95% confident that for every additional of Alcoholic family expenses most of the income on their illness, the average

poverty of Alcoholic family leads between 0.054 and 0.309.

- We are 95% confident that the slope for Alcoholic family facing the stress is somewhere between 0.054 and 0.238. In other words, we are 95% confident that for every additional of Alcoholic family facing the stress, the average poverty of Alcoholic family leads between – 0.025 and 0.238.
- We are 95% confident that the slope for Alcoholic family facing the problem of income for their family needs is somewhere between – 0.254 and – 0.035. In other words, we are 95% confident that for every additional of Alcoholic family facing the problem of income for their family needs, the average poverty of Alcoholic family leads between – 0.254 and – 0.035.

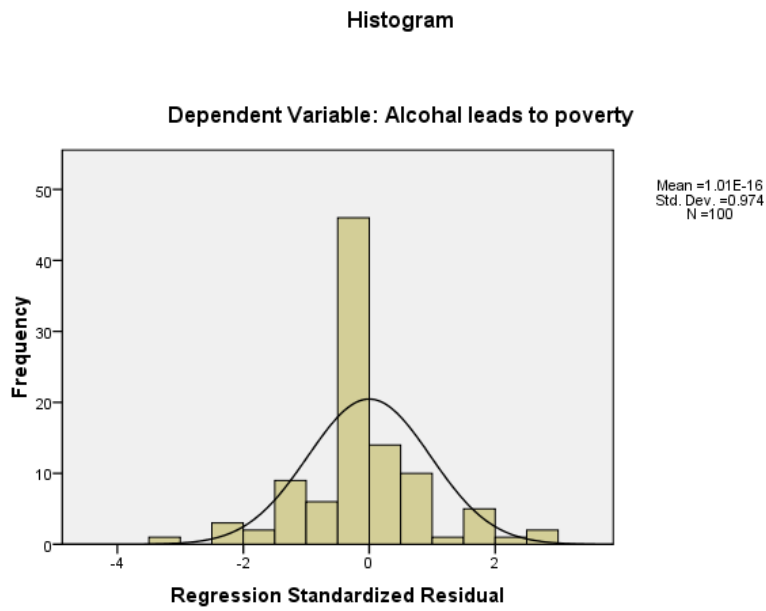
**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.0787	1.2035	.4900	.18896	100
Std. Predicted Value	-3.010	3.776	.000	1.000	100
Standard Error of Predicted Value	.055	.287	.108	.068	100
Adjusted Predicted Value	-.1107	1.3011	.4851	.19410	100
Residual	-.64182	.61978	.00000	.46553	100
Std. Residual	-1.336	1.290	.000	.969	100
Stud. Residual	-1.404	1.369	.004	.994	100
Deleted Residual	-.72962	.78390	.00486	.49172	100
Stud. Deleted Residual	-1.411	1.376	.005	.995	100
Mahal. Distance	.331	34.473	5.940	9.014	100
Cook's Distance	.000	.113	.008	.017	100
Centered Leverage Value	.003	.348	.060	.091	100

a. Dependent Variable: Taken the Alcohol

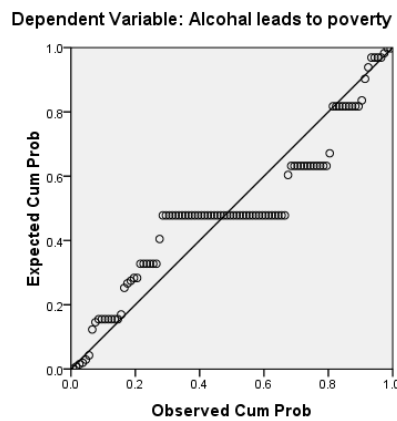
In the residual statistics we can see that the minimum and the maximum of standardized residual is respectively - 1.336 and 1.290 respectively, both are lower than 2. So, that there is no exceptional value in the residual table.

Graph 01 Histogram



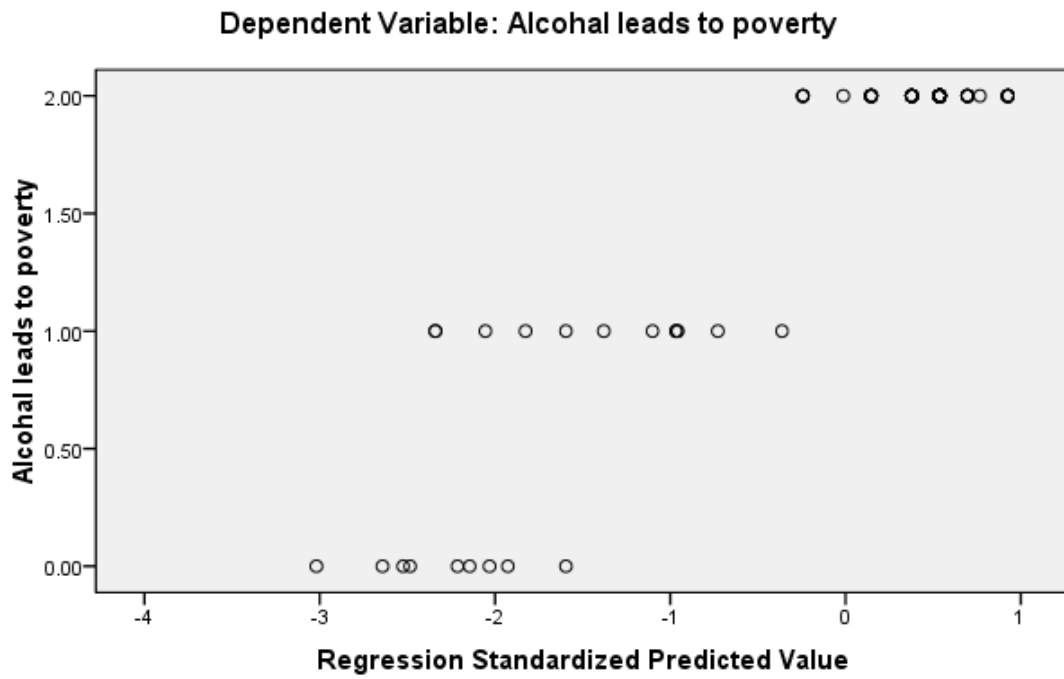
Graph 05 P – P Plot of Regression Std. Residual

Normal P-P Plot of Regression Standardized Residual

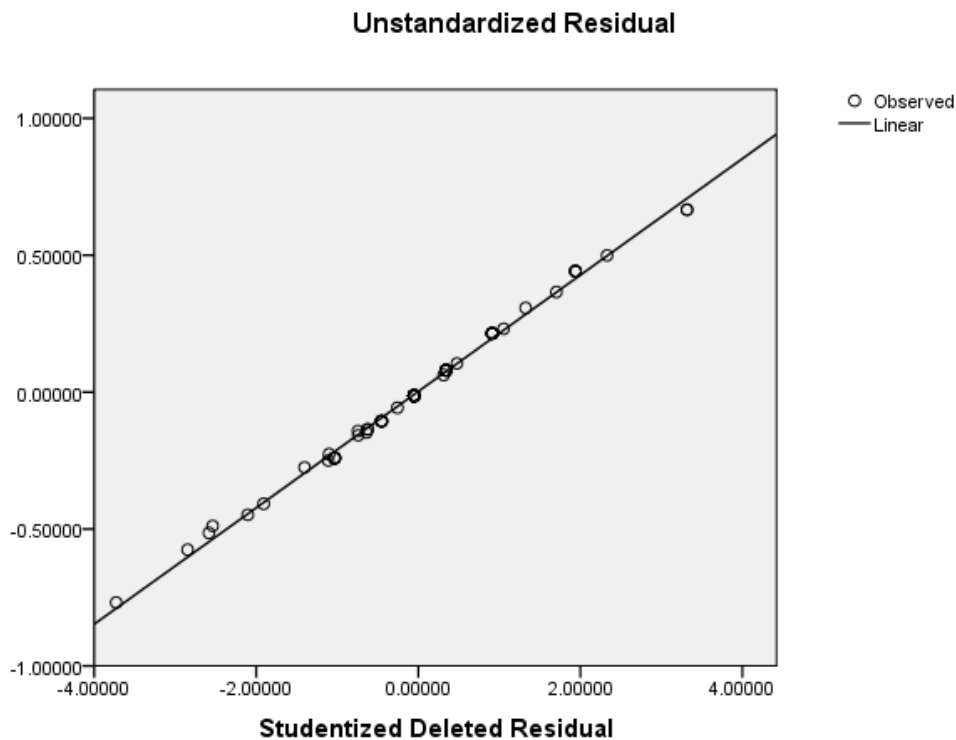


Graph 02 ScatterPlot

Scatterplot



Graph 03 Unstandardized Residual



Becoming Poor appears to be linearly related to each of the predictor variables with no visible potential outliers or influential observations (no points away from the main cluster of points); thus, Assumption 1 appears to be satisfied.

The normal plot of the residuals shows the points close to a diagonal line; thus, Assumption 2 is satisfied. The studentized residual plot shows a random scatter of points with constant variability and no definite outliers (although, there is one very slight potential outlier); thus, Assumption 3 is met.

The normal plot of the residuals shows the points close to a diagonal line; thus, Assumption 2 is satisfied. Each of the studentized residual plots shows a random scatter of points with constant variability; thus, Assumption 3 is met.

Note that observation #22 has an unusual residual in each of the studentized residual plots (the residual is more than three standard deviations from the mean residual of 0). This indicates that observation #22 is likely to be an outlier.

Also, at first glance one might think that the variability is less for the right half of the plots when compared to the left half. This is likely not the case,

and any apparent decrease in variability is probably due to the fact that there are far fewer observations in the right half (having fewer values leaves less room for variability).

## In summary

- (i) *The rates of alcohol consumption have been influenced by measurement and methods of enquiry*
- (ii) *Nearly 30–35 % of adult men and around 5% of women are found to be regular users of alcohol in India; these figures may vary from region to region.*
- (iii) *Available data show that the age trend of drinking alcohol is shifting downward. Today, adolescents begin to experiment with alcohol around 15 years and a substantial number progress to higher levels of drinking both in terms of frequency and quantity of alcohol consumed.*
- (iv) *Drinking among women is also on an upward trend.*
- (v) *Emerging evidence reveal that the transitional towns and cities of India are witnessing rapid changes in patterns of alcohol use.*
- (vi) *Alcohol consumption is directly associated with education, social class, occupation and income; higher levels have been recorded among those at the lower end of the spectrum.*
- (vii) *Hazardous drinking patterns are observed in a majority of alcohol users.*
- (viii) *Under-socialized and solitary drinking of mainly spirits is the hallmark pattern of drinking; drinking to intoxication is the signature pattern.*

## Conclusion

People a uniform and homogeneous mass, whose development needs are all the same. But some common characteristics that apply to poor living

conditions can be recognised, such as the lack of boundaries leading to others intruding into personal life, aspirations being limited and extra income tending to flow uncontrollably along readymade unproductive channels – especially on alcohol use. There are forces within and outside poor communities that contribute to ensuring that they do not escape from poverty.

The impact of alcohol on human development is not only on health and economic matters but also on general wellbeing – including healthy social relating. Alcohol is a significant contributor to maintaining and worsening economic difficulties and it likely plays a role in generating poverty too. It keeps poor people collectively poor. Alcohol consumption is driven strongly by ritual and symbolic pressures and not just by the desire for intoxication. Huge alcohol expenses impact not only on the families of heavy consumers but also on the community as a whole. Social customs associated with alcohol use ensure that those who consume little or no alcohol have to subsidize those who consume more. There is a major synergy between alcohol use and poverty in damaging people's wellbeing, including their physical health. The combined influence of these two factors often has disastrous impact.

A particular example is the permission that the intoxicated person is given, to interfere in the affairs of others. This social practice causes heightened harm in poorer settings – where the associated overcrowding allows intrusion into each other's personal lives. The combined effect on the powerless is appalling.

## Bibliography

**Isaac M. Contemporary trends:** India. In: Grant M. ed. *Alcohol and emerging markets, patterns, problems and responses*. Taylor & Francis, 1998. pp. 145–176.

**National Institute of Alcohol Abuse and Alcoholism.** *Economic costs of alcohol and drug abuse estimated at \$246 billion in the United States*. Press release 301–443–6245 dated Wednesday May 13, 1998.

(<http://www.nih.gov/news/pr/may98/nida-13.htm>, accessed 15 June 2006).

**Samarasinghe, Diyanath (2014)** "Alcohol and Poverty: some connections" Published by FORUT – Campaign for Development and Solidarity.

**Single E, Collins D, Easton B, Harwood H, Lapsley H, Maynard A.** *International guidelines for estimating the costs of substance abuse.* Ottawa, Canadian Centre on Substance Abuse, 1996.

**Sundaram KR, Mohan D, Advani GB, Sharma HK, Bajaj JS (1984).** Alcohol abuse in a rural community in India. Part I: epidemiological study. *Drug and Alcohol Dependence.* 14:27-36.

**Reddy K S, Gupta P C. eds.** *Report on tobacco control in India.* New Delhi, Ministry of Health and Family Welfare, 2004.

**Varma VK, Singh A, Singh S, Malhotra A (1980).** Extent and pattern of alcohol use and alcohol-related problems in north India. *Indian Journal of Psychiatry.* 22(4):331-337.

**Vaswani M, Hemraj P, Desai NG, Tripathi BM (1997).** Lipid profile in alcohol dependence syndrome. *Indian Journal of Psychiatry.* 39(1):24-28.

**Vijayakumar L, Rajkumar S.** Are risk factors for suicides universal? A case– control study in India. *Acta psychiatrica Scandinavia.* 1999; 99: 407–11.

**Wilson JF (2003).** Should doctors prescribe alcohol to adults? *Annals of Internal Medicine.* 139(8):711-714

**World Health Organization (WHO).** *Global status report: alcohol policy.* Geneva, 2004b.

## Literature Sites

- <http://www.infoplease.com/encyclopedia/science/drug-addiction-drug-abuse-effects-substance-abuse.html>
- <http://www.niaaa.nih.gov/alcohol-health/alcohols-effects-body>
- <http://www.webmd.com/mental-health/addiction/features/12-health-risks-of-chronic-heavy-drinking>
- <https://www.drinkaware.co.uk/check-the-facts/health-effects-of-alcohol>
- <http://www.knowyourlimits.info/know%E2%80%A6-effects-alcohol>

---

*Copyright © 2015, Dr. Inu Mehta and Sandeep Singh. This is an open access refereed article distributed under the creative common attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.*