

## PUBLIC HEALTH AND ILLNESS AMONG THE LOW INCOME HOUSEHOLD IN UTTAR PRADESH

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**“Life is not merely being alive but being well.”**

– Martial, 66 AD, Epigrams

### ABSTRACT

*In this paper I have taken some common diseases which can be communicable i.e. transferred from one person to another and non-communicable i.e. which cannot be transferred from one person to another. Besides this paper also explains the prevalence of common diseases in Uttar Pradesh and what these diseases are and how it can be treated. Some of the common communicable diseases taken in this paper are Cough & cold & fever, Allergy, Acne Vulgaris and Pyria in the gums. Non – communicable common diseases are Diabetes Mellitus, Arthritis, Anemia, Stones, Obesity, Depression, Insomnia, Blood Pressure, Eye Sight problem, Problem of Dehydration, Problem of Sun Stroke, Unintentional injuries and Muscle and back pain. This paper is based on primary survey*

### INTRODUCTION

When illness or disability strikes with a person or any family member, the whole family is affected by the disease and the entire health care experience they face during illness. Every person in the family plays important and different role in the part of everyday's functioning; illness of one member in the family disrupts whole family. When a family member gets ill then other member of the family has to take the responsibility which alters the lifestyle and affects their own normal role functioning. We must have faced some situation in our daily life if the person who cooks for the family gets ill then other family takes the responsibility in addition to do the cooking task. When a working parent try to console their child with an ear infection they not only loses sleep

but also have to arrange emergency child care or have to take a day off from work. If a primary income earner falls sick then his wife has to return to work or increase the hour of working if she is employed to become a bread earner. For aging parents whose children have left their home have to change their plan and targets to accommodate their parents in order to take care of them.

Illness breaks the whole family and causes additional strain such as economic problem and working of the family as it was working earlier. If the patient is a young child then stress falls upon mother and father to meet his needs. The extent of disruption of the family totally depends on the seriousness of the disease and the functioning of the family before disease and after disease considering socio economic conditions. Long- term illness causes

disequilibrium in the family structure until and unless a person finds some solution or adjustment to bring the family in balance. So, it is mostly safe to say, that illness is a subjective experience of disease and it is possible to experience illness without getting ill and having disease. Therefore, awareness and proper treatment is the right approach to keep oneself and family safe from the disease.

An illness of the human and animal body or plants is known as disease. It is a disorder of structure or function in plants or human and animal body. It relates to specific symptoms which causes ailment it can affect to a particular location or many location at a time. Disease can cause ailment, sickness, ill- health or illness. Due to the frequency of occurring and time we can classify a disease. Common disease can be defined as which can be prevalent in a lot of places or lot of people at a same time. It can be equally shared, or it can be in more people or groups, occurring or appearing frequently which is not rare. It can be in a form of any bacterial disease, common virus, common viral disease and infection. This can be cured or treated quickly by a medical doctor with some common medicines but if not cured and can lead to a serious ailment or to a death of a person.

In this paper I have taken some common diseases which can be communicable i.e. transferred from one person to another and non- communicable i.e. which cannot be transferred from one person to another. Besides this paper also explains the prevalence of common diseases in Uttar Pradesh and what these diseases are and how it can be treated. Some of the common communicable diseases taken in this paper are Cough & cold & fever, Allergy, Acne Vulgaris and Pyria in the gums. Non – communicable common diseases are Diabetes Mellitus, Arthritis, Anemia, Stones, Obesity, Depression, Insomnia, Blood Pressure, Eye Sight problem, Problem of Dehydration, Problem of Sun Stroke, Unintentional injuries and Muscle and back pain.

## SYMPTOMS AND METHOD TO DEAL WITH DISEASES

Every disease has some or the other symptoms by which we can recognize a person is suffering from which kind of disease. There are certain methods which can be followed to prevent from such disease in some or the other cases we can go to medical doctor for treatment which can be cured by taking some medicines.

## DIABETES MELLITUS

It is commonly named as diabetes; it is group of metabolic disease in which there is an increase in blood sugar level over a prolonged period of time. With the symptoms of increase in blood sugar it also includes frequent urination, increase in thirst and hunger. Serious long- term complication causes cardiovascular disease, stroke, kidney failure, foot ulcer and damage to eyes. Diabetes occurs due to pancreas not properly producing insulin or cells of the body are not responding properly to the insulin produced in the body. Diabetes can be avoided by not smoking and consuming alcohol, scheduled regular examination of eyes, keeping blood pressure and cholesterol under control, by keeping vaccines **(Flu, Pneumonia, Hepatitis B and other vaccines) up to date and by neglecting stress level.**

## ACNE VULGARIS

Acne vulgaris is a long term skin problem which is characterized by areas of blackheads, whiteheads, pimples and greasy skin and possibly scarring. This problem arises due to increase in sebum level of skin. Long term occurrence of acne vulgaris may lead to anxiety, reduced self esteem, and in extreme cases it can cause depression and may lead to suicidal cases. Genetics is estimated to be the cause in 80% of the cases and on the other hand role of diet is also responsible for the disease. However, smoking and consumption of alcohol may increase the risk of developing acne and worsen. Acne mostly affects skin with a greater number of oil glands

including the fact, upper part of the chest, back and face. Acne can be prevented by cleaning and moisturizing the face, taking proper diet, avoiding the skin from the direct contact of the sun and maintaining proper hygiene.

## COUGH AND COLD AND FEVER

If a person is suffering from cough and cold he must have a running nose and a sore throat this can be due to cold, allergies or flu. Symptoms of cough and cold generally start between 1 and 3 days after that a person gets infected with a cold virus. These symptoms last for 3 to 7 days. After that worst is over, but still a person may feel stuffed up for a week or more than that. It is most contagious during the first 3 days of sickness, but it is still possible that it can spread during the first week. Increase in body temperature above the normal range (98.6 F (37 C)) is called fever. Prevention can be taken by taking proper diet and medication and keeping safe from changing of weather conditions.

## ARTHRITIS

Arthritis is a kind of joint disorder which causes inflammation in one or more joints. There are more than 100 different types of arthritis. The most common form of arthritis is osteoarthritis which causes trauma and infections to the joints. The major complain made by the patients is joint pain. Sometimes pain is constant and can be localized to the affected joint this occurs due to inflammation that occurs around the joint from disease and daily wear and tear of joint. Arthritis can be prevented by doing regular exercises.

## ANEMIA

Anemia occurs due to the deficiency of iron as a decrease in the amount of red blood cells which brings down the hemoglobin in the blood due to deficiency of iron. Anemia occurs slowly with the symptoms i.e. feeling tired, weakness, shortness of breath or a poor ability to exercise. It occurs to

insufficient dietary intake and consumption of less iron. Anemia can be prevented by taking proper diet and iron pills.

## STONES

Stones are build of hard crystals which forms hard lumps. Stones are generally found in kidney and gall bladder which causes pain if found in kidney causes urination problem if found in gall bladder causes digestion problem. Kidney stones are common and it affects around 15% of men and 10% of women during their lives. It occurs during the ages of 30 and 60. Symptoms are not taking sufficient fluid everyday i.e. dehydration, low consumption of fiber intake and by taking high protein diet or if there is a family history of kidney stones.

## OBESITY

When a person gains excess fat which causes negative effect on health it is known as obesity. It reduces the life expectancy and increases health problems. Obesity gives birth to many diseases particularly heart disease, type 2 diabetes, obstructive sleep, certain type of cancer and osteoarthritis. Obesity can be prevented by doing regular exercises and by balance diet intake.

## DEPRESSION

It is a kind of mood swing where a person is in state of low mood which affects the daily activities along with person's behavior, tendencies, feelings and sense of well-being. A depressed person feels a loss of loved once. It is a symptom of some physical disease and side effects of some drugs and medical treatments. Depressed mood is a major depressive disorder or dysthymia.

## PYRIA IN THE GUMS

Pyria is generally bleeding gums which cause bad breathing smell. It is important that a person should take care of dental hygiene. One should brush the

teeth twice a day by using soft brush bristles. Drinking plenty of water and avoid eating processed foods and sweets will give a good life to teeth. Another important thing is avoid eating tobacco in any form. Smoking and chewing tobacco may lead to harmful effects on teeth and gums.

## INSOMNIA

It is a kind of sleeping disorder where a person feels trouble in sleeping. It is also known as sleeplessness. A person feels difficulty in sleeping as long as desired. Insomnia is followed by daytime sleepiness, low energy, irritability and a depressed mood. The cause of insomnia is psychological stress, chronic pain, heart failure, hyperthyroidism, heartburn and menopause. To prevent insomnia a person should be stress free and do regular exercises to keep him healthy.

## BLOOD PRESSURE

Blood pressure is the pressure of circulating blood on the walls of blood vessels. It generally refers to the pressure in large arteries of the systematic circulation. Blood pressure is of two types systolic pressure means high BP and Diastolic pressure means low BP and is measured in millimeter.

## EYE SIGHT PROBLEM

When a person has a Weak vision at night, particularly when driving and has trouble in seeing movement, details, or objects (especially street signs) means individual is suffering from eyesight problem. These can be of two types Myopia and hypermetropia. When vision gets Blurry or worse in looking at distant objects it is called myopia. When vision is Blurry in looking at close objects and both near and far objects may look fuzzy then it is called have hypermetropia.

## THYROIDISM

The thyroid gland is the master gland of metabolism. It plays a very important role in producing the hormone that helps in insuring oxygen and glucose to get into individual cells. Every cell, organ, tissue, and gland requires oxygen and glucose to function. Thyroid hormone helps the brain to think clearly. Even heart needs thyroid hormone to beat properly. Thyroid hormone gives a drift to skin, hair, nails, digestion and sex. Thyroidism is of two types Hyperthyroidism where a person starts gaining bodyweight above normal bodyweight and another is hypothyroidism where a person start losing its bodyweight below normal range of bodyweight. Thyroid can be cured by taking proper medical help.

## MIGRAINE

Migraine is a neurological disorder which causes severe headache. It results in intense pulsing and palpitations in one area of head. An individual may feel nausea, vomiting and sensitivity to light and sound. Warning signs of migraine are blurred vision, tingling in the arms or face, difficulty in speaking or loss of peripheral vision. There are many types of migraine **Silent migraines which occur without head pain, Complex migraines or atypical migraines** are related to extended or exaggerated visual auras, **sporadic hemiplegic migraines** causes fever, prolonged weakness, seizures and coma, **Abdominal migraines are not related to head this causes pain in abdomen it is generally found in adults and this occurs due to inherited family history and Vestibular migraines** are related to vertigo where individual may experience dizziness or loss of balance accompanied by the common symptoms of Nausea and vomiting . Migraine can be prevented by avoiding loud sounds and bright lights, by paying attention to food choices, by keeping a headache diary, beware of hormonal changes, proper food supplement intake, paying attention to weather change, eating and sleeping on regular schedule, by avoiding stress and doing relaxing exercises.

## GASTRIC AND INDIGESTION PROBLEM

Indigestion is a pain which creates discomfort in the upper abdomen (dyspepsia) and behind the breastbone (heartburn). Indigestion occurs due to stomach acid which comes in contact with the sensitive, protective lining of the digestive system (mucosa). This stomach acid breaks down the lining, leading to irritation and inflammation, which causes pain in stomach and pain in breastbone. In most of the cases indigestion problem is related to eating, triggered by other factors such as smoking, drinking, alcohol, pregnancy, stress or taking certain medications. Many individuals are able to treat indigestion problem by making simple changes to their diet and lifestyle, or by following number of different medications, such as antacids.

## PROBLEM OF DEHYDRATION

Dehydration occurs when water resistance is low in body as required. Dehydration occurs when individual does not take proper fluid mostly water mostly the exceeding amount which should be taken. During dehydration, more water moves out of individual cells and after that out of the body than the amount of water which is taken in through drinking. Dehydration leads to serious complications which leads Heat injury. If individual does not intake enough fluids while exercising vigorously and perspiring heavily, it may end up with a heat injury, further it can lead from mild heat cramps to heat exhaustion or potentially life-threatening heatstroke. Dehydration also causes Urinary and kidney problems. Prevention is one of the most important treatments for dehydration. Consuming plenty of fluids and foods that have high water content (such as fruits and vegetables) should be enough for most people to prevent dehydration. People should take precautions about doing activities during extreme heat or the hottest part of the day and individual who is exercising should make replenishing fluids a priority. It is noticed that the elderly and very young are at higher risk of being dehydrated therefore special attention should be provided and given to them to make sure that they are receiving enough fluids.

## PROBLEM OF SUN STROKE

Sun stroke occurs due to overexposure to extreme heat. Sometimes it is also called as heatstroke, this is a condition when the body's heat control system fails and it cannot lose the excessive heat out of the body. Heatstroke generally occurs when an individual has been in too heated area for too long, whether working, exercising, or simply sitting in a hot environment. Heat stroke is considered to be the most serious form of heat injury and is considered a medical emergency. A Symptom of heat stroke includes confusion, agitation, disorientation, the absence of sweating, and coma. Patient should be taken to a shady area and by removing the clothes one should apply cool or tepid water, fan the patient to promote sweating and evaporation, and place ice packs under the armpits and groin. Person should be provided with liquids and fluids if able to drink, and should be provided with cool water or other cool beverages that do not contain alcohol or caffeine. Body temperature should be monitored time to time with a thermometer with continue cooling efforts until the body temperature drops to 101 to 102 F (38.3 to 38.8)

## UNINTENTIONAL INJURIES

Unintentional injuries are unforeseen risks that are unplanned i.e. accident an unintentional tort that is done without intention. The accident may lead to financial loss, injury or property damage with the person considered being negligence. Unintentional injuries are of two types physical and non-physical. Physical injury includes unintended motor vehicle collisions or falls, being injured by touching something sharp, hot, dropping a plate, contacting electricity or ingesting poison. Some example of Non-physical is unintentionally revealing a secret or otherwise saying something incorrectly, accidentally deleting of data, forgetting an appointment etc. First Aid is one of the important, immediate and temporary cares which is given to a person who suddenly gets ill or injured. It includes self-help and

home care if medical assistance is not available or delayed.

## ALLERGY

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Allergy is one of the most common medical disorders. Allergy is a misguided reaction of substances by the immune system it is a kind of defense made by body against pathogens. Allergies are of many types food allergy which is abnormal response to immune system; pollen allergy is noticeable during the weather change and skin allergy when a person becomes sick and develops skin or breathing problem. Allergy can be prevented by taking immune boosting supplements and healthy diet, by taking vitamin c, dust mites cover, reduction in exposure to allergens, by upgrading cleaning procedures, by taking yeast free diet, drinking clean and filtered water, by finding about what an individual is allergic to and by balancing the hormone which triggers to boost up the immune system.

## MUSCLES AND BACK PAIN

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Muscle and back pain is common among all types of ages. It is a symptom with large array of diseases. Back pain can be in lower back and upper back whereas muscle pain can develop almost anywhere in body including neck, legs and even in hands. Muscle and back pain can be prevented by taking physical therapy, proper exercising, by improving the posture which causes pain in the body, minimize and avoid twisting of motions, drinking plenty of

water, maintaining a healthy weight, by living an active life and strengthening of abs, by finding out the best sleeping position and purposely interrupt long periods of sitting.

## MULTIPLE DISEASES

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Multiple diseases mean a person suffering from many diseases at a time means an individual suffering from many diseases like fever, diabetes mellitus, arthritis, cough and cold etc. Multiple diseases bring down the efficiency of human being.

## PREVALENCE OF COMMON DISEASES AMONG LOW HOUSEHOLDS IN UTTAR PRADESH

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A total of 1991 episodes of illness in rural and urban area of kakori, Malihabad, Bakshi ka Talab and Banthara were reported by the households. Table 1 gives the disaggregation of the kinds of ailments that were reported. Fever was the most widely reported in urban area (21.09 percent) ailment. These episodes of fever did not include dengue, chikungunya or malaria, nor did they include fever due to typhoid, chicken pox or pneumonia. Other widely reported ailments were, arthritis (12.78 percent) and by complaints of anemia (10.64 Percent) and Pyria in gums (9.93 Percent). Other ailments had less reporting. It was also found that people in rural areas are much healthier than urban people.

Table1: Number of cases under the common diseases

Disease	Rural (%)		Urban (%)		Total Cases (%)	
Cough & amp; cold & amp; Fever	51	(18.09)	66	(21.09)	117	(19.66)
Arthritis	20	(7.09)	40	(12.78)	60	(10.08)
Anemia	30	(10.64)	26	(8.31)	56	(9.41)
Pyria in gums	28	(9.93)	23	(7.35)	51	(8.57)
Muscles and back pain	20	(7.09)	17	(5.43)	37	(6.22)
Diabetes Mellitus	12	(4.26)	23	(7.35)	35	(5.88)
Acne vulgaris	15	(5.32)	18	(5.75)	33	(5.55)
Blood Pressure	10	(3.55)	22	(7.03)	32	(5.38)
Gastrick&Digestic problem	21	(7.45)	11	(3.51)	32	(5.38)
Thyroidism	13	(4.61)	18	(5.75)	31	(5.21)
Stone	12	(4.26)	10	(3.19)	22	(3.70)
Eye Sight Problem	13	(4.61)	7	(2.24)	20	(3.36)
Allergy	11	(3.90)	8	(2.56)	19	(3.19)
Insomnia	7	(2.48)	7	(2.24)	14	(2.35)
Migraine	6	(2.13)	8	(2.56)	14	(2.35)
Unintentional injuries	5	(1.77)	7	(2.24)	12	(2.02)
Obesity	3	(1.06)	2	(0.64)	5	(0.84)
Depression	4	(1.42)	0	(0.00)	4	(0.67)
Dehydration	1	(0.35)	0	(0.00)	1	(0.17)
Total	282		313		595	
Number of person in Household	342		340		682	
Prevalence score	0.825		0.921		0.872	

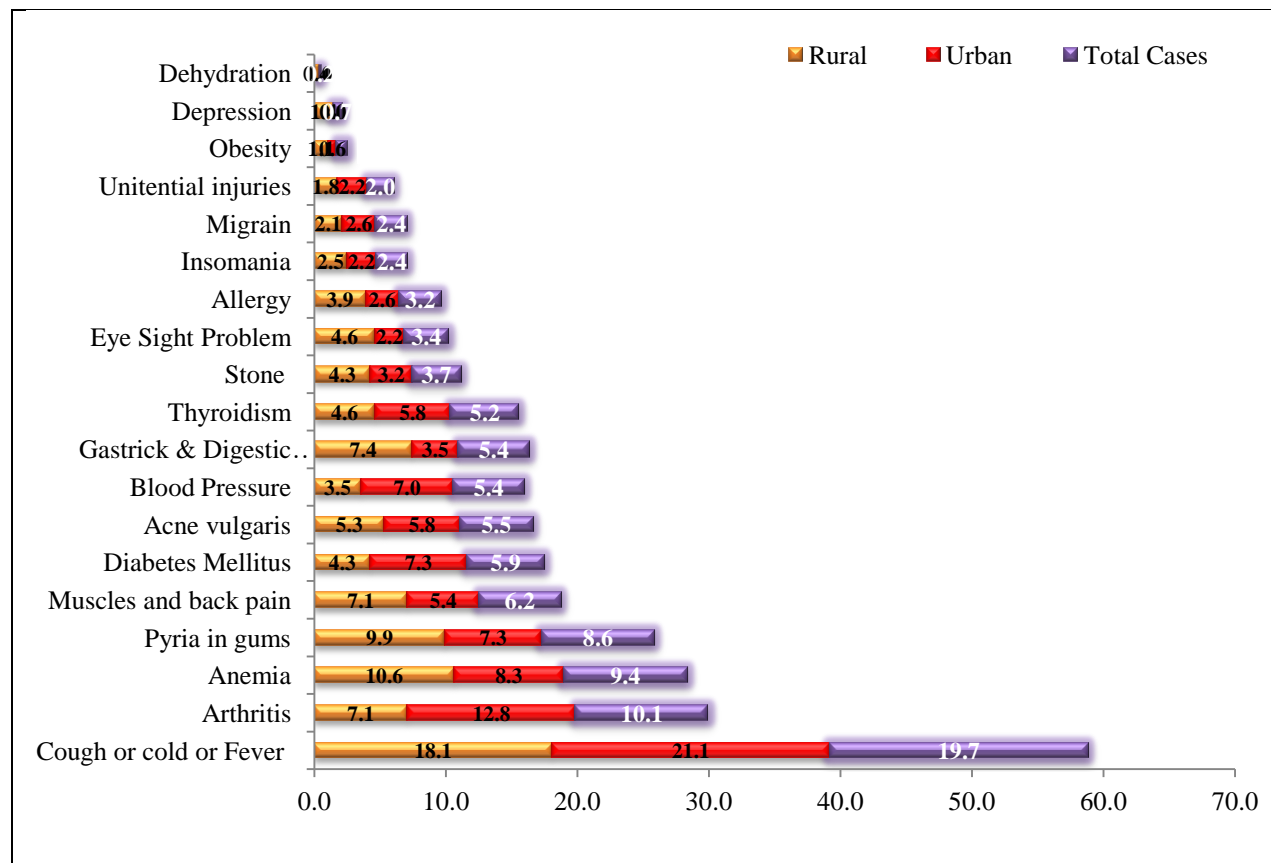
Note: Values shown in parentheses are percentage of total. Source: Estimated from Field Survey Data

Figure1 shows a graphical depiction of percentage number of case suffering under several types of diseases. Since the sound effects of the common diseases and the loss of health will differ from one individual to another. The result may be serious losses disturbing a person's capability to work.

Therefore the data capture the burden of disease experienced in the low income families. The illnesses that affect the largest number of individuals in the low income households of Uttar Pradesh are not easily overlooked and underestimated.



Figure 1: Percentage Share of the Diseases in Lucknow District



Source: Author's construction

## ASSUMPTIONS FOR THE STUDY

The following assumptions have been made:

- 1) It is assumed that Prevalence of common disease among low income group is high.
- 2) It is assumed that the vulnerability of common disease in the older age group is more as compared to younger age groups.
- 3) It is expected that women have a higher likelihood of being affected with common disease than the men.
- 4) It is assumed that the likelihood of having common disease is higher among joint families than that of nuclear families.
- 5) It is assumed that the likelihood of being common disease is higher among smokers than that of non-smokers.

- 6) It is assumed that the likelihood of being common disease is higher among who didn't adopt exercise than that of who adopt the exercise programme.
- 7) It is assumed that the likelihood of acquiring common disease is higher in who feel work stress as compared to who didn't feel the same.

## METHODOLOGY

The regression model is used to ascertain the underlying contributing factor which has a significant influence on the occurrence of common disease. Due to the binary nature of the outcome variable in this study, being having the common disease or not, a binary logistic regression model is employed for the given data. One of the key uses of logistic regression is to determine or prediction the chance of the occurrence of a particular outcome of the



response variable on the basis of independent or explanatory variables by fit a given data to Logit function. Based on the number of classes of the outcome variable, a logistic regression model can be categorized as binary or multinomial. The outcome (dependent) variables which are binary in nature are classified under binary logistic regression whereas outcome variables which have more than one category are classified under multinomial logistic regression.

For a binary outcome  $Y_j$  and explanatory variable  $X_{ij}$ ,  $i=1, 2, \dots, m$  and  $j=1, 2, \dots, n$ .

Where  $m$  denotes the number of variables included in the model and  $n$  is the number of observations, Let  $\pi_j = P(X_{ij})$  represents the "success probability" when  $X_{ij}$  takes the values  $x_{ij}$ . The problem with a linear model is that the probability model  $E(Y) = X\beta$  (where  $\beta$  is the vector of parameters to be estimated) is used to approximate a probability value,  $\pi_j = P(Y_j=1)$  within the interval 0 and 1, while  $E(Y_j)$  is not so constrained.

Therefore, the Logit transformation where the transformed quantity  $\log(\pi_j / (1-\pi_j))$  lies in the interval  $(-\infty, \infty)$  and is modeled as

$$Y_j = \text{Logit}(\pi_j) = \log(\pi_j / (1-\pi_j)) = \beta_0 + \sum_{i=1}^m \beta_i X_{ij} + \mu_j$$

Where, the parameter  $\beta_i$  represents the coefficient of parameter to be estimated. Through

algebraic manipulation, cumulative logistic probability function and is specified as:

$$P = F(Z) = 1 / (1 + e^{-(\beta_0 + \sum \beta_i X_{ij})})$$

Where,  $Z$  determines a set of explanatory variables  $X$ ,  $F(Z)$  is the cumulative logistic function;  $e$  represents the base of natural logarithms and  $P$  is the probability of success when explanatory variable has the value  $X$ . Logit models are interpreted by using odds and odds ratios. The odds ratio indicates the multiplicative impact in the odds for a unitary change in the explanatory variable, holding other variables constant. If the exponential coefficient is greater than unity, it explains that the odds are increasing, and on the other hand negative value indicates that the odds decrease. Therefore in our case to corroborate our findings obtained from the primary data, we have applied the logistic regression technique to determine the factors responsible for occurrence of Common disease which is the response variable (dependent variable) and is binary in nature (Yes: 1; No: 0). for dependent variable we have taken the household where diseases occur coded as Yes. The predictors considered for the model are Income Per Capita (log), Age- group who is having disease in a household, Gender, Type of the household whether the household is joint or nuclear, Exercise programme that the household adopt the exercise programme or not, work stress and smoking habits, which are categorize in following manner.

Table2: Coding of Determinants affecting Common Disease

Sr. no.	Variables	Coding
1	Income per capita (log)	Continuous variable
2	Age Group	10-20 year :1 , 21-40 year :2, *Greater than 41 year :3
3	Gender	Household where proportion of females greater than males :1 , *Otherwise :2
4	Type of Family	Joint :1, *Nuclear: 2
5	Exercise	Family adopt exercise programme : 1, *Not adopt :2
6	Work Stress	Mental Stress during Occupation (Yes) :1,*No :2
7	Smoking Habits	Yes :1 , *No :2

**Note:** Dependent variable Common Disease in any Household (Yes: 1, No: 0)

\*denotes the reference category

The equation could be framed as follows:

$$\text{LOGIT(Common Disease)} = \beta_0 + \beta_1 \text{Income per capita (log)} + \beta_2 \text{Age Group} + \beta_3 \text{Gender} + \beta_4 \text{Type of Family} + \beta_5 \text{Exercise} + \beta_6 \text{Work Stress} + \beta_7 \text{Smoking Habits} + \epsilon_i$$

When using the logistic regression model, from both the predictors as well as the response category first we have to select a reference level. In the fitted regression model the coefficient expresses about the influence of the explanatory variable on the response variable. The sign that is linked with the regression coefficient gives the measure about the decrease or increase of the likelihood of being the common disease as compared with the benchmark category also identified as the reference category. The positive sign link with the regression coefficient denotes that the likelihood of being infected by the common disease in any household

has been increased while the negative sign associated with the regression coefficient indicated that the likelihood of being diseased with common diseases has been decreased as compared to a reference level.

## ANALYSIS

A logistic regression has been performed to ascertain the effects of predictors on the likelihood of occurrence of common diseases. The logistic regression model is statistically significant [ $\chi^2 (7) = 34.297$ ,  $p < 0.01$ ]. The model explained 25.3% (Nagelkerke  $R^2$ ) of the variance in likelihood of Common disease in a household and correctly classified 87.3% of the cases. It can also be interpreted by the Hosmer and Lemeshow Test that the logistic model significantly predicts the odds of the common diseases ( $p > 0.05$ ).

Table 5.5: Factors affecting the likelihood of Common Disease (N = 400)

Variable	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Constant	-7.977	2.945	7.336	0.007***	0.0003		
Ln(Income per capita)	1.405	0.440	10.178	0.001***	4.076	1.719	9.664
<b>Age- Group</b>			7.244	0.027**			
10- 20 years	-0.981	0.368	7.118	0.008***	0.375	0.182	0.771
21-40 years	-0.662	0.413	2.576	0.109	0.516	0.230	1.158
Gender (Female)	0.107	0.557	0.037	0.848	1.113	0.374	3.316
Type of Family (Joint)	0.281	0.330	0.727	0.394	1.325	0.694	2.530
Exercise(Yes)	-0.199	0.329	0.366	0.545	0.819	0.430	1.562
Work Stress (Yes)	0.718	0.338	4.515	0.034**	2.050	1.057	3.974
Smoking habbit(Yes)	0.897	0.347	6.698	0.010**	2.43	1.243	4.839
<b>Hosmer and Lemeshow Test</b>		<b>0.2549</b>					
<b>-2 Log likelihood</b>		<b>274.81</b>					
<b>Nagelkerke R Square</b>		<b>0.253</b>					

Significant at \* $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\* $p < 0.01$

Source: Estimated from field survey data.

On the basis of the results the Model could be framed as follows:

*LOGIT (Common Disease) = -7.977+ 1.405 Income per capita (log)-0.981 Age Group (10-20 year)-0.662 Age Group (21-40 year) +0.107 Gender (F) +0.281 Type of Family (Joint)-0.199 Exercise+0.718 Work Stress+0.897 Smoking Habits*

## CONCLUSION

This paper explains that when a person is ill he or she not only alone suffers from but the whole family is affected by some or the other way. Illness in a family member creates the anxiety for all those who are close to the patient this reduces help and support to the patient. When a member of the family gets ill this completely changes the life of each

and every one person present in the family. This starts with a new journey and ends for months and years depending on the progress of the loved once illness. The life changes the routine by the treatment which the loved once is getting or the limitation on mobility which is caused by their illness. Family should be economically strong to deal with the expenses of the treatment which the loved once is getting. The behavior and appearance of the loved once changes as the illness progress. Person living with serious illness can cause physical and emotional stress for both the family and patient it creates anger, denial, anxiety, depression, guilt, irritability, exhaustion, stress related to physical conditions and dissatisfaction with life. Daily stressors can include extra demand on time and energy which changes the ability to perform job responsibilities and pressure of trying to maintain a life separate from care giving