



Cross Sectional Study on Pupusa Noigal (Lung Diseases) among the People who are living in Surrounding the Cement Factory in Thazhaiyuthu, Tirunelveli District

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ABSTRACT:

AIM: Survey of respiratory disease among resident of the area around thazhiyuthu cement factory in Tirunelveli from June to August 2018.

METHODS: This is a cross sectional random study. There analyze the lung diseases (pupusa noigal) caused by dust (asbestos) to the peoples among the area around the cement factory of thazhayuthu who residing more than 10 years

RESULTS: Among the people who residing near the factory surrounding 3 to 5 km the incidence of lung diseases symptoms persist along the 132 sample size not in cluster method only in random methods, cross sectional study by questionnaire, the result says by my way of cross study age limits from 20 to above 60 yrs, below 20 yrs is 15.15%, 20- 40 yrs is 28.78%, 40 - 60 yrs is 31.06%, above 60 is 25%, more over the age limit increase % along 40-60%. About gender ratio is male -53.78%, female- 46.21%, About Educational qualification percentage by strategy, SSLC -28.78%, HSC- 34.09%, Degree-31.06%, PG-6.06%. About monthly income : 4000- is 7.57%, 4000 to 6000 is 11.36%, 6000 to 8000 is 34.84%, 8000 to 10,000 is 32.57 %, above 20,000 is 13.63%. About diet pattern: Veg - 22.72%, non veg- 34.09%, mixed- 43.18%., About pupusa noigal related causes Erumal- 4.54%., Kabam- 1.51%., Mouchu thinaral- 16.66%., Erraiippu -20.45%., Peenisam- 56.81%., About period of living: The people living in that area within the period of 3 yrs is 3.03%., 5yrs- 24.24% then above 10 yrs is 72.72%.,

CONCLUSION: The study of cross sectional among the people reveals the incidence of higher proportions in age around 40 to 60 yrs, more literate but hsc qualified is more that is 34.09%, the income group for monthly among 8000 per month is large, diet pattern mixed is more, and the dust allergy means peenisam is large in the sankar nagar area due to settle of dust particles, the people who are mostly affected with the living period of 10 yrs is more.,

Keywords: Asbestos, coals, mines, lung diseases (pupusa noigal), bronchial asthma, bronchogenic carcinoma, mouchu thinaral (breathing difficulties), kabam, eraaiippu, erumal.

INTRODUCTION

In this modern world we people are living most sophisticated life, here we discuss about the causes of lung diseases commonly, the emission of dust, minute particles, chemical emission from factories cause most widely breathing difficulties, allergy and inhalation problem, it affects the primary respiratory system, the cross sectional study to know the frequency of dust allergy or difficult breathing due to cement (asbestos) from the factory, most of them are not aware of the dust induced diseases. We conduct the study by asking questions about duration of living that particular area, age, cold, fever, dust pollution and allergens to asbestos, The lung is the primary organ to promote vital oxygen to the human cells were exchanging of gases occur here. I made a cross sectional study among the people who are living in an around the cement factory area for period of more than ten years, am asking the problems of respiratory diseases that is Kabam, Erraiippu, Erumal,

Mouchu thinaral, Peenisam, and elaiippu,. According to this categories there difficulties and concluded the study. according to following; KABAM--COLD, ERUMAL--COUGH, MOOCHU THINARAL--BREATHING DIFFICULTIES, ERRAIPPU--WHEEZING, PEENISAM--DUST ALLERGY\SINUSITIS, ELLAIPPU--TUBERCULOSIS

AIM:

To rule out the prevalence of lung diseases which occur among the people who lives near by the cement factory. Period of living and frequently occurring diseases list out in lung diseases (pupusa noigal).

OBJECTIVES:

To estimate the prevalence of pupusa noigal (lung diseases) among the people who are living in surrounding the cement factory in Thazhaiyuthu, Tirunelveli district.

To determine the interrelation between the pupusa noigal and dust exposures to find out the frequency of suffering from pupusa noigal to list out the type of pupusa noigal . Among the people who are living in surrounding the cement factory in Thazhaiyuthu, Tirunelveli district.

LITERATURE REVIEW:

MODERN ASPECT:

Respiratory diseases commonly it occur wide in human population, due to dust & infections

SYMPTOMS AND SIGNS:

- ❖ Cough
- ❖ Sputum
- ❖ Haemoptysis
- ❖ Dyspnoea
- ❖ Chest pain
- ❖ Clubbing

LUNG DISEASES:

- Bronchial asthma -inflammatory diseases of the small air ways, reversible bronchial obstruction.
- Bronchiectasis- persistent and irreversible dilatation and distention of medium sized bronchi,
- Bronchiolitis-inflammation of bronchus
- Chronic bronchitis- excessive trachea bronchial mucous production cause cough with expectoration tuberculosis- pulmonary and systemic disease caused by mycobacterium tuberculosis. transmission is by droplet nuclei
- Bronchogenic carcinoma - asbestos exposure (pre disposing Factors)

SIDDHA ASPECT:

- ❖ Mookadaippu noi - 9 types they are vali, azhal, ayya mookadaippu, neer, kuruthi, seel, serrai, mulai, kazhuthu mookadaippu, all the above
- ❖ Erumal noi: (kasam)-12 types they are mandharam, pakka mandharam, sudar, vali, thee, suvasa, iratha, ayya, penis, vali azhal, pitha kaba, mukutra errumal, all above
- ❖ Erraippu noi- 5 types they are soothra, thamaraha, vichinna, maha suvasam, mel nokku erraippu noi
- ❖ Ellaippu noi- tuberculosis

METHODS AND MATERIALS :

STUDY POPULATION:

This research work conducted in Thazhaiyuthu area. Thazhaiyuthu is a large village located in Tirunelveli taluk of Tirunelveli district, Tamil nadu with total 2465 families residing. The Thazhaiyuthu village has population of 9013 of which 4525 are males while 4488 are female a per population census 2011.

Area	Latitude	Longitude	Elevation from sea level in feet
1	8.7863	77.72569	167.3
2	8.78693	77.72675	170.27
3	8.78613	77.73312	153.35
4	8.7803	77.73374	134.69
5	8.79544	77.7411	142.01
6	8.78941	77.73978	139.47
7	8.79158	77.72793	163.65
8	8.78697	77.73151	169.76

The area were the surroundings nearby cement factory with latitude and longitude ,elevation from sea level. According to that 1. Thazhiyuthu main road, 2. Thazhaiyuthu, 3. Sathankoil nagar, 4.Pulithevar nagar, 5.Maruthadai sastha nagar, 6.Sankar nagar -I ,7.Kamaraj nagar, 8. Sankar nagar-II, These are the places where the minor project research questioner asked for cross study of lung diseases.

OPERATION:

In this research denied as key feature of samples are known lung disease persons; people who living in more than two years within 03 km surrounding from cement factory. Due to asbestos exposure near cement factory the inhalation of dust cause inflammation to lungs and respiratory tract. Now a days there are less effect on carcinoma of lung due to medical awareness, am here just inform the frequency of signs and symptoms of respiratory disease, the area covered so far are Thazhaiyuthu, Sathan koil nagar, Poolithevar nagar, Maruthadai sastha nagar, Sankar nagar, Kamaraj nagar. Were these are situated near the cement factory around 3 to 5 kms.

SAMPLE SIZE:

Use population survey or descriptive study using random sampling in epi. info. Confidence level -95%, Confidence limits -5%, Population size - 9013, Expected frequency - 13.4%, Sample size- 132.

DATA COLLECTION:

Information collected, collect the primary data from direct interview with questionnaires among pupusa noigal (lung diseases)persons in Thazhaiyuthu.

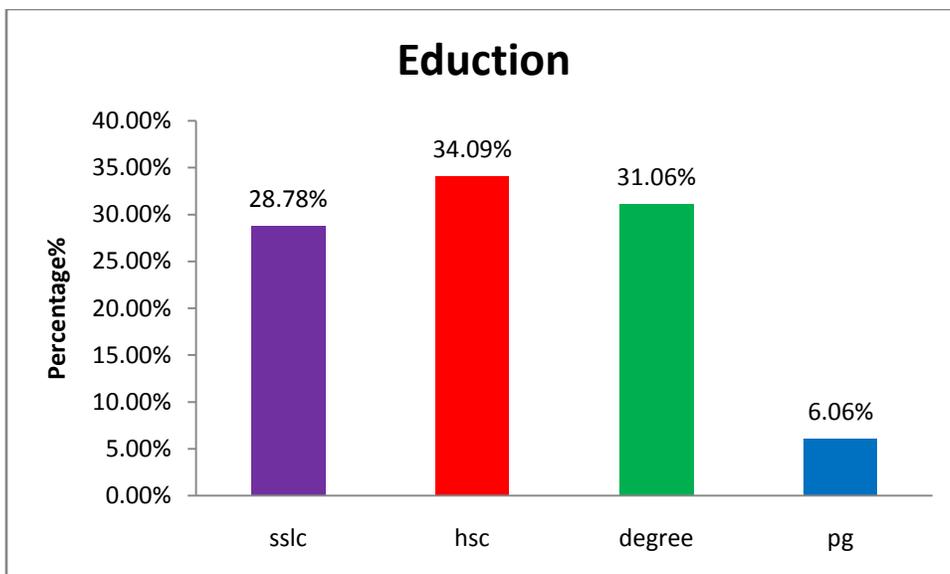
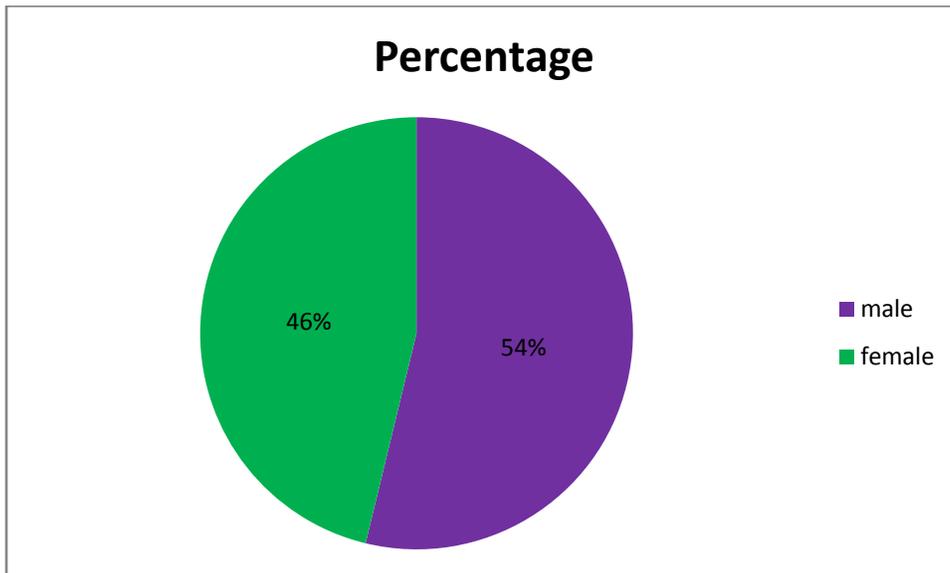
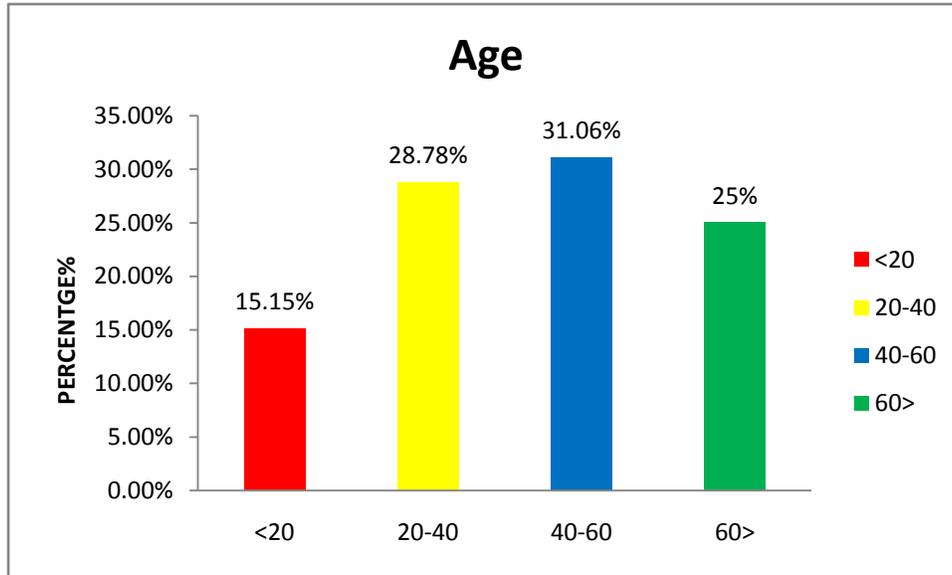
DATA COLLECTION PROCEDURE:

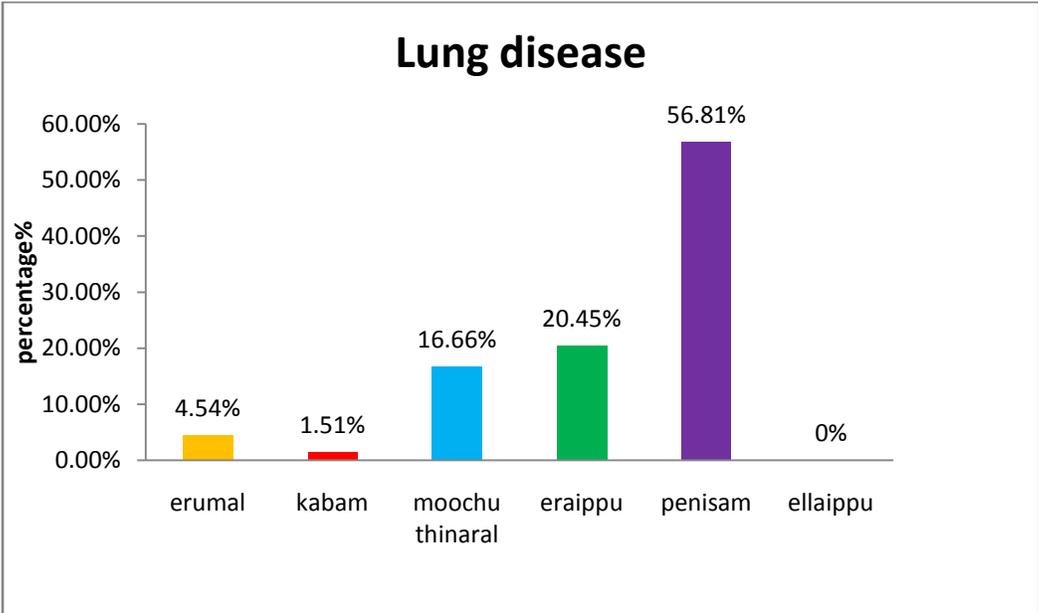
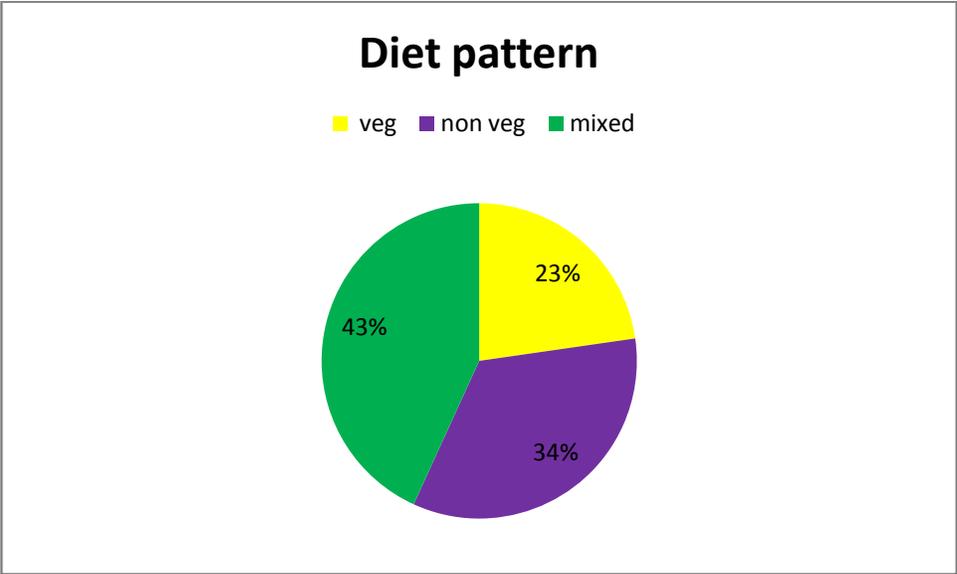
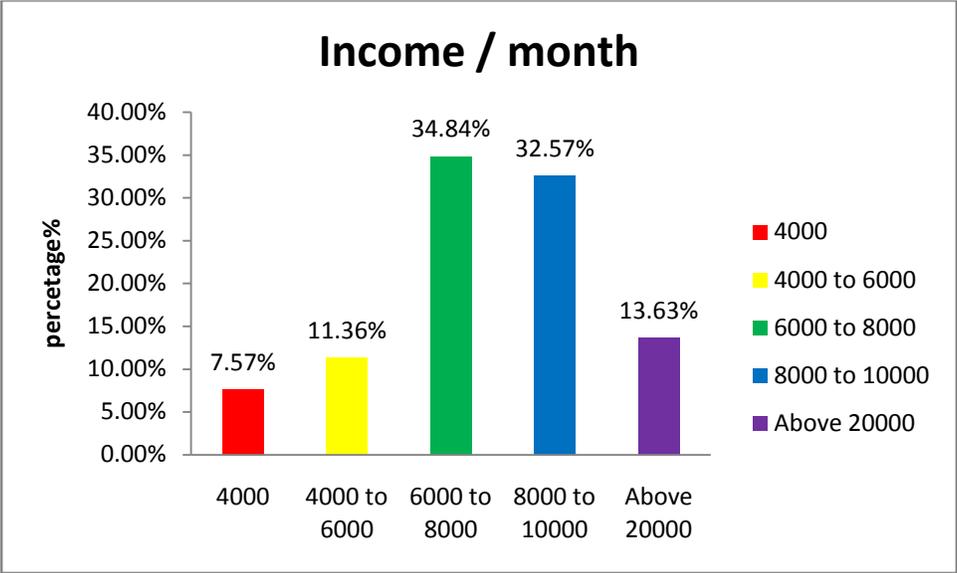
Main investigator collects all data from public by questionnaire fill in field survey method.

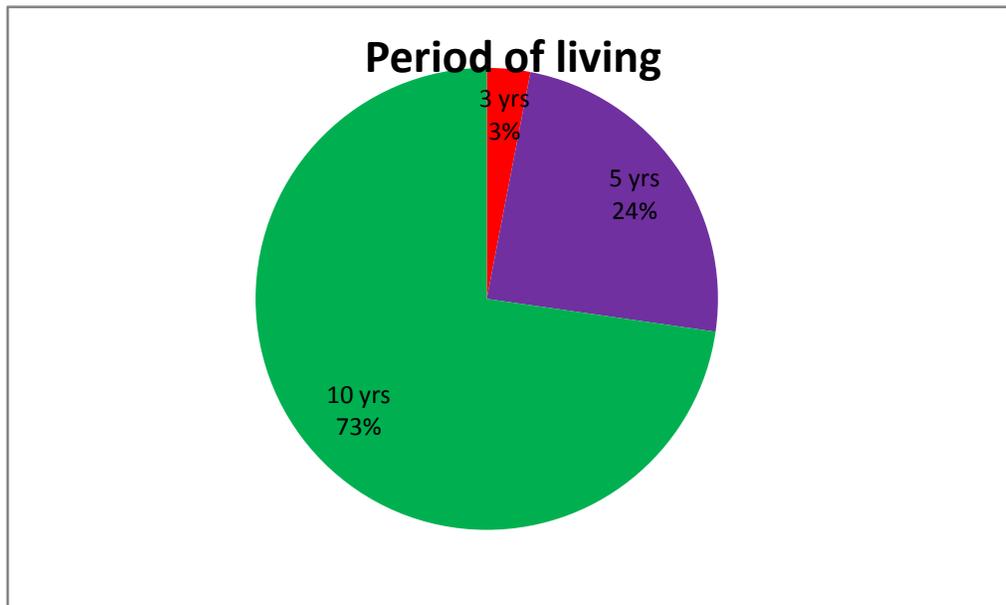
DATA ANALYSIS:

In research data analysis, including recording of key exposure\ outcome variables, indicators to be calculated for the descriptive analysis, measure the pupusa noigal (lung diseases) persons in near living to cement factory use (prevalence, incidence, measures of central tendency(mean, median). How much the dust exposure near the cement factory residence.

RESULT:







Discussion and Conclusion:

Among the people who residing near the factory surrounding 3 to 5 km the incidence of lung diseases symptoms persist along the 132 sample size not in cluster method only in random methods, cross sectional study by questionnaire, the result says by my way of cross study age limits from 20 to above 60 yrs, below 20 yrs is 15.15%, 20- 40 yrs is 28.78%, 40 - 60 yrs is 31.06%, above 60 is 25%, more over the age limit increase % along 40-60%. gender ratio is male -53.78%, female- 46.21%, educational qualification percentage by strategy, sslc -28.78%, hsc-34.09%, degree-31.06%,PG-6.06%. monthly income : 4000- is 7.57%, 4000 to 6000 is 11.36%, 6000 to 8000 is 34.84%, 8000 to 10,000 is 32.57 %, above 20,000 is 13.63%.Diet pattern: veg- 22.72%, non veg- 34.09%, mixed-43.18%.. Pupusa noigal related causes: Erumal- 4.54%., Kabam- 1.51%., Mouchu thinaral- 16.66%., Erraippu - 20.45%., Peenisam- 56.81%..Period of living: The people living in that area within the period of 3 yrs is 3.03%., 5yrs- 24.24% then above 10 yrs is 72.72%.,

A brief account of previous research article included the carcinoma effect of lungs due to cement asbestos, but here I pre-dominantly spoke about the dust allergy due to factory emission, the incidence occur mostly distal to the factory where it settle down as a minute particles am focusing on cough, cold, breathing difficulties, wheezing, dust allergens - rhinitis, it is the symptoms of lung diseases, mostly seen in Tile factory, Cotton spinning, and Coal mines.

CONCLUSION: The study of cross sectional among the people reveals the incidence of higher proportions in age around 40 to 60 yrs, more literate but HSC qualified is more that is 34.09%, the income group for monthly among 8000 per month is large, diet pattern mixed is more, and the dust allergy means peenisam is large in the Sankar nagar area due to settle of dust particles, The people who are mostly affected with the living period of 10 yrs is more.

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