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SOCIO-ECONOMIC CONDITIONS AND OCCUPATIONAL HEALTH CHALLENGES OF WOMEN CONSTRUCTION WORKERS: A CASE STUDY IN MADURAI DISTRICT, TAMIL NADU

A. Subha Bharathi[1], Dr. T. Indra[2]
[1]*PhD Research Scholar, School of Economics, Madurai Kamaraj University, Madurai-21*
[2]*Assistant Professor, School of Economics, Madurai Kamaraj University, Madurai -21*
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ABSTRACT
The construction sector plays an important role in the livelihoods of rural poor populations, contributing significantly to their economic sustenance. This study focuses on the status and significance of women construction workers in the Madurai district of Tamil Nadu. More than 3 lakh construction workers are employed in Tamil Nadu facing various challenges on a daily basis. Women in this sector encounter numerous issues including socio-economic hardships, environmental risks and health problems at the worksite. The present study investigates the socio-economic conditions and occupational health problems faced by women in Madurai's construction industry. The construction sector a key employer in developing countries like India predominantly hires unskilled and semi-skilled labour. Women workers in construction industry endure long working hours, wage discrimination and adverse working conditions often with limited access to social security or healthcare. Data collected from 60 respondents through purposive sampling reveals that most of the women workers are between 30 and 50 years old and have only a primary level of education. Despite their significant contributions these women face a multitude of challenges such as health issues like neck and shoulder pain, anaemia and asthma with minimal awareness of medical insurance. The study highlights the urgent need for targeted interventions aimed at improving economic security, health awareness, and working conditions for women in the construction sector.
KEYWORDS: *construction women workers, marginalized, health problems, wage discrimination, livelihood.*

INTRODUCTION
In developing countries, the construction industry plays a significant role in driving economic growth. It provides a large number of employment opportunities for both skilled and unskilled labourers. Housing is a fundamental need for every individual and the construction sector is a key contributor in fulfilling this demand. A large portion of India's workforce is engaged in the unorganized sector which is supported by various economic resources. India has a workforce of 501 million people, making it the second-largest labour force globally. Of these 17.1 million workers are part of the unorganized sector (Business Standard, 2016).

The term "unorganized worker" is defined under the Unorganized Workers' Social Security Act, 2008. It refers to home-based workers, self-employed workers or wage workers in the unorganized sector as well as workers in the organized sector who are not covered under any of the acts listed in Schedule II of the Act. A significant portion of this workforce is composed of semi-skilled and unskilled labour. Workers in the unorganized sector are primarily found in industries such as housing, handicrafts, tailoring, fishing, leatherwork, agriculture, landless labour, small and marginal farming, salt production and oil mills (UWSSA, 2008).

Employment in the unorganized sector is typically characterized by contract work, casual labour, migrant workers and agricultural labourers. Women workers especially in the construction sector often hold low-level positions. Many migrant women workers acquire new skills and become financially independent with their income gradually increasing. They often lack awareness about workplace safety, accidents and hygiene. In many developing countries there is minimal knowledge about safety regulations in the construction industry and labourers typically lack access to insurance coverage.

Women Workers in the Construction Industry
In India, women workers in the construction industry are predominantly semi-skilled or unskilled. They are mainly involved in tasks such as carrying sand, stone, bricks and cement at construction sites. These workers commonly referred to as "chittal," typically work for more than eight hours a day. While agriculture remains the first choice of employment for women workers construction comes second due to the relative ease of securing jobs in this unorganized sector. Most of the women in the unorganized sector have only completed primary education limiting their opportunities for advancement.

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REVIEW OF LITERATURE

Anjali et.al (2016) found the temporary nature of activity started and happiness to poor socio-economic standing reduces their priority to activity health and safety. The occupations involve varied work connected hazards. These activity hazards are a unit the resultant risk to health. The study aimed to work out activity health situation within the India informal sector. One thousand eleven hundred and 22 women workers from five totally different occupations specifically weaving, construction, transportation, tobacco process and fish process were assessed by scientist administrated health form. Women worker suffered from contractile organ complaints, eye issues and skin connected complaints. There was high prevalence of self – reported activity health issues within the choose sectors. The study finds that women worker has activity exposures to multiple hazards. The absence of protecting guards aggregates their health conditions.

Monika Yadav (2015) despite the mountain of funds on the market, one keeps seeing women worker carrying babies at their waist while they struggle to hold basins of mud on their head thanks to the shortage of day- care centres for his or her youngsters at the most work-sites. Worse, one reads regarding workers' children falling fatally into open sumps or into construction pits. The women worker wasn't aware of the schemes' that are a unit on the market for the developing women worker. Neither their contractor nor the supervisor mentions them regarding their right from government. Their skills don't seem to be upgrade as they're allowed to perform just some varieties of work and typically, they back of the male workforce. India is one amongst the quickest growing economies of the globe.

Ravi kumar (2013) findings of the study show that a lot of women construction worker are a unit illiterate, widows, solely earning members of the family, from depressed category and from low financial reception and work place and that they are a unit discriminated in wage and promotion. The vital reasons why women don't seem to be promoted as masons is that the gender bias that men and women have, and women workers in construction industry don't seem to be trained informally like men within the housing industry. Most of the women are a unit willing to become masons, and men particularly the contractors, area unit willing to just accept them train and provides them placement within the housing industry.

OBJECTIVES OF THE STUDY

1. To examine the socio-economic condition of the construction women workers.
2. To investigate the work-related health issues and health awareness of the construction women workers.

METHODOLOGY

Research Design

This study examines the socioeconomic conditions and occupational health issues of women construction workers in the Madurai district of Tamil Nadu. It adopts an empirical approach by using both primary and secondary data sources.

Sampling Technique

A sample of 60 women construction workers from the Madurai district was selected through a simple random sampling technique. It is needed on how randomization was implemented to ensure the sample's representativeness given the small size. It is important to consider whether this sample accurately reflects the broader population of women construction workers in the region.

Data Collection

Primary data were collected through face-to-face interviews conducted in Tamil the local language. An interview schedule was used to guide the interviews and record specific details. Secondary data were gathered from various sources including magazines, journals, publications, books, articles, research papers, websites, government reports and brochures.

Qualitative Data

Qualitative data were obtained through detailed interviews, allowing the participants to share their personal experiences and perspectives. This qualitative approach provided deeper insights into the socio-economic conditions and occupational health challenges faced by women construction workers.

Data analysis

Basic statistical tools such as percentages and figures were used for data analysis. Providing a clear understanding of the socio-economic and occupational health issues among the women construction workers.

RESULT AND DISCUSSION

Table 1: Age of the Respondents

Sl. No	Age Composition	No. of respondents	Percentage
1	25-30	8	13.3
2	30-40	22	36.7
3	40-50	19	31.7
4	Above 50	11	18.3
Total		**60**	**100**

Source: Primary Data.

The table (1) it is inferred that 36.7 per cent of the respondents are within the people of 30-40 followed by 31.7 per cent are in 40-50 and regarding eighteen per cent are in above 50 and remaining thirteen per cent are in 25-30. It's clear that the foremost of women worker are engaged construction sector in their time of life.

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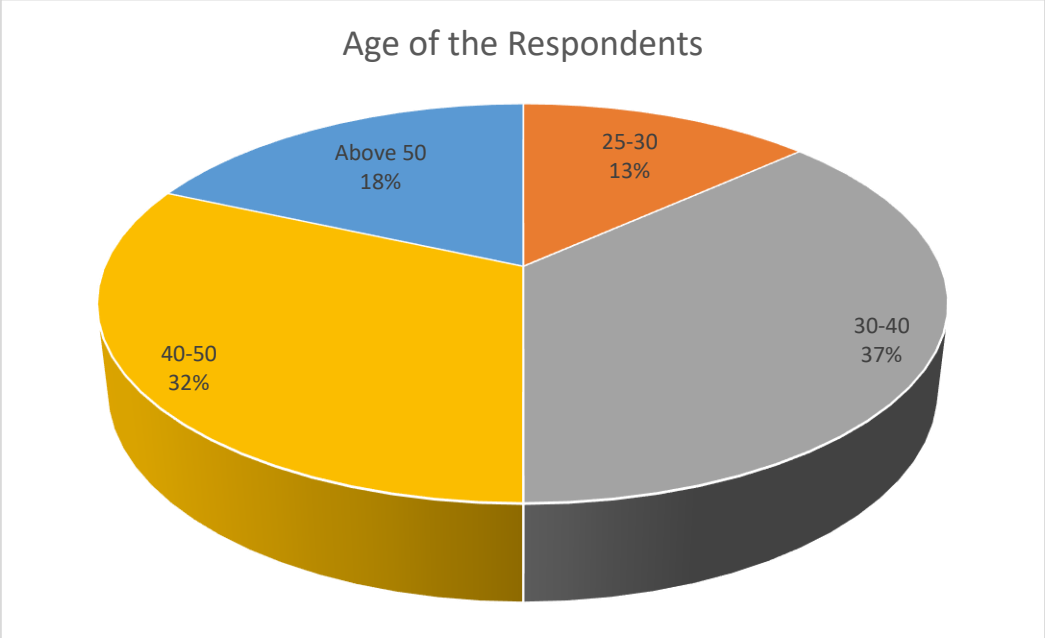


Table 2: Educational Level of the Respondents

Sl. No	Educational Level	No. of respondents	Percentage
1	Illiterate	17	28.3
2	Primary	43	71.7
	Total	**60**	**100**

Source: Primary Data.

This table 71.7 per cent of the respondents studied school solely. None of the respondents have seemed not even crossed school.

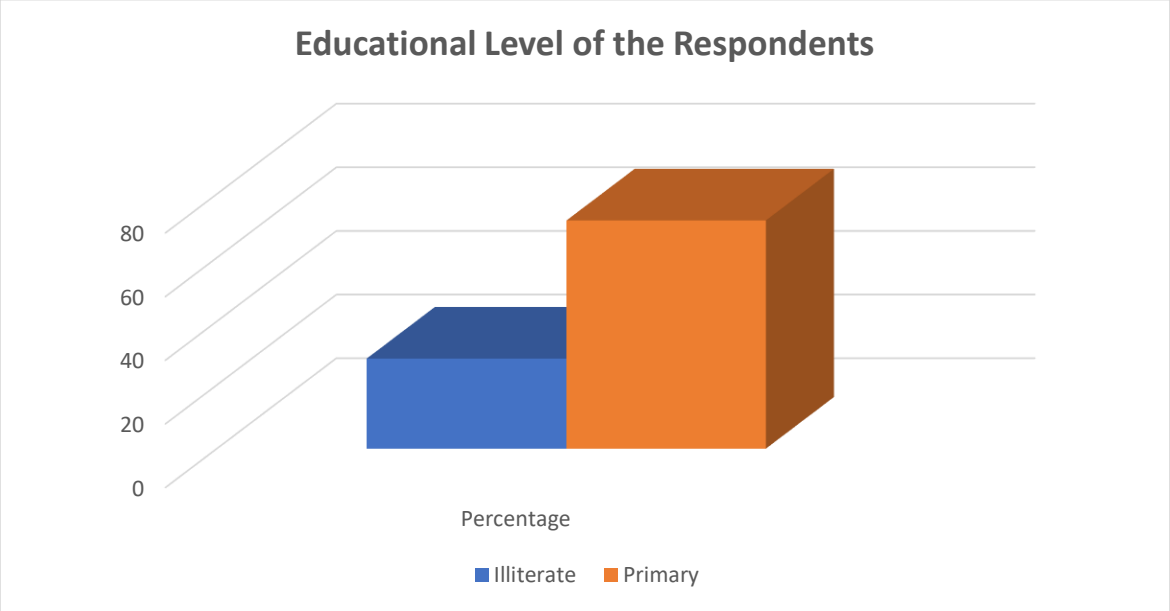


Table 3: Monthly Income of the Respondents

Sl. No	Monthly Income	No. of respondents	Percentage
1	Below 10,000	10	16. 7
2	10,000-12,000	23	38.3
3	12,000-13,000	15	25
4	13,000-15,000	12	20
Total		**60**	**100**

Source: Primary Data.

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Table (3) indicates that 38 per cent of the respondents are earning 10,000-12,000 per month followed by 25 per cent of the respondents are earning 12,000-13,000 and 16 per cent are below 10,000 and 20 per cent of the respondents gain around 15,000 per month

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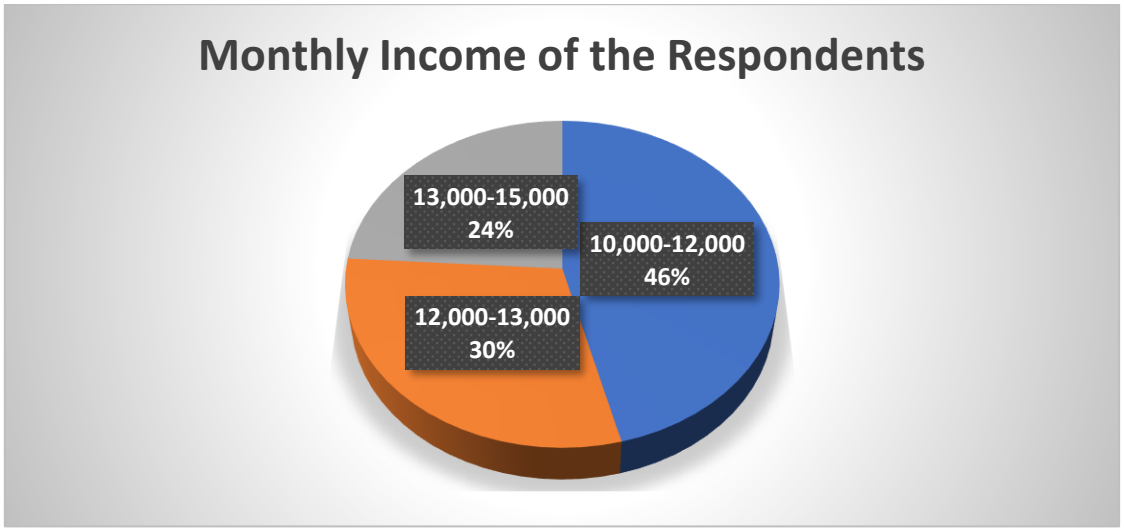


Table 4: Expenditure of the Respondents

Sl. No	Monthly Expenditure	No. of respondents	Percentage
1	Below 3000	12	20
2	3000-5000	21	35
3	Above 5000	27	45
Total		**60**	**100**

Source: Primary Data.

This table (4) shows the expenditure of respondents per month. It's clearly perceived that half of respondents that is 45 per cent are spending their earning more than 5000 followed by 35 per cent are 3000-5000 and remaining 20 per cent respondents spend below 3000.

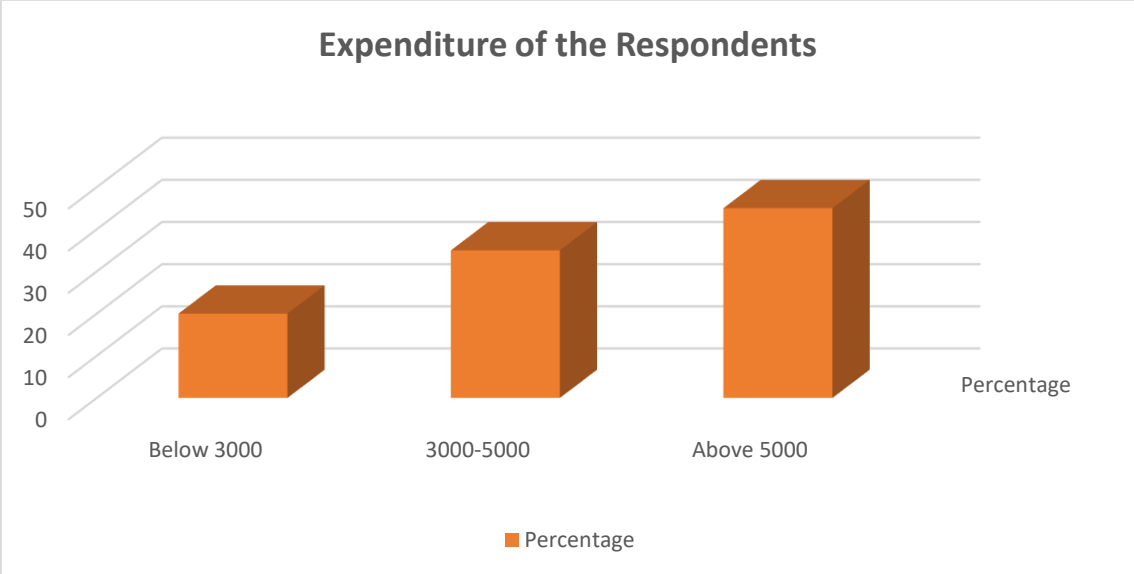


Table 5: Saving of the Respondents

Sl. No	Monthly Saving	No. of respondents	Percentage
1	Nil saving	14	23. 3
2	Below 3000	24	40
3	3000-5000	15	25
4	Above 5000	7	11. 7
Total		**60**	**100**

Source: Primary Data.

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The table (5) shows the saving ability of the respondents 40 per cent of the respondents save below 3000 per month followed by 25 per cent save 3000-5000 and 11 per cent save more than 5000 and remaining 23 per cent respondents don't seem to save. This table it's perceivable that the majority of the respondents have the habit of saving.

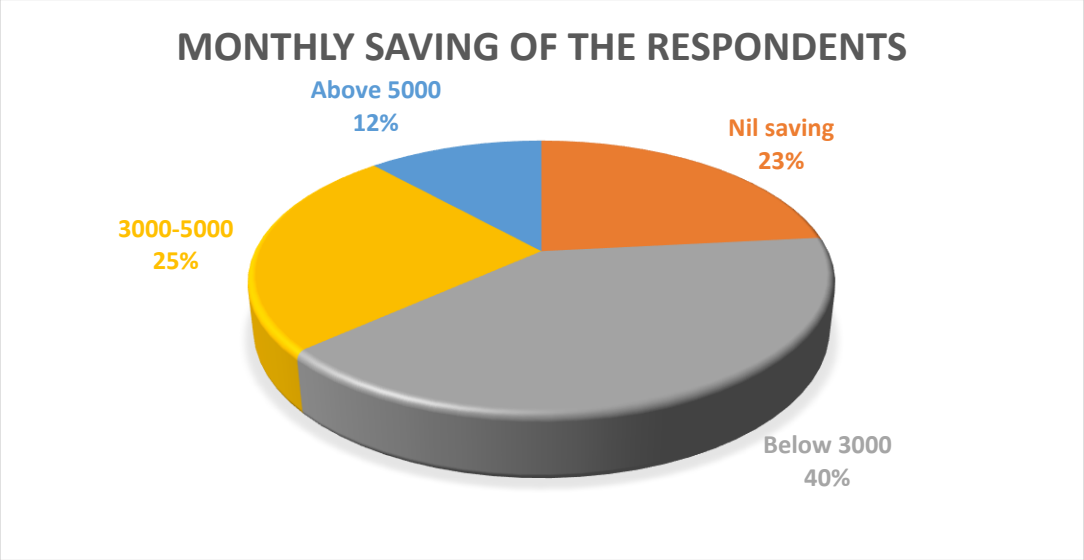


Table 6: Debt of the Respondents

Sl. No	Debt	No. of respondents	Percentage
1	Health problem	22	36. 7
2	Construction	11	18. 3
3	Marriage	17	28. 3
4	Education	10	16. 7
Total		**60**	**100**

Source: Primary Data.

The table (6) reveals that all respondents have debts for her family needs likes medical expenditure, education of their youngsters, construct a home and their youngster's marriage, etc., virtually half the respondents 36 borrow cash for his or her health problem, 16 per cent for youngster education followed by 28 per cent for wedding and 18 per cent for construct a home and 14 per cent of the respondents borrow cash to fulfill medical expenditure.

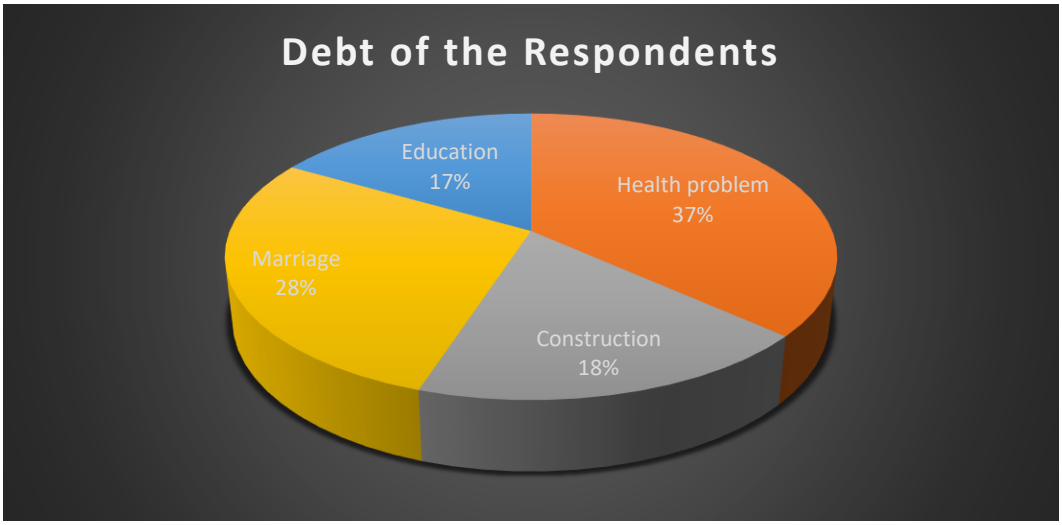


Table 7: Time and Work of the Respondents

Sl. No	Time and Work	No. of respondents	Percentage
1	Below 8 hours	8	13.3
2	8 hours	29	48.3
3	Above 8 hours	23	38.4
Total		**60**	**100**

Source: Primary Data.

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This table (7) shows the working hours of the respondents 48 per cent of the respondent workers worked for eight hours sometimes followed by 38 per cent of the respondents worked more than 8 hour and 13 per cent of the women worker was engaged but 8 hours.

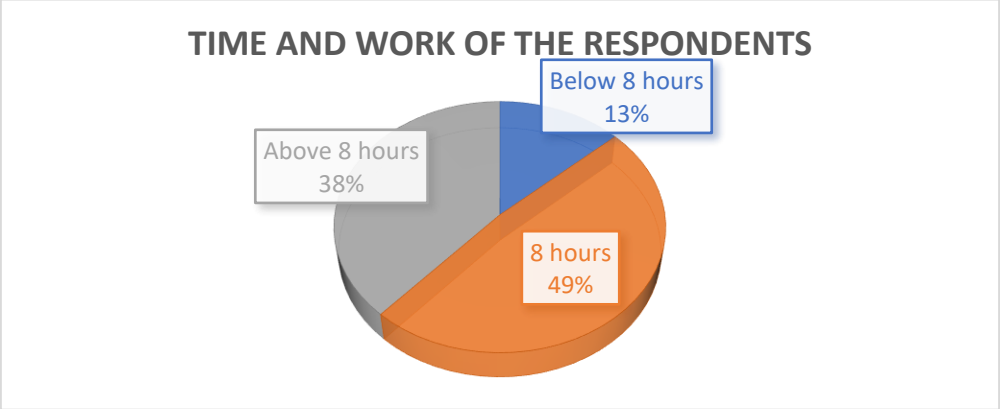


Table 8: Health Problems of the Respondents

Sl. No	Health problem	No. of respondents	Percentage
1	Anemia	11	18.3
2	Asthma	9	15
3	Back ache and headache	15	25
4	Neck pain and shoulder pain	18	30
5	Hypertension	7	11.7
Total		**60**	**100**

Source: Primary Data.

This table (8) shows the number of the health problems with the construction women workers. Most of respondents are 30 per cent have neck and shoulder pain followed by 25 per cent have headache and back ache and about 18 per cent were stricken by anemia and 15 per cent of the respondents have bronchial asthma and 11 per cent of them feel hypertension at the work place.

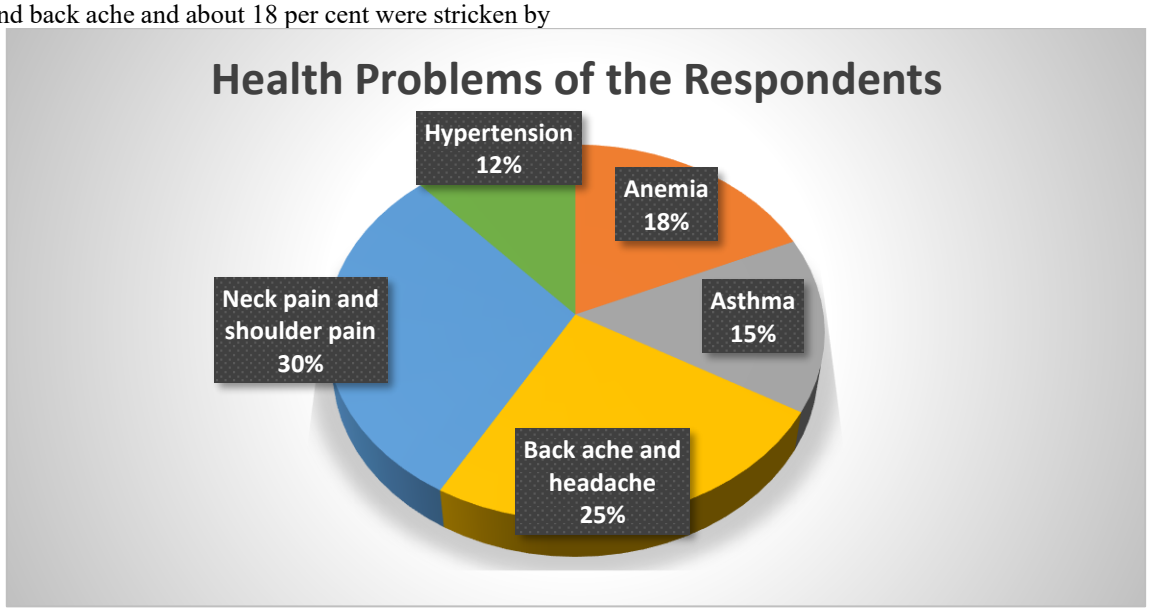


Table 9: Medical Insurance of the Respondents

Sl. No	Medical Insurance	No. of respondents	Percentage
1	Yes	21	35
2	No	39	65
Total		**60**	**100**

Source: Primary Data.

This table (9) clearly displays the notice of the respondents close to holding medical insurance. 65 per cent of the respondents haven't insured. 35 per cent women worker have medical insurance. It's clear from the table most of the respondents have poor awareness about medical insurance.

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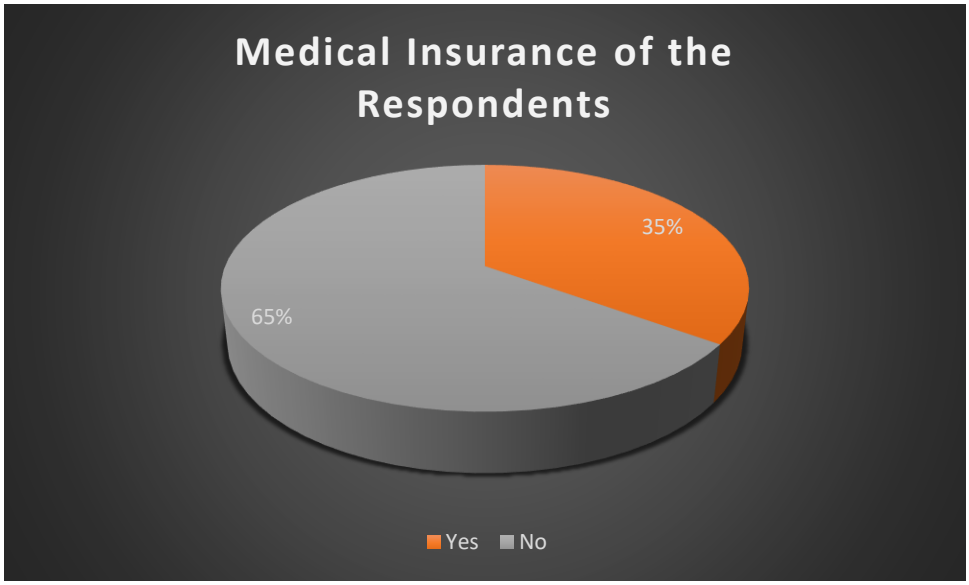


Table 10: Wage Discrimination

Sl. No	Wage Discrimination	No. of respondents	Percentage
1	Yes	60	100
2	No	0	0
Total		**60**	**100**

Source: Primary Data.

It is terribly clear from the more than table that women worker in construction have round face in the matter of wage discrimination within the construction field.

DISCUSSION AND IMPLICATIONS

The findings align with existing literature which similarly identifies wage discrimination, poor working conditions and a lack of health awareness among unorganized sector workers. The analysis adds specificity by linking particular health conditions like anemia and musculoskeletal issues to the physically demanding and hazardous conditions these women face. Long working hours, combined with poor ergonomics and lack of safety measures, exacerbate these health challenges.

Socio-economic factors also play a major role. Limited education combined with the informal nature of employment constrains these women's opportunities for upward mobility. The systemic factors contributing to these conditions include inadequate enforcement of labour laws, lack of access to social security and insufficient healthcare infrastructure both at local and national levels. Existing government schemes such as medical insurance are either not well-publicized or difficult to access due to bureaucratic inefficiencies.

CONCLUSION AND RECOMMENDATIONS

The study underscores the urgent need for targeted interventions to address the issues faced by women construction workers in Madurai. Stricter enforcement of wage parity laws would help combat wage discrimination. Providing mandatory health and safety training and regular medical check-ups would mitigate many occupational health risks. Improving access to affordable healthcare through government-sponsored medical insurance programs is essential to alleviate the financial burden caused by health problems.

Expanding skill development programs can empower women workers by providing them with opportunities for higher paying jobs. The introduction of daycare facilities at construction sites would reduce the dual burden of work and childcare increasing productivity and improving work life balance. Raising awareness about existing government schemes and ensuring that these programs are easily accessible through simplified procedures would greatly enhance the socio-economic security of women construction workers.

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