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**“A cross-sectional study to assess the body Mechanics,  
perceived musculoskeletal problems and health-seeking  
behaviour among Construction workers of Udupi district.” ”**

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## "ABSTRACT

A study to assess the body mechanics perceived musculoskeletal problems and health-seeking behaviour of construction workers of Udupi district was carried out at construction sites in selected panchayats of Udupi district by Mr Raghavendra Nayak for the award of MSc Nursing Degree.

The objectives of the study were to assess the body mechanics, to find the perceived musculoskeletal problems and health-seeking behaviour among construction workers of Udupi district.

The modified conceptual framework adopted from Irwin Rosen Stocks Health-Belief Model 1950 for the study. Through quantitative research approach cross-sectional survey design used in the study. The simple random sampling technique used to select Taluks and panchayats from Udupi district and samples collected using a convenient sampling technique.

To collect data self-reported tools used they were, Tool 1: socio-demographic proforma, Tool 2: body mechanics five-point rating scale for construction workers, Tool 3: modified Nordic Musculoskeletal Questionnaire (NMQ) for construction workers and Tool 4: health-seeking behaviour three-point rating scale for construction workers.

The content validity of all the four tools established by giving to seven experts and according their suggestions modifications were done wherever applicable. All the tools were pre-tested and reliability was established. The reliability of the body mechanics rating scale was established by Cronbach's Alpha method, modified Nordic musculoskeletal Questionnaire established using Kuder Richedson's K 20 formula and Abstract

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health-seeking behaviour rating scale were established using Cronbach's Alpha method. All the tools were found reliable.

Administrative permission obtained from Dean Manipal College of Nursing Manipal, Institutional Research Committee, MCON, Manipal, clearance sought from Institutional Ethics Committee Kasturba Hospital and Kasturba Medical College Manipal, permission obtained from panchayat authorities under the study, CTRI registration done and informed consent taken from the study participants. Data for main study collected from 390 participants from January to April 2020. SPSS Version 16.0

used to analyse the data and analysis done through descriptive statistics.

The study results uncovered that majority 144(36.9%) of the participants fall between the age group of 41-50 years and 376(96.4%) of them were men and Hindus respectively from village residents. Most 240(61.5%) of them were from nuclear family and 135(34.6%) of them had primary education qualification. Most 220(56.4%) of them have monthly income less than 10,000 Indian rupees and 204(52.3%) of them having primary health centers near to their home. Most 196(50.3%) of them having more than ten years of experience in the same field of work and 107(27.4%) of them reported availability of leave facility without pay. Large 375(96.2%) number of participants having eight hours of work per day and six days per week 245(62.8%). Most 145(37.2%) of them using tobacco and 31(7.9%) of them had hypertension. Most 247(63.3%) of them having health insurance schemes out of which 120(30.8%) participants had Ayushman Bharat scheme. Few 32(8.2%) of them had information on body mechanics from friends 13(3.3%) as a source of information.

Abstract

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The overall body mechanics score revealed that most 79% of the participants had a fair practice and 21% of them had a good practice of body mechanics score while working at construction sites.

The perceived musculoskeletal problems score shows that most of the participants had problems in lower back and pelvis in the last 12 months and in the last one week. Most of the construction workers reported lower back issues for their restriction of activities in the last 12 months.

The overall health-seeking behaviour score of construction workers revealed that most 99.5% of them had beneficial health-seeking behaviour and only 0.5% of them had non-beneficial health-seeking behaviour for musculoskeletal problems.

The study showed that a large number of construction workers follow a fair practice of body mechanics while working at the construction sites. Many of the participants had lower back problems and which caused them to work absenteeism and restriction of routine activities for a longer time. The large participants had beneficial health-seeking behaviour for their illness which may be due to the presence of healthcare resources in the district.

The study recommends for awareness programmes and training for construction workers about the effective use of body postures at the working sites. Proper screening and referral services for construction workers important to reduce and prevent musculoskeletal problems. Media and concerned authorities have a responsible role in spreading awareness on labour welfare facility which meant for them."