



AWARENESS OF PHYSIOTHERAPY AMONG MEDICAL RESIDENTS: A CROSS SECTIONAL SURVEY

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Abstract: Medical residents will be future medical consultants so physiotherapy awareness among them is necessary so that work of physiotherapy can be enhanced and can be used widely with appropriate knowledge and concern. To know the acceptance and extent of awareness among medical residents. Total of 80 medical residents were included. The study identified that there is need to educate medical residents.

Index Terms – Medical residents, Questionnaire form, Sakinaka, Kurla.

INTRODUCTION

World Confederation for Physical Therapy (WCPT) defines Physical Therapy as providing services to people and populations to develop maintain and restore maximum movement and functional ability throughout the life-span. This includes providing services in circumstances where movement and function are threatened by ageing, injury, diseases, disorders, conditions or environmental factors.¹

The First World War marked the start of the profession. Throughout the world 16 million people were engaged in the battlefield. In 1917, the US entered the war and the need to rehabilitate injured soldiers was recognized by the army. This led to the formation of a special unit of the army medical department. In 1920 a partnership grew between physiotherapy and medical and surgical community, which boosted public recognition and validation.² In 1930s, the polio epidemic was still continuing, and the year 1937 the national foundation of infantile paralysis was established. The world entered the second world war and the physical therapy continue to show its dominance by treating the individuals who sustain injury during the war.²

Physiotherapy as a profession has evolved over the years from general forms of physical therapies to specialized physiotherapy services in healthcare settings. Despite the recognition and advances gained worldwide in physiotherapy, yet there are few researches done in India to evaluate the awareness of physiotherapy among clinical doctors of India.

Thus it is important to increase the awareness of the role of a physiotherapist among the medical residents which would be future clinical consultants, so that the work of physical therapy can be enhanced and can be used widely with appropriate knowledge and concern. Physiotherapy is now practiced extensively in the community however the situation in India is still challenging and the need for physiotherapy awareness necessary among medical residents.

II. AIM

- To study the awareness of physiotherapy among medical residents.

III. OBJECTIVES

- To study about awareness of different fields of physiotherapy among medical residents.
- To study about if they have perceived enough background to refer patient to physiotherapy effectively.

IV. HYPOTHESIS

- NULL HYPOTHESIS- There is not enough awareness of physiotherapy among medical residents.
- ALTERNATIVE HYPOTHESIS - There is enough awareness of physiotherapy among medical residents.

V. METHODOLOGY

- STUDY DESIGN. : Cross sectional survey
- SAMPLING METHOD. : Convenience Sampling
- SAMPLE SIZE. : 80

- **INCLUSION CRITERIA :**

- Both the genders
- Medical residents

- **EXCLUSION CRITERIA :**

- Subjects not willing to participate
- Subjects not able to complete the questionnaire.

- **MATERIALS:**

- Pen
- Questionnaire form
- Information sheet
- Data collection sheet

VI. PROCEDURE

It is a cross sectional survey study. The survey was conducted offline using a pre validated questionnaire.

Ethical clearance was obtained from the Institutional Ethics Committee of TMV's Lokmanya Tilak College of Physiotherapy, Kharghar.

Consent form of the included participants was taken and information sheet was explained to them. A pre validated questionnaire consisting of 12 questions was made in English language. In the study all willing medical residents meeting the inclusion criteria was included. The sample size of 80 subjects was taken. After the questionnaire was made the questionnaire was taken to hospitals in Sakinaka and Kurla and questionnaire was administered to study subjects via face to face method. The questions were kept closed ended to avoid statistical error.

DEMOGRAPHICS: Name, Age and Sex

VII. RESULTS

Descriptive statistics was conducted to evaluate the responses obtained from the subjects. The percentage of response for each question was calculated.

Regarding the duration of physiotherapy course, 81.25% were of the opinion that physiotherapy is a 4.5 year course. While 16.25% were of the opinion that it is a 4 year course.

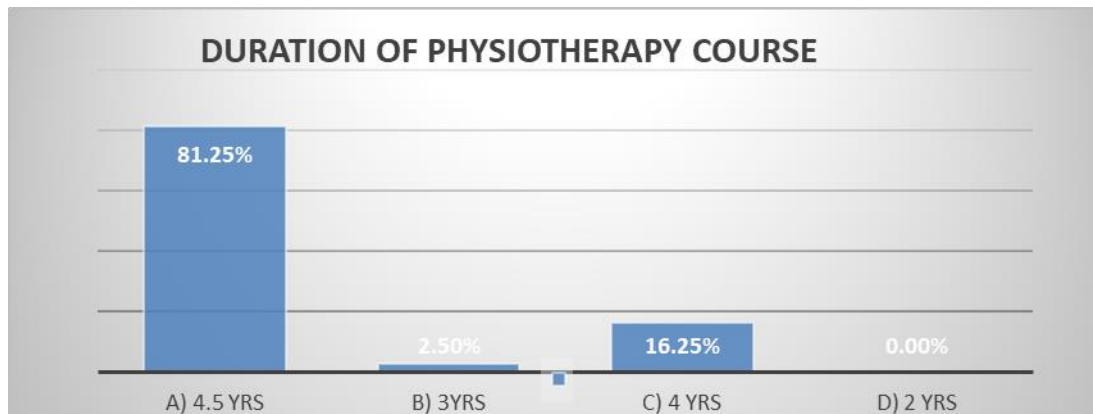


Fig 1 : Duration of physiotherapy course according to Medical residents.

It was observed that 68.75% of the residents thought that Physiotherapy was a Degree course, 55% a professional course while 3.75% a diploma course.

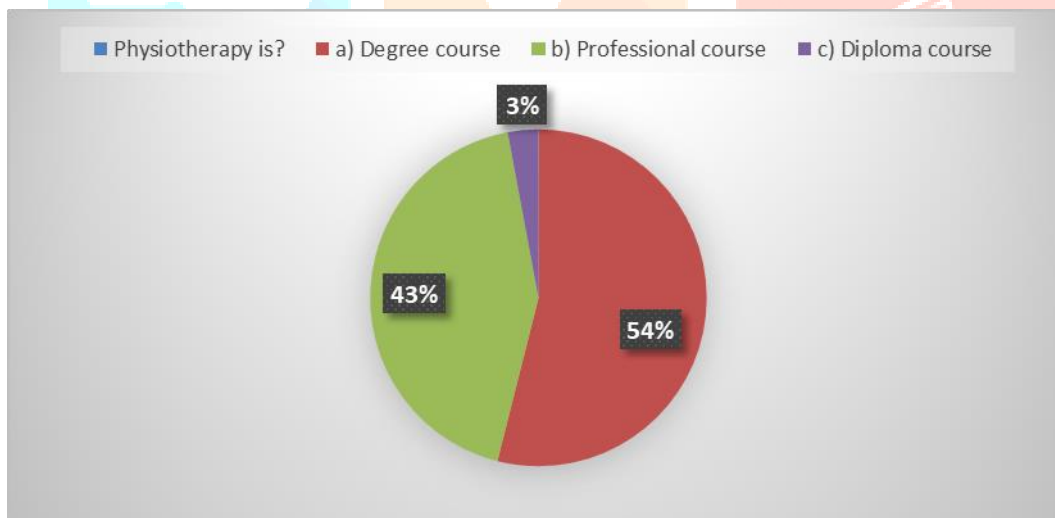


Fig 2 : This picture represents about the knowledge of physiotherapy course according to Medical residents.

On enquiring about various clinical aspects of Physiotherapy, the following results were found.

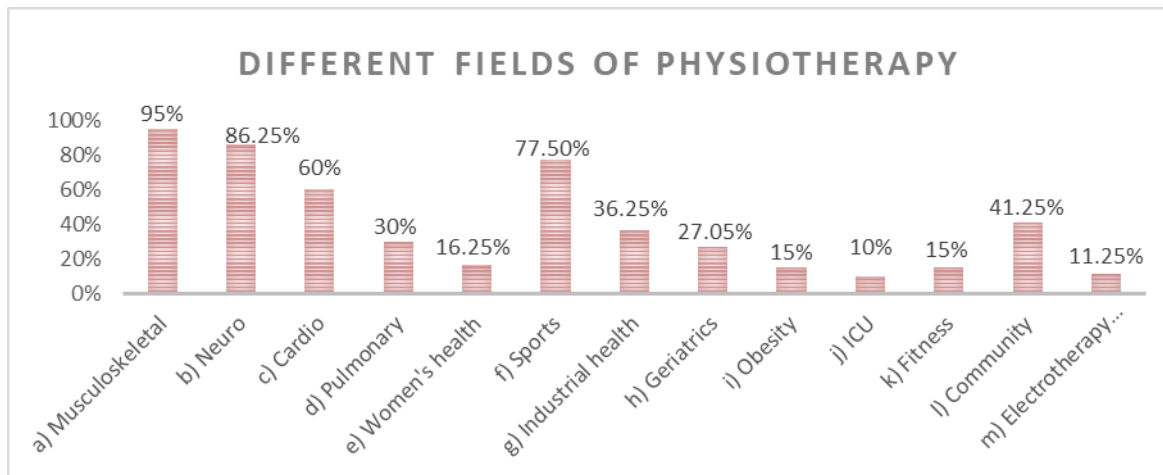


Fig 3 : The figure represents that the residents had highest knowledge about musculoskeletal physiotherapy(95%), followed by neuro physiotherapy(86.25%), sports(77.50%) and cardio(60%) while least was reported for ICU(10%) and electrotherapy and diagnosis(11.25%).

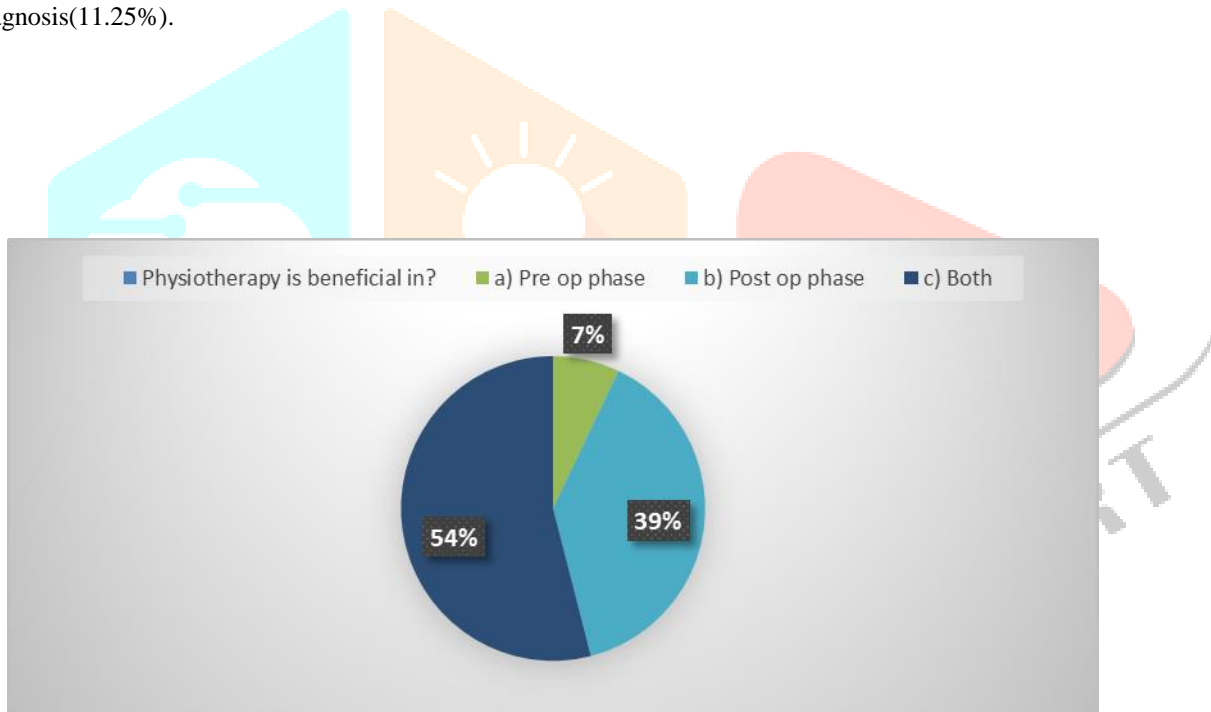


Fig 4 : The above graph represents that the Medical residents were of the opinion that physiotherapy was mostly referred for both(54%) pre as well as post operative physiotherapy.

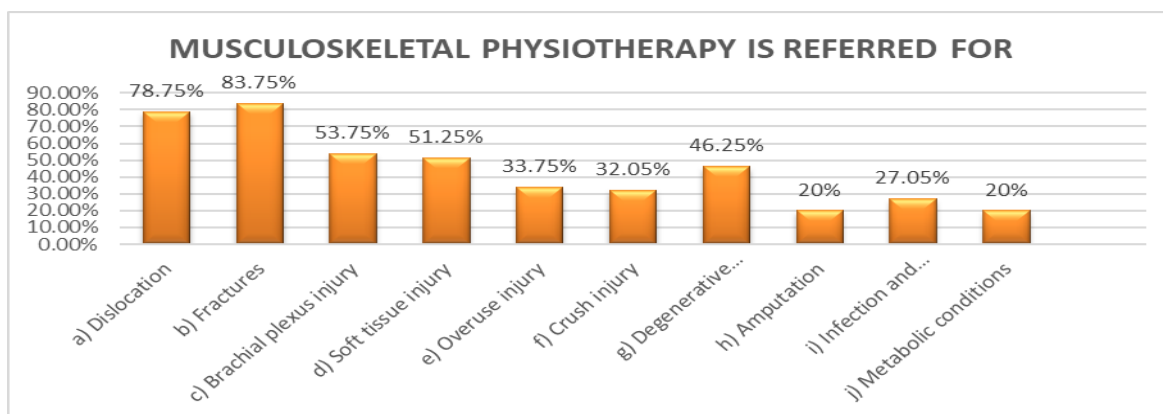


Fig 5 : According to residents musculoskeletal is highest referred for fractures(83.75%) and dislocation(78.75%) while least is recorded for amputation(20%) and metabolic conditions(20%).

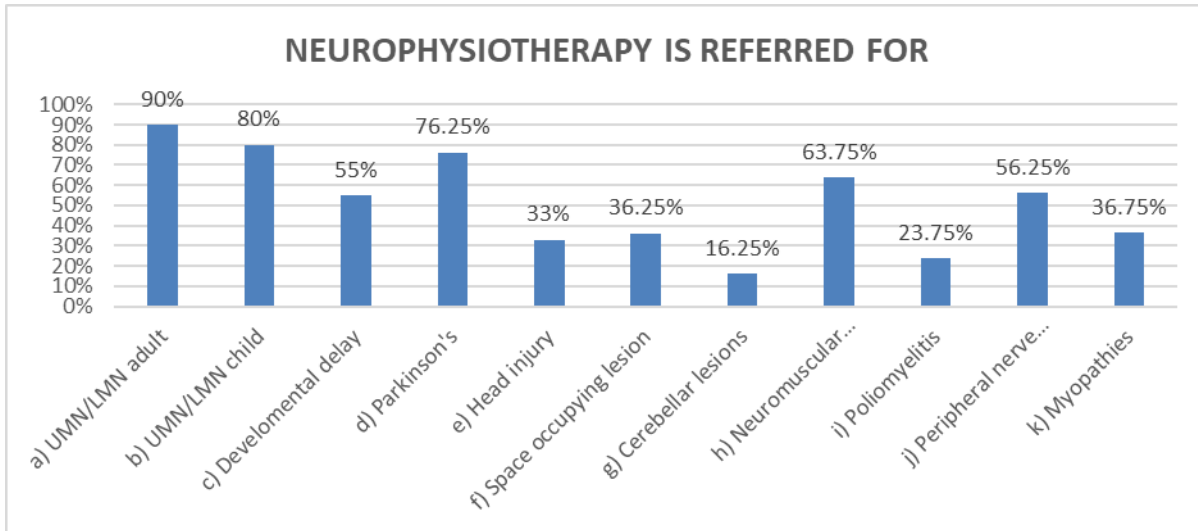


Fig 6 : According to residents, Neuro physiotherapy is referred highest for Umn/lmn adult(90%) followed by Umn/lmn child(80%) and parkinson's(76.25%) while least were reported for cerebellar lesion(16.25%) and poliomyelitis(23.75%).

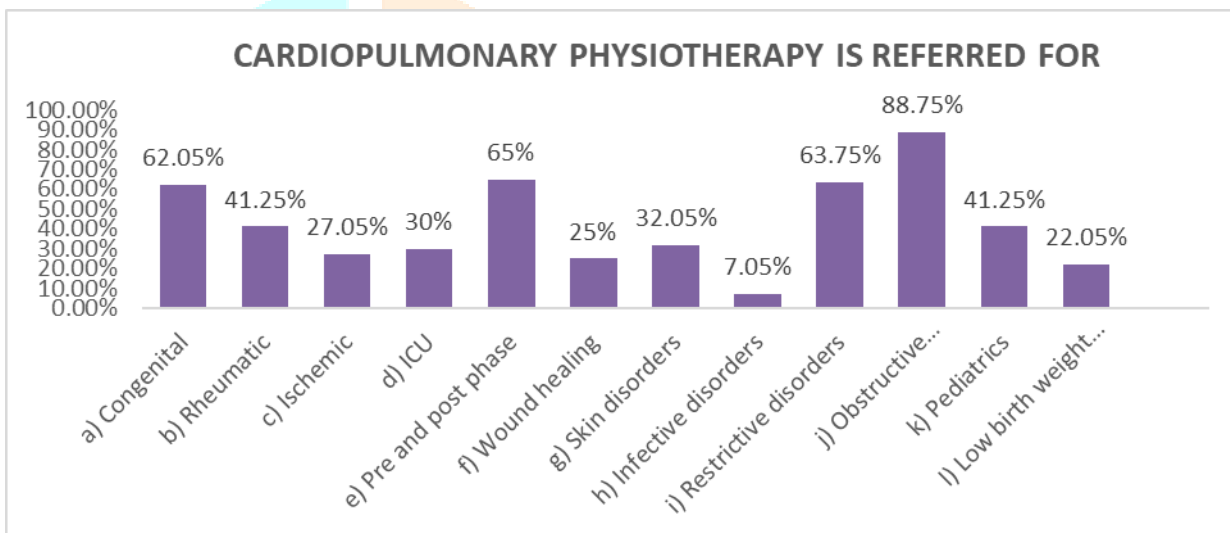


Fig 7 : According to residents, cardiopulmonary physiotherapy is highest referred for cases of obstructive(88.75%) and pre and post operative phase(65%) while least is recorded for infective disorders(7.05%) and low birth weight babies(22.05%).

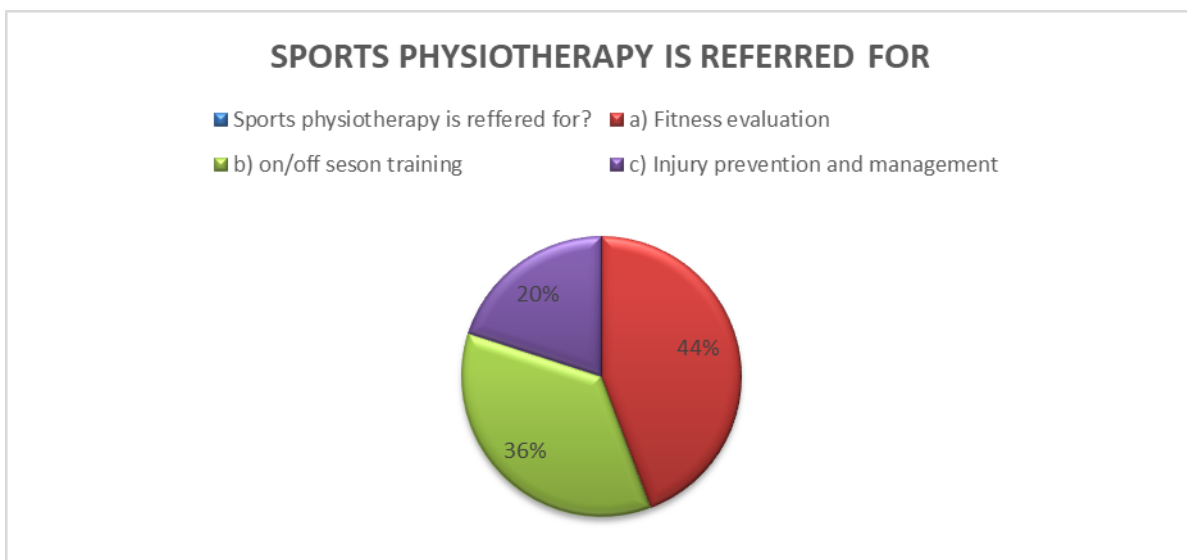


Fig 8 : According to residents, Sports physiotherapy is referred highest for fitness evaluation(91.25%), followed by on/off season training(73.75%) and injury prevention and management(41.25%).

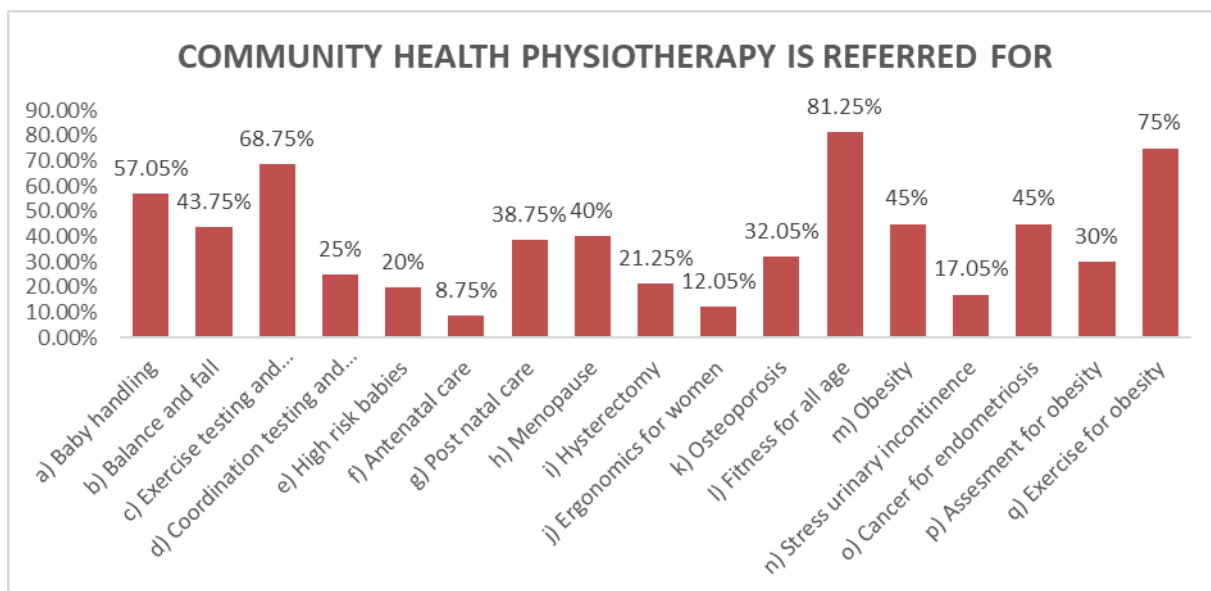


Fig 9 : According to residents, community health physiotherapy is referred highest in cases of fitness for all age(81.25%) followed by exercise for obesity(75%) while least was observed in cases of antenatal care(8.75%) and stress urinary incontinence(17.05%).

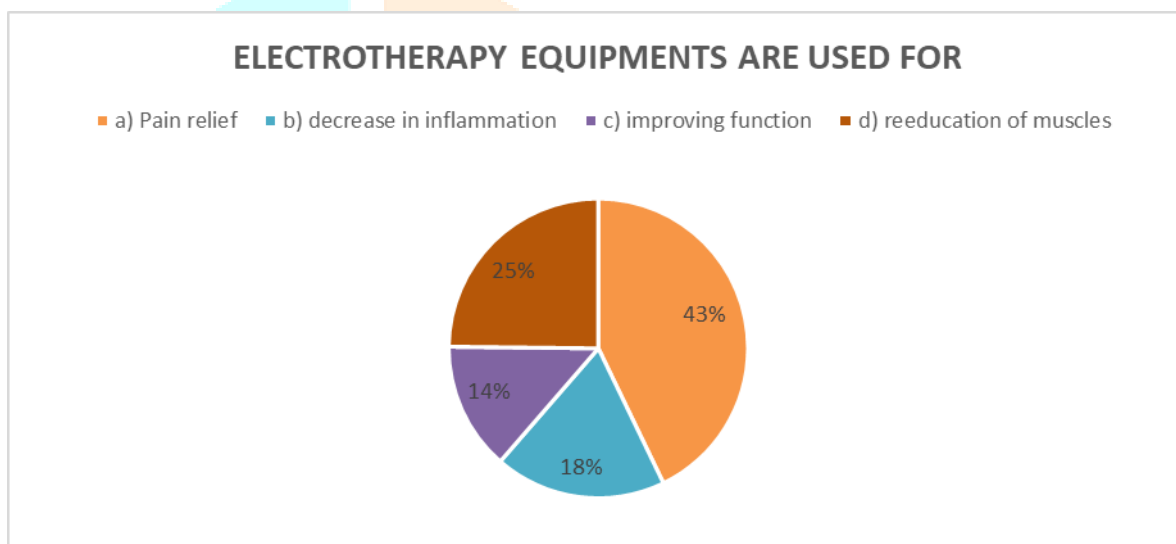


Fig 10 : According to residents, electrotherapy equipments are highest used for pain relief(43%) followed by reeducation of muscles(25%), decrease in inflammation(18%) and least for improving function(14%).

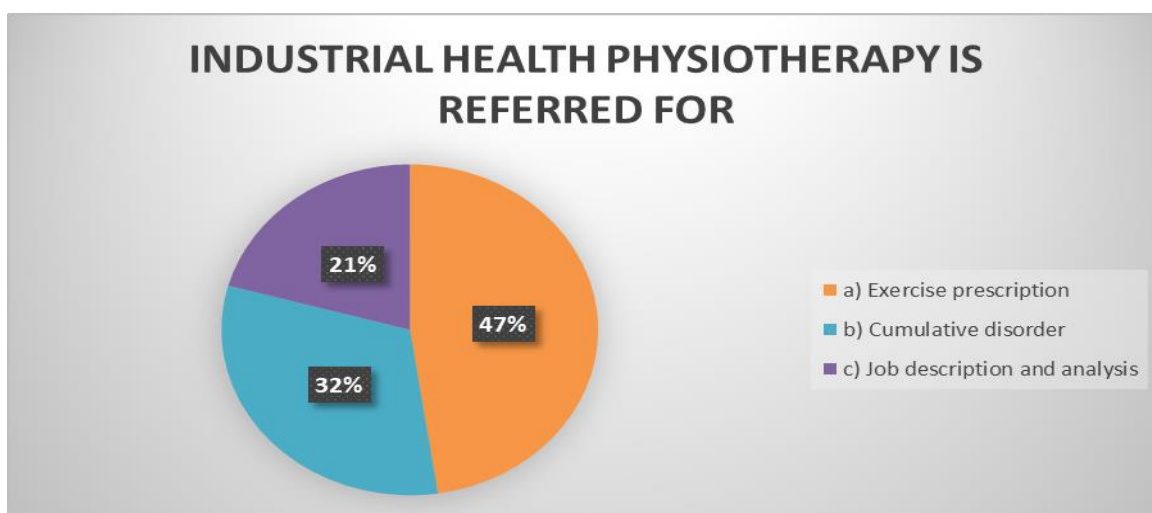


Fig 11 : According to residents, industrial health physiotherapy is referred highest in exercise prescription(47%) followed by cumulative disorder(32%) and job description and analysis(21%)

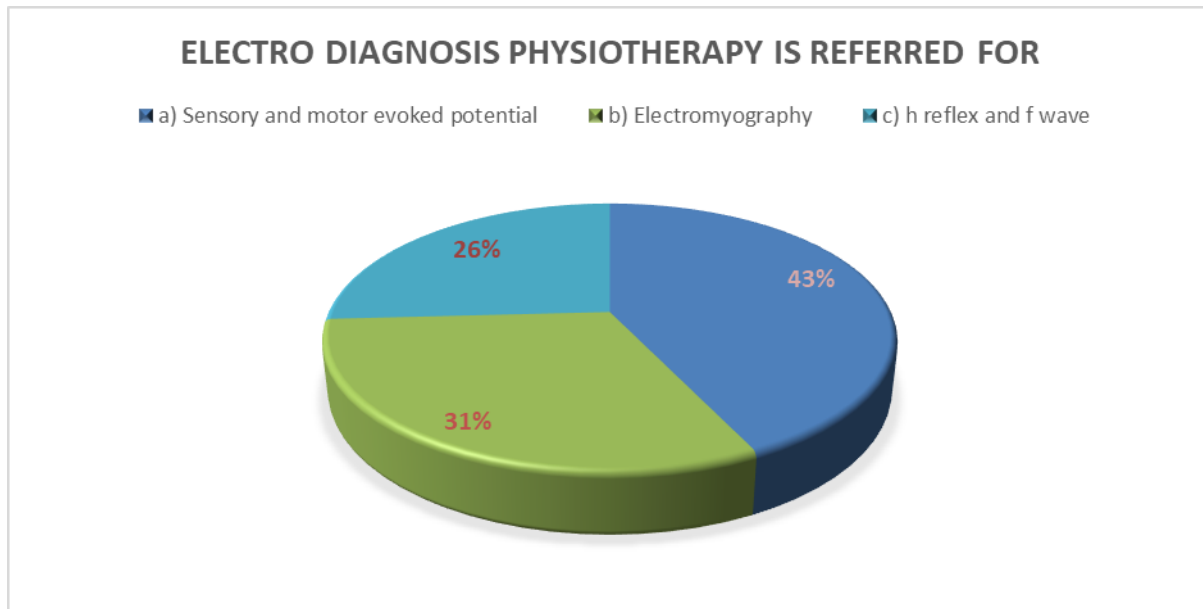


Fig 12 : According to residents Electro diagnosis Physiotherapy is referred highest for sensory and motor evoked potential(85%) followed by electromyography(62.05%) and h reflex and f wave(51.25%).

VIII. DISCUSSION

When duration of the course was studied among medical residents various responses were recorded from which highest response recorded was for 4.5 years course while some residents were of the opinion that it is a 4 year and 3 year course, while some of the residents thought that it is degree course while some of them thought that it is a diploma course. This may be due to lack of awareness about physiotherapy course which was earlier a 3 year diploma course and later evolved as a professional course of 4.5 years. Among various fields of physiotherapy the resident responded highest to musculoskeletal physiotherapy followed by neuro physiotherapy and least was found for ICU and electrotherapy and diagnosis. This may be due to lack of knowledge and advancement in different fields of physiotherapy. Similar results were seen in a study which was conducted by Devanshi Doshi (2017) a cross sectional survey to study awareness of physiotherapy in medical vs non medical population.³

According to the results the medical residents were not much aware about pre operative physiotherapy which may be due to the assumption that post operative physiotherapy is the only indication to minimize deconditioning post surgery. According to the residents cases of fractures and dislocation are referred highest while lowest is referred for metabolic conditions and amputation. This results were consistent with a study which was conducted by Deepa Abichandani and Vidhi Radia about awareness of physiotherapy among medical residents.⁶ The probable reason for lesser awareness regarding referral for metabolic and crush injuries may be due to the perception that a physiotherapist mostly deal with cases pertaining to conditions of larger joints of either traumatic or degenerative cause.⁶ The findings in which neuro physiotherapy cases are referred for were found highest for upper motor neuron and lower motor neuron conditions in adult and child were least were recorded for cerebellar lesions and space occupying lesions. Physiotherapy has a key role to play in patients with chronic neurological conditions such as stroke, parkinson's, brain injury and spinal cord injury.⁷ The possible reason for the resident's lower awareness regarding space occupying as well as cerebellar lesion could be as this condition have a first line reference to a physician or neuro surgeon while patient with upper and lower motor neuron lesions require home care for gait training, transfers and bed mobility.

It was found that highest referral was found obstructive and pre and post operative phase. While lowest was recorded for infection and wound healing. There are studies which state the importance of physiotherapy in wound healing with help of various therapies like ozone(O₃) which helps to activate proliferation of fibroblast, hence leads to successive healing.⁸

According to the residents sports physiotherapy was highest referred for fitness evaluation followed by on/off season training and injury prevention and management. This finding shows that the residents may have perception about fitness evaluation but not holistic approach which also include injury prevention and management.⁹

According to the residents Community based physiotherapy is highest referred for fitness for all age and exercise for obesity. While lowest was seen in antenatal care and hysterectomy. This show inadequate knowledge of residents regarding work of physiotherapist in women during antenatal period and post hysterectomy. According to a study there was a little awareness that PT provides special care for women and children.¹⁰

Various benefits of electrotherapy equipments used by the residents was most for pain relief followed by improving function and decrease in inflammation. This could be due to lack of knowledge regarding the therapeutic effects of various electrotherapy equipment's.

On enquiring about the referral, it was found highest for exercise prescription followed by cumulative disorder and job description and analysis. Thus the finding show that residents were aware of physiotherapist treating cumulative disorder but were not aware about the role in performing job description and analysis which include early intervention and identification of the disability of patients, in clinical evaluation and treatment. 11

According to the residents electrodiagnostic physiotherapy is referred for mostly sensory and motor evoked potential followed by electromyography and h reflex and f wave. The reason could be that the residents refer the patients to physiotherapy for sensory and motor evoked potential and may not be aware about h reflex and f wave.

IX. CONCLUSION

The study identified that there is need to educate medical residents about various fields of physiotherapy, their extensive roles in each field, treatment modalities and evaluative procedures.

Clinical implications - There should be seminars arranged with various departments promoting interactive sessions about update o each other's profession. Inter department research projects should be encouraged.

X. REFERENCES

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