

**CURRENT CLINICAL PRACTICES IN
HEMIPLEGIC REHABILITATION
AMONG PHYSIOTHERAPIST IN
INDIA**

Code SCBR2

Introduction

- Physiotherapist have different perspective and practices in stroke rehab.
- This study was aimed at understanding the current physical therapy practices in stroke rehabilitation in the India.
- The insights gained from this study will be used in a future study aimed at understanding stroke rehabilitation practices across the nation

Objective

- To understand the current clinical practices in stroke rehabilitation in India in following
 - Aim of treatment
 - Pertaining to tone
 - Facilitation of movement
 - Functional task training
 - Motor rehabilitation
 - Upper limb rehabilitation
 - Orthotics
 - Ambulation

Methodology

- Study Design: Cross sectional survey
- A survey questionnaire of **37-items** was developed through literature review.
- These questions were sent to **>1000** therapists who have treated stroke patients.
- Sample size: A total of **459** participant's point of view was analysed for the study.

RESULTS

Demographics

No's of subjects participated:

Mph students	Practicing physiotherapists
47	52

Responses obtained:

Division	North	South	East	West
No's of responses	72	178	47	156

Aim of Treatment

Statement	Agree (%)	Unsure (%)	Disagree (%)
Re-educate normal movement	99	0	0
Facilitate Postural adjustment	97	2	0
Facilitate adaptation to function	51	12	36
Prevent secondary complications in neuromuscular function	96	2	1

Pertaining to Tone

Statement	Agree (%)	Unsure (%)	Disagree (%)
In patients with hypertonia, normalizing tone is important when facilitating movement.	66	19	14
Practice of functional tasks may normalize patient's tone and movement	93	5	1
Inhibition of spasticity does not necessarily result in movement, movement needs to be facilitated.	44	53	2

Facilitation of Movement

Statement	Agree (%)	Unsure (%)	Disagree (%)
Proximal stability is prerequisite of distal selective movement.	82	15	2
Treating proximal stability will not necessarily result in recovery of distal movement in limb, distal movement needs to be facilitated	94	4	1
Therapist's role is to facilitate normal movement components.	86	12	1
Stroke patients need hands-on training.	99	0	0
Stroke patients need task-oriented functional practice	99	0	0
Stroke patients need hands-on training and task-oriented functional	99	0	0
Activating movements bilaterally helps to promote recovery on affected side	96	2	1

Specific Questions in Motor Rehabilitation

Statement	Agree (%)	Unsure (%)	Disagree (%)
In patients where potential for recovery of normal movement exists, therapists should delay performing certain activities if they are reinforcing abnormal movement patterns.	89	7	3
Improving patient's voluntary control does not necessarily improve patients ability to perform functional tasks	26	69	5
Intensive training of single-plane movement patterns can carry over into activities of daily living	22	63	14

About motor rehabilitation

Statement	Agree (%)	Unsure (%)	Disagree (%)
Active assistive movement is useful in patients with muscle weakness.	98	0	1
Patients presenting with limited active range of motion would begin with small amplitude movements.	94	3	1
Passive range of motion is important for treatment.	83	9	7

Speed of movement

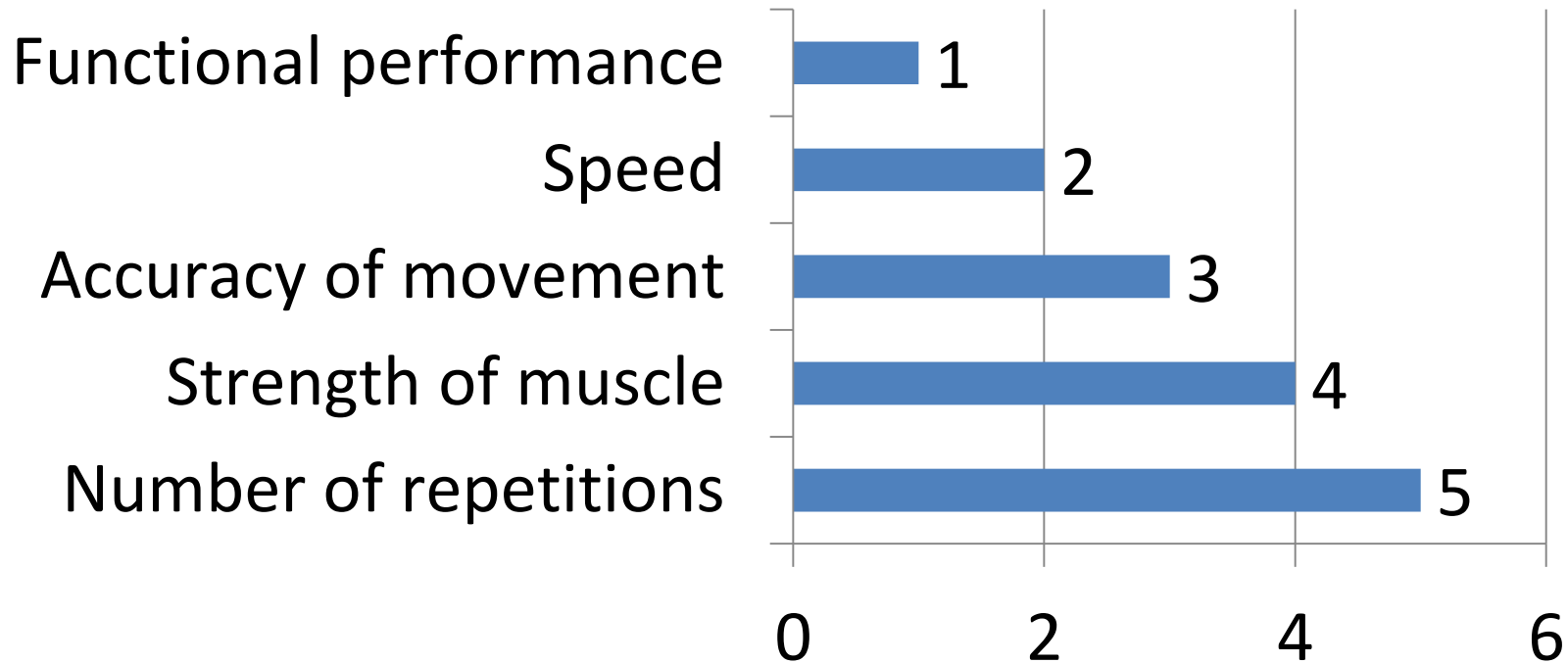
Statement	Increase (%)	Remains constant (%)	Decrease (%)
In your opinion, what should be done to speed of movement for individuals with high tone? Velocity should	89	3	7
In your opinion, what should be done to speed of movement for individuals with low tone? Velocity should	8	89	2

Incorporation of concept of Motor Learning (No's of subjects following reaserch based practice)

Options	Not sure	Not at all	Less frequently	Frequently
% of subject	2	16	72	9

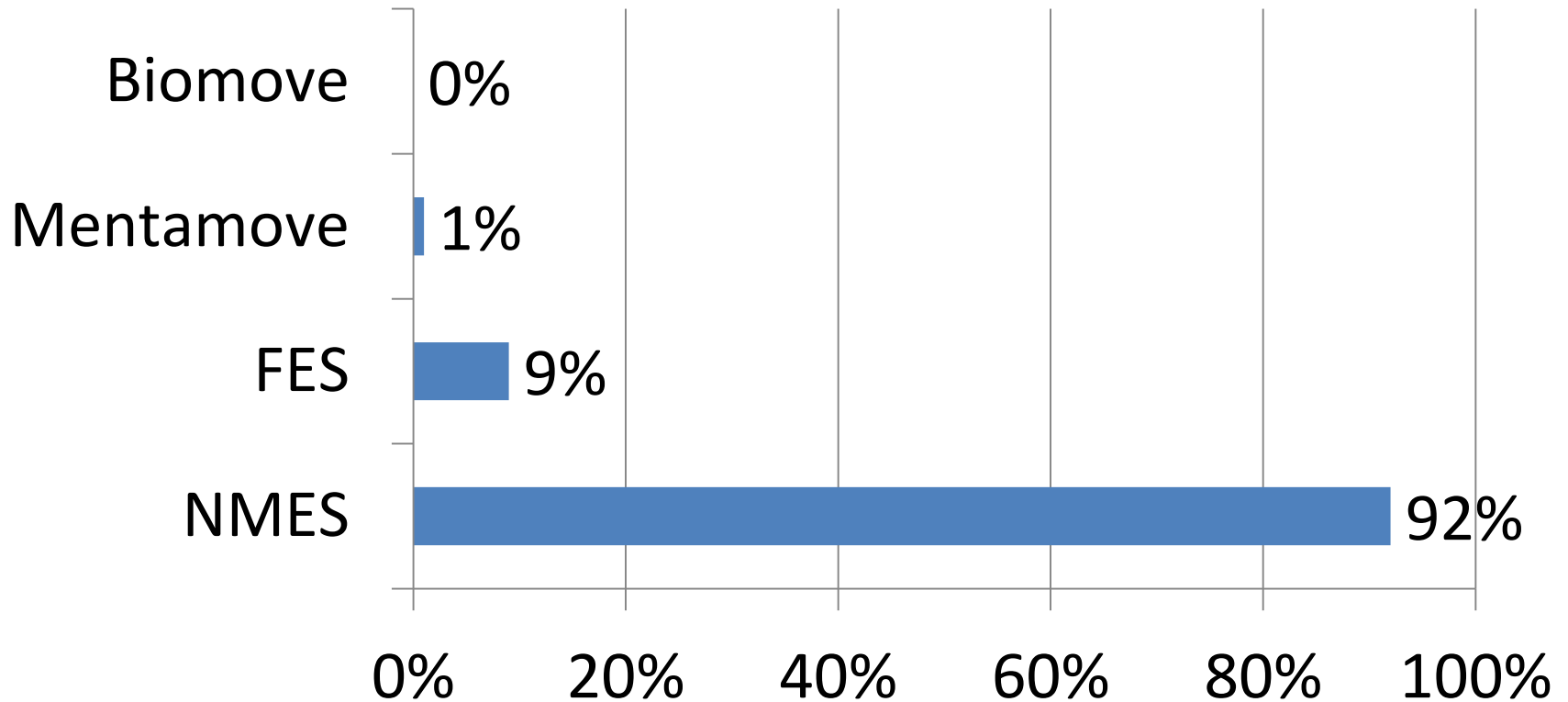
Aspect most important in determining the progress of the patient

Graded acc to the most preferred

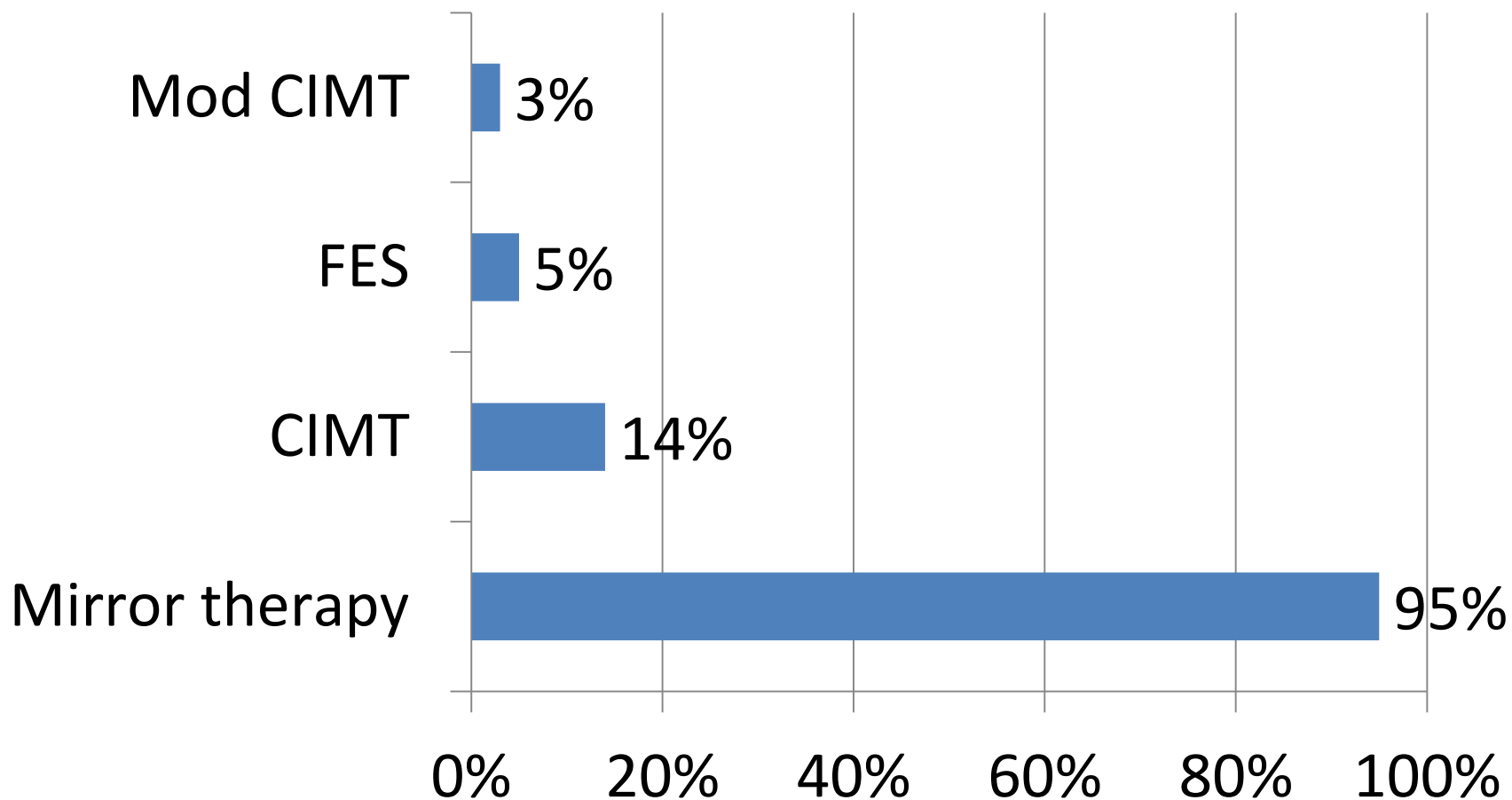


Preferred stimulator for Hand Rehabilitation

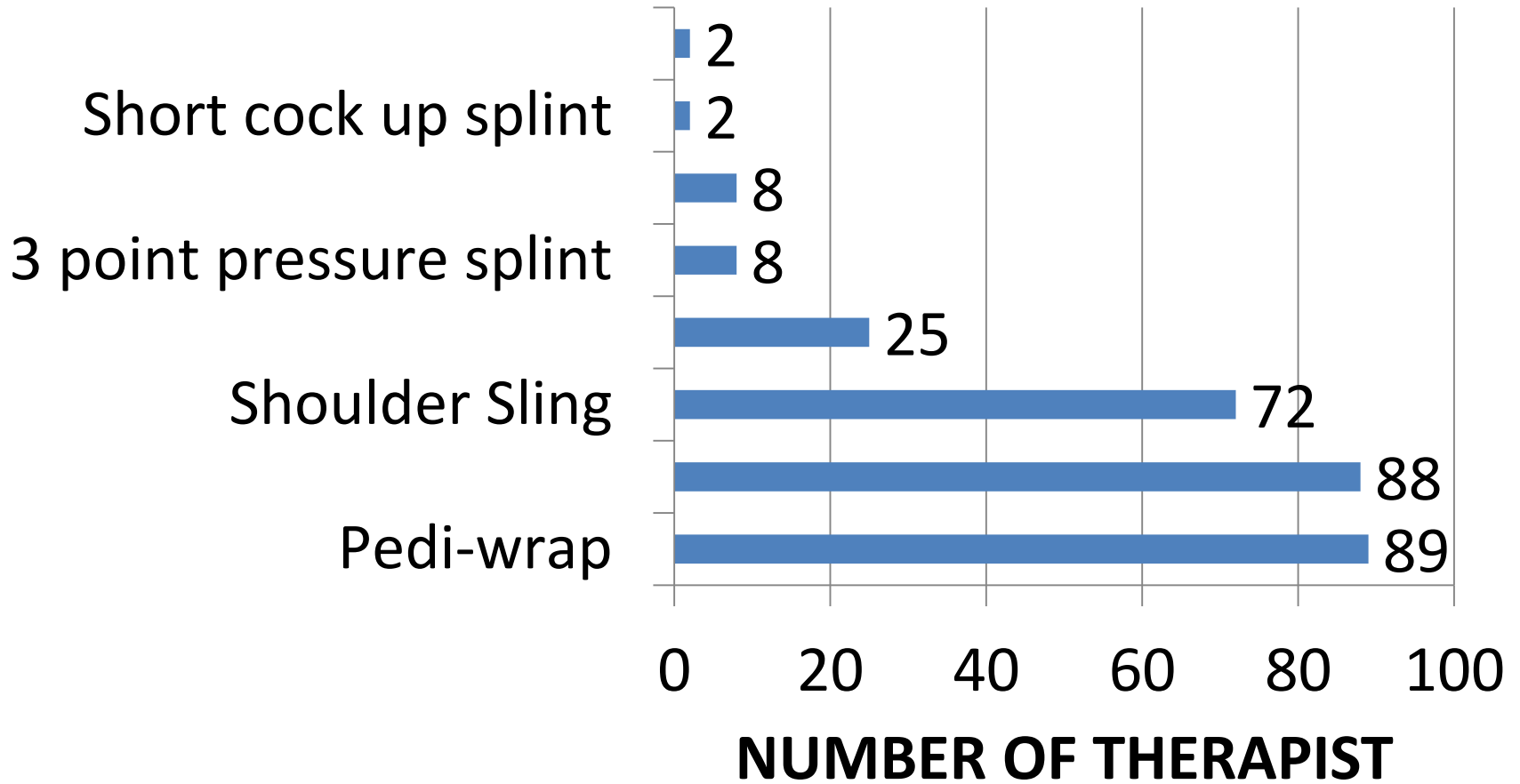
% of subjects



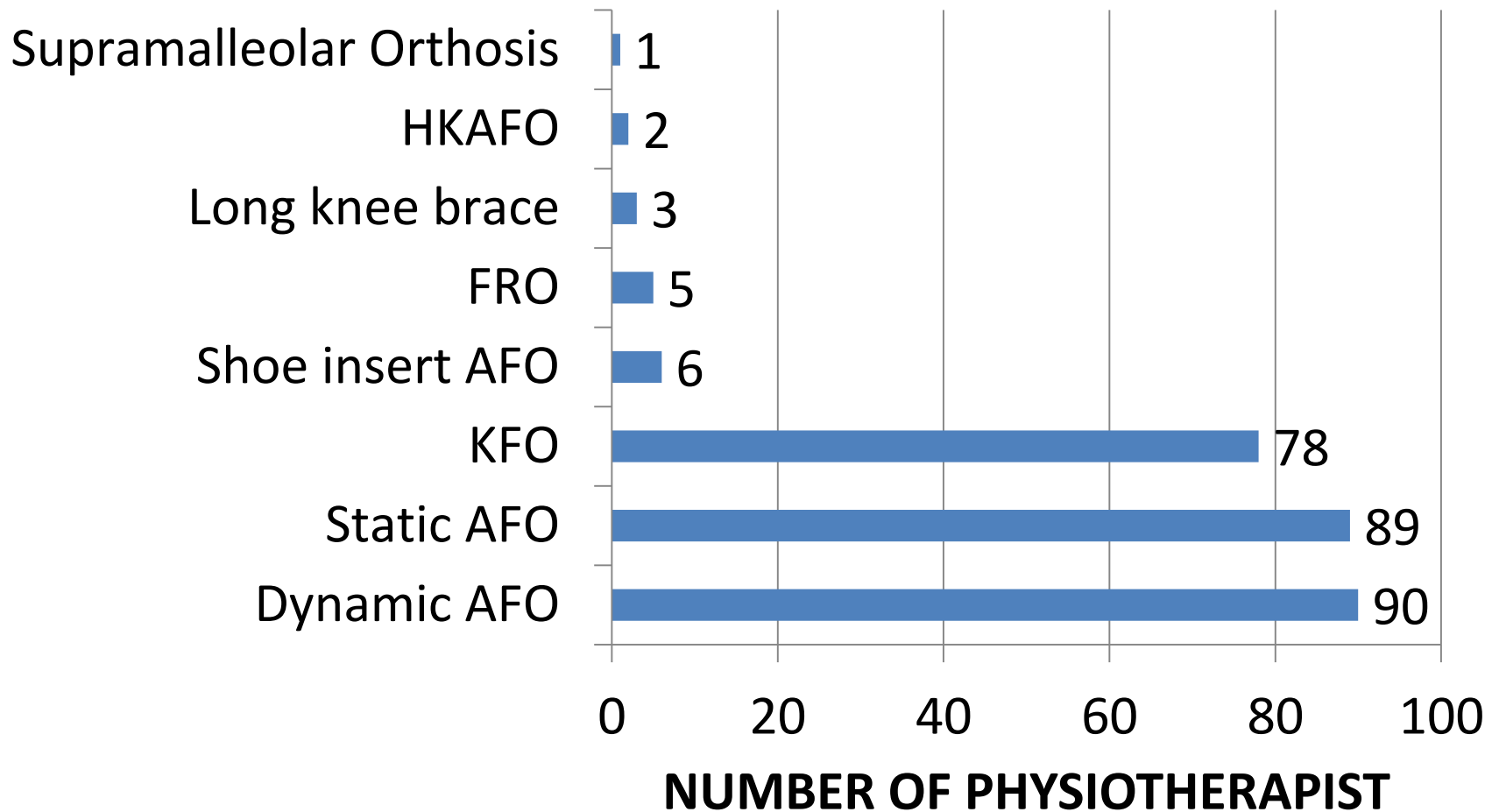
Preferred Adjunct therapy



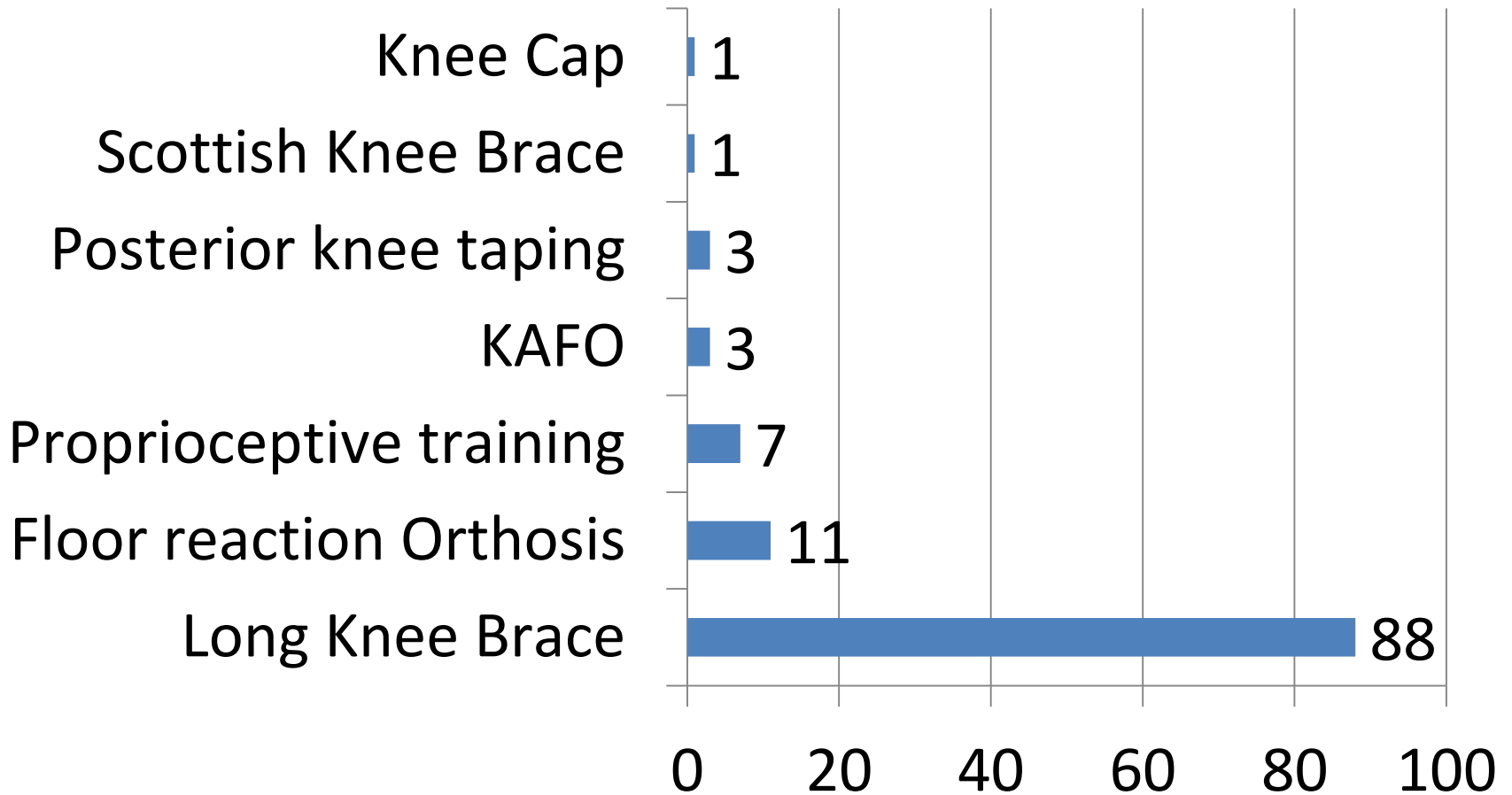
Preferred Orthosis for UL Rehabilitation



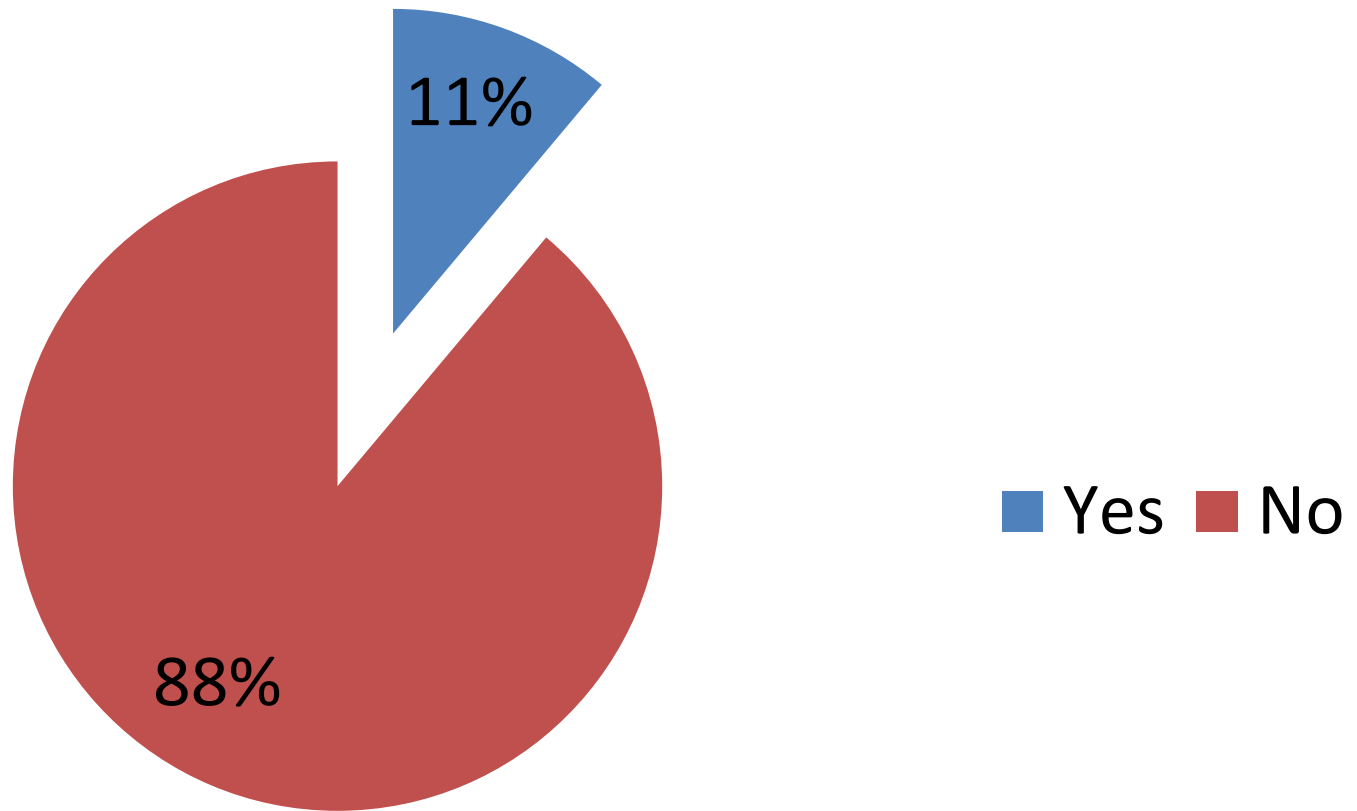
Preferred Orthosis for LL Rehabilitation



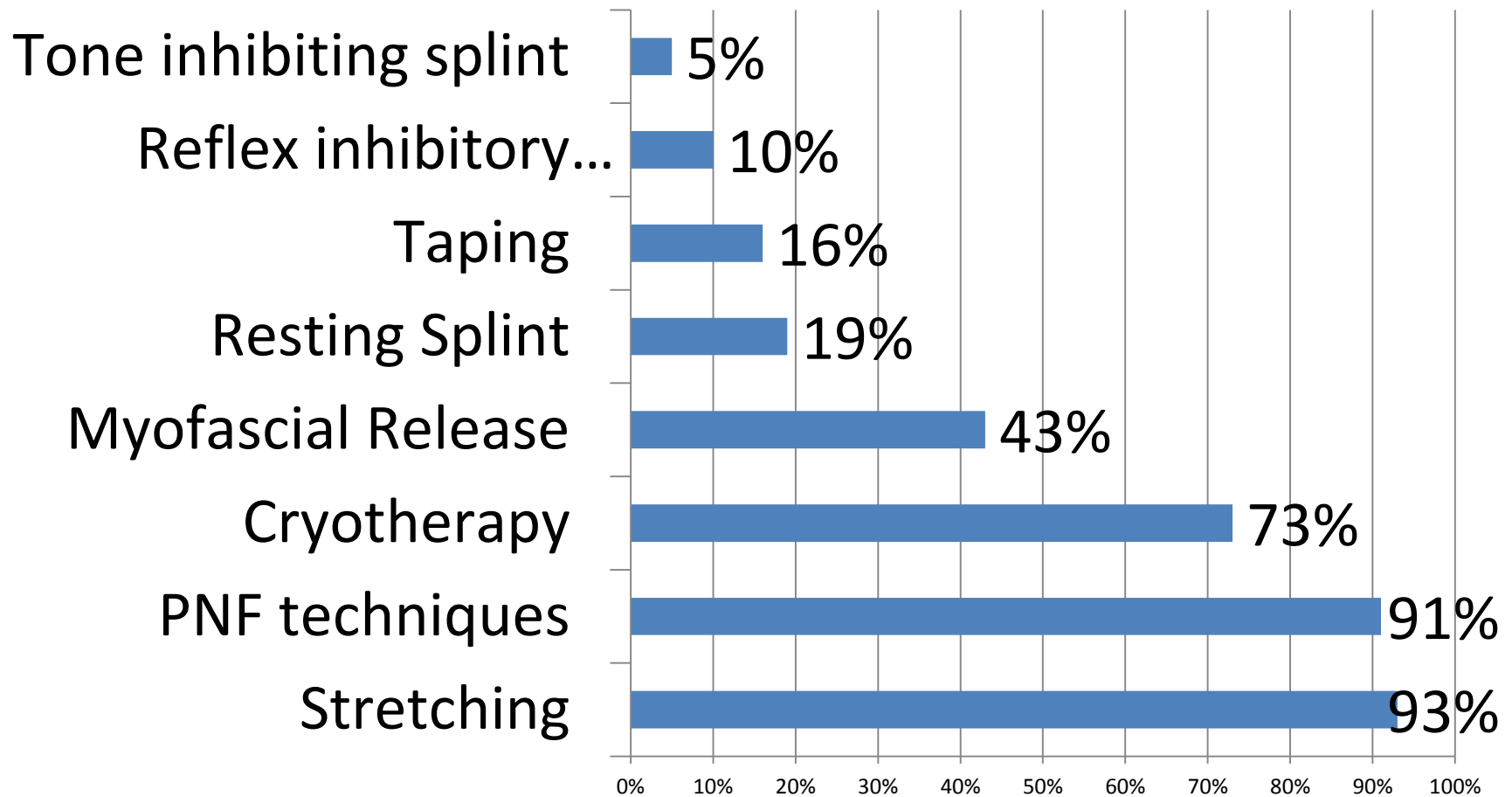
Preferred Management of Genu-recurvatum in hemiplegics



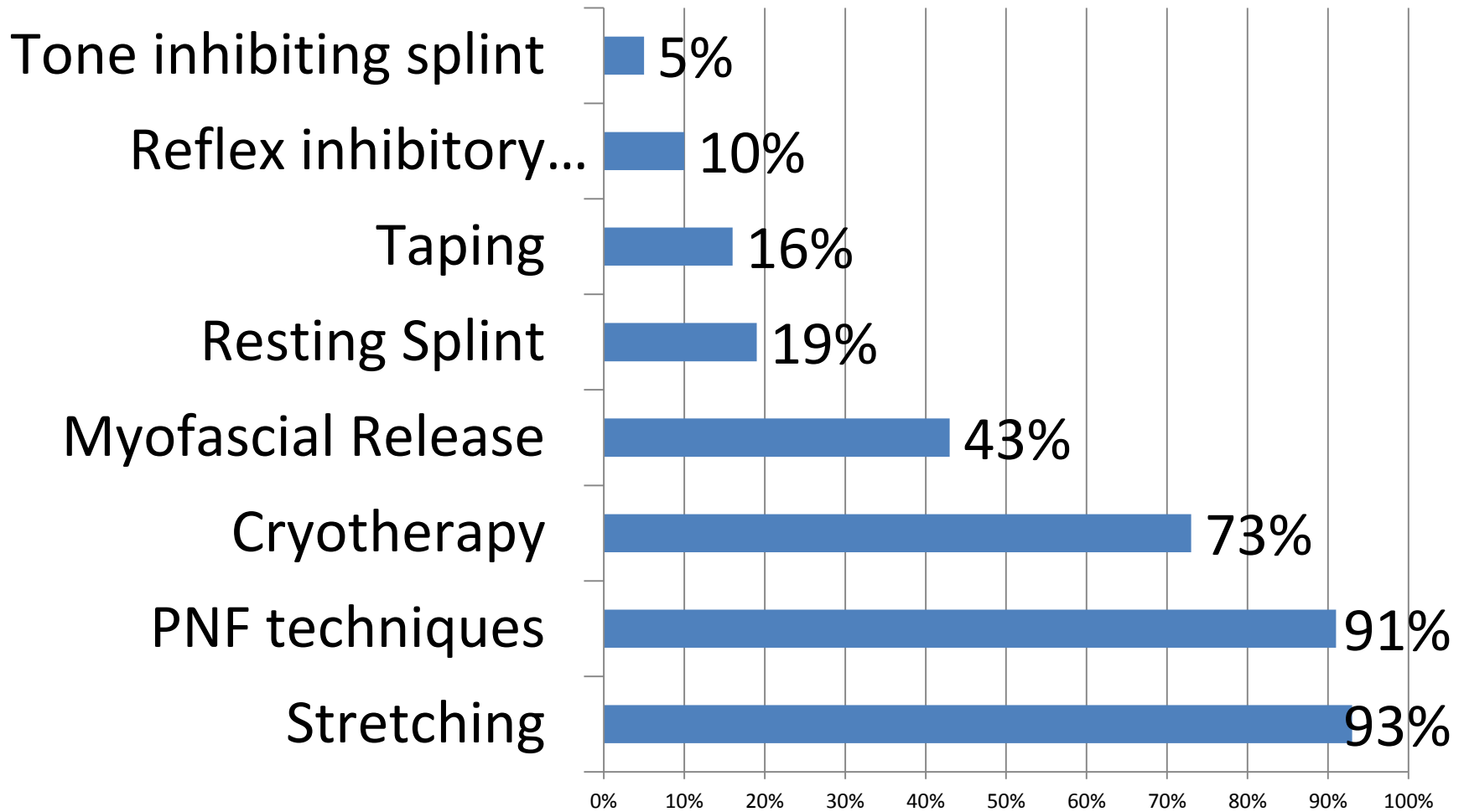
Do you believe in early ambulation in patients with VC grade 0?



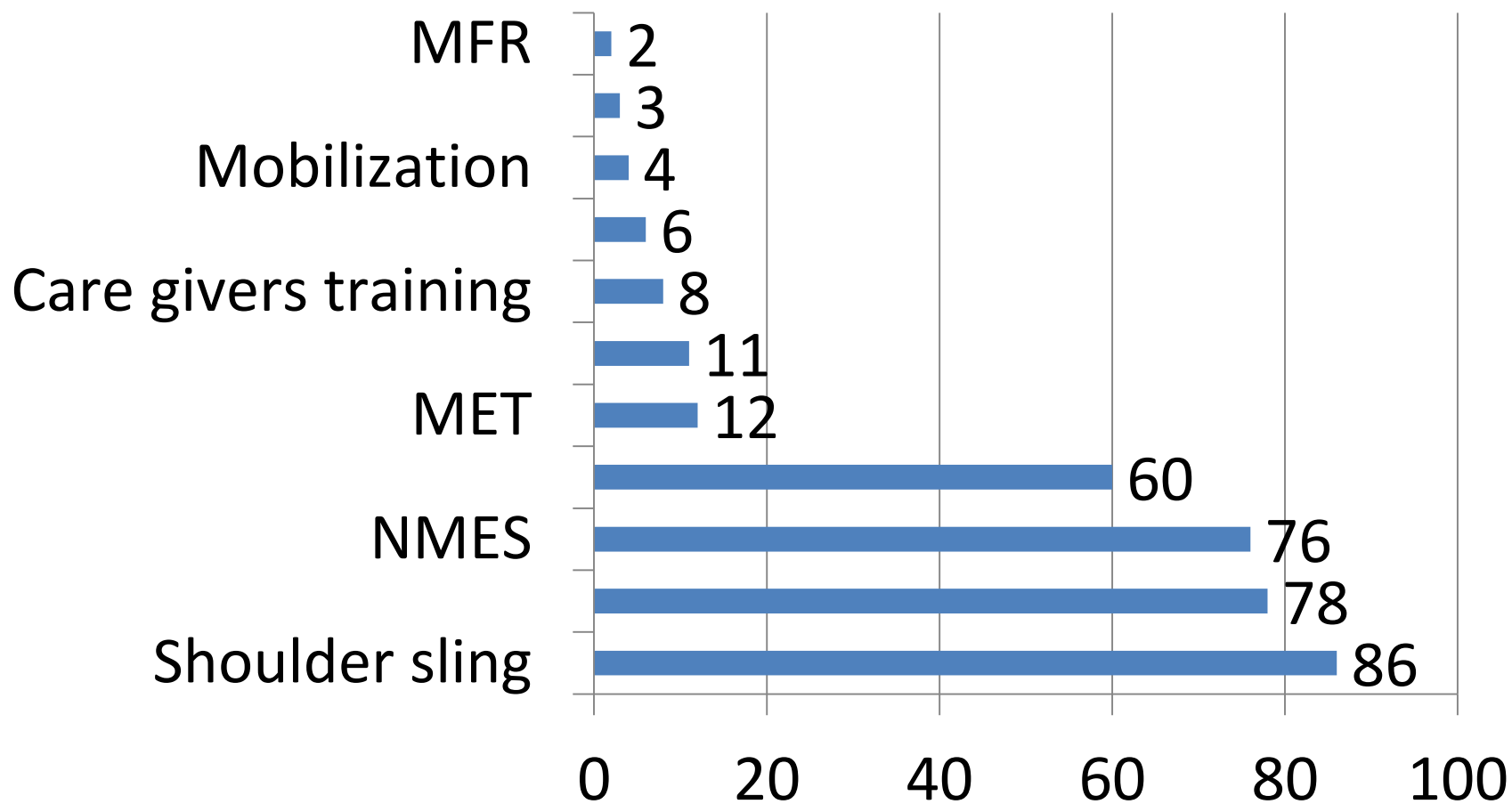
Preferred assistive device used for ambulation



Therapeutic management used for spasticity



Treatment for shoulder pain in stroke patients.



Conclusion

- More than 90% the physiotherapist had similar understanding about aim of treatment, tone management and neurotherapeutic approaches.
- More than 95% use NMES in hand rehabilitation along with functional tasks NMES.
- Shoulder sling is used the maximum in case of shoulder pain (86%) followed by heating modalities, NMES in hemiplegic shoulder.
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Conclusion

- There was lot of variation about the upper and lower limb splints.
- Walker and cane is most frequently used ambulatory device.
- The most preferred lower limb orthosis was dynamic AFO and static AFO.
- Only 9% are doing research based practice which is a dangerous alarming sign.

Conclusion

- There was good understanding for the aims required to be set before treating the hemiplegic patients among physiotherapists.
- Less awareness was present about adjunct therapies, orthosis.
- Uncertainty was seen regarding tone and orthosis for ambulation of hemiplegics.

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