

Physiotherapy awareness among clinical doctors in Nepal

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Abstract

Introduction: Physiotherapy as a profession has come a long way over the years. As the treatment of injuries and illness has developed over the decades, the practice has evolved and grown from general forms of physical therapies to specialized physiotherapy services in healthcare settings. Despite the recognition and advances gained worldwide in physiotherapy, yet there is lack of research study in Nepal to evaluate the awareness of physiotherapy among clinical doctors of Nepal. Objective of this study is to investigate the awareness of physiotherapy among clinical doctors working in various hospitals of Nepal.

Methods: A cross sectional survey was conducted among the clinical doctors working in various hospitals of Nepal. A questionnaire was randomly distributed among 200 doctors. It comprised of 13 questions related to physiotherapy awareness. Data were collected and statistically analyzed.

Results: Among 115 respondents, 98.3% were aware of physiotherapy and 87.8 % of the doctors reported to have physiotherapy services in their hospital. Referral to physiotherapy was found to be 94.8 %. With respect to referrals to physiotherapy in pre-operative cases, it was found that 63% of the clinical doctors agreed to refer their patients

to physiotherapists. The study also found that 93% of the clinical doctors agreed to refer their patients to physiotherapy post-operatively. Referrals to ICU were agreed by 88% of the doctors involved in this study. Among the clinical doctors surveyed physiotherapy in orthopedic conditions has the maximum awareness (94.8%). The study found that a very small percent of the clinical doctors knew about physiotherapy education in Nepal (39.1%) and Nepal Physiotherapy Association (NEPTA) (33%).

Conclusions: The study concluded that the clinical doctors had a good awareness about physiotherapy profession. But awareness needs to be accelerated in terms of referrals and specialized services provided by the physiotherapists for potential benefits of the patients. Physiotherapists as a part of the health care team plays an essential role in reducing the hospital stay, quick recovery and in rehabilitation for a better quality life.

Key words: clinical doctors and physiotherapy, physiotherapy, physiotherapy awareness, physiotherapy in Nepal, physiotherapy referrals.

Introduction

Globalization is having a significant impact on health care and the demands put on the health profession are increasing. The constant flood of information, scientific developments and rapid technological advances also bring challenges to the field of healthcare. These developments necessitate changes in healthcare services and the effective use of appropriate health professionals. There is a demand both internally within the profession and externally from other health care disciplines and third party payers that physiotherapy is recognized as providing relevant and valid knowledge that can be applied in a changing environment.¹

Primary health care in most countries calls for equity of access to health care as a right. Physiotherapy is a part of primary health care therefore there should be the right of every person to have access to physiotherapy services. In 1999, the World Confederation for Physical Therapy (WCPT) adopted a general description of physiotherapy for worldwide use. It states that physiotherapy provides services to people and populations to develop, maintain and restore maximum movement and functional ability throughout the life span.² In 2011, The USA labor describes Physical therapists (or physiotherapists) as primary healthcare professionals who diagnose and treat individuals of all ages, from newborns to the very oldest, who have medical problems or other health-related conditions, illnesses, or injuries that limit their abilities to move and perform functional activities as well in their daily lives.³ Physiotherapists are highly skilled health professionals in a wide variety of specialist medical areas. As such they work to improve the health outcomes of the community as part of the health care team.

Today, the practice of physiotherapy in developed countries is based on very sound scientific research evidence. Every living man or woman either sick or apparently healthy either in hospitals or in their own homes is referred for physiotherapy. The practice of physiotherapy has gone beyond the hospital walls. That is, physiotherapy is now practiced extensively in the community: in the urban, rural and remote rural areas; in industries; in sporting teams; in schools for children with disabilities; in rehabilitation centres; in private practice and in acute hospitals. Volumes of books now exist regarding physiotherapy practice. Also existing today are numerous Monographs, Newsletters, Official Communication Booklets, Magazines and Journals in physiotherapy worldwide. However, in Nepal the situation of the physiotherapy profession is still very challenging. The recognition of Physiotherapy in the country still remains a question.

In Nepal, Physiotherapy formal education commenced in Nepal in 1983, and physiotherapy is a relatively new profession compared to more developed countries. Although the formal institution of the profession of Physiotherapy in many developing countries like Nepal may be recent, the actual practice of physiotherapy in several oriental and occidental countries is very old. The period of the physiotherapy profession in Nepal is nearly 30 years, during this time the government has mandated the registration of physiotherapists through the Nepal Health Profession Council (NHPC). However this is not sufficient, the government needs to include physiotherapy services when they develop the National Health Policy to deliver the best possible health outcomes for the Nepalese citizen.

In Nepal, there are a rising number of disabilities, which increase the financial burden for individuals as well as for the government. There is an increasing life expectancy with many more incidences of chronic diseases. In addition, there is an increase in motor vehicle accidents as well as other traumatic events. All of the above leads to the need for an increased and better informed health workforce both in the cities and in the rural and remote areas of Nepal. At this time there is very little awareness by the people and by government agencies, in particular the role of physiotherapy in the health care team.

Accordingly, there is an urgent need to change the attitudes towards physiotherapy in Nepal in order to provide high quality physiotherapy services for Nepalese people. This can be achieved with the support of both government and public bodies.

Currently, with the development of physiotherapy worldwide, various specialties in physiotherapy have emerged in order to meet the human needs. While there are many specialization in physiotherapy, the American Board of Physical Therapy ⁴ listed eight specialist certifications such as specialization in Cardiovascular & Pulmonary, Clinical Electrophysiology, Geriatric, Integumentary, Neurological, Orthopedic, Pediatric, Sports and Women's health. Despite the fact that physiotherapy has evolved in attaining specialization in physiotherapy services worldwide, here in Nepal physiotherapy is still at an early stage of development of general services where specialized services is far behind.

Even though the formal education of Physiotherapy commenced in 1983, there is a dearth of understanding about the physiotherapy services and their effectiveness by the public.

Most of the clinical doctors as well as the general public are still not aware of physiotherapy. There has not been any study done to evaluate the awareness of physiotherapy service as an integral part of the health care system among the clinical doctors. So, the aim of the study was to investigate the awareness of physiotherapy among clinical doctors in Nepal. The study also further aims to investigate the awareness among clinical doctors in Nepal about the various fields of physiotherapy services.

Methods

A cross –sectional survey was done for the study and a close format questionnaire was randomly distributed to the clinical doctors practicing in 10 different hospitals of Nepal. The questionnaire was distributed by the researcher from January 2011 to April 2011. A consent form was sent to each participant. A reminder telephone contacts was made after every three weeks to all non-responders to maximize the response rate.

A close format questionnaire was designed for use in this study. Before distribution, the questionnaire was piloted with a convenience sample of three Nepali physiotherapists and three doctors. They were asked to comment on the format of the questionnaire, its content, wording, instructions and ease of completion. The questionnaire was revised in response to the feedback received. Physiotherapists felt questions about physiotherapy services in the respective hospitals, awareness of physiotherapy in different fields and their referral for physiotherapy should be included to reflect the participant's knowledge about physiotherapy.

The questionnaire consisted of 13 questions with the demographic and clinical profile about the responding doctors. Information was gathered regarding specialization or area of practice, type of institution, work duration, referral for physiotherapy, physiotherapy services in the hospital, physiotherapy schools in Nepal and about the awareness of the Nepal physiotherapy association. Out of the 13 questions asked, the respondent were asked to report the questions based on the referral and the benefits of physiotherapy on a Likert Scale from 1-5, where 1 is strongly disagreed, 3 is neutral and 5 is strongly agreed.

Data were anonymously coded and entered into a spreadsheet programme before being analyzed using the Statistical Package for the Social Sciences (SPSS 13 and 17). Percentages, frequencies, mean and standard deviation were calculated to summarize the responses. Independent t test, chi square test (continuity correction, exact) and Mann Whitney U test were also used for the analysis.

Results

Two hundred questionnaires were distributed out of which 115 responded and were analyzed. Among the respondents, the details of the participants specialization is given in fig I. Summary background data on the type of practice, duration of working years, and about the knowledge of physiotherapy during Bachelor of medicine and Bachelor of Surgery (MBBS), post graduate or during practice is shown in fig. II, III and IV respectively.

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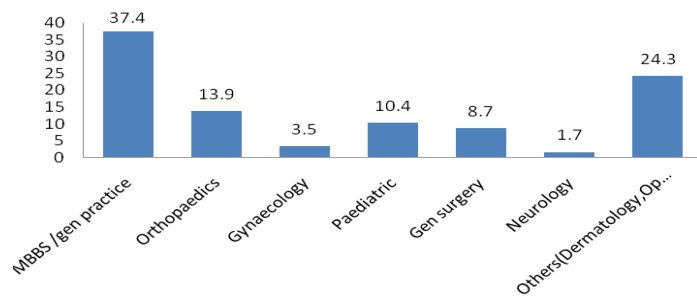


Fig. 1: Percentage of specialization of the participants

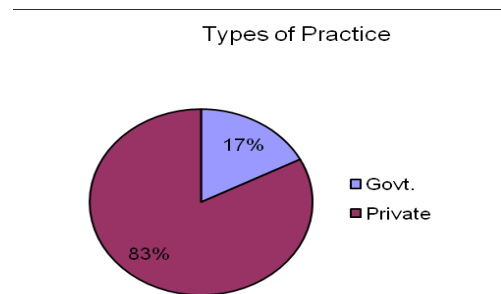


Fig. 2: Type of practice of the participants

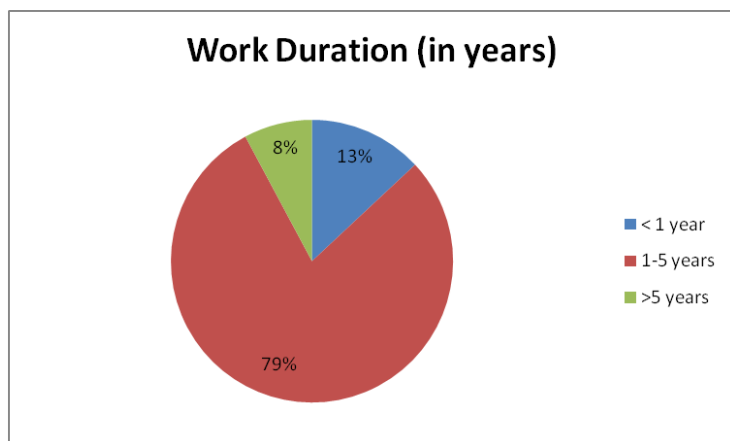


Fig. 3: Working duration of the participants

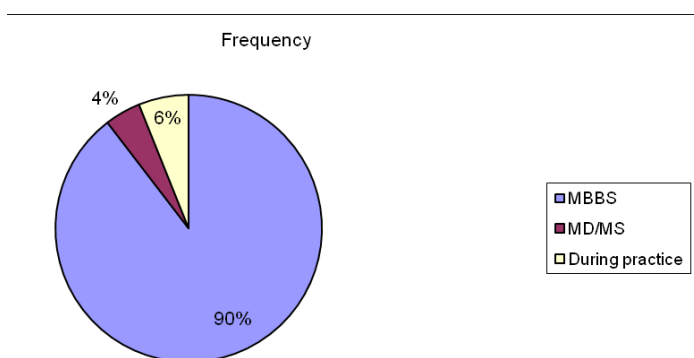


Fig. 4: Knowledge of physiotherapy during MBBS, during post graduate and during practice.

Among 115 clinical doctors respondent, 98.3% were aware of physiotherapy. According to the work duration the percentage of the doctors that were aware of physiotherapy was (89%) with 1-5 years of experience compared to less than 1 year experience (15%) and more than 5 year experience (9%). The doctors working in private hospitals (93%) were more aware of physiotherapy compared to those working in government hospitals (20%). The study showed that 89.6% of the doctors knew about physiotherapy while studying MBBS compared with during MD/MS (4%) and during practice (6%).

It was observed that 87.8% of the doctors reported to have physiotherapy services in their hospital. Out of the 87.8% reported to have physiotherapy services, the type of Service provided was 17.5% on a 'call basis' and 82.5% with physiotherapy departmental services.

Our study showed that overall referral to physiotherapy was 94.8% of the clinical doctors referred to physiotherapy. Our result found that 89% of the clinical doctors practicing in private hospitals refer their patients for physiotherapy whereas only 20% of the doctors working in government hospitals ($p=0.54$) referred to physiotherapy. It was also found that 87% of the doctors with the work duration within 1-5 years of experience have high referrals for physiotherapy ($p=0.23$) compared to less than 1 (13%) year or more than 5 (9%) years.

Our study also investigated the referrals by doctors for physiotherapy in pre-operative, post-operative and ICU cases. With respect to referrals to physiotherapy in pre-operative cases, it was found that 63% of the clinical doctors agreed and 30% of the clinical doctors were neutral. The study also found that 93% of the clinical doctors agreed to referrals to physiotherapy post-operatively and 4% of the clinical doctors were neutral. For referrals by doctors to physiotherapy for ICU cases the study reported 88% of the clinical doctors agreed and 4% of the clinical doctors were neutral.

The study also surveyed the benefits of physiotherapy and the importance of having physiotherapy department in hospitals. Among the clinical doctors surveyed about the benefits of physiotherapy treatment 94% of the clinical doctors agreed and 4% of the clinical doctors were neutral. The study showed that 96% of the clinical doctors agreed that all hospitals should have a department of physiotherapy. According to the awareness and referrals to specialized physiotherapy services, our studies have found that among the clinical doctors surveyed physiotherapy in orthopaedic conditions has the maximum awareness (94.8%) followed by physiotherapy in neurological conditions. The detail of other physiotherapy areas is shown in fig. V.

We also investigated the awareness and the referrals of physiotherapy according to the type of the institution using Likert scale against various statements, the details are shown in table 1.

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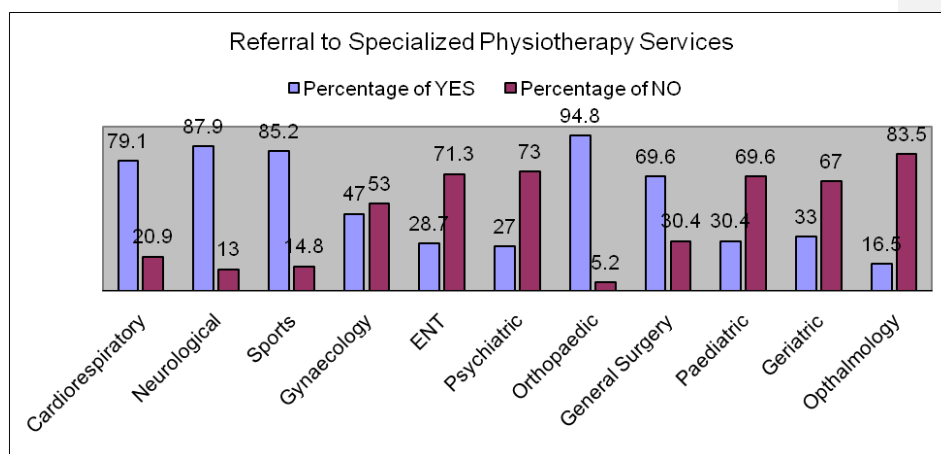


Fig. 5: Percentage of referrals to physiotherapy according to specialized physiotherapy services

Statements	Type of institution	Number	Mean	Standard Deviation	P value
Patient should be referred for physiotherapy treatment	Govt.	20	4.4000	.50262	0.37
	Private	95	4.5053	.52336	
Patient should be referred for pre-operative	Govt.	20	3.6500	.74516	0.49
	Private	95	3.7684	.83095	
Patient should be referred for post operative	Govt.	20	4.5000	.51299	0.45
	Private	95	4.3263	.76412	
Patient should be referred for ICU	Govt.	20	4.5000	.76089	0.20
	Private	95	4.2421	.93075	

All hospital should have dept. of physiotherapy	Govt.	20	4.7000	.47016	0.27
	Private	95	4.4737	.81007	
Patients have benefited from physiotherapy treatment	Govt.	20	4.4000	.59824	0.77
	Private	95	4.4421	.57825	

Table 1: Awareness and the referrals of physiotherapy according to the type of the institution

The study found that a very small percent of the clinical doctors knew about physiotherapy education in Nepal (39.1%) and NEPTA (33%).

Discussion

The clinical doctors whom we surveyed appeared to have good awareness of physiotherapy with 98.3% responding that they knew about physiotherapy. However even with the result of a good awareness of physiotherapy among the doctors surveyed, there is still a variation and lack of a referral system.⁵ Awareness about physiotherapy among the clinical doctors is much more in the more developed countries compared to ours. This may be due to the recent emergence of physiotherapy services in Nepal. Awareness to some extent is totally dependent on the overall educational system where the medical clinicians completed during their undergraduate or post graduate courses. In one study done in Australia (1998) it was reported that the knowledge and perception of physiotherapy services among the medical students is low as the medical students had received little formal education about physiotherapy throughout their undergraduate course and suggested that medical students need more information about physiotherapy services.⁶ The authors of this study believe the nominal percentage of unawareness about physiotherapy may be due to the lack of physiotherapy services in their training place or in their curriculum. The clinicians may be unaware of physiotherapy due to the absence of the functioning physiotherapy department in their work place. Remarkably, a dearth of literature exists regarding awareness of physiotherapy among clinical doctors.

Institutions running multiple parallel health education programmes significantly increase the awareness in the students and staff about each others profession, their knowledge and skills. The increasing awareness of PT now that it is placed within the university will increase the knowledge by all health professionals of physiotherapy. Interprofessional education have showed to have potential education values leading to a better practice and improved health outcomes.^{7, 8}

The curriculum plays a significant role in the overall outcome of any profession. At times inclusion of certain topics in the curriculum can increase overall awareness in others profession. Our study showed a good awareness (89%) among the clinical doctors surveyed about physiotherapy while studying MBBS, compared to MD/MS (4%) and

during practice (6%). The authors are pleased that the majority of the practitioners had awareness about physiotherapy during their undergraduate course. However, their detailed knowledge of the profession and the professional capabilities of physiotherapists were not examined in this study.

We were surprised with our results that we found no significant difference between years of practice and the awareness of physiotherapy among the clinical doctors ($p=1$). One of the study done by Pamela et.al (1985) showed a similar result.⁹

The doctors working in private hospitals (93%) were more aware of physiotherapy compared to those working in government hospitals (20%). This finding is very disappointing to the authors in the sense that there is not much contribution made from the government sectors in the field of physiotherapy, especially for the development of services, education and research in Nepal. Furthermore, when some of the government hospitals in Nepal still lack the basic clinical services, equipments, expert manpower and medications, physiotherapy as a profession can't be an exception. With the limitations of basic health care services in the government sector, physiotherapy has been neglected and never been given priority. The lack of physiotherapy services in the government sector has meant that many clinicians are unaware of the work of physiotherapist. However with the commercialization of private hospitals and competition in terms of better patient care, private hospitals practitioners are much more aware of what services physiotherapists can provide. The appointments of significant numbers of physiotherapists in the private sector are evident when compared to the government sectors. This can contribute to increasing amount of awareness among private practitioners.

Our study reported that 94.8% of the clinicians referred patients to physiotherapy, which is little lesser than other studies, however our study could not cover the detail of the referral system, which is one of the limitations of the study.⁹

Our study has found that among the clinical doctors surveyed, physiotherapy in orthopaedic conditions has the maximum awareness (94.8%). The result is similar with the study by Childs et al (2005) which reported that GP's (general practitioner) consider physiotherapy to have a major role in the management of musculoskeletal conditions, and have a high opinion of the profession.^{10,11} The fact that general practitioners recognize physiotherapy as competent practitioners for the management of musculoskeletal problems is well documented.^{11,12,13} A key challenge facing physiotherapists in Nepal is low general awareness of the profession. Doctors generally have a narrow view of physiotherapy scope and technique and such narrow medical perspectives of physiotherapy have been identified as a barrier to the development of the profession in many other countries. Kay et al. (1999) for example document low awareness in Vietnam.¹⁴ The WCPT Newsletter summarized issues for physiotherapists in Kenya, Uganda, Malawi and Tanzania describing similar problems to those in Nepal.¹⁵

The study found that 87.8% of the doctors reported to have physiotherapy services in their hospital and 12.2% reported the absence of physiotherapy services in their hospital.

Out of the 87.8% reported to have physiotherapy services, the type of service provided was 17.5% on call basis and 82.5% with physiotherapy departmental services. One of the reasons for physiotherapy services being on an 'on call' basis may be due to the inability of the hospitals to recruit full time physiotherapists due to the financial burden to the hospital. Even though the number of physiotherapists is increasing per year there is not much being done from the government sector to employ these highly skilled health professionals in the country. Due to the absence of job opportunities all over Nepal many physiotherapists are migrating to other countries where there is a demand for physiotherapy services. However, with the emerging new private hospitals in Nepal promising quality services and complete care to the public we can hope for further job opportunities for physiotherapists in near future.

One of the key specialized areas of physiotherapy practice worldwide is in the ICU and yet in Nepal at least 30% of the clinicians in this study had negative or neutral responses to this area of practice. In order to understand the role of physiotherapists, two things must be considered, namely the degree to which specialist physiotherapy services are available in the ICU, and the specific tasks that are performed by physiotherapists in the ICU. Literature regarding the staffing levels and availability of physiotherapists in the ICU is rare. In most hospitals in developed countries, physiotherapy is seen as an integral part of the management of patients in ICUs. The physiotherapist's role in the ICU is the assessment and management of cardio-respiratory, neurological and musculoskeletal complications¹⁶. The precise role that physiotherapists play in the ICU varies considerably from one unit to the next, depending on factors such as the country in which the ICU is located, local tradition, staffing levels, training, and expertise. The referral process is one example of this variation, whereby in some ICUs, physiotherapists assess all patients, whereas in other ICUs, patients are seen only after referral from medical staff¹⁵. The most common techniques used by physiotherapists in the ICU are positioning, mobilization, manual hyperinflation (MH), percussion, vibrations, suction, cough, and various breathing exercises.^{17,18,19,20,21,22,23} Some physiotherapists routinely treat most, if not all, ICU patients with a combination of these techniques, regardless of the patient's underlying patho-physiological condition, with the intention of preventing pulmonary complications, whereas other physiotherapists use such techniques selectively when they believe they are specifically indicated. In most hospitals in developed countries, physiotherapy is seen as an integral part of the management of patients in ICUs however in Nepal there is still a lack of awareness of the importance of physiotherapy in ICU as 30% of the doctors in our study felt neutral about referral to ICU which informed us that awareness regarding benefits of physiotherapy in ICU needs to be accelerated.

Various studies have been conducted which have shown the benefits of post-operative physiotherapy.^{24,25,26,27} A survey done by Nicholls and Howell(1968),²⁸ reported that the majority of hospitals refer for post operative physiotherapy which supports our study about referral for post-operative physiotherapy among the clinical doctors (93%). Their study further reported that only few hospitals refer for pre-operative physiotherapy on a routine basis which showed a similar result with our study(63%). The result indicated the poor awareness of the role of pre-operative physiotherapy in our health care settings as a preventative measure.

Our report showed a good positive response (94%) about the benefits of physiotherapy surveyed among the clinical doctors. Our result found that the doctors felt that all hospitals should have a department of physiotherapy, which is standard practice in most other countries. This suggests that the doctors are well aware of the benefits of physiotherapy treatment outcomes and the authors hopes that the support and the referral to physiotherapy will be more routine in the future. Medical Clinicians play a major role in the development of physiotherapy which is in an embryonic phase in Nepal and the contributions made in terms of referrals and other forms of support can be a milestone in the history of physiotherapy of Nepal.

We also found that the clinical doctors have poor awareness of the physiotherapy school (39.1%) and NEPTA (33%). The reason could be because the schools in Nepal are very few in numbers and started very recently. The first certificate program of physiotherapy started in 1983 in Institute of Medicine (IOM) at Tribhuvan University which continued till 1990. This was followed by commencement of certificate course in 2002 until 2009 in Dhulikhel Medical Institute (DMI) at Kathmandu University. However with the increasing scope and recent advances in the field of physiotherapy education, the certificate course was upgraded to a Bachelor of Physiotherapy (BPT) for the very first time in Nepal in 2010 at Kathmandu University. This has become a pioneer program in Physiotherapy education in Nepal and is an excellent outcome for improving physiotherapy services to assist in better health outcomes for Nepali citizens. Physiotherapists see this program with great pride and the institute as a premier institute in physiotherapy of the Himalayan nation. NEPTA, uniting body of physiotherapists is working for the welfare of the physiotherapists in Nepal since its establishment and is well supported by World Confederation of Physiotherapy (WCPT).

Conclusions

Even though the awareness about physiotherapy among clinical doctors looks appreciable and satisfying to the authors, there stills remains a deficit regarding awareness in terms of referrals and specialised physiotherapy services. Clinical doctors being the major health care providers should support physiotherapy for the benefit of patients during the hospital stay and rehabilitation. It is essential that the government develop policies that will implement in the total health care for the best outcome of the patient care and services.

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