

SCOPE OF PRACTICE AND CHALLENGES FACED BY PHYSIOTHERAPIST IN ARUNACHAL PRADESH

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Abstract

Field of physiotherapy is expanding to its further limits as it is less understood by the people residing within the state. Its development may be halted by several known and unknown issues. So far, no studies have been found regarding challenges and scope of a physiotherapist within Arunachal Pradesh. This study aims to explore certain/selected problems faced by physiotherapist working within the state. As for every initiation there is a need of exploration and gross understanding about the current status of the subject, so that further research would be done effectively with minimal biasness.

Method: An exploratory survey was conducted to find the scope of practice and challenges faced by physiotherapist in Arunachal Pradesh. A questionnaire was formed based on the current challenges faced by the physiotherapist of Arunachal Pradesh as well as in India and abroad countries. The questionnaire was formed using Google form and distributed via sharing its link through emails, phone sms and whatsapp application. The questionnaire included demographic data, professional responses about physiotherapy practice in their area, job-oriented questions and their opinion and suggestions.

Results: Twenty six physiotherapists responded to the survey. Most of them are young female therapist. The female-male ratio is 2.7:1. The survey states that the majority of localities are biased between physiotherapists and massage therapist. A limitation of diagnostic facilities in state is one of the challenges faced by the physiotherapist. The other factors that challenge the therapist are improper state infrastructures such as bad road, poor transportation facilities, electric power shortages. Extreme climate and impatience of a patient also adds in problem list of physiotherapists. The ignorant behaviour of society such as social discrimination and gender discrimination, hamper the moral boost and motivation for physiotherapist. Apart from this, the majority of physiotherapists are not satisfied with equipment availability, low pay scale and no standardization of fees for therapist.

Conclusion: To get rid of all problems, majority of therapist expects a proper state Physiotherapy council, proper social awareness & health benefit schemes, and programme for promoting physiotherapy need to be conducted.

Keywords: Challenges, scope, Physiotherapy, Arunachal Pradesh

INTRODUCTION

Physiotherapy is a profession which has been enrolled officially in India since 1952 after fifth year of independence¹. Hippocrates in his books of joints (460-385 BCE) and later Galen (131-202 CE) a noted Roman surgeon are believed to have also used physical therapy/techniques as one of the treatment method².

During many wars and conflicts, natural disasters, pandemics diseases and many other health

complications around the world, physiotherapy has given best services for mankind, but due to certain factors the growth and development had been hampered. Physiotherapists in different countries and states faced various problems due to lack of knowledge by other medical fraternity. Factors like availability of instrument, learning guidance, social-ethical rules and religious believes, geographic, climate calamity and economic problems etc are the blockage between the physiotherapist and the people living in a society.

Middle east countries, where wars and conflicts between different ethnic groups are common and leads to many casualties. Such conflicts and wars isolated the physiotherapists of Afghanistan, where the developments in professional field and upgradation in educational curriculum got struck. Many patients required physiotherapy intervention as a part of better treatment and rehabilitation, but unfortunately patient is referred to a physiotherapist suggesting a massage⁴. The low public awareness about the importance of physiotherapy and certain medical practitioner acting as the sole gatekeeper to physiotherapy has limited the physiotherapist's contribution towards research and modern practice of physiotherapy⁴. Pakistan physiotherapist expressed similar difficulties and realised the importance, requirement of the establishment of board/council for physiotherapy. They further focused the expansion of physiotherapy in different health services ⁵. Likewise, Nigeria faces many problems in accessing to physiotherapy services. There is ignorance about the physiotherapy profession, poor referral practices by the health workers and patronage of traditional health workers in the rural areas of Nigeria⁶.

Republic of India, a populous, known for its fast developing, enormously diverse country with broad languages, caste, tribes, different geographical areas, many religions, believes and traditions, has a great challenge for implication of new system, laws and developments in every field. The rigorous improvements, growth and development in field of physiotherapy may be facing many different problems and challenges in different states of India. Like, the challenges faced by the physiotherapist in Punjab hospitals which includes lack of professional development, non-standardization of pay scales, lack of proper formation of boards or councils, low pay scale and malpractice on the name of physiotherapy profession by some quacks⁷, there may be different problems too in other states of India. There is a lack of professional understanding and knowledge about physiotherapy by health employees, students and communities or villages in India. The present generation of students are the future of our country, and since they have less understanding on actual profession value about physiotherapy, this also contribute to one of the causes for the unhealthy competition and slower development along the physiotherapy field^{8,9}.

Though some of the population may know about the physiotherapy profession, there are other factors like poor infrastructure, time consumption, economic factors, cost of treatment, poor communication, stigma of disability and the belief in other forms of alternative treatment which can hamper and lead to non-adherence of Indian patients to physiotherapy recommendations¹⁰.

Based on above facts discussed our survey aim is to identify the scopes and challenges faced by physiotherapists in Arunachal Pradesh. The main objectives of this survey were identification of selected problems faced by physiotherapist, challenges of physiotherapy expansion, identification of contemporary and emerging issues in physiotherapy practices and channelized the problem for further research.

This survey covers selected challenges faced by physiotherapist in Arunachal Pradesh. As the exploratory questionnaires with random samplings may be too biased in nature, but it is a

crucial step on any study so that the further research can be done. This survey is mostly focused on the clinical aspect from physiotherapy practitioners. The data collected will somehow be helpful in understanding and analysing the current status, problems, solutions and further research on respective field of physiotherapy in Arunachal Pradesh.

METHODOLOGY

Prior to the study several scientific papers were evaluated for proper identification of problems faced by health care professionals in professional field, through different search engines such as research gate, google scholars and so on. Based on problems listed in previous studies and personal experiences, the researcher intends to focus on selected problems after verbal discussion with senior professionals of different health sectors. A self-made questionnaire was prepared, and scrutinised by the experts to rule-out the all possible errors. The ethical clearance was done by research board members. The e-questionnaires were scripted on google form and the link was distributed via whatsapp, email, hard copy to different to physiotherapist. The reminder communications were done to get maximum responses. The survey took place in the month of Feb 2021 to May 2021.

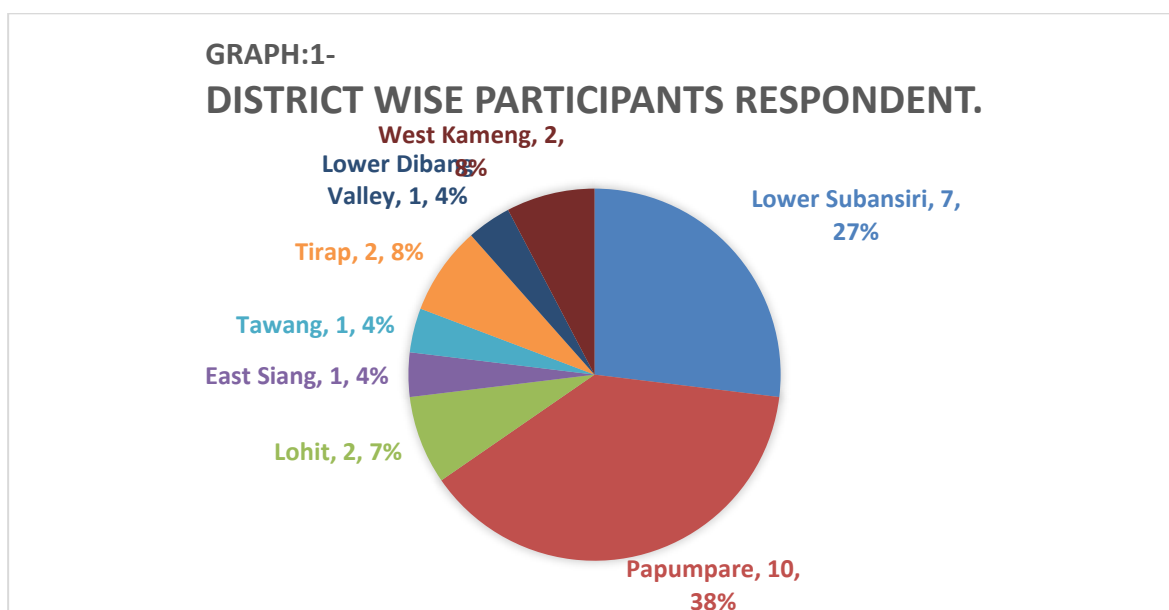
The inclusion criteria for this study were physiotherapist who had completed baccalaureus program in physiotherapy is working and / or had worked in Arunachal Pradesh with minimum of six month experiences. This is an exploratory survey design with random purposive sampling.

At the end of three months survey, 29 responses were received. As per the inclusive criteria only 26 respondents were evaluated. The data was scrutinized manually under the guidance of stastician and presented in next session.

RESULT

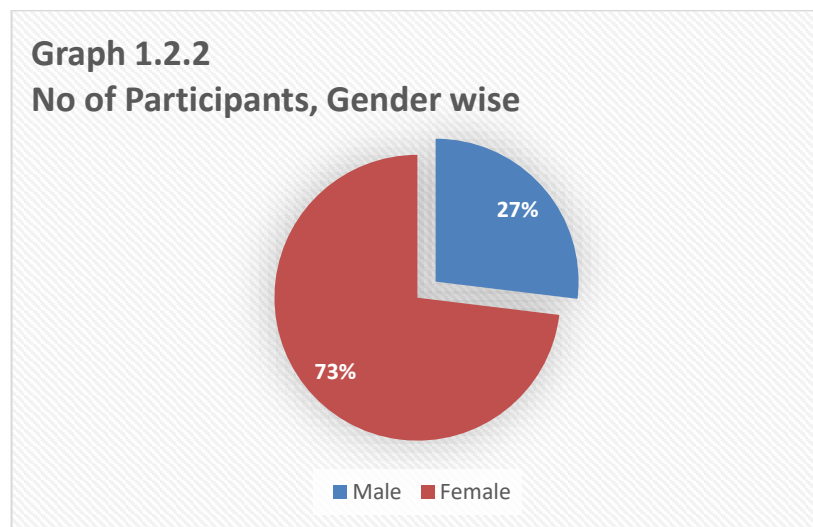
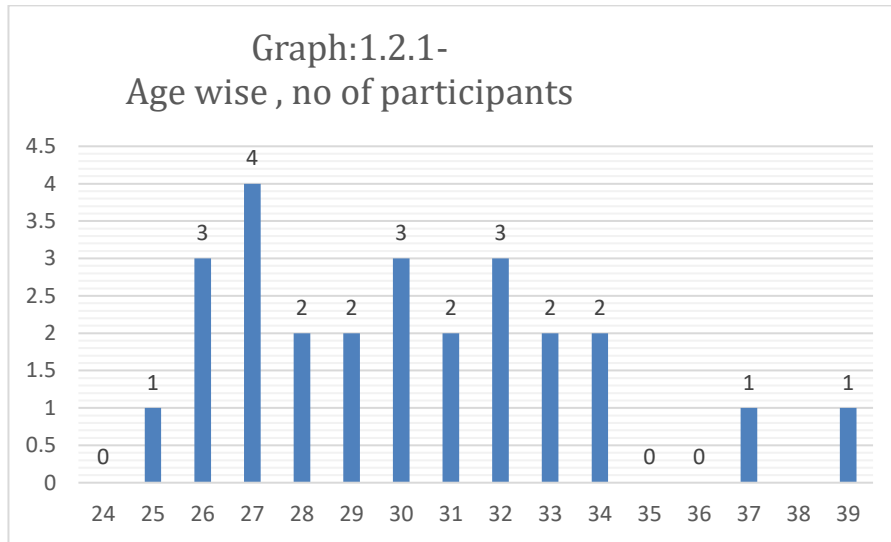
1. DEMOGRAPHIC DATA:

1.1 District wise participant's respondent.



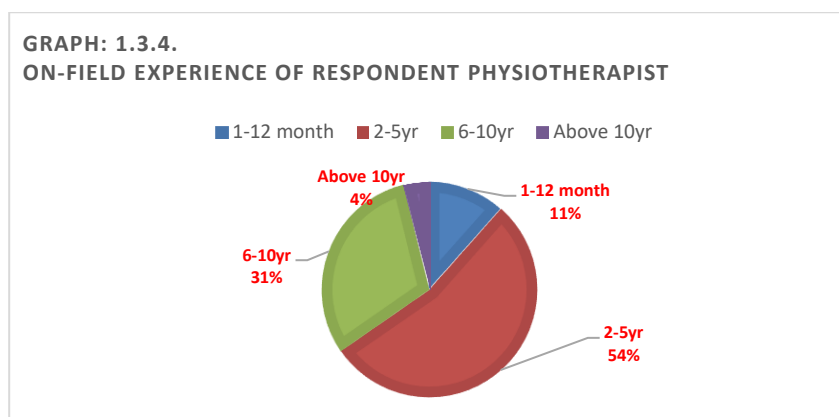
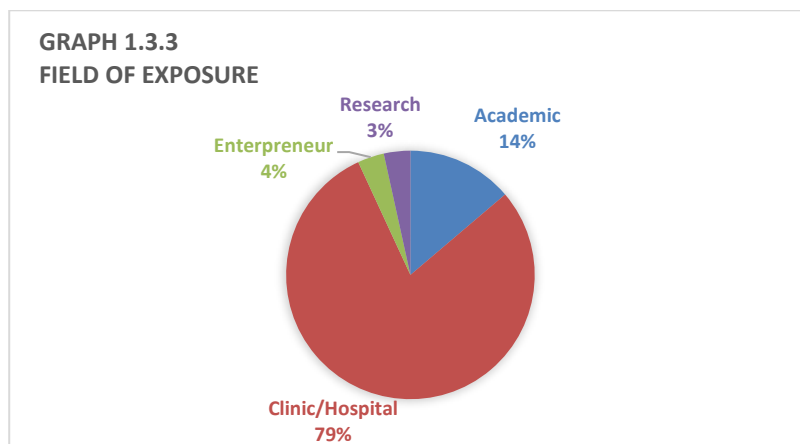
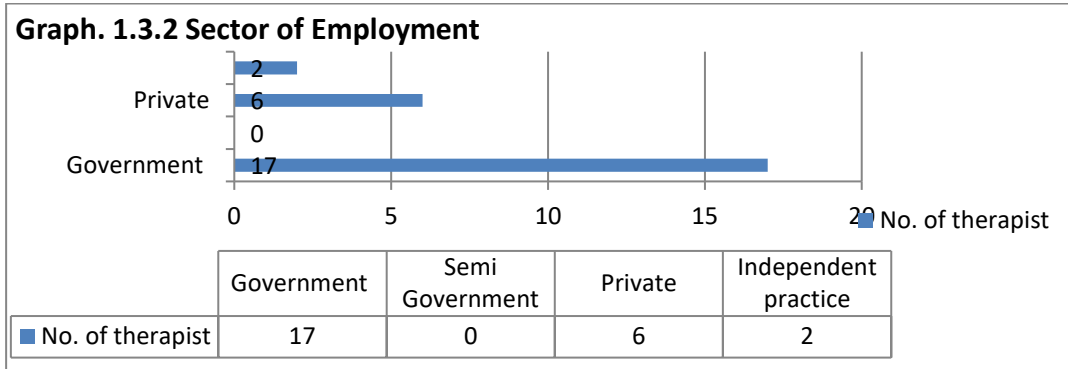
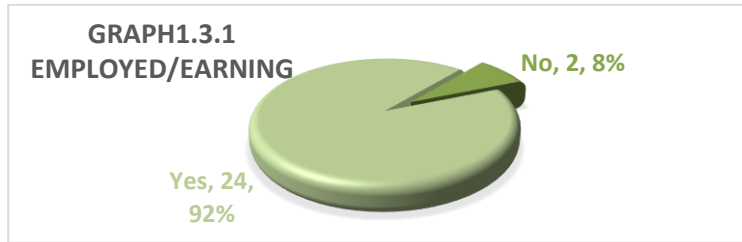
The maximum respondent was from Papumpare district (38%) and Lower Subansiri District (27%). The remaining respondent belongs from Different district of Arunachal Pradesh Such as Lohit, East Siang, Tawang, Tirap, Lower Dibang Valley and West Kameng.

Age and Gender



Graph 2.1 Represent the respondents as age wise distribution whereas X- axis denotes number of participants and Y- axis denotes age's of respondent. Our survey represents the physiotherapist are youngsters with mean age 30.11 ± 3.42 years. In Graph 2.2 shows majority of the survey respondents were females.

Employability Ratio

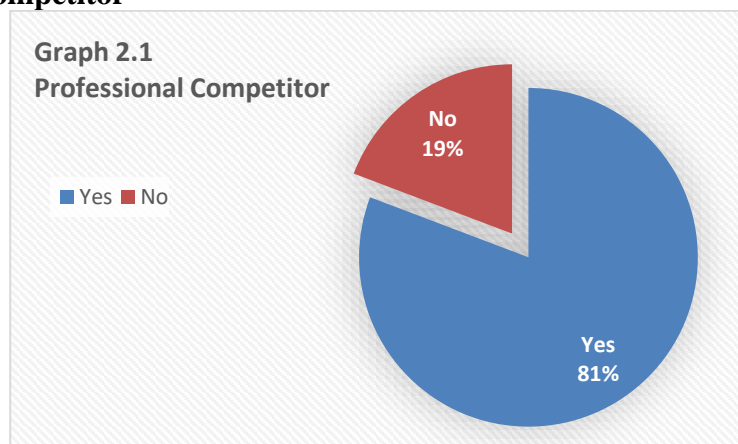


Graph 1.3.1 represent the employability ratio among physiotherapist, the survey shows that 92% of them are employed in different sectors, in Arunachal Pradesh. On further details analysis we found that out of 26 respondents, 17 of them are government employee. (**Graph1.3.2**) and 79% of them are exposed to clinical / hospital sectors (**Graph 1.3.3**). Looking on experiences the majority of young physiotherapist (54%) having experiences of 2-5 years only (**Graph.1.3.4**).

PROFESSIONAL RESPONSE:

The researcher tried to understand the professional relationship with other health care professionals.

- **Professional competitor**

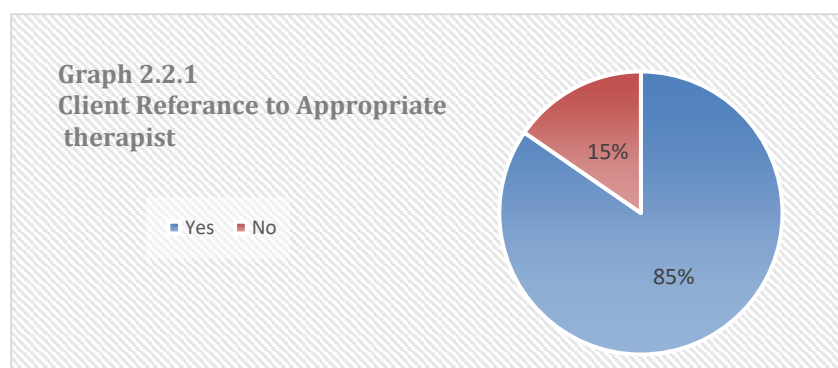


In **Graph 2.1**, out of 26 respondents, 81% accepted about professional competitor available in their area, where as 19% declared them as solo therapist in their area.

- **Professional cooperation.**

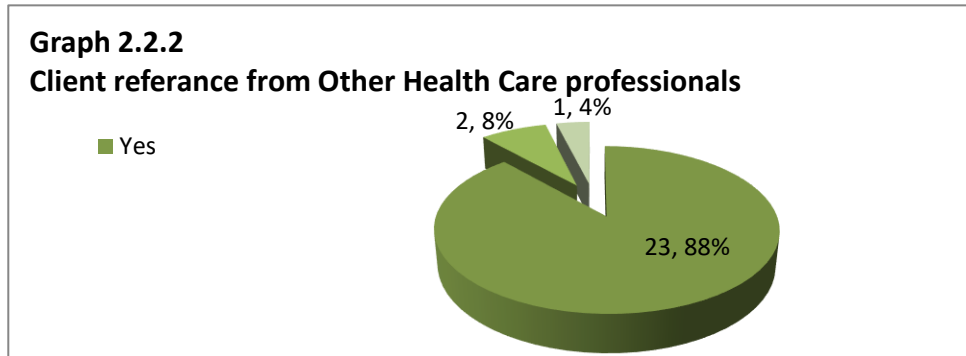
To analyse the professional cooperation, the researchers enquired about client referral system. The researcher enquired about three specific things i.e. referring the clients to appropriate therapist, reference of client from other health care professionals and maximum reference from specific health professionals.

- **Client reference to appropriate therapist.**



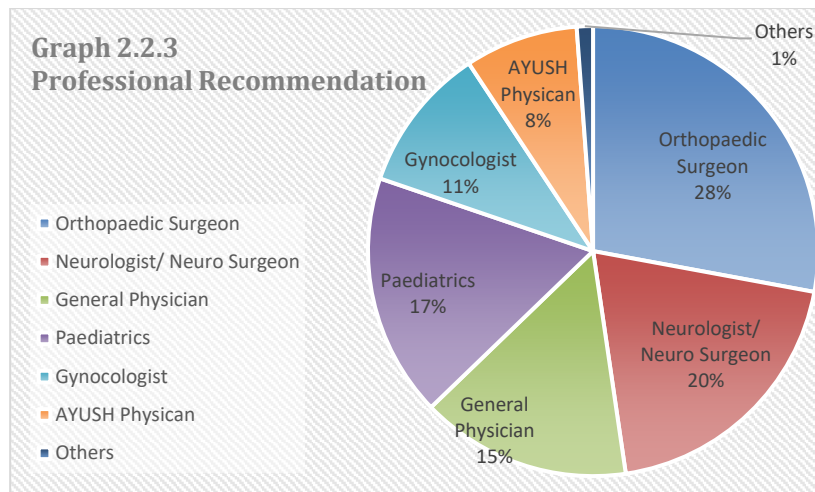
The (**Graph 2.2.1**) survey finds that 85% of respondents do refer to appropriate / specialised therapist, if needed.

➤ Client reference from other health care professionals.



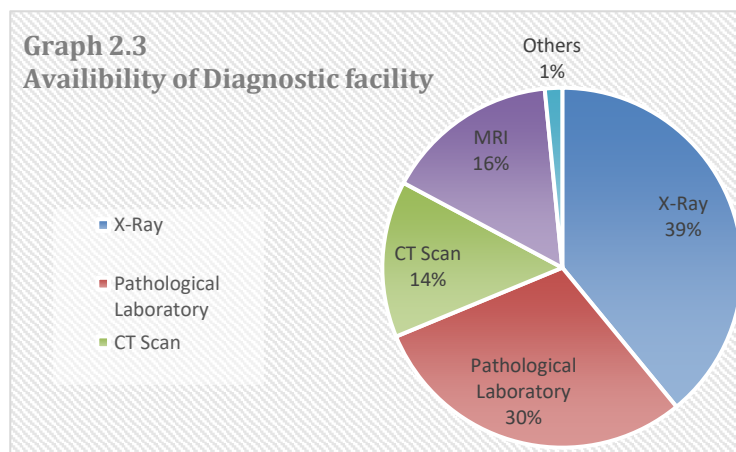
(Graph 2.2.2.) On enquiring about clients reference from other health care professionals, 88% therapist agree about, where as 8% do not agree about the opinion and one respondent didn't responded anything.

➤ Professional Endorsement



Regarding enquiring about maximum reference, 28% of orthopaedic surgeon followed by 20% of neuro physician / surgeon, 17% Paediatrics and 15% general physician recommend Physiotherapist for active services for client's recovery.

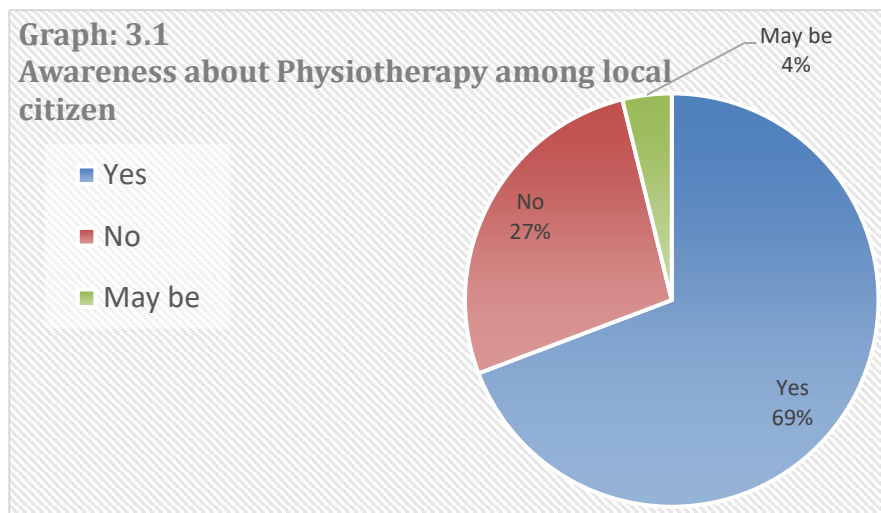
• Diagnostics facilities.



Our survey probed about resource for diagnostic facility availability. Therapist states that basic diagnostic equipment such as X-rays, Pathological laboratories are available in 39% and 30% respectively in their practicing area, where as advance radiological equipment's such as CT and MRI are hard to find out in their local area.

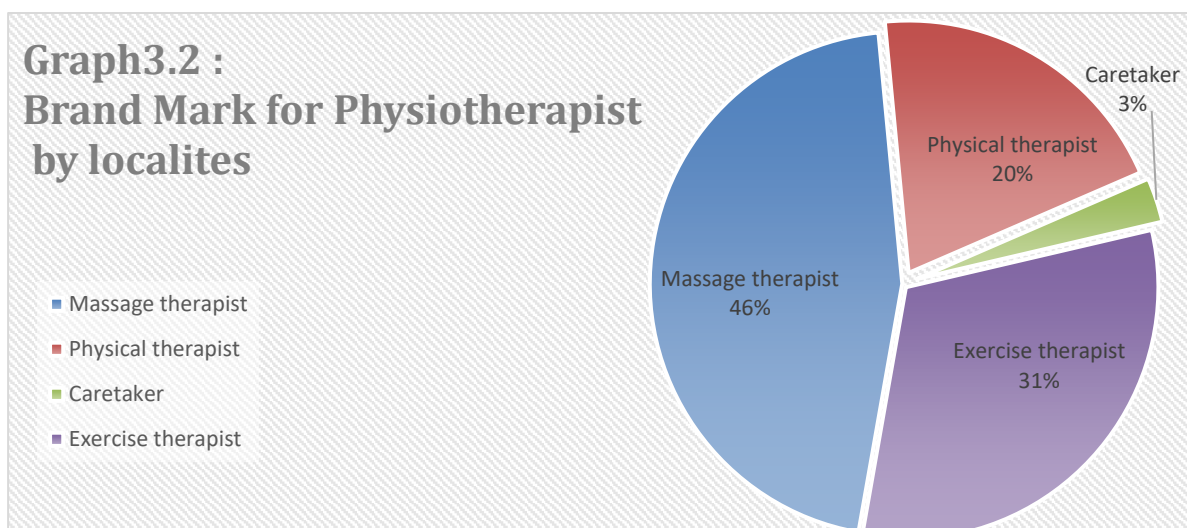
SOCIAL RESPONSE TOWARDS PHYSIOTHERAPIST

- Local citizen awareness towards physiotherapy.



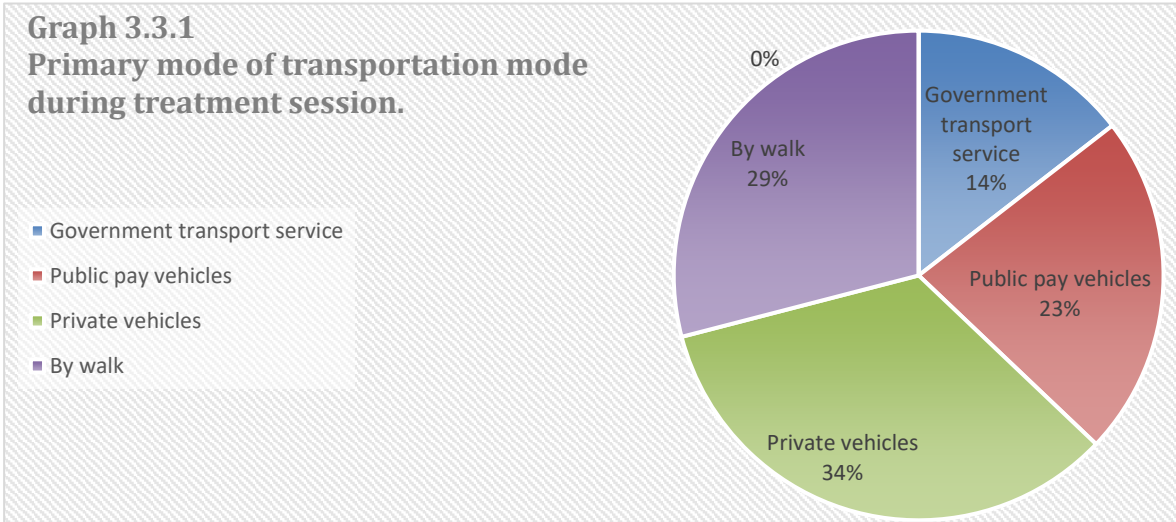
Graph 3.1 Describes that 69% of therapist accept that local citizen of their locality are aware about the physiotherapist where as 27% of therapist complains about ignorance among their local members about physiotherapist.

- Physiotherapist's brand mark by localities



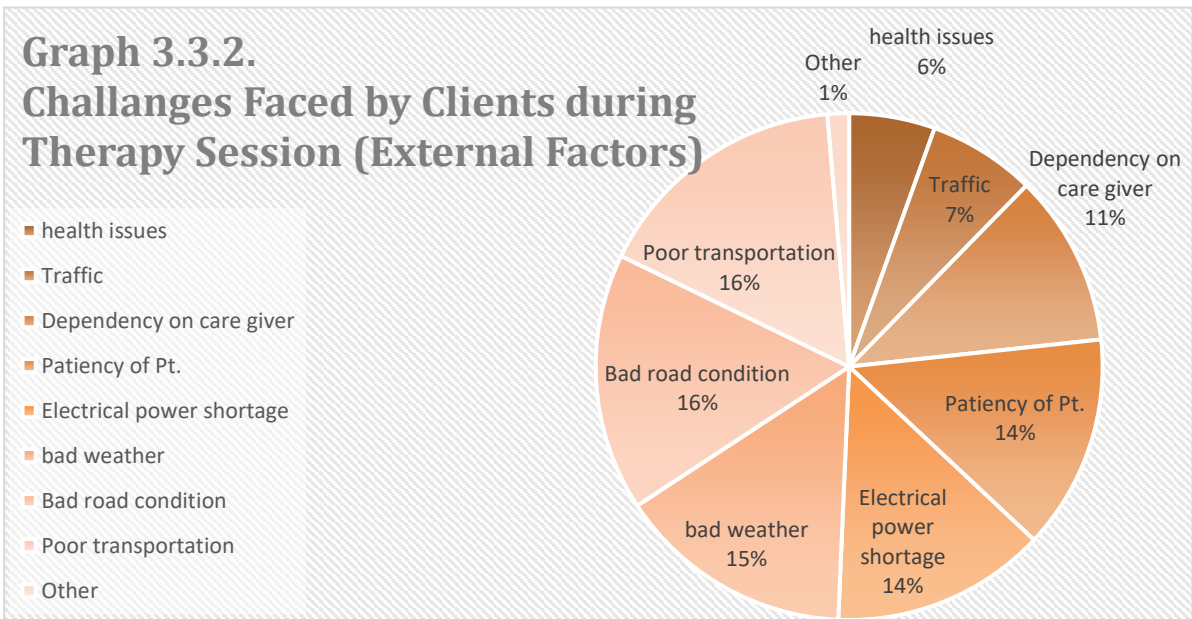
(Graph3.2) the survey states that majority of physiotherapist (46%) complain that their localities confuses between massage therapist and physical therapist. Though large number of physiotherapists recognised by the localities as exercises therapist (31%) and physical therapist (20%).

- Clients challenges during treatment regimen
 - Mode of Transportation.



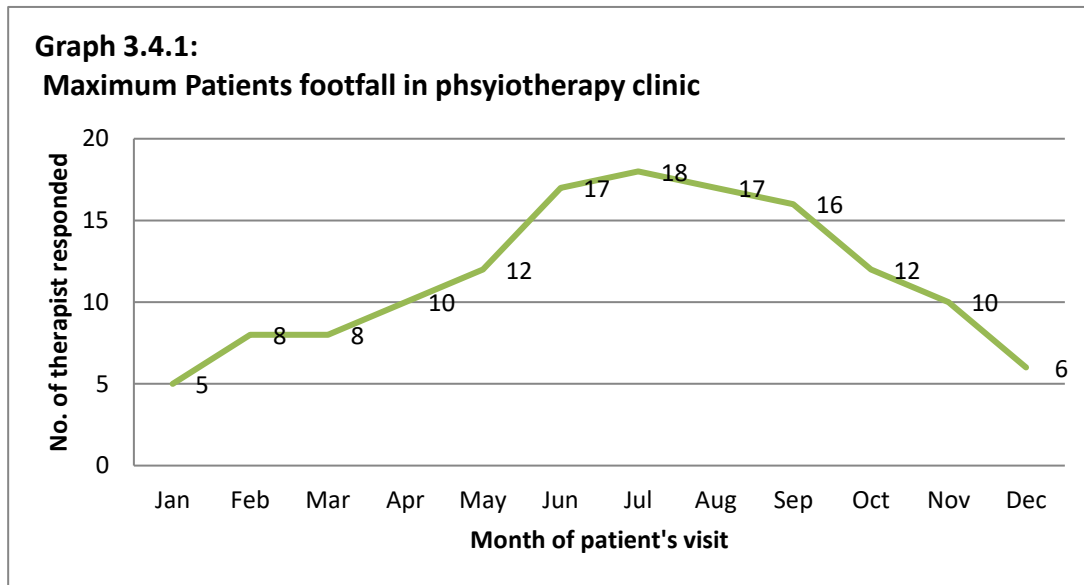
Graph 3.3.1 After gathering the responses from 26 therapist, we came to know that only 34% of their clients can effort private vehicles during treatment session, the remaining have to reach by Govt transportation (14%), Public pay Vehicle (23%) or even by walk (29%), which is a big challenge for therapist for caring their clients.

- Challenges for clients during treatment session. (External Factors)



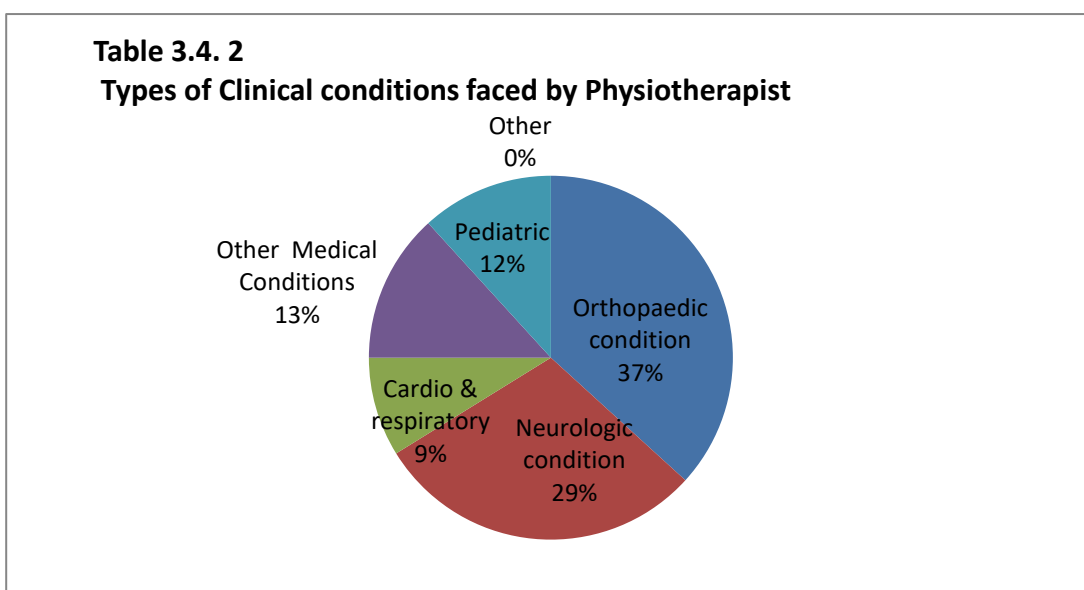
Graph 3.3.2 Explain about the challenges faced by clients during therapy session. The survey outcome states that Bad road condition (16%), poor transportation (16%), bad weather (15%), unavailability of power supply during treatment (14%) are the few of the factors which hampers the client’s motivation for continuation for the treatment.

• Patients Visits.



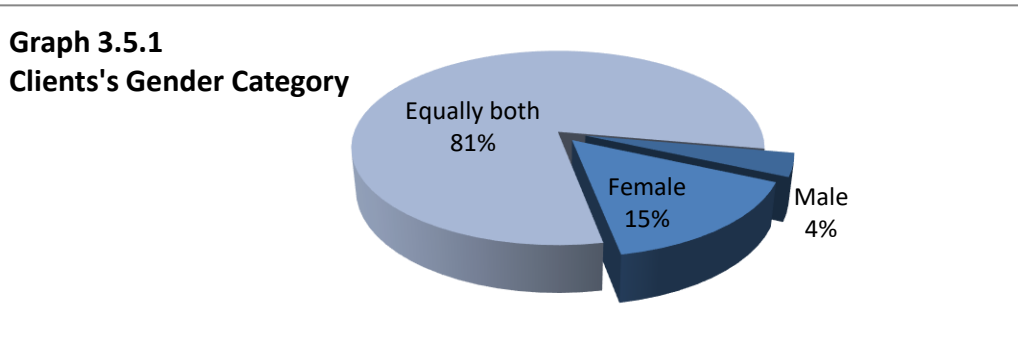
Graph 3.4.1 Majority of the therapist states that June, July and August are the months for maximum numbers patients visits their clinic. The reason many be the patients are unwilling to visit clinic in cold session.

➤ Majority types of clinical conditions face by therapist



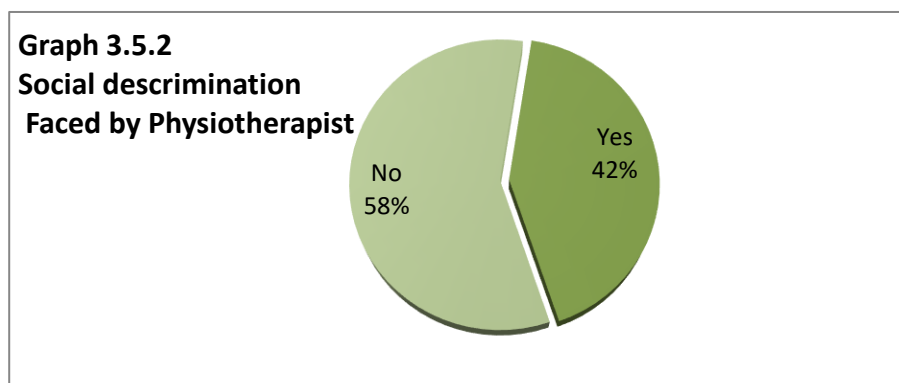
Graph 3.4.2 represents the majority of the clinical conditions handled by physiotherapist. 37% of therapist answered that majority of the patients complains with orthopaedic related conditions and whereas 29% conditions are representing Neurological conditions.

- Society responses
 - Gender majority



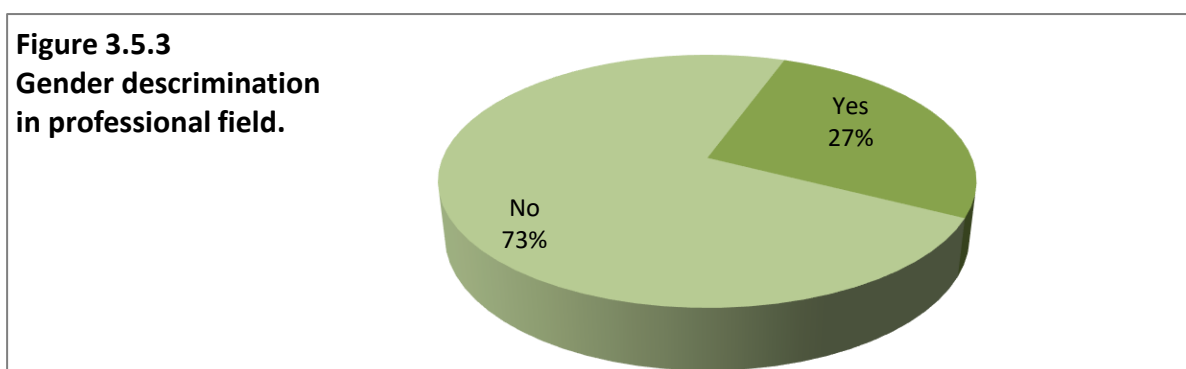
Graph 3.5.1 represents that 81% of Therapist states both equal number male and female visits the physiotherapy clinic, though 15% of therapist believes that female patients visits the clinic more than male patients.

- **Social discrimination by Patients or his/her relatives.**



Graph 3.5.2 found a shocking finding that out of 26 respondents, 42% of them accepting that they faced social discrimination from clients or from their relatives. The exact cause and type of discrimination was not evaluated.

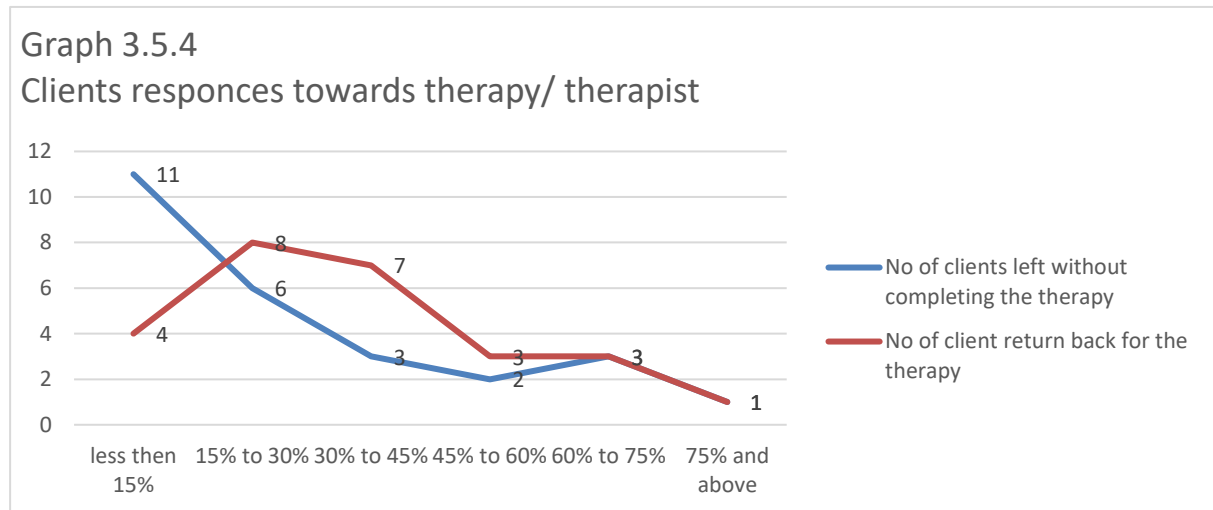
- **Gender Discrimination.**



Graph 3.5.3 shows some little alarming fact that 27% of physiotherapist accepted gender discrimination in professional field. The exact reasoning and type of gender discrimination

was not evaluated in this research.

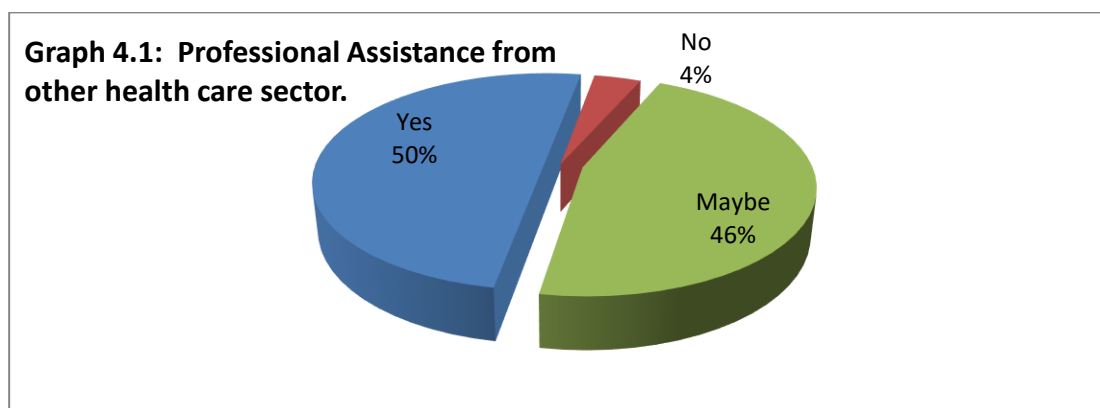
➤ **Clients responses towards therapy/ therapist**



Graph 3.5.4 tried to analyse the responses of clients towards therapy / therapist. Out of 26 respondent 11 therapist stated that less than 15% clients leave the therapy without completing the therapy sessions. Whereas 15 therapists answered that 15% to 45% of clients return back to the clinic for betterment. The cause leaving the therapy in mid-session and return back of clients were not evaluated in this survey.

PROFESSIONAL OUTCOME FEEDBACK

- **Assistance from other Health Care professional during treatment.**

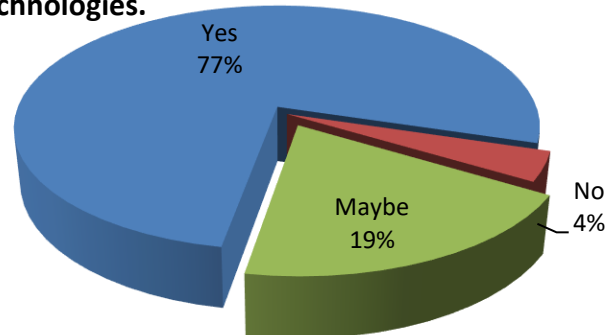


(Graph 4.1) On enquiring about the need/requirement of other medical practitioners for quality assessment, and assistance to evaluate patient's problem and better improvement for rehabilitation, the 50% of the respondent agree with mutual assistance with other health care professionals where as 4% do not agree, whereas responding as situation based.

- **Improvisation of equipment up to latest technology.**

Graph 4.2:

Need of upgrade/improvisation of equipment to the latest technologies.



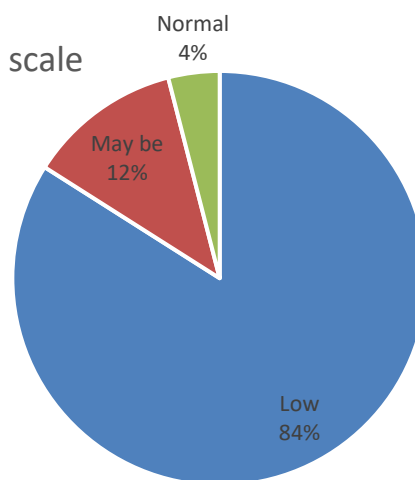
(Graph 4.2) Survey found that 77% of the therapist responded that the equipment needs to be upgraded and improved to the latest version, whereas 19% are in dilemma on upgradation. The researcher assumption was, that therapist is not sure about cost effect and client benefits with new technology.

- **Pay scale for physiotherapist.**

➤ **Present Pay scale satisfaction.**

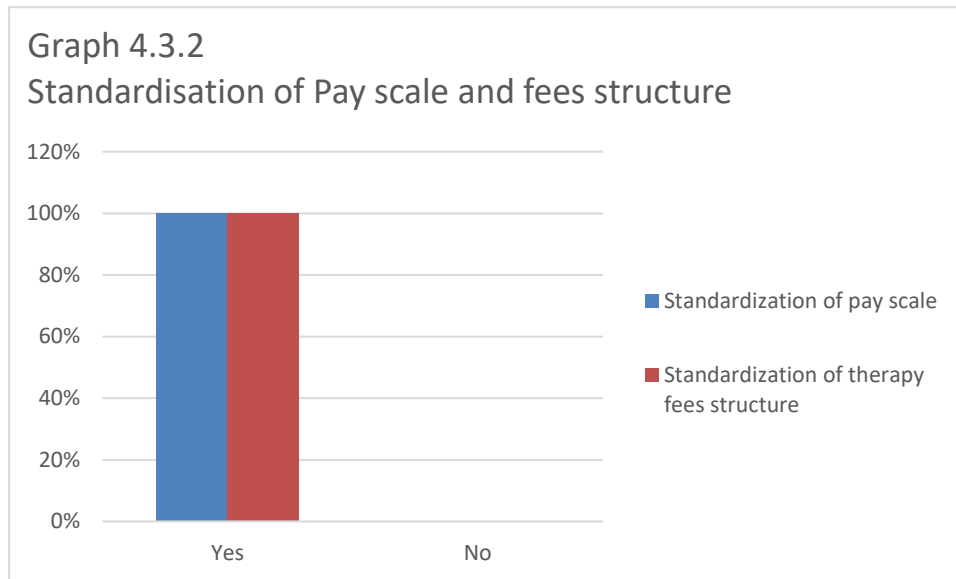
Graph4.3.1

Satisfaction with present pay scale



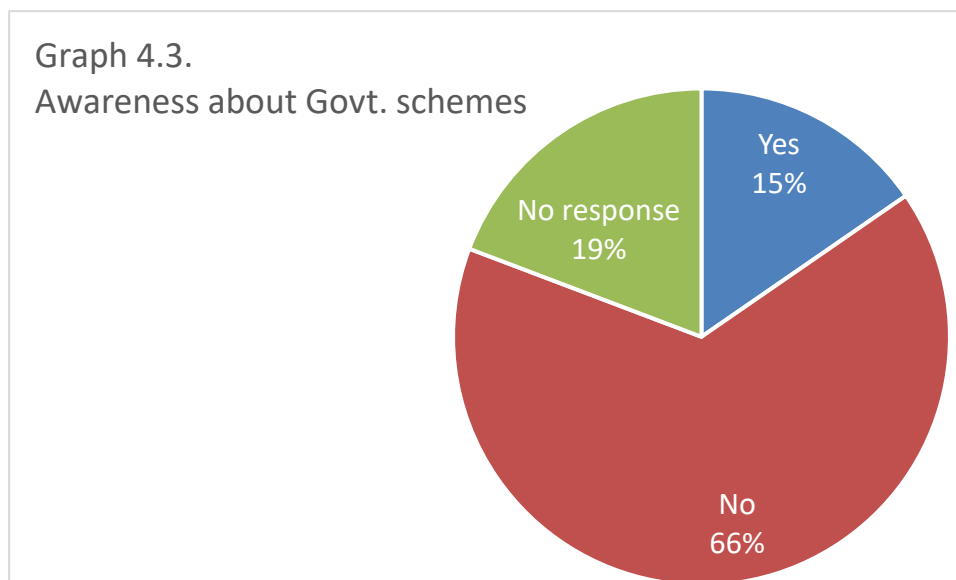
(Graph 4.3.1) On questioning about the present pay scale as compared to other health care professional, 84% of physiotherapist are not satisfied, whereas 12% are expecting little more than the present amount.

➤ **Standardization of pay scale and fees structure.**



(Graph 4.3.2) On further probing about the requirement for payment, all physiotherapist believes that there should be standardization of pay scale, which need to be revised. Additionally, all therapist believes that there should be standardization of fees structure need to be set. Researcher believes a proper regulatory commission need to standardize these issues.

• **Awareness of Government Schemes.**



(Graph 4.3) Regarding asking about schemes by government central or state, 66% of therapist are unaware where as 19% didn't responded to this survey question.

RESULTS

Of total respondents, most of them are young female therapist. The female-male ratio is 19:7. According to the survey data most of local people are biased between physiotherapists and massage therapist. A limitation of diagnosis facilities in state is one of the challenges faced by

the physiotherapist. The other factors that challenge the therapist are bad road, poor transportation facilities, bad weather, electric power shortages and impatience of a patient. Survey says that highest numbers of patient are seen in summer seasons. The ignorant behaviour of society such as social discrimination and gender discrimination hamper the moral boost and motivation for physiotherapist. Apart from this, the majority of physiotherapists are not satisfied with equipment availability, low pay scale and no standardization of fees for therapist, which demotivate the physiotherapist to work in hard condition. Researcher believes that physiotherapist should be aware of different health schemes and expecting a regulatory body to guide and nurture the physiotherapy profession in society.

DISCUSSION

In health sectors, physiotherapy has an important role on the treatment process, pre and post condition of a patient in any health status. Physiotherapy can offer a lot in prevention and rehabilitation for affected as well as healthy person. Field of physiotherapy within Arunachal Pradesh is yet to be explored and expanded. Hence, a survey was conducted through a questionnaire to find the scope of practice and challenges faced by physiotherapist within the state. The questionnaire consists of demographic data and questions regarding problems around them which would hinder the growth of physiotherapy. The questionnaires were distributed through google survey form. A total of 29 therapist responded out of which 3 were excluded based on the exclusion criteria.

EMPLOYMENT

Most of the practitioners responded were employed in government sector (17/26) and few are independent practitioner. When compare to other states in India, there is limited colleges and universities within Arunachal Pradesh which offer physiotherapy, due to which a handful practitioners are enrolled in academic and research activity. According to the data, majority of the therapist are under 2 to 5 year of experience in physiotherapy field. This possibly indicates that the most of job in physiotherapy was created or vacancies was filled around past 5 years.

The data regarding the standardization of pay scale is totally one sided of 100%. Survey conducted in Punjab also shows that 90% of the therapists require standardization of the pay scale.⁷ Patient would choose between higher and lower therapy fees without taking any account in quality of treatment. Though physiotherapist may deal with lower number of patients in some areas, therapy sessions may require a huge amount of time and effort. A physiotherapist has to be with the patient on therapy sessions. The therapist needs to be physically fit and mentally self-motivated. Like other health care profession, physio too have occupational hazards such as injuries, fatigue, micro-trauma, mental stress they have to deal it without hampering their job.^{16,19} There is an effort-reward imbalance on physiotherapist.³ 84% of therapist felt that they are offered low pay scales as compared to other health professionals. If pay scale and therapy fees would be standardized, a practitioner can solely focus on the quality of treatment/rehabilitation of a patient. A research-based practice would greatly emphasize the growth of physiotherapy and its aid to the society.

REFERRAL SYSTEM AND AWARENESS AMONG PROFESSIONALS

As per data, the other medical practitioners do know about physiotherapy and does refer their patient in the care of physiotherapists, but it is unclear. The purpose of referring to physical therapy department. Like in Afghanistan, there were referrals but under physicians control over

any therapy conducted by physiotherapist and they referred to physiotherapist as massage therapist.⁴ In a survey of Mumbai, 95% (110 out of 196) of doctors did refer their patient to physiotherapy but also they (56%) objected to the physiotherapist having a first contact practice. Although they give referrals, 36% of the general practitioners felt that they themselves lacked knowledge about various functions of physiotherapy.¹ Inadequate knowledge about physiotherapy is the cause of late referrals and long series of referrals finally to physiotherapists. Many authors speak about the lack of awareness about physiotherapy among other health professionals. They also cited about unethical referral systems.¹⁸

FACILITIES AND TREATMENT

There are many physical diagnostic approaches to evaluate the problem of a patient. Though for differential diagnosis, to find aetiology, to identify complications and consequences the advanced diagnostic equipment's are needed. For better interventions, research and studies on patient's problems one should at least have access to the basic health facilities like x-rays, CT scan, MRI, pathology lab etc. Though our survey found that 96% of the respondents have X-ray facilities in their area and 34.6 % of them have CT scan facility, but they are limited to only 2 districts who could reach out for CT scans and MRI. Our investigation concludes that almost all the people from every other district have to travel to main cities for appropriate diagnosis. In Arunachal Pradesh the transportation and travelling from one place to other are time consuming and very prone to accidents due to bad road conditions, as well as access to health care is a complex issue with socio-economic condition, lack of awareness, unavailability of infrastructure, lack of well-equipped health facilities, lack of proper telecommunication and internet facility, lack of awareness of health schemes, lack of health insurance and many more.¹¹ This causes a limitation of efficient and effective services near the door step.

PATIENT'S NON- ADHERENCE AND IGNORANCE TOWARD PHYSIOTHERAPY

According to therapists many patients arrive at clinic/hospital by public transportation or by pedestrian. But due to poor transportation, bad road communication and sometimes bad weather are the major factors for the patient for unable to attend their treatment sessions regularly. Also, electrical power shortage is one of the major factors that hamper the regular treatment.^{11, 20} The transporting, travelling and treatment process may consume heavy amount of time & also indirectly effects on economical factors of a family¹⁰ which may cause stress, anxiety, depression and impatience on both the patient as well as caregiver. Traffic problems are affected precisely in two districts according to survey data. Our survey surprises us with most interesting fact from most populous and highest literate districts (Population census 2011 done by Government of India)¹⁷. that only 69% of physiotherapist said that local people do know about physiotherapy, researcher believe that there was some slack in awareness about physiotherapy. Based on previous statement, it's our prediction that public living far away from the towns may be unaware about physiotherapy, even it is possible that they may never heard about physiotherapy services.

This survey found another interesting fact that, physical therapist is busy in clinic during summer as compare to the winter season. Further fact was discovered that July has the most number of patients, reported by Physical therapist of Arunachal. Factor relating to the lower number of patient in winter of Arunachal Pradesh could be related to many factors like winter economy of family²² (no agriculture, more fuel consumptions on firewood and electricity etc),

and also therapy may be problematic due to frequent power shut down because of overload to powerstations.^{23,24} These are the few possible factors for making patients non-adherent towards physiotherapist.. In addition to above problems, 27% of therapist faces gender discrimination and 42% of therapist faces social discrimination by a patient or his relatives. Thus, it makes harder for a therapist to conduct a therapy session on such condition.

Study Limitation

There are several limitations in this survey such as

- ✓ Numbers of online participant/respondent are minimal.
- ✓ Unable to do offline survey due to COVID crisis.
- ✓ Few participants unable to respond due to network issues/lack of internet facility etc.
- ✓ Postal services hampered due to COVID.
- ✓ May need more time duration for survey.
- ✓ Limited secondary data.

CONCLUSION

Regarding the topic, within the state this survey was first of its kind as no similar studies were found up to date. It was the reason for the conducted exploratory survey. At the end of this pilot survey, researcher found many hidden problems such as social and gender discrimination can affect the motivation of physiotherapist for upliftment of the professional, though it's unclear the exact causes / source of the problem, thus researcher believes that further research or survey needed to know the exact cause. Further Physiotherapist of Arunachal. The therapist

needs to work hard to improvise the professional and make aware of the role and function of physiotherapist in society. The survey data are mainly from young physiotherapist thus like to suggest that they should effort themselves to upgrade their skills and eager to adapt new therapeutic technology and update with Govt schemes related to health, the author appreciate despite several external and professional problems, they kept the spirit to move forward and serve the locality people. To get rid off all problems, majority of therapist expects a proper state physiotherapy council and fair & transparent regulatory board to resolve the problems. The NGO's and Govt organisation need to be come forward for proper social awareness & induce physiotherapy sector in health benefit schemes, and programme for promoting physiotherapy.

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