

# Scope of Physiotherapy Practice in District Hospitals of the Semi-developed Barisal Division, Barisal, Bangladesh

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## ABSTRACT

In the developed nations physiotherapist are autonomously participating in the first line and already they are working in the second line treatment alongside with other professionals and the right for the mass population similar to the goal of the public health. The aim of the study was to sort out the real scenario of the development of physiotherapy services as a part of primary health care services including the knowledge and attitude of the general people. A multistage sampling method was selected for conducting the study in districts hospitals of the Barisal division. Result depicted that among the respondents mean age  $36.86 \pm 4.558$  years and most 33.3% (n= 73) of them were younger age range 21-30 years and interestingly highest 41.55% (n= 91) were graduated with highly significant ( $\chi^2= 1.196$ ,  $P= 0.000$ ). 65.3% (n= 143) of patients had knowledge about physiotherapy. Majority of case 41.1% (n= 90) orthopedic ( $\chi^2= 86.175$ ,  $P= 0.000$ ) and medical condition stroke were highest 30.1% (n= 66) statically significant ( $\chi^2= 1.561$ ,  $P= 0.000$ ). Due to the awareness maximum, 39.70% (n= 87) came from self-reference and 88.4% (n= 176) received exercise therapy including other electrical modalities. Lowest 8.70% (n= 19) of patient expense > 300 BDT. Treatment right time 60.3% (n= 132). Treatment success rate 69.4% (n= 152). Difficulty to come physiotherapy center 43.8% (n= 96). Some limitation that causes insufficiency in treatment provide; 10.6% patient noted poor timing, 30.7% long waiting time, 68.3% (n= 136) unpleasant, 78.9% (n= 157) absence of physiotherapist, 9.5% (n= 19) lack of cooperation. Although that 99.5% patient demand physiotherapy center as close as their range and 60.3% (n=132) satisfied with the treatment. Therefore it is strongly suggested to set up a modern physiotherapy department within the primary health care system with the qualified physiotherapist in community-level also District level hospital.

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## I. BACKGROUND

Usually, an occupation belongs to a countrywide organization and specialists are the human beings who practice specialized understanding in the field for a rate [1, 2]. Health care services furnished via preventive, primitive, healing and rehabilitative activities via the health professionals for person and community. It has to feature optimally for the fantastic functioning of fitness system of a country [3]. Physiotherapist in education, practice, and research settings takes part in the progression of fitness promotion not only to the mainstream however also to the forefront of public health practices [4].

Despite Australia being counted among those nations presently undertaking fitness care and social welfare reforms like South Africa, New Zealand, and international locations from



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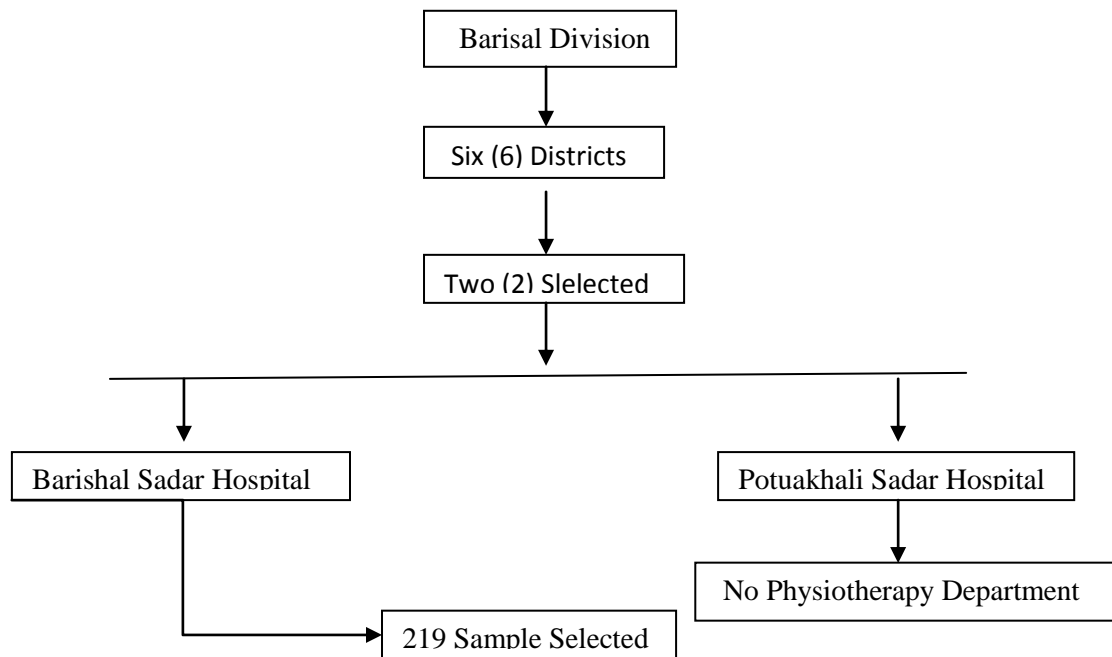
Europe and North America, a recent record that surveyed six industrialized nations regarding their overall performance in preventative and persistent ailment care ranked Australia fifth [5]. Although Physiotherapists are well located to the integrated into important fitness care fashions in Nova Scotia [3,6]. To enhance public health and meet national goals physiotherapist has an inevitable key function [6]. In the past times' known Extended Scope of Practitioners (ESPs) however lately it is introduced as Advance Practice Physiotherapy (APPs) in the UK [2]. Recently, involved in secondary health promotion considerably; that is, via physiotherapy intervention, the patient learns greater about their fitness condition, how fine to manage it and how to prevent recurrence of sickness and damage [3]. Have lower healthcare fees and normally more healthy populations than those concentrating their efforts on the tertiary quit of healthcare [5,7].

Further linking of health promotion with physiotherapy should be one step in attaining this goal. Physiotherapists have to become position models in searching at the massive image and should have self-belief in addressing broader fitness problems in growing nations like India [4]. For instance, from a clinical assessment in Alberta, the place physiotherapists decline session ready time about 80%, surgery waiting time nearly 90%, medical institution remain around 30%, more suitable accountability and greater complete and fulfilling care to the patient [3]. Physiotherapists are precious individuals of multidisciplinary teams, making an essential contribution to fundamental fitness care via their health promotion, prevention, screening, as well as triage, assessment and remedy things to do [8]. In the remaining few decades, there has been a name for reorientation of health offerings towards fitness advertising and prevention. Furthermore linking of health promotion with physiotherapy ought to be one step in achieving this goal. Physiotherapists ought to turn out to function fashions in national standpoint and have to have self-belief in addressing broader health issues [4]. The term most normally used in relation to essential health care is a multidisciplinary team, numerous disciplines with more than a few know-how and talent bases that are drawn collectively in a structure to furnish services [9].

The current institutional scenario in Bangladesh, no individual government physiotherapy college yet established whereas there is more than 70 physiotherapy institute/college in bordering country India [10]. Likewise, recent health care system and policy development situation also alike to the educational status. Long since back, worldwide recognized that rehabilitation services to integrate into the primary health environment also incorporated into coordinated community services and committed to caring delivered by the three things; right professional, in the right place, at the right time [3]. Physiotherapists are valuable members of multidisciplinary teams, making an important contribution to primary health care through their health promotion, prevention, screening, as well as triage, assessment and treatment activities. [11]. In our nation physiotherapy services provided by the other health professionals or quack instead of qualified and certified physiotherapist mostly, in right place; most of the hospitals devoid of services and right time; yet include primary health care service; beyond imagination.

## **II. METHODS AND METHODOLOGY**

A multistage sampling approach used to be specific to habits the find out about in the physiotherapy department of the district hospitals positioned semi-developed district at Barisal division. Data had been amassed from the April to July 2017. Study populace used to be elected these who bought here to the physiotherapy out-patient department.



Flowchart: Sample collection through multistage approach

The investigator has chosen the district hospitals by using multistage sampling technique; in Barisal Division, there had been six districts, within six districts two districts have been taken by randomly sampling and from there two districts hospitals particularly Barishal Sadar Hospital and Potuakhali Sadar Hospital were chosen via random sampling. But Potuakhali Sadar Hospital did not have any operated out-patient physiotherapy department; therefore we took the sample completely from the Barishal Sadar Hospital. The selected 219 persons have been counted by using adopting the purposive sampling method primarily based absolutely on inclusion and exclusion criterion. Data had been accrued by using way of the Face-to-face interview with a pretested semi-structured questionnaire. English questionnaire additionally translated into Bengali for the higher understanding and having the utmost right answer from the respondents.

Prior to the data collection, permission has been taken from the authority of sanatorium and contributors who have been inclined to give written consent. Participants had the right to withdraw themselves from any stage of the study. All interviewed questionnaires have been checked for its completeness, accuracy and consistency to remove lacking or inconsistent data. The statistics had been analyzed with the aid of way of the use of the software program application SPSS 16th. The analyzed records have been introduced in tables, charts and bars, descriptive facts carried out at the aim of interpretation of the findings. To figure out the affiliation among the variables chi-square take a look at have been located in move tabulation.

### III. RESULTS

The descriptive cross-sectional study was exploring the treatment scope of physiotherapists in selected districts hospital of the Barisal division. Total number of 219 respondents were interviewed where 51.1% (n= 112) male and 48.9% (n= 107) female. There mean age  $\pm$  SD, 36.86  $\pm$  4.558 years, minimum of less than 20 years, and the maximum of more than 60 years.

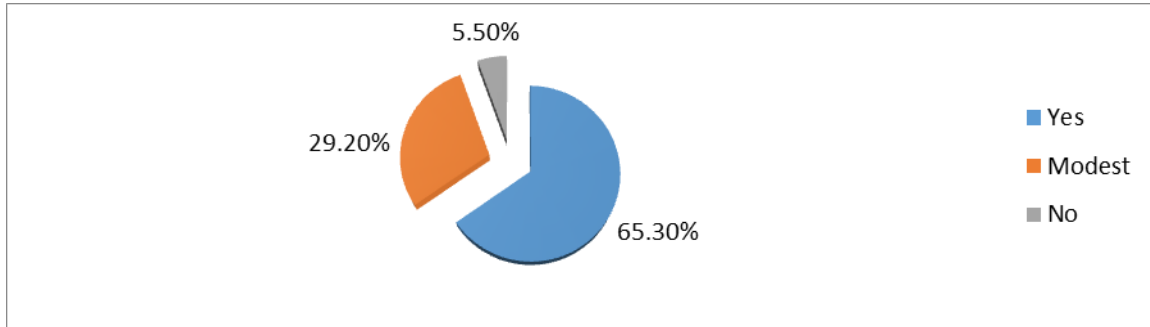
**Table 1: Distribution of the respondents according to the base line characteristics**

Variable	Characteristics	Number (%)	Knowledge about Physiotherapy			Chi-Square, X <sup>2</sup>	P value
			Yes	Modest	No		
Gender	Male	112(51.1)	72	37	3	4.458	0.108
	Female	107(48.9)	71	27	9		
Age	<20 years	25 (11.4)	13	10	2	20.857	0.022
	21-30 years	73 (33.3)	38	19	6		
	31-40 years	36 (16.4)	41	4	1		
	41-50 years	52 (23.7)	36	14	2		
	51-60 years	13 (5.9)	4	8	1		
	>60years	20 (9.1)	11	9	0		
Religion	Muslim	153(69.9)	83	64	6	--	--
	Hindu	43 (19.6)	40	0	3		
	Christian	23 (10.5)	20	0	3		
Education level	Illiterate	9 (4.1)	9	0	0	1.196	0.000
	Primary	46 (21)	21	22	3		
	SSC	35 (16)	10	24	1		
	HSC	38 (17.35)	19	18	1		
	Graduate	91 (41.55)	84	0	7		
Occupation	Farming	24 (10.2)	21	0	3	--	--
	Business	42(19.2)	19	22	1		
	Housewife	42(19.2)	0	42	0		
	Private Job	48(21.9)	44	0	4		
	Gov. Job	42(19.2)	38	0	4		
	Other (Retired)	21(9.9)	21	0	0		
Monthly Income (BDT)	≤ 10000	163 (74.4)	113	42	8	19.101	0.004
	10001-20000	44 (20.1)	18	22	4		
	20001-30000	6 (2.7)	6	0	0		
	30001-40000	6 (2.7)	6	0	0		
Earning Member	01	55 (25.1)	--	--	--	--	--
	02	158 (72.1)	--	--	--		
	03	6 (2.7)	--	--	--		
Family Income (BDT)	≤ 10,000	97 (44.3)	89	0	8	99.105	0.000
	10,000 –20,000	89 (40.6)	32	53	4		
	20,001 –30,000	17 (7.8)	6	11	0		
	50,001 –60,000	10 (4.6)	10	0	0		
	> 60,000	6 (2.7)	6	0	0		
<b>Total</b>		<b>219 (100)</b>					

P value originated from Chi-square (x<sup>2</sup>) test, BDT= Bangladeshi Taka (1\$ = 84 BDT)

Study depicted that 11.4% (n= 25) belonged to the age group < 20, 33.3% (n= 73) went to the age group 21 – 30, 16.4% (n= 36) with the age group 31-40, 23.7% (n= 52) presented to the age group 41-50, 5.9% (n= 13) went to the age group 51-60 and 8.5% (n= 20) belonged to the age group 9.1% (n= 20) and (X<sup>2</sup>= 20.857, P= 0.022). 69.9% (n= 153) were included in the Muslim, 19.6% (n=43) were linked to Hindu and 10.5% (n= 23) were associated with the Christian. 4.1% (n= 9) were illiterate, 21.0% (n= 46) completed primary level education, 16% (n= 35) carried out SSC, 17.35% (n= 38) managed HSC and 41.55% (n= 91) were graduate highly significant (P = 0.000). In the occupation, 10.2% (n= 24) engaged in farming, 19.2% (n= 42) holed Business, housewife and

government job, 21.9% (n= 48) were doing private job and 9.9% (n= 21) were retired from their profession. Among the participants monthly income range is ≤ 10000 BDT for 74.4% (n= 163), 20.1% (n= 44) were income between 10001-20000 BDT, 2.7% (n= 6) were income range 20001-30000 BDT and 2.7% (n= 6) were income between 30001 - 40000 BDT (P= 0.004). Each family, income were ≤ 10,000 BDT for 44.3% (n= 97) family, 40.6% (n= 89) family income were 10,000 – 20,000 BDT, 7.8% (n= 17) family were income range 20,001-30,000 BDT, 4.6% (n= 10) family were income between 50,001- 60,000 BDT and 2.7% (n= 6) family were income > 60,000 BDT per month highly significant (P = 0.000) (Table 1).



**Fig 1: Distribution of respondents by knowledge about physiotherapy**

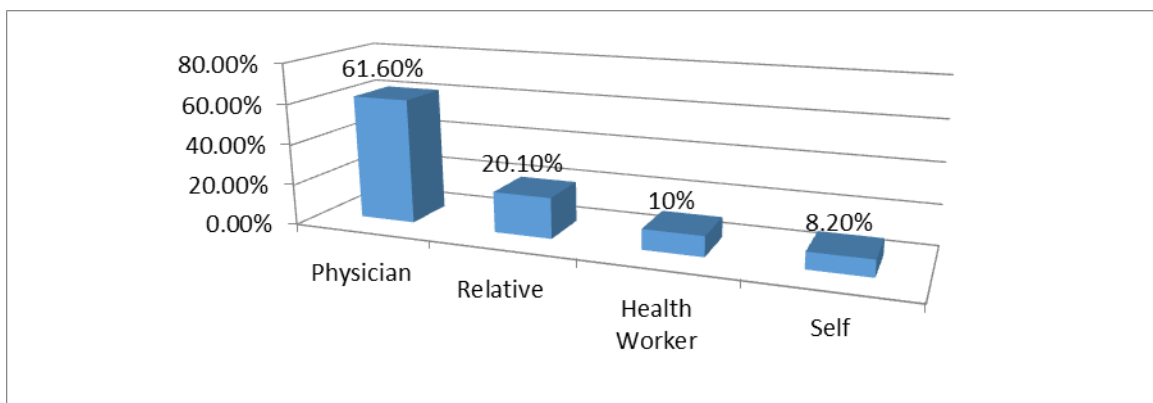
Data described that 65.3% (n= 143) patients were aware, 29.2% (n= 64) patients did have poor knowledge and 5.5% (n= 12) patient patients have no knowledge about physiotherapy prior to the treatment begin (Figure 1).

**Table 2 Distribution of respondents by medical condition**

Variable	Characteristics	Number (%)	Knowledge about Physiotherapy			Chi-Square, $\chi^2$	P value
			Yes	Modest	No		
Case	Orthopedic	90 (41.1)	66	18	6	86.175	0.000
	Neurological	66 (30.1)	19	46	1		
	MSK	23 (10.5)	20	0	3		
	Surgical	19 (8.7)	17	0	2		
	PWD	21 (9.6)	21	0	0		
Medical Condition	ULP	20 (9.1)	20	0	0	1.561	0.000
	LLP	25 (11.4)	23	0	2		
	LBP	28 (12.8)	25	0	3		
	Neck Pain	24 (11)	21	0	3		
	RTA	20 (9.1)	2	18	0		
	Post Fracture Complication	19 (8.7)	17	0	2		
	Stroke	66 (30.1)	19	46	1		
	Bell's Palsy	2 (0.9)	1	0	1		
	Nerve Injury	1 (0.5)	1	0	1		
	Post-Surgical Complain	14 (6.4)	14	0	1		
	Previous visit	Yes	58 (26.5)	38	18		
No		161 (73.5)	105	46	10		
<b>Total</b>		<b>219 (100)</b>					

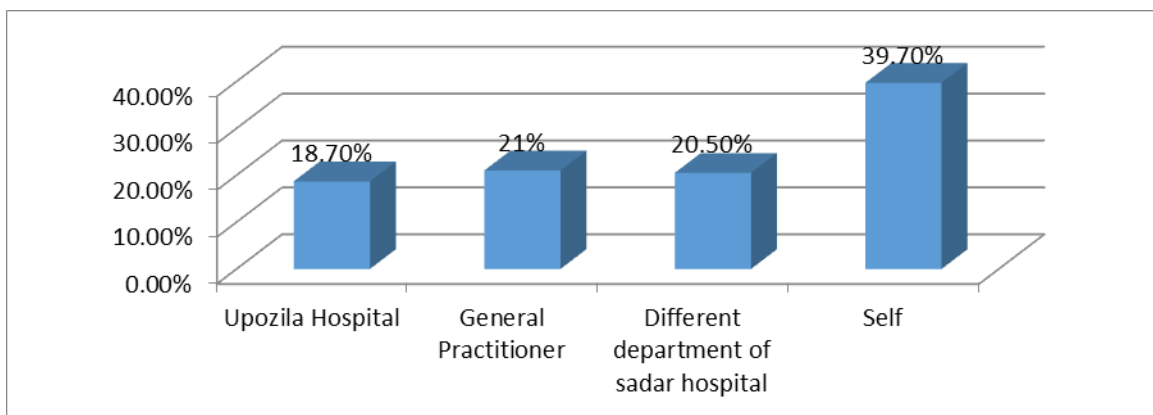
MSK= Musculoskeletal, ULP= Upper limb pain, LLP= Lower limb pain, LBP= Low back pain, PWDs= person with disabilities, RTA= Road Traffic Accident

From this analysis, mostly 41.1% (n= 90) cases were orthopedic, 30.1% (n= 66) cases were neurological, 10.5% (n= 23) cases were MSK, 8.7% (n= 19) cases were surgical and 9.6% (n= 21) cases PWDs highly significant ( $\chi^2=86.175, P= 0.000$ ). In medical condition, 9.1% (n= 20) participants suffered from ULP, 11.4% (n= 25) suffered LLP, 12.8% (28) suffered LBP, 11.0% (n= 24) participants suffered from neck pain, 9.1% (n= 20) suffered from RTA, 8.7% (n=19) suffered from post fracture complication, 30.1% (n= 66) suffered from stoke, 0.9% (2) suffered from, 0.5% (n= 1) were nerve injury and 6.4% (n= 14) suffered from post-surgical complication significant level is higher ( $\chi^2= 1.561, P = 0.000$ ) 26.5% (n= 58). Maximum 73.5% (n= 161) participants did not visit previously in the physiotherapy department ( $\chi^2= 0.683, P = 0.711$ ) (Table 2).



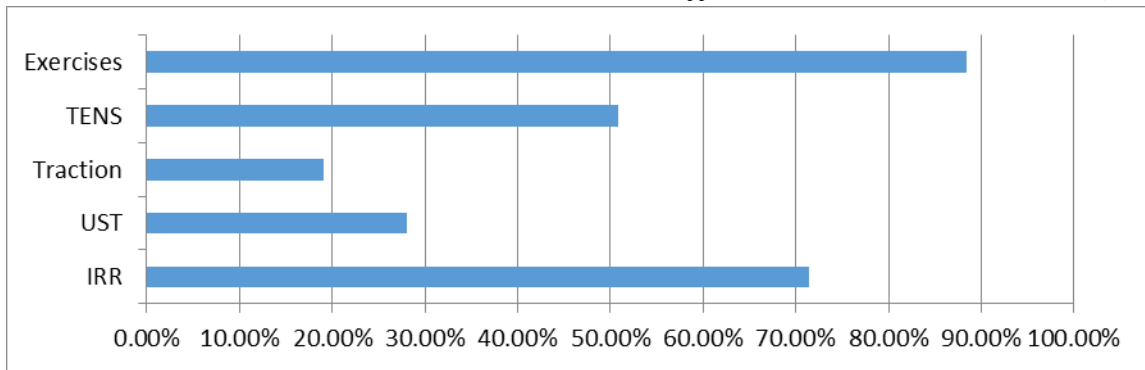
**Fig 2: Distribution of respondents by referral from professionals**

Investigation showed that more than half of respondents 61.6% (n= 135) were referred by physician, 20.1% (n= 44) were known by relative, 10.0% (n= 22) were introduced by health worker and 8.2% (n= 18) referred by themselves (Figure 2)



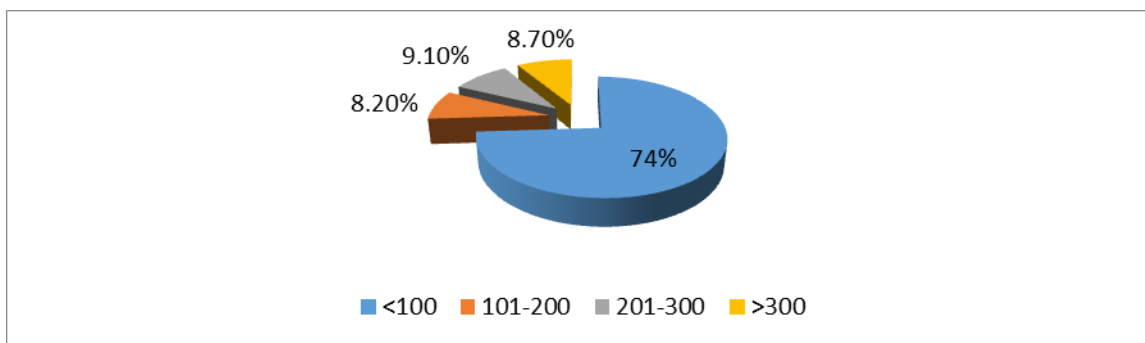
**Fig 3: Distribution of respondents' referral from institution**

Distribution manifested that 18.7% (n= 41) participants were referred from upozila hospital, 21.0% (n= 46) participants were referred from general practitioner, 20.5% (n= 45) participants were referred from different department of sadar hospital and 39.7% (n= 87) participants were attended by alone (Figure 3).



**Fig 4: Distribution of respondents by different treatment means**

The bar chart exhibited that 71.4% (n= 142) cases treated by IRR, 28.1% (n= 56) cases remedy by UST, 19.1% (n= 38) of cases treated by traction, 50.8% (n= 101) cases treated by TENS and 88.4% (n= 176) cases treated by exercise (Figure 4).



**Fig 5: Distribution of per day expenditure during treatment**

In the figure, maximum 74.0% (n= 162) contributors were expense < 100 BDT per day for treatment, 8.2% (n= 18), 9.1% (n= 20) and 8.7% (n= 19) were dissipated 101 - 200 BDT, 201 300 BDT and > 300 BDT respectively per day for per session treatment (Figure 5).

**Table 3: Distribution of respondents by the treatment**

Variable	Characteristics	Number (%)	95% Confidence Interval, CI	
			Upper Bound	Lower Bound
Required day	≤ 5	150 (68.5)	9.50	11.13
	6-10	45 (20.5)		
	>10	24 (11)		
Require Time (Minute)	≤ 10	48 (21.9)	32.40	26.68
	11-20	59 (26.9)		
	21-30	27 (12.3)		
	31-40	34(15.5)		
	41-50	14(6.4)		
	51-60	22 (10)		
	61-70	4(1.8)		
	>70	11 (5)		
Treatment at right time	Yes	132 (60.3)	1.46	1.33
	No	87 (39.7)		
Treatment outcome	Improved	152 (69.4)	1.63	1.41
	Remain same	20 (9.1)		
	Unable to assess	47 (21.5)		
<b>Total</b>		<b>219 (100)</b>		

Study showed, lion population 68.5% (n= 150) of contenders required day for treatment between  $\leq$  5 days, 20.5% (n= 45) for 6-10 days and 11.0% (n= 24) for  $>$  10 days (95% CI: 9.50 – 11.13). The average time required for the treatment, 21.9% (n= 48) required  $\leq$  10 minutes, 26.9% (n= 59) needed 11-20 minutes and 15.5% (n= 34) required 31-40 minutes (95% CI: 32.40 – 26.68). The greatest 60.3% (n= 132) contributors noted that they received treatment at right time whereas 39.7% (n= 87) replied did not receive the treatment at right time (95% CI: 1.46 – 1.33). In outcome of the treatment, topmost 69.4% (n= 152) acknowledged improvement and 47% (n= 21.5) contenders countered with instability of the condition, 9.1% (n= 47) contenders reported condition remain same (95%CI: 1.63 – 1.41) (Table 3).

**Table 4: Distribution of respondents by distance and transport**

Variable	Characteristics	Number (%)
<b>Center close to Range</b>	Yes	219 (99.5)
	No	1 (0.5)
<b>Distance</b>	1-5	78 (35.61)
	6-10	50 (22.83)
	11-15	32 (14.61)
	16-20	21 (9.6)
	21-25	38 (17.35)
<b>Difficulty to come</b>	Yes	96 (43.8)
	No	123 (56.2)
<b>Treatment cost</b>	5-25	140 (63.9)
	26-45	18 (8.2)
	46-65	22 (10)
	66-85	20 (9.1)
	106-125	19 (8.7)
<b>Reach hospital</b>	Own House	135 (61.6)
	Relative House	45 (20.5)
	Hotel	19 (8.7)
	Admission in Hospital	20 (9.1)
<b>Total</b>		<b>219 (100)</b>

Analysis illustrated that 99.5% (n= 219) respondents sought after to have a physiotherapy center close to their range but only 0.5% (n= 1) did not explain any interest to have a physiotherapy center close to their range 21.5% (n= 20). 35.61% (n= 78) people were come from the distance of 1-5 km, and 22.83% (n= 50) were come from the distance of 6-10 km, 14.61% (n= 32) were come from the distance of 11-15 km, 14.61% (n= 32) were come from the distance of 16-20 km and 17.35% (n= 38) people were come from the distance of 21-25 km. Half of 56.2% (n= 123) patients said that it was difficult to come hospital and 43.8% (n= 96) said it was easy to coming the hospital. The average per day money expense for transport was 56.70 BDT per day. In transportation cost, 63.9% (n= 140) patient were burned up 5-25 BDT per day for treatment, 8.2% (n= 18) were contributed 26 - 45 BDT, 10.0% (n= 22) were expense 46 - 65 BDT and 9.1% (n= 20) were expance 66 - 85 BDT, 8.7% (n= 19) were expense 106-125 BDT per day for taking treatment per day 61.6% (n= 135) patients were taking treatment from their home, 20.1% (n= 45) patients were from their relative house, 8.7% (n= 19) patients from the hotel and 9.1% (n= 20) patients



remaining admitted during

their

taking treatment period (Table 4).

**Table 5: Distribution of respondents by addressing the lacking present in PT department**

Variable	Characteristics	Number	(%)
Scarcity in Department	Lack of Timing	24	10.6
	Long waiting time	42	30.7
	Unpleasant environment	136	68.3
	Functional apparatus	36	18.1
	Poor Management	60	30.2
	Graduate Physiotherapist	157	78.9
	Cooperation	19	9.5
	Others (dirtiness, quick change of technician)	21	10.6
	<b>Total</b>	<b>495</b>	<b>256.9</b>

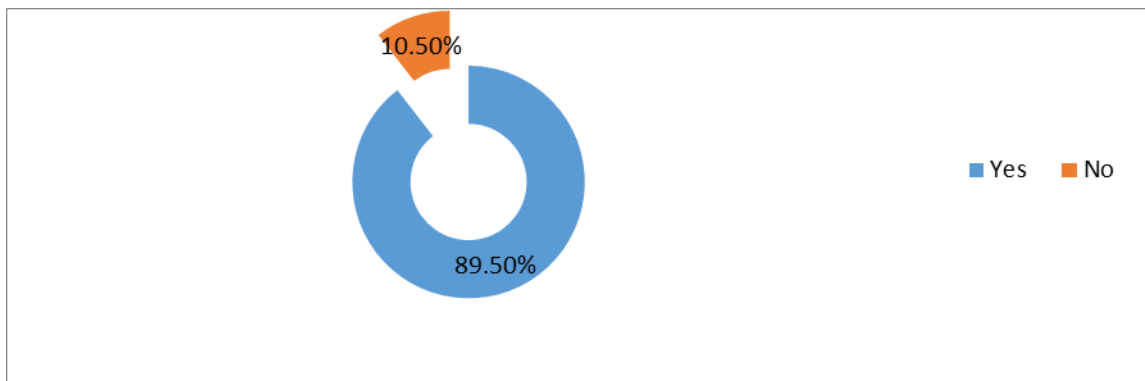
Study outlined that the several insufficiencies was quoted by the patients and those were 10.6% (n= 24) cases said poor timing, 30.7% (n= 42) cases said about long waiting time, 68.3% (n= 136) cases said unpleasant environment, 18.1% (n= 36) lack of functional machine, cases noted 30.2% (n= 60) poor management, 78.9% (n= 157) cases said absence of Physiotherapist, 9.5% (n= 19) cases said lack of cooperation and 10.6% (n= 21) cases said about misbehave, dirtiness, quick change of technician (Table 5).

**Table 6: Distribution of respondents' response about physiotherapy**

Variable	Characteristics	Number (%)	Knowledge about Physiotherapy			Chi-Square (x <sup>2</sup> )	P value
			Yes	Modest	No		
Satisfaction	Yes	132 (60.3)	82	42	4	1.483	0.476
	No	87 (39.3)	61	22	8		
Refer other Pt	Yes	213(97.3)	140	62	11	1.666	0.435
	No	6 (2.7)	3	2	1		
	<b>Total</b>	<b>219 (100)</b>					

**Pt= Patient**

The study demonstrated the satisfaction level about the treatment where more than half 60.3% (n= 132) were satisfied with the treatment except only 39.3% (n= 87) who did not respond positively (P = 0.476). When the respondent was asked for the weather they could referral patient to the physiotherapist then most them 97.3% (n= 213) preferred and scanty 6% (n= 2.7) did not prefer (P = 0.435) (Table 6).



**Fig 6: Distribution of respondents if they desire treatment**

The figure represented the desire of the treatment if required in future, 89.5% (n= 196) respondents were preference treatment on the other had barely 10.5% (n= 23) did not prefer (Figure 6).

**IV. DISCUSSION**

The study was attempting to explore the scope of physiotherapy practice in selected least developed districts hospital of Barisal division. The relevant findings were presented below: Among the total 219 respondents slightly higher 51.1% (n= 112) male and lower 48.9% (n= 107) female with the mean age ± SD 36.86 ± 4.558 year. Participants age range 20 - > 60 years where maximum 33.3% (n=73) belonged to the age group 21 – 30, and lowest 5.9 (n= 13) belonged to the age group 51-60 years statistically significant ( $\chi^2= 20.857, P = 0.022$ ). Upper most 69.9% (n=153) were practicing Islam, 19.6% (n=43) were believe in Hinduism and remaining 10.5% (n=23) were Christian. Considering educational category, graduates participants were highest 41.6% (n=91), 21.0% (n= 46) completed primary level, 16% (n= 35) concluded with HSC and merely smaller amount 4.1% (n= 9) were illiterate highly significant ( $\chi^2= 1.196, P= 0.000$ ). 21.9% (n= 48) were doing jobs in private sector, equal 19.6% (n= 42) participants were businessman, housewife and government job holder. Participants monthly income range ≤ 10000 were highest 74.4% (n=163), next to 20.1% (n= 44) income was in between 10001-20000, equal 2.7% (n= 6) income were between 20001-30000 and 30001-40000 significant ( $\chi^2= 19.101, P= 0.004$ ). Greatest 72.1% (n= 158) family were two earning persons, 25.1% (n= 55) family were only one earning person and only 2.7% (n= 6) family had three earning member in their family. In total income of each family, average income was 8487.44+/-5582.22 BDT; just lower than half 44.3% (n= 97) of the family member income was ≤ 10,000 BDT, 40.6% (n= 89) family were income 10,000 – 20,000 BDT and lowest 2.7% (n= 6) family income were > 60000 BDT per month vastly significant ( $\chi^2= 99.105, P= 0.000$ ) (Table 1).

Considering knowledge of the respondents about the physiotherapy, greatest 65.3% (n= 143) contributors were poses past knowledge, lowest 5.5% (n= 12) responders did not have post-knowledge on physiotherapy (Figure 1). More than half 61.6% (n= 135) of the patient was referred by the physician whereas barely 8.2% (n= 18) visited the department to receive treatment by their own (figure 2).

In the study, least 8.7% (n= 19) were surgical cases, orthopedic cases were most frequent 41.1% (n= 90) and MSK cases were moderate 10.5% (n= 23) came to the outpatient department ( $\chi^2 = 86.175, P= 0.000$ ). Stroke patient were highest 30.1% (n=66), followed by LBP 12.8% (28), LLP 11.4% (n= 25) and neck pain 11.0% (n= 24) amid the medical condition statistically significant ( $\chi^2 = 1.561, P= 0.000$ ). No more than 26.5% (n=58) patients were previously visited other than greater 73.5% (n= 161) did not visit ever in the physiotherapy department for the treatment ( $\chi^2= 0.683, P = 0.711$ ) (Table 3).

Ultimately 39.7% (n= 87) patients went by themselves due to the chronic endurance condition, next to 21.0% (n= 46) patients were referred from general practitioner and 20.50% (n= 45) patients were passed on from the various department of sadar hospital extremely significant ( $\chi^2= 66.724$ ,  $P= 0.000$ ) (Figure 3).

The main arsenal of physiotherapy treatment were therapeutic exercises, which trend of practice was utmost 88.4% (n= 176) for the patients benefit in contrast among the electrotherapeutic modalities application of IRR was picked around 71.4% (n=142) and traction applied less than 19.1% (n=38) cases (Figure 4). Considering expenditure of the treatment cost, 74.0% (n=162) patient were spent < 100 BDT and only 8.7% (n= 19) were depleted > 300 BDT per session for the purpose of treatment (Figure 5). 89.5% (n=196) respondent were agreed to take physiotherapy treatment as per the requirement statistically significant ( $\chi^2= 7.886$ ,  $P= 0.019$ ) (Figure 6).

Lion's portion of the participants' number of required treatment  $\leq 5$  days were 68.5% (n= 150) and just 11% (n= 24) required > 10 days (95% CI: 9.50 – 11.13). 26.9% (n= 48) participants treated with 11 -20 minutes, 21.9% (n= 48) treated by  $\leq 10$  minutes and highest > 70 minutes were required for simply 5% (n= 11) cases (95% CI: 32.40 – 26.68). Around 60.3% (n= 132) recognized the treatment were started at appropriate time (95% CI: 1.46 – 1.33). Highest 69.4% (n= 152) noted these treatment were effective (95% CI: 1.63 – 1.41) (Table- 3).

The study reported patients desired to have a physiotherapy center close to their range uppermost 99.5% (n=219) but smaller amount 0.5% (n= 1) did not expect any interest to have physiotherapy center close to there. Distance as a matter of fact to continue the treatment, even though, 17.35% (n=38) people came from the long-distance 21 -25 km, most 35.16% (n= 78) of the patient received treatment who live near to the closer range 1-5 km from hospitals and 22.83% (n= 50) from the distance of 6-10 km. More than half 56.2% (n= 123) of patients noted it as an obstacle to come hospital and 43.8% (n= 96) did not count distance as a hinder to reach the hospital. Average expenditure per day for the purpose of transport was just 56.70 taka per day. Utmost 63.9% (n= 140) patient were expense 5-25 BDT in contrast only 8.7% (n = 19) required highest 106 - 125 BDT per day for the treatment. Lions portion 61.6% (n= 135) of the patients were reaching hospital directly from their home, 20.1% (n= 45) patients received by living their house of the relative and tiny amount 8.7% (n= 19) of patients secured treatment by hiring a room in a hotel for the accomplishment of the treatment (Table 4).

Respondents noted the scarcity of the department where most 68.3% (n=136) of them reported about the unpleasant the environment, lowest equal 10.6% (n=21) of participants quoted about the lack of timing and other like dirtiness and quick alter of the physiotherapist assistance and scanty 9.5% (n=19) reported poor cooperation (Table 5).

Patients were satisfied with the treatment more than half around 60.3% (n=132) ( $\chi^2= 1.483$ ,  $P= 0.476$ ) and they were asked about the referral of other patients to the physiotherapy department where interestingly 97.3% (n=213) desired to refer both were not statistically significant ( $\chi^2= 1.666$ ,  $P= 0.435$ ) (Table 6).

## V. CONCLUSION

Through the study was explained the scope of physiotherapy practice selected district hospital Barisal division. Educated respondents were more among came for the physiotherapy treatment statistically significant  $P= 0.000$ ; knowledge about physiotherapy 65.3% (n= 143) was concern. Most of the patient suffering from the reason of orthopedic 41.17% (n= 90) and neurological 30.1% (n=66). Around 61.6% patient referred from physician and 69.4% cases improved the condition by physiotherapy treatment within the unpleasant environment nearly 68.3%. Even though lowest 9.6% participants came from the long distance but the majority 35.61%. Overall satisfaction of participants 60.3% but it was not statistically significant ( $\chi^2= 1.483$ ,  $P = 0.476$ ).

## VI. RECOMMENDATION

A suggestion evolves out of the context in which we find out about was locate out the scope of physiotherapy paritic and include in primary health care system. Through the lookup has some boundaries but the researcher identified some future step that may be taken for the higher accomplishment of future research. To ensure best of physiotherapy provider open district stage physiotherapy branch in government health facility and appointed certified physiotherapist.

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## REFERENCES

- [1] Sjukgymnastforbundet. (1012). "Profession. Stockholm: Legitimerade Sjukgymnasters Risk for bund"; Retrieved from: <http://www.sjukgymnastforbundet.se/english/Sidor/english.aspx>
- [2] Fennelly, O., Blake, C., FitzGerald, O., Breen, R., O'Sullivan, C., O'Mir, M., Desmeules, F., and Cunningham, C. (2018). "Advanced Musculoskeletal Physiotherapy Practice in Ireland: a National Survey". Wiley Online Library. doi: 10.1002/msc.1351.
- [3] "Integrating Physiotherapy into the Primary Health Care Model in Nova Scotia: an Economic Solution. Nova Scotia Physiotherapy Advisory Group". (2007).
- [4] Yasobant S, and Mohanty S. (2017). Would Physiotherapists be Public Health Promoters?: Concern or Opportunity for Indian Public Health System: Austin Palliat Care. 2(1): 1012.
- [5] Doggett, J. (2007). "A new approach to primary care for Australia, occasional paper no. 1, Centre for Policy Development", Sydney, NSW. Retrieved from [http://cpd.org.au/sites/cpd/files/u51504/a\\_new\\_approach\\_to\\_Primary\\_Care\\_\\_CPD\\_June\\_07.pd](http://cpd.org.au/sites/cpd/files/u51504/a_new_approach_to_Primary_Care__CPD_June_07.pd).
- [6] Baky, AMAE. (2014). "Physical therapy profession perception by physicians and medical students in sudayr region". Indian journal of physical therapy. 2: 54-60.
- [7] McDonald, J & Hare, L. (2004). "The Contribution of primary and community health services, literature review, Centre for Health Equity, Training, Research and Evaluation", UNSW, Liverpool, NSW.
- [8] College of Physical Therapists of Alberta, Alberta Physiotherapy Association & Canadian Physiotherapy Association. (2007). "Primary health care. A resource guide for physical therapists". Retrieved from <[http://www.cpta.ab.ca/initiatives/PHC\\_Guide\\_20070605.pdf](http://www.cpta.ab.ca/initiatives/PHC_Guide_20070605.pdf)>.
- [9] McAvoy, BR & Coster, GD. (2005). "General practice and the New Zealand health reforms – Lessons for Australia?, Australia and New Zealand Health Policy". 26(2). Retrieved from, <<http://www.anzhealthpolicy.com/content/2/1/26>>.
- [10] Haque, MM. (2017). "Physiotherapy Practice in Bangladesh: Orthopedics and Rheumatology".7(5), 001. (doi: 10.19080/OROAJ.2017.06.555724).
- [11] Soever, L. (2006). "Primary health care and physical therapists – Moving the profession's agenda forward, discussion paper, Canadian Physiotherapy Association, Toronto, Ontario". Retrived from, <<http://www.physiotherapy.ca/PublicUploads/226839PrimaryHealthCareandPTSoever2006.pdf>>.