### Frequency and behavior towards recommended postnatal physical therapy after c section in primiparous females

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Abstract- : it is descriptive cross sectional study .which is conducted in Mirpur Azad Kashmir .Data is collected through self-structured questionnaire .sample size is 211 and data is collected through non probability convenient sampling. Inclusion criteria includes primiparous females who had c section and prim parous females with reproductive age 18-45.exclusion criteria includes females with medical background, pschytrict patients ,patients with hearing and speaking disability, comatose patients Frequency of recommendation of post natal physical therapy is very low 36.49% were recommended postnatal physical therapy after c section in spite of many complications, which shows that there is lack of knowledge among the gynecologists and other healthcare providers. The patients who were recommended postnatal physical therapy shows positive behavior

*Index Terms*- Primiparous females, postnatal physical therapy, frequency, behaviour

### I. INTRODUCTION

Female reproduces, being pregnant, giving child birth and Apost-delivery phase are integral part of her reproductive activities <sup>1</sup>females who are giving birth for the first time(singleton/prim parous females) are more conscious about the method they are going to deliver than that of those whose birth order is high(i-e multiparous females) and consideration like injury tothe new born and as it happens in normal delivery like damaging of endometrial tissue of uterus, infection of urinary tract, enuresis and in order to maintain their physique number of c section have

Pelvic floor practice have been displayed to help singleton mothers with side effects of urine leakage in post-delivery phase and may incredibly accelerate their actual recuperation. Typically pelvic arrangement programs recommend eight to 12 biggest pelvic floor muscle compressions daily (multiple times a week), while holding the maximal withdrawals for 6-8 seconds, and integrating three to four quick tightening influences close together. The recurrence of diastasis recti abdominals at or over the level of umbilicus tops during the third trimester and 53% in the speedy post-delivery phase and 36% some place in the scope of 5 -7% weeks post-delivery. These data show that the condition of diastasis recti does not decide following movement.inquisitively,this condition was absent in all women who were energetic exercisers before the start of gestational period .Back pain either in Gestational period or in post delivery phase ,brought on by weak abdominal muscles .but back pain is not same as lumber pain or posterior pelvic pain.Back pain can be treated with increased in them(even without recommended by doctor) in spite of this risks due to anesthesia like myalgia, fever or headache are more observed in them and

. complications not only last during post-delivery phase but also in future<sup>2</sup>.

After delivery there are three main aspects of post-delivery carei)Hospital based care (48 hours after vaginal birth and 72 hours after cesarean birth);ii) the immediate postpartum period (2 days to 2 weeks after delivery) and iii)6 weeks after delivery. Although information given to females in post-delivery phase varies between hospitals, most hospital based care programs focus on breast feeding, infant care and bathing, maternal episiotomy ,laceration care and vaginal bleeding blue babies and depression. During immediate postpartum period, information regarding the infant ,breast feeding ,maternal health with regard to exercise and weight loss symptoms of depression and availability of help at home are emphasized <sup>1</sup>

birth (comprises of three phases i-e acute phase lasts for 8 to 19 hours, subacute phase comprises of 2 to 6 week and delayed period period consists of 6 to 8 month) is such a tough time in sence of stress remarkably. Several changes takes place mentally , bodily and physiology such as uterus, fallopian tube, overies and vagina be likely back to pre pregnan state during puerperal period. And postnatal physiotherapy helps in healing and improving overall fitness<sup>3</sup>. Intrauterine massage while acute phase, isotonic and isometric while sub acute phase and kegel exercise should be performed after c section<sup>4</sup>

development of abdominal muscles and overall great fitness,but not that of posterior pelvic pain.Abdominal workouts should be carefully selected because ability of abdominal muscles to hold against pelvis after delivery is still less than during pregnancy this is the reason that strengthening excercises in case of posterior pelvic pain results into significant symptoms.<sup>4</sup>

Postnatal physiotherapy has benefits ,although it is seldom advised.<sup>1</sup>;the most common kinds include aerobics,muscle strengthening ,relaxation methods and breathing excercises <sup>3</sup>ought to be friendly and unpretentious.it is better if a women works from home because they are less active than men or even parents of older kids during this period.in order to remove barriers<sup>5</sup> such as being unambitious ,weary,,having transportationchallenges,using arguments of not having time,and having unsupporti ve families,circle the postpartum women and educationalists must collaborate<sup>5</sup>

In Pakistan ,there is lack of research and knowledge betwee gynecologists and mothers regarding postnatal

physical therapy. <sup>4</sup>A combination of activities led by a physiotherapist,eye to eye teachingand maternal health

Knowing the frequency of recommended postnatal physical therapy will demonstrate the level of knowledge about postnatal physical therapy among gynecologists and other doctors, allowing for observation of postnatal physicaltherapy practice among singleton mothers .Knowing how patients responds to recommended postnatal physical therapy following a c section will also assist

### II. METHODOLOGY

A descriptive cross sectional study was conducted in district mirpurAzadKashmir.Subjects who met the inclusion and exclusion criteria were selected.primiparous females age between 18-45 were included in this investigation by using non probability convenient sampling strategy.details about consent forms were explained to the participants prior to filling the forms.

A self-structured questionnaire (shown in Table 3)was used to assess frequency and behavior towards recommended

### III.RESULTS

The research results were analyzed and presented in tabe form and as comments for easy assimilation by the reader.(Table 1)

Table 1 shows the distribution of the respondents by demographic characteristics.the most majority 145 (68.7%) were aged between 26-35,20 out of 211 participants weights between 61-70 kg,71 of them weight between 51-60kg.18 weight between 70-80kg out of 211(graph 3)137 participants out of 211 BMI between 25-29.0 means they were over weight and 73 participants had normal BMI(18.5-24.9).157 out of 211 females show stable economic status(graph 1),13 were belong to elite class and 41 was belongs to below average.results shows that most of the females education(graph 2)was matric(n=211),8 was uneducated and 8 females studied intermediate.143females were working women and 68 were urban area.low back pain was most common complain among them(n=49)then uterine prolapse(n=43)females were suffering from urinary incontinence and 6 cases reported of prolonged post spinal anesthesia.32 of them complainof sciatic pain.Table 2 shows how much people out of 211 shows behavior towards recommended postnatal physical therapy after c section .according to the given statistic in this table 135 people showed neutral behavior while 76 shows positive behavior.the participants in the study age between 18-45, child bearing age, the result of the study indicate decrease level of wareness about the importance of postnatal physical therapy among the gynecologistand healthcare providers.similar to the study ,attitudeand services might reduce difficulties that arise during the postnatal periods <sup>5, 6</sup>

postnatal physical therapy after c section .this self structuredquestioanore was briefly explained to the participants after which data was collected. necessary demographical information such as age, weight, height, BMI ,locality,occupation,complaint due to which postnatal physical therapy was recommended .This self-structured questionnaire to evaluate frequency and behavior towards recommended postnatal physical therapy after c section. A pilot study was carried out to evaluate the reliability of selfstructured questionnaire. The questionnaire was valid and reliable with Cranbach alpha value of 0.74.the questionnaire has two main heading 1) frequency which includes one question to assess frequency of recommendation and second heading 2)behavior which includes 15 questions. Research was approved by institutional review board (IRB), university of Lahore, Punjab, Pakistan

practice of obstetric and gynecologic conditions study on medical professional practice was done by by Oguntibeju O et al was published in 2013 in this study <sup>7</sup>conclusion was drawn that physician know the importance of physical therapy care plan in that study 80.6% of the participants were agreed with the importance of physical therapy in gynecology and obstetric rehab but they were not refers by their physicians in our study only 36.49% primiparous females are recommended postnatal physical therapy after c section.

Another study by Ismail SI for the National institute for clinical excellence to characterize it, they arrived to the conclusion that 52 out of 377 exercise regimens for expectant women were provided by medical experts<sup>8</sup>

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Low back pain was reported by 23.3% the participants as being the main issue following a c section in primiparous females in this study as shown in table no.4 This is consistent with earlier researches findings that low back pain is the most prevalent musculoskeletal issue associated with pregnanacy.however,92.86% of the respondents who had physiotherapy recommended to them claimed they were satisfied with the results of their therapies. This agrees with findings from

past research by Hush et al. and Tennakoon and dezoysa<sup>9, 10</sup>The women in the current research accepted the recommendation for physical therapy well.Similarly ,83.8% of respondents agreed that access to physiotherapy for the management of pregnanacy related low back pain, urine incontinence and postpartum weight

gain should be available during both the antepartum and postpartum phases of treatment. These finding support previous studies by pennikandyoung, wang et al, Symons and Hausenblas , and other scientists.<sup>9, 11-13</sup>

| Table1:Socio-demographic characteristics of the respondents(n=211) |
|--|
|  |

| Characteristic                  | *                        | Frequency | Percent |
|---------------------------------|--------------------------|-----------|---------|
| Age of the respondents          | 18-25                    | 20        | 9.5     |
|                                 | 26-35                    | 145       | 68.7    |
|                                 | 36-45                    | 46        | 21.8    |
| Weight of the respondents 40-50 |                          | 27        | 12.8    |
| (Kg)                            | 51-60                    | 71        | 33.6    |
|                                 | 61-70                    | 95        | 45.0    |
|                                 | 70-80                    | 18        | 8.5     |
| Height of the                   | 3-4ft                    | 47        | 22.3    |
| respondents(meter)              | 4-5ft                    | 101       | 47.9    |
|                                 | 5-6ft                    | 54        | 25.6    |
|                                 | 6-7ft                    | 9         | 4.3     |
| BMI of the respondents (Kg/m2)  | 18.5 (Under weight)      | 1         | .5      |
|                                 | 18.5-24.9(Normal weight) | 73        | 34.6    |
|                                 | 25-29.9(Over weight)     | 137       | 64.9    |
| Socioeconomic status of the     | Below average            | 41        | 19.4    |
| respondents                     | Stable                   | 157       | 74.4    |
|                                 | Elite                    | 13        | 6.2     |
| Education of the respondents    | Uneducated               | 8         | 3.8     |
| -                               | Under matric             | 74        | 35.1    |
|                                 | Matric/SSC               | 121       | 57.3    |
|                                 | Intermediate/HSSC        | 8         | 3.8     |
| Occupation of the respondents   | Working women            | 143       | 67.8    |
|                                 | House wife               | 68        | 32.2    |
| Locality of the respondents     | Urban area               | 121       | 57.3    |
|                                 | Rural area               | 90        | 42.7    |
| Complaint of the respondents    | Urinary incontinence     | 34        | 16.1    |
|                                 | Bowel incontinence       | 20        | 9.5     |
|                                 | Uterine prolapse         | 43        | 20.4    |
|                                 | Sciatic pain             | 32        | 15.2    |

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| Low  | v back pain                             | 49       | 23.2       |
|------|---|----------|------------|
| spin | longed post<br>nal anesthesia<br>alysis | 6        | 2.8        |
| Ede  | ema<br>stasis recti                     | 11<br>16 | 5.2<br>7.6 |
| Tota |   | 211      | 100.0      |

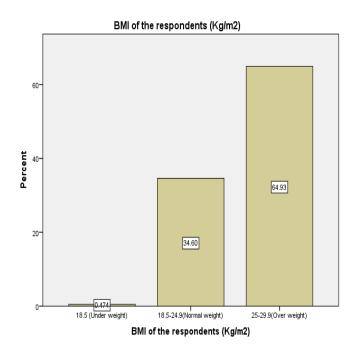
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Low back pain was reported by 23.3% the participants as being the main issue following a c section in primiparous females in this study as shown in table no.4 This is consistent with earlier researches findings that low back pain is the most prevalent musculoskeletal issue associated

Table 3:Questionnaire to assess frequency and behavior towards recommended postnatal physical therapy after c section in primiparous females with pregnanacy.however,92.86% of the respondents who had physiotherapy recommended to them claimed they were satisfied with the results of their therapies. This agrees with findings from past research by Hush et al. and Tennakoon and dezoysa<sup>9, 10</sup>The women in the current research accepted the recommendation for physical therapy well.Similarly ,83.8% of respondents agreed that access to physiotherapy for the management of pregnancy related low back pain, urine incontinence and postpartum weight gain should be available during both the antepartum and postpartum phases of treatment. These finding support previous studies by pennikandyoung,wang et al,Symons and Hausenblas ,and other scientists.<sup>9, 11-13</sup>



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| Question to find out frequency                   | Yes |    | No  |    | Total |     |
|--|-----|----|-----|----|-------|-----|
| were you recommended postnatal physical therapy? | f   | %  | F   | %  | F     | %   |
|  | 76  | 36 | 135 | 64 | 211   | 100 |

| Questions To assess Behaviour   | Stro     | ongly<br>ee | Agr    | ee       | Neut   | ral      | S.     | D            | D |    | N/A      |          | Total |     |
|---|----------|-------------|--------|----------|--------|----------|--------|--------------|---|----|----------|----------|-------|-----|
| Postnatal exercises should be performed on the daily basis?   | f.<br>67 | %<br>31.8   | f<br>1 | %<br>0.5 | f<br>8 | %<br>3.8 | f      | %            | f | %  | f<br>135 | %<br>64  | f     | %   |
| postnatal exercise to be prioritized above household chores?  | 1        | .5          | 2      | .9       | 43     | 20.4     | 2<br>9 | 1<br>3.<br>7 | 1 | .5 | 135      | 64       | 211   | 100 |
| encourage others to seek out postnatal physical therapy?  | 34       | 16.1        | 31     | 14.7     | 9      | 4.3      | 2      | .9           | 0 | 0  | 135      | 64       | 211   | 100 |
| Health care providers imparts good impact on postnatal exercises                                    | 36       | 17.1        | 31     | 14.7     | 7      | 3.8      | 0      | 0            | 0 | 0  | 135      | 64.<br>5 | 211   | 100 |
| postpartum workouts bad for your health or inappropriate?   | 1        | .5          | 63     | 29.9     | 12     | 5.7      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| Postnatal back pain can be treated through postnatal physical therapy?                              | 1        | .5          | 63     | 29.9     | 12     | 5.7      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| Postnatal physical therapy can help treat<br>weakness of abdominal muscles                          | 1        | .5          | 66     | 31.3     | 9      | 4.3      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| Postnatal exercises help lessen the excessive weight gain delivery                                  |          |             | 67     | 31.8     | 9      | 4.3      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| postnatal workouts be carried out as directed by medical professionals?                             | 4        | 1.9         | 64     | 30.3     | 8      | 3.8      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| in case you skip a postpartum exercise day, do<br>you feel guilty/bad                               | 59       | 28          | 6      | 2.8      | 11     | 5.2      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| Urine leakage can be treated through postnatal physical therapy?                                    | 32       | 15.2        | 36     | 17.1     | 8      | 3.8      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| Post Delivery recovery enhance through physical therapy?  | 55       | 26.1        | 5      | 2.4      | 16     | 7.6      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |
| PNPT beneficial for building stamina and regain body shape?   | 31       | 14.7        | 36     | 17.1     | 9      | 4.3      | 0      | 0            |   | 0  | 135      | 64       | 211   | 100 |
| Postnatal excercises are waste of time or money   | 65       | 30.8        | 3      | 1.4      | 8      | 3.8      |        | 0            |   | 0  | 135      | 64       | 211   | 100 |
| Awareness about postnatal physical therapy<br>should be given to mothers on the time of<br>delivery | 4        | 1.9         | 64     | 30.3     | 8      | 3.8      | 0      | 0            | 0 | 0  | 135      | 64       | 211   | 100 |

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### Table no.2;BehaviourC

|          |          | Frequency | Percent |
|----------|----------|-----------|---------|
| Behavior | Neutral  | 135       | 64.0    |
| Category | Positive | 76        | 36.0    |
|          | Total    | 211       | 100.0   |

,Similar to the research,where 80% of respondents believed that physiotherapy is important for both prenatal and postnatal care<sup>14</sup> Females participated in this study ,who showed positive behavior towards recommended postnatal physical therapy were educated similarly to the studies Jawaher et al, alharqi et al, who have reported positive a correlation between

women education and knowledge about professionals and non-health professionals<sup>15</sup>Another study supports the results where urban mothers receive postnatal physical therapy 2.68% than those of rural areas<sup>16</sup>

### IV. RECOMENDATION

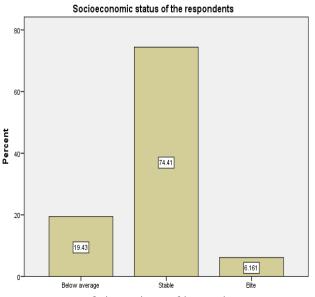
This literature has shown that many complications a patient suffer after c section just like urinary incontinence, low back pain etc.it is the prime role to throw light on the importance of postnatal exercises and emphasize to adherence to PNC among all the post natal mothers. It is important to detect these complications early in order to provide timely help, thereby, preventing lifelong miseries from undetectable problems. The main problem is how to make the women to utilize the postnatal care services .this can be done through various strategies such as education on the existence and importance of healthcare facilities like postnatal care And postnatal physical therapy can help treat these complications but a very low percentage of patients suffering from complication are recommended postnatal physical therapy.

### V. CONCLUSION

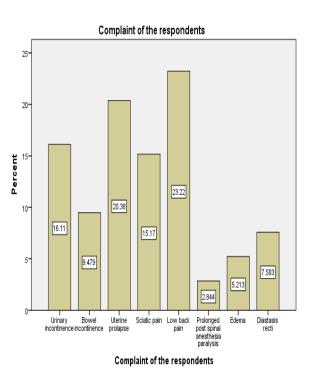
Study found most of the patients who are recommended postnatal physical therapy show positive behavior towards it and considering it a beneficial tool. education and creating awareness among family members and friends of post natal mothers are also very important to adherence to those who were recommended said that they will emphasize the importance PNE to others.so continuing influence by health care workers will be the key for improving the adherence rate among this study population. Being educated and being social and lived in rural areas seemed to be influences on changing behavior.

60 50-40 Percent 30 57.35 20 35.07 10 3.791 3.791 Uneducated Under matric Matric/SSC Intermediate/HSSC Education of the respondents

Education of the respondents



Socioeconomic status of the respondents



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