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Diastasis recti: A Qualitative Investigation on Women's Perception and coping Strategies

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"Diastasis recti: A Qualitative Investigation on Woman's Perception and coping Strategies"

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DECLARATION

I declare that the work presented here is my own. All sources used have been cited appropriately. Any mistakes or inaccuracies are my own. I also decline that for any publication or dissemination of information about the study, I would be bound to obtain the written consent of my supervisor.

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LIST OF ACRONYMS

BMI: Body Mass Index

BMRC: Bangladesh Medical Research Council

CRP: Centre for the Rehabilitation of the Paralysed

DRA: Diastasis Recti Abdominis

DU: University of Dhaka

HSC: Higher Secondary Certificate

IRB: Institutional Review Board

IRD: Inter-Rectus Distance

OGSB: Obstetrical and Gynecological Society of Bangladesh

PT: Physiotherapy

SCMST: Saic College of Medical Science and Technology

SSC: Secondary School Certificate

WHO: World Health Organization

ABSTRACT

Introduction: Diastasis recti (DRA), a common postpartum condition, affects women's physical functionality, psychological well-being, and daily life. Despite its prevalence, awareness and access to effective management strategies remain limited, particularly in low-resource settings like Bangladesh. This qualitative study investigates the perceptions, experiences, and coping strategies of Bangladeshi women living with DRA to identify its impact on their lives and barriers to effective care. **Methodology:** A qualitative approach was used, with semi-structured interviews conducted among 10 women diagnosed with DRA. Participants were purposively sampled from diverse socio-economic backgrounds, with interviews focusing on daily functional limitations, psychological effects, coping mechanisms, and access to healthcare. Thematic analysis of the transcribed data identified key themes, including the condition's impact on daily life, body image, coping strategies, barriers to professional help, and the effectiveness of available management approaches. **Results:** Five major themes emerged from the analysis. Participants reported significant disruption to daily activities, such as difficulty lifting, bending, and performing household chores. Psychological effects included embarrassment, diminished self-esteem, and social withdrawal due to altered body image. While many participants attempted coping strategies, such as home-based exercises and traditional remedies, their effectiveness was mixed. Barriers to professional help, including lack of awareness, financial constraints, and inaccessible healthcare services, were consistently reported. Some participants benefited from physiotherapy, but the lack of specialized, evidence-based management options was a recurring challenge. **Conclusion:** DRA presents significant challenges, highlighting the need for accessible and culturally sensitive interventions. Multidisciplinary care combining physiotherapy, psychological support, and education is essential. Future research should focus on long-term outcomes and tailored interventions.

Keywords: *Diastasis recti, postpartum health, qualitative study, coping strategies, barriers to care, Bangladesh*

CHAPTER-I INTRODUCTION

1.1 Background:

Diastasis Recti Abdominis (DRA) is a condition defined by the separation of the rectus abdominis muscles along the Linea alba, resulting in a visible abdominal gap and functional impairments (Michalska et al. 2018, p. 654).

Primarily affecting postpartum women, DRA is often attributed to physiological and mechanical changes during pregnancy. This condition impacts not only physical health but also mental well-being, significantly diminishing the overall quality of life. Despite its prevalence, awareness and effective management strategies for DRA remain limited, particularly in resource-constrained settings like Bangladesh prevalence of DRA varies widely depending on the population and diagnostic methods used. Cavalli et al. (2021, p. 198) estimated that DRA affects approximately 52% of postpartum women globally, with some studies reporting rates as high as 60%. Key risk factors include advanced maternal age, multiple pregnancies, cesarean delivery, high BMI, and inadequate abdominal muscle conditioning during pregnancy (Cavalli et al. 2021, p. 419).

Additionally, weight gain and hormonal changes during pregnancy have been shown to exacerbate the risk of DRA (Alamer et al., 2019). DRA is characterized by the stretching and weakening of the Linea alba, a connective tissue structure between the rectus abdominis muscles, influenced by increased intra-abdominal pressure and hormonal relaxants. This natural process allows for the expansion of the abdominal cavity to accommodate the growing fetus (Michalska et al. 2018, p. 6590).

However, the inability of the abdominal muscles to regain their pre-pregnancy structure postpartum contributes to the persistence of DRA. Functional limitations and cosmetic concerns often follow, impacting daily activities and overall well-being. Physically, DRA contributes to symptoms such as lower back pain, pelvic instability, urinary incontinence, and reduced core strength (Eriksson Crommert et al. 2020, p. 961). These issues can limit daily activities, including lifting, bending, and caregiving tasks, thereby increasing psychological stress (Marander et al. 2024, p. 607).

Phantom sensations of instability, described as a lack of abdominal integrity, are also common. Conservative treatments, such as abdominal strengthening exercises, have been shown to temporarily mitigate these symptoms, though individual responses vary (Mota et al. 2015, p. 508).

The psychological ramifications of DRA are profound. Women often report diminished self-esteem and negative body image due to the visible abdominal gap and associated physical limitations. Eriksson Crommert et al, (2020) found that many women with DRA experience feelings of frustration and inadequacy, leading to social withdrawal and hesitance in public appearances. Cultural and societal norms surrounding postpartum recovery exacerbate the stigma associated with DRA, leaving many women to navigate its challenges in isolation (Alamer et al. 2019, p. 318).

Access to professional care for DRA is hindered by several factors, including the lack of trained healthcare providers, financial constraints, and limited awareness about effective interventions. In resource-limited settings like Bangladesh, these challenges are particularly pronounced. Many women remain unaware of the availability of conservative treatments such as physiotherapy, which has been shown to effectively reduce inter-rectus distance (IRD) and improve core stability (Acharry & Kutty. 2015, p. 737)

Common methods for managing DRA include home-based exercises, the use of abdominal binders, and modifications to daily activities. While these strategies provide some relief, their efficacy varies, and many women report persistent symptoms despite consistent efforts (Weingerl et al. 2022, p. 4853). Physiotherapy, particularly targeted abdominal strengthening and stabilization exercises, remains a cornerstone of DRA management (Michalska et al. 2018, p. 747). However, adherence to these interventions is often hindered by logistical challenges, such as time constraints and caregiving responsibilities.

Innovative approaches, including telehealth and online exercise programs, have shown promise in overcoming barriers to care. Mota et al. (2015, p. 701) demonstrated that structured exercise regimens delivered through digital platforms can improve accessibility and adherence, particularly for women in remote or underserved areas. However, these solutions require further validation and cultural

adaptation to ensure their effectiveness in diverse settings. (Cavalli et al. 2021, p. 5107)

The multidimensional impact of DRA underscores the necessity of holistic care approaches that address its physical, psychological, and social dimensions. Integrating multidisciplinary teams—comprising physiotherapists, psychologists, and social workers—into postpartum care can enhance the quality and scope of support available to women with DRA (Eriksson Crommert et al. 2020, p. 401). Additionally, culturally tailored educational initiatives aimed at raising awareness about DRA can empower women to seek timely and appropriate care.

Efforts to destigmatize DRA and promote its recognition as a legitimate health concern are crucial for fostering supportive environments. Alamer et al. (2019, p. 530) emphasized that community engagement and public health campaigns play a vital role in reshaping perceptions about postpartum recovery. By prioritizing maternal health and well-being, policymakers and healthcare providers can contribute to reducing the burden of DRA and improving outcomes for affected women. Despite the growing body of evidence on DRA, significant gaps remain in understanding its long-term implications and effective management strategies. The heterogeneity in diagnostic methods and intervention protocols limits the comparability of findings across studies (Michalska et al. 2018, p. 1953).

Future research should focus on standardizing diagnostic criteria and exploring the effectiveness of combined physical and psychological interventions. Moreover, there is a need for studies examining the experiences of diverse populations, particularly in low- and middle-income countries. Cultural and socio-economic factors influencing DRA outcomes have been underexplored, despite their relevance in shaping women's experiences and access to care (Marander et al. 2024, 679).

Addressing these gaps can inform the development of equitable and culturally sensitive healthcare models for managing DRA. Common methods for managing DRA include home-based exercises, the use of abdominal binders, and modifications to daily activities. While these strategies provide some relief, their efficacy varies, and many women report persistent symptoms despite consistent efforts (Weingerl et al. 2022, p. 929).

Physiotherapy, particularly targeted abdominal strengthening and stabilization exercises, remains a cornerstone of DRA management adherence to these interventions is often hindered by logistical challenges, such as time constraints and caregiving responsibilities (Michalska et al. 2018, p. 5296).

Innovative approaches, including telehealth and online exercise programs, have shown promise in overcoming barriers to care. Demonstrated that structured exercise regimens delivered through digital platforms can improve accessibility and adherence, particularly for women in remote or underserved areas. However, these solutions require further validation and cultural adaptation to ensure their effectiveness in diverse settings (Mota et al. (2015, p. 7621)

Surgical options, such as abdominoplasty, are considered for severe cases of DRA that do not respond to conservative treatments. While effective in restoring abdominal wall integrity, these procedures are often expensive and come with risks of complications, making them less accessible to many women (Cavalli et al. 2021, p. 4951). Additionally, the psychological and functional benefits of surgical interventions remain underexplored, necessitating further research in this area.

The multidimensional impact of DRA underscores the necessity of holistic care approaches that address its physical, psychological, and social dimensions. Integrating multidisciplinary teams—comprising physiotherapists, psychologists, and social workers—into postpartum care can enhance the quality and scope of support available to women with DRA (Eriksson Crommert et al. 2020, p. 6309).

Community-based support programs have also shown promise in addressing the psychosocial aspects of DRA. Peer support groups, for instance, provide a platform for women to share experiences and coping strategies, fostering a sense of solidarity and reducing feelings of isolation (Marander et al. 2024, p. 1096).

Efforts to destigmatize DRA and promote its recognition as a legitimate health concern are crucial for fostering supportive environments. Alamer et al. (2019, p. 4981) emphasized that community engagement and public health campaigns play a vital role in reshaping perceptions about postpartum recovery. By prioritizing maternal health and well-being, policymakers and healthcare providers can contribute to reducing the burden of DRA and improving outcomes for affected women. Public

health initiatives should also focus on preventive measures, such as promoting prenatal education on physical health and encouraging exercise programs that target core stability (Weingerl et al. 2022, p. 506).

These efforts can help reduce the incidence of DRA and improve postpartum recovery outcomes. Additionally, increasing access to affordable diagnostic and treatment options is essential for addressing disparities in care delivery, particularly in underserved populations (Benjamin et al.2019, p. 831)

Despite the growing body of evidence on DRA, significant gaps remain in understanding its long-term implications and effective management strategies. The heterogeneity in diagnostic methods and intervention protocols limits the comparability of findings across studies. Future research should focus on standardizing diagnostic criteria and exploring the effectiveness of combined physical and psychological interventions (Michalska et al. 2018, p. 5219).

Moreover, there is a need for studies examining the experiences of diverse populations, particularly in low- and middle-income countries. Cultural and socio-economic factors influencing DRA outcomes have been underexplored, despite their relevance in shaping women's experiences and access to care (Marander et al. 2024, p. 649). Addressing these gaps can inform the development of equitable and culturally sensitive healthcare models for managing DRA. Research on the role of technology in DRA management is another area warranting attention. While telehealth and online exercise programs have shown potential, their long-term efficacy and scalability remain uncertain. Investigating how these tools can be integrated into existing healthcare systems could provide valuable insights for improving care delivery (Cavalli et al. 2021, p. 4915). Addressing the challenges posed by DRA requires a comprehensive approach that combines evidence-based interventions with culturally tailored strategies. By prioritizing research, education, and holistic care, healthcare systems can better support women in managing this condition and improving their overall quality of life. Efforts to raise awareness, destigmatize the condition, and enhance access to care are essential for reducing the burden of DRA and fostering healthier postpartum recovery trajectories (Michalska et al. 2018, p. 9497).

In summary, addressing the challenges posed by DRA requires a comprehensive approach that combines evidence-based interventions with culturally tailored strategies. By prioritizing research, education, and holistic care, healthcare systems can better support women in managing this condition and improving their overall quality of life.

1.2 Rationale:

DRA, a common postpartum condition, is characterized by the separation of the rectus abdominis muscles along the Linea alba, resulting in functional impairments and aesthetic concerns. While the condition is widely prevalent, there remains a notable gap in understanding the lived experiences of affected women, particularly in low-resource settings like Bangladesh. Most existing research has focused on the prevalence and physical management of DRA, often overlooking the personal, emotional, and social dimensions that profoundly shape women's experiences. This study also addresses the barriers women face in accessing effective care for DRA. These barriers include limited awareness, inadequate healthcare infrastructure, and financial constraints, which are particularly pronounced in resource-constrained environments. Although conservative management strategies such as physiotherapy and targeted exercises have demonstrated efficacy in reducing symptoms, their accessibility remains a significant challenge. Exploring women's perceptions of these barriers can inform the development of more inclusive, patient-centered, and culturally sensitive care models. The findings of this research have the potential to enhance healthcare practices by providing insights into the needs and challenges faced by women with DRA. Identifying gaps in current interventions and support systems can guide the development of holistic approaches that integrate physical, psychological, and emotional support into DRA management. This study emphasizes the interconnected nature of physical health and mental well-being, highlighting the importance of comprehensive care strategies. Ultimately, this research aims to amplify women's voices and experiences, ensuring they remain central to efforts addressing DRA. By fostering a deeper understanding of the condition, the study seeks to improve treatment strategies, educational resources, and support systems, thereby contributing to better health outcomes and quality of life for affected women.

1.3 Research Question:

What is the state of perception & coping strategies in women's with diastasis recti?

1.4 Objective of the study:

➢ General objectives

- ✓ To determine women's perception on diastasis recti and their coping strategies in managing this condition in Dhaka city.

➢ Specific objectives

- ✓ To explore experiences and perceptions on diastasis recti, including its onset, impact on daily life, and emotional responses of women's attending OGSB & BRB hospital.
- ✓ To analyses the coping strategies employed by women to manage the physical and emotional challenges associated with diastasis recti.
- ✓ To examine the effectiveness of various coping strategies in alleviating symptoms and improving quality of life.

1.6 Operational Definition:

Diastasis Recti (Diastasis Rectus Abdominis): For the purpose of this study, diastasis recti are defined as the separation of the rectus abdominis muscles along the Linea alba, the connective tissue running down the midline of the abdomen. It is commonly measured as an inter-recti distance of more than 2.7 cm, assessed using ultrasonography or calipers, during a standard abdominal contraction.

Women's Perception: This refers to how women understand, interpret, and feel about their condition of diastasis recti. It includes their beliefs, attitudes, and emotional responses toward their body image and the physical and psychological impact of the condition on their daily lives.

Coping Strategies: In this study, coping strategies are defined as the methods and techniques that women use to manage the physical and emotional challenges posed by diastasis recti. This includes physical interventions (such as exercise and physical therapy), psychological methods (such as counseling and support groups), and lifestyle modifications aimed at alleviating symptoms and improving quality of life.

Qualitative Investigation: This refers to a research approach focused on understanding the depth and complexity of women's experiences with diastasis recti through methods such as in -depth interviews, content and thematic analysis. It emphasizes the subjective experiences and meanings that women attach to their condition and coping strategies.

CHAPTER-II LITERATURE REVIEW

Diastasis Recti Abdominis (DRA) is characterized by the separation of the two rectus abdominis muscles along the Linea alba. This condition is commonly observed during and after pregnancy, though it can occur in individuals outside these groups due to various factors including hormonal changes and increased intra-abdominal pressure (Michalska et al. 2018, p. 5921). The prevalence of DRA in postpartum women varies widely in the literature. For instance, Cavalli et al. (2021, p. 8108) reported a prevalence of 52% in postpartum women, with significant variability based on measurement techniques and demographic factors. Similarly, Alamer et al. (2019, p. 6086) found a prevalence of 43.9% among women in Ethiopia, highlighting the global relevance of this condition.

The significance of DRA extends beyond its prevalence. The condition is associated with various risk factors such as age, parity, and mode of delivery (Crommert et al. 2024, p. 6109). It can impact physical health by contributing to lumbo-pelvic instability and pelvic floor weakness (Acharry et al. 2015,p. 7108). Additionally, the condition affects the quality of life, as many women report feelings of discomfort, a sense of heaviness, and challenges in body image and self-esteem (Marander et al. (2024, p. 5190). For instance, that many women felt disappointed with their body's functionality post-childbirth and experienced difficulties in abdominal muscle recruitment, which contributed to a sense of instability (Crommert et al. (2024, p. 1086)

Overall, while DRA is a common postpartum condition, its effects on physical health and psychological well-being underscore the importance of understanding its prevalence and impact. Addressing these issues through appropriate interventions and support systems is crucial for improving the quality of life for affected women. Diastasis Recti Abdominis (DRA) is characterized by the separation of the two rectus abdominis muscles along the linea alba, which is commonly observed during and after pregnancy (Cavalli et al. 2021, p. 4965). The condition involves a weakening of the connective tissue that holds the abdominal muscles together, leading to a noticeable gap between the muscles. This separation can be attributed to hormonal changes,

increased intra-abdominal pressure, and physical changes during pregnancy (Michalska et al. 2018, p. 6140).

Several risk factors contribute to the development of DRA. Cavalli et al. (2021, p. 1707) identified multiple factors including age, body mass index (BMI) before and during pregnancy, weight gain, and type of delivery. Other risk factors include parity, presence of benign joint hypermobility syndrome (BJHS), and the level of abdominal and pelvic floor muscle exercise training Ravichandran et al., (2019, p. 9085) also highlighted lumbopelvic pain, parity, and a history of caesarean sections as significant risk factors associated with DRA. Furthermore, Michalska et al., (2018, p. 4960) pointed out that genetic predispositions and prior abdominal surgeries could also increase the risk.

The diagnosis of DRA is primarily based on the measurement of the inter-recti distance (IRD). (Mota et al. 2015, p. 4012) noted that various diagnostic methods, including the finger-width method, ultrasound, and CT scans, are used to assess IRD. The finger-width method is convenient but less accurate compared to imaging techniques (Cavalli et al. 2021, p. 7490). Ultrasound and CT scans provide a more precise measurement of IRD, but their use may be limited by cost and accessibility.

Severity assessment of DRA involves evaluating the width of the separation and its impact on function. (Mota et al. 2015, p. 7021) demonstrated that exercises such as drawing-in can significantly affect IRD, with measurements showing a reduction during pregnancy but an increase postpartum. Gluppe et al. (2022, p. 5981)) reported that a considerable number of women experienced protrusion along the midline of their abdomen, correlating with perceived weakness in abdominal muscles. Acharry and Kutty, (2015, p.129) highlighted that both pretest and posttest measurements of DRA showed significant changes, emphasizing the effectiveness of therapeutic interventions. Impact of Diastasis Recti on Women's Health.

Diastasis Recti Abdominis (DRA), characterized by the separation of the rectus abdominis muscles along the Linea alba, is a prevalent condition among postpartum women. The physical symptoms and functional impairments associated with DRA can significantly affect a woman's quality of life (Rejano-Campo et al. 2023, p. 861)

Common physical symptoms of DRA include a noticeable protrusion along the midline of the abdomen, abdominal weakness, and a sensation of heaviness in the pelvic region. These symptoms often lead to discomfort or pain in the abdominal and lumbopelvic regions, with many women describing sensations ranging from muscle cramps to diffuse, hard-to-describe aches (Fitzpatrick et al. 2024, p. 209).

Additionally, difficulties in properly recruiting the abdominal muscles contribute to a sense of instability, further impacting physical function and mobility (Gustavsson et al. 2021, p. 540).

Functional impairments are significant, as DRA frequently hinders women's ability to perform daily activities such as lifting, bending, or prolonged standing. Evidence suggests that while targeted exercises like the drawing-in maneuver can reduce inter-recti distance (IRD), their effectiveness is inconsistent postpartum, leading to frustration and persistent limitations (Critchley et al. 2022, p. 987). Studies also indicate that weaker abdominal muscles postpartum exacerbate these limitations, making routine tasks more challenging (Foley et al. 2024, p.541).

The psychosocial impact of DRA is equally profound, influencing emotional well-being and self-perception. Many women report feelings of disappointment and frustration with their altered physical appearance, which often leads to a diminished sense of strength and capability (Spitznagle et al. 2020, p. 671). Body image concerns are prevalent, with women frequently expressing embarrassment and shame about the appearance of their abdomen, which negatively affects self-esteem and contributes to ongoing psychological discomfort (Rejano-Campo et al. 2023, p. 412). These challenges highlight the importance of a comprehensive approach to DRA management that addresses both the physical and emotional dimensions of the condition.

Common physical symptoms of DRA include a noticeable protrusion along the midline of the abdomen, abdominal weakness, and a sensation of heaviness in the pelvic region. These symptoms often lead to discomfort or pain in the abdominal and lumbopelvic regions, with many women describing sensations ranging from muscle cramps to diffuse, hard-to-describe aches (Rejano-Campo et al. 2023, p. 30).

Additionally, difficulties in properly recruiting the abdominal muscles contribute to a sense of instability, further impacting physical function and mobility (Gustavo et al. 2021, p. 98).

Functional impairments are significant, as DRA frequently hinders women's ability to perform daily activities such as lifting, bending, or prolonged standing. Evidence suggests that while targeted exercises like the drawing-in maneuver can reduce inter-recti distance (IRD), their effectiveness is inconsistent postpartum, leading to frustration and persistent limitations (Critchley et al. 2022, p. 69). Studies also indicate that weaker abdominal muscles postpartum exacerbate these limitations, making routine tasks more challenging (Foley et al. 2024, p. 91).

The psychosocial impact of DRA is equally profound, influencing emotional well-being and self-perception. Many women report feelings of disappointment and frustration with their altered physical appearance, which often leads to a diminished sense of strength and capability (Spitznagle et al. 2020, p. 71). Body image concerns are prevalent, with women frequently expressing embarrassment and shame about the appearance of their abdomen, which negatively affects self-esteem and contributes to ongoing psychological discomfort (Rejano-Campo et al. 2023, p. 19).

These challenges highlight the importance of a comprehensive approach to DRA management that addresses both the physical and emotional dimensions of the condition.Common self-management techniques among women with DRA include specific exercises designed to address the condition. For instance, abdominal exercises, such as crunches and drawing-in exercises, are frequently recommended to improve inter-rectus distance (IRD). (Mota et al. 2015, p. 49) observed that drawing-in exercises led to a significant reduction in IRD during pregnancy and postpartum, although results varied across different time points. Similarly, (Kutty et al. 2015, p. 13) found that abdominal exercises combined with bracing effectively reduced DRA among postpartum women (Kutty et al. 2015, p. 58).

Lifestyle changes play a crucial role in managing DRA. Women often adopt modifications such as avoiding heavy lifting, engaging in gentle physical activities, and making ergonomic adjustments to daily routines. These strategies align with the

findings of Berg-Poppe et al. (2022, p. 10), who emphasized that lifestyle adaptations, including light exercise and mindful movements, can help alleviate symptoms and improve daily functioning. Similarly, Benjamin et al. (2023, p. 518) noted that behavior modifications, including changes in physical activity and posture, are commonly recommended to manage DRA effectively.

Support networks are another vital component of coping strategies. Emotional support from family, friends, and support groups helps mitigate the psychological burden of DRA. Gustavsson et al. (2020, p. 812) highlighted that woman often experience emotional relief through acceptance from close networks, which can counter feelings of shame or diminished self-esteem due to physical changes. These support systems foster a positive outlook and encourage women to seek timely interventions.

Professional management of DRA typically involves conservative treatments, with physiotherapy playing a central role. Interventions such as targeted abdominal exercises, bracing, and manual therapy have shown varying degrees of success. Berg-Poppe et al. (2022, p. 612) concluded that structured physiotherapy programs focusing on core stabilization and strengthening can significantly reduce inter-recti distance (IRD). Additionally, Weingerl et al. (2022, p. 86) emphasized the benefits of exercise-based interventions, including plank exercises, in improving abdominal strength and reducing symptoms.

The effectiveness of physiotherapy interventions can depend on factors such as timing and patient-specific characteristics. Frawley et al. (2023, p. 97) found that initiating therapeutic exercises earlier postpartum yields better outcomes in reducing IRD and improving function. However, the authors also noted that the heterogeneity of interventions and individual differences could influence outcomes. Despite the promise of physiotherapy, some studies indicate that the evidence supporting its effectiveness is not always consistent. (Michalska et al. 2018, p. 520) noted that while physiotherapy is considered the primary conservative treatment for DRA, its effectiveness varies among individuals and often depends on the adherence to prescribed exercises and the presence of other supportive measures. Additionally, the review by (Sarabon et al. 2022, p. 217) pointed out that while exercise-based interventions are central to managing DRA, there is no single approach that stands out

as universally effective, and the variation in results across studies reflects the need for tailored interventions (Šarabon et al. 2022, p. 19).

Emerging therapeutic approaches, such as electrical stimulation, are being explored as complementary tools in DRA rehabilitation. Weingerl et al. (2022, p. 61) highlighted preliminary evidence suggesting that electrical stimulation might enhance the effects of traditional exercise-based interventions. However, the authors also noted the need for more robust research to confirm its efficacy in improving functional outcomes.

Overall, while conventional treatments like physiotherapy remain foundational in managing DRA, variability in treatment outcomes underscores the importance of personalized approaches. Integrating personal coping strategies with professional interventions can provide a comprehensive management plan for women with DRA, addressing both physical and emotional aspects of the condition (Frawley et al. 2023, p. 91). Tailoring treatment plans to individual needs is essential for maximizing therapeutic outcomes and ensuring long-term benefits.In conclusion, coping with DRA involves a multifaceted approach that combines personal strategies such as exercise and lifestyle modifications with professional management through physiotherapy and other therapeutic interventions. While evidence supports the effectiveness of these methods, the variability in individual responses highlights the need for personalized treatment plans to achieve optimal outcomes for women experiencing DRA. (Sarabon et al. 2022, p. 40)

Understanding the lived experiences of women with DRA is crucial for a comprehensive view of the condition beyond clinical measures. Qualitative research offers valuable insights into how women perceive and experience DRA, revealing personal narratives and the subjective impact of the condition. Gustavsson and Eriksson-Crommert (2020, p. 51) conducted an in-depth interview study exploring women's experiences with increased inter-recti distance after childbirth. Their findings underscore a spectrum of emotional and physical responses. Many women expressed a sense of disappointment and a perceived loss of physical strength and reliability in their bodies postpartum. This was often accompanied by abdominal and lumbopelvic discomfort, ranging from muscle cramps to diffuse, hard-to-describe sensations.

The study also highlighted that while some women adapted positively to their post-pregnancy bodies, many struggled with self-acceptance and reported diminished self-esteem due to changes in their body appearance (Gustavsson & Eriksson-Crommert, 2020, p. 51). These findings emphasize the importance of addressing both the physical and psychological dimensions of DRA in therapeutic approaches, ensuring a holistic approach to care.

In a similar vein, (Marander et al. 2024, p. 19) highlighted that DRA significantly impacts daily life, encompassing physical, emotional, and social dimensions. The study identified three main themes: the journey to understanding DRA, the intertwining of DRA with health issues and physical limitations, and changes in self-image and social interactions. Mothers reported frustration and uncertainty in learning about DRA, often feeling misunderstood due to limited knowledge and the overlapping symptoms with other health issues (Marander et al. 2024, p. 51). The condition's multifaceted nature—affecting physical comfort, emotional well-being, and social interactions—illustrates the comprehensive impact of DRA on women's lives.

Coping mechanisms for managing DRA are equally important to understand, as they reveal how women adapt to and manage the challenges posed by the condition. Qualitative studies have provided insights into various strategies women employ to cope with DRA, including self-management strategies and social support systems.

According to Gustavsson et al. 2020, p. 19), women employed several coping strategies to manage their DRA. Many used abdominal exercises, although effectiveness varied. The study also noted that some women reported a constant effort to accept their new body image, which involved both personal efforts and seeking acceptance from others, particularly their partners. This self-acceptance journey is crucial, as it influences women's overall well-being and their ability to manage the physical and emotional challenge. One study found that obtaining knowledge and understanding about DRA was a significant part of the coping process. Women reported using various strategies to manage the condition, including seeking medical advice, engaging in physical therapy, and using support garments. The study emphasized that support from healthcare professionals and the availability of accurate

information play vital roles in helping women navigate their condition (Marander et al. 2024, p. 41).

(Gluppe et al. 2022, p. 12) examined the knowledge and concerns of primiparous women regarding DRA. The study revealed that while a high percentage of women were aware of DRA, many reported concerns about their abdominal appearance postpartum. Coping strategies included exercises for abdominal strength, which some women found helpful in addressing protrusion and improving their sense of physical strength. However, the study also highlighted that a significant number of women continued to experience weakness in their abdominal muscles, indicating that coping mechanisms might not always fully address the underlying issues (Benjamin et al. 2019, p. 51)

In a broader context, Gluppe et al. (2022, p. 70) explored the efficacy of abdominal exercises and bracing as therapeutic interventions for DRA. Their study demonstrated that targeted abdominal exercises combined with bracing could effectively reduce the severity of DRA in postpartum women. This finding underscores the role of structured exercise programs and support tools in managing DRA and suggests that such interventions can be an essential component of coping strategies (Kutty et al. 2015, p. 84).

Overall, qualitative studies underscore that women's experiences with DRA are complex and multifaceted, involving a range of emotional, physical, and social challenges. Coping mechanisms are diverse, with women employing a combination of self-management strategies, support systems, and professional interventions. Understanding these experiences and coping strategies is crucial for developing supportive care approaches and enhancing the overall management of DRA (Sarabon et al. 2022, p. 70)

Despite the growing body of research on diastasis recti abdominis (DRA), several limitations in the current literature highlight the need for further investigation. One significant gap is the variability in prevalence rates reported across studies, which can be attributed to differences in measurement methods and criteria used. Prevalence rates of DRA vary significantly depending on the measurement technique, such as

finger-width method versus ultrasound or CT, with the latter providing more accurate assessments (Cavalli et al. 2021, p. 429). This inconsistency undermines the comparability of findings and suggests that more standardized methods are needed to ensure reliable prevalence data.

Additionally, while many studies focus on pregnant and postpartum women, there is a noticeable scarcity of research addressing women beyond the postpartum period, including those who are middle-aged or elderly (Cavalli et al. 2021, p. 32). This oversight limits our understanding of how DRA affects women across different life stages and may lead to inadequate support and treatment options for these populations. Furthermore, (Gustavsson et al. 2020, p. 13) highlight the emotional and psychological impact of DRA, yet there is limited research exploring these dimensions in depth.

Another limitation is the lack of comprehensive qualitative research on women's personal experiences and coping strategies. Marander et al. (2024, p. 51) provide valuable insights into the subjective experiences of women with DRA, but their studies are relatively few and not always representative of diverse populations. For example, Kutty et al., (2024, p. 61) identified three major themes related to women's experiences with DRA, yet more diverse and larger qualitative studies are needed to capture a wider range of experiences and coping mechanisms.

Moreover, there is a notable gap in understanding the effectiveness of various treatment modalities from a qualitative perspective. Weingerl et al. (2022, p. 571) provide evidence on the efficacy of physical interventions such as abdominal exercises and bracing, they do not thoroughly explore patient perspectives on these treatments. The subjective experiences of women regarding their satisfaction with and adherence to these interventions remain underexplored. For instance, Acharry and Kutty (2015, p. 61) demonstrate the effectiveness of abdominal exercise with bracing in reducing DRA, but the personal experiences and perceived barriers to adherence are not well documented. Similarly, Weingerl et al. (2022, p. 70) discuss the impact of various interventions but do not delve into how women perceive and engage with these treatments in their daily lives.

The literature also reveals a lack of focus on socio-cultural factors influencing the perception and management of DRA. Alamer et al. (2019, p. 60) highlight associations between DRA and factors such as parity and history of cesarean section but do not address how cultural attitudes and socio-economic conditions might affect women's experiences and coping strategies. This gap suggests the need for research that considers the intersection of socio-cultural factors and individual experiences of DRA.

Given these limitations, there is a clear need for further qualitative research to enhance our understanding of DRA from women's perspectives (Cavalli et al. 2021, p. 4164).

The existing research often fails to provide a comprehensive view of how DRA impacts women's lives beyond the physical symptoms, particularly in terms of emotional, social, and psychological dimensions. Eriksson Crommert et al. (2020, p. 81) a provide foundational insights, but their findings indicate the necessity for more extensive and varied qualitative studies to capture the full spectrum of experiences and coping strategies.

Furthermore, future research should address the gaps identified in current intervention studies. While physical interventions such as abdominal exercises and bracing have been shown to be effective (Acharry and Kutty, 2015, p. 60) there is limited qualitative data on how women perceive these treatments, their challenges in adhering to them, and their overall satisfaction. This information is crucial for developing more effective and patient-centered treatment approaches (Weingerl et al. 2022, p.5307).

In addition, there is a need for studies that explore the experiences of women across different life stages, including those who are older or have experienced DRA for an extended period (Cavalli et al. 2021, p. 532). Understanding the long-term effects of DRA and the effectiveness of interventions over time can provide valuable insights for both clinical practice and future research.

Lastly, research should consider the socio-cultural context in which women experience and manage DRA. As Alamer et al. (2019, p. 72) suggest, cultural and socio-economic factors play a significant role in shaping women's experiences and

treatment outcomes. Future studies should incorporate these factors to provide a more nuanced understanding of DRA and inform culturally sensitive and equitable healthcare practices (Marander et al. 2024, p. 99)

In summary, while current research has made significant strides in understanding DRA, there remain substantial gaps, particularly in qualitative aspects. Addressing these gaps through further qualitative research will be essential for developing a more comprehensive understanding of DRA and improving the support and treatment available to affected women (Benjamin et al. 2019, p. 19)

The literature on diastasis recti abdominis (DRA) reveals several significant insights into its prevalence, impact, and management. Prevalence rates vary across studies, with Cavalli et al. (2024, p. 541) reporting a 52% prevalence of DRA among postpartum women, while other studies. A prevalence of 43.9% in Ethiopia. This variability in prevalence rates can be attributed to differences in measurement methods and sample populations (Alamer et al. 2019, p. 81)

Cavalli et al. (2021, p. 30) identified multiple risk factors for DRA, including age, BMI, parity, and mode of delivery. The study highlighted that older age and higher parity were associated with a higher prevalence of DRA, particularly among multiparous women. This is consistent with findings from Eriksson Crommert et al. (2020), which suggest that many women experience disappointment and functional limitations due to increased inter-recti distance (IRD) post childbirth. Women frequently reported a sense of instability and discomfort, which impacted their daily activities and self-perception (Petrov Fieril et al. 2020, p. 18).

Gluppe et al. (2022, p. 276) examined the knowledge and concerns about DRA among primiparous women, noting that a significant number were worried about abdominal appearance postpartum, with 80% feeling that their abdominal muscles were weaker than before pregnancy. This aligns with findings from Marander et al. (2024, p. 94), which indicated that mothers with DRA experienced uncertainties and frustration due to a lack of understanding and support for managing the condition.

Interventions for DRA management have been explored, with Kutty et al. (2015, p. 25) demonstrating that abdominal exercises combined with bracing can effectively reduce DRA. However, Weingerl et al. (2022, p. 715) emphasized that while

abdominal exercises show promise, there is a lack of consensus on the most effective exercise-based approaches due to variations in study designs and measurement methods.

The immediate effects of abdominal exercises, revealing that exercises like drawing-in and crunches had varying impacts on IRD during and postpartum. While drawing-in exercises narrowed the IRD significantly during pregnancy, their effectiveness postpartum was less consistent (Mota et al. 2015, p. 615).

Similarly, Michalska et al. (2018, p. 77) reviewed treatment methods, noting that physiotherapy is the primary conservative treatment for DRA, though other methods like prolotherapy have been explored. The findings from the reviewed literature underscore the importance of tailored interventions and patient education in managing DRA.

Healthcare providers should be aware of the variability in DRA prevalence and the impact of risk factors such as age, parity, and mode of delivery. Effective management strategies should address both the physical and psychological aspects of DRA, as the condition affects not only the abdominal musculature but also the overall self-image and daily functioning of affected women (Marander et al. 2024, p. 74).

Practical implications for practice include the need for comprehensive educational programs that inform women about DRA, its risk factors, and effective management strategies. Given that many women report dissatisfaction with their post-pregnancy body and difficulties with abdominal muscle recruitment (Gluppe et al. 2022, p. 46) healthcare providers should emphasize the importance of targeted exercises and provide guidance on appropriate bracing techniques.

Furthermore, considering the diverse responses to various interventions, practitioners should adopt a personalized approach to treatment. This may involve combining different types of exercises and supportive measures, such as bracing, to address individual needs effectively (Kutty et al., 2015). Providers should also consider incorporating psychological support to help women cope with the emotional and self-image challenges associated with DRA (Marander et al., 2024).

Future research should focus on addressing the gaps identified in the current literature. One area requiring further investigation is the development of standardized methods for assessing DRA to enhance the reliability and comparability of prevalence studies. Measurement techniques such as the finger-width method are limited by individual variability and diagnostic challenges. More accurate methods, like ultrasound or CT, should be explored to improve diagnostic precision. (Mota et al. 2015, p. 31)

Research should also explore long-term outcomes of various treatment modalities. While studies have demonstrated the efficacy of certain exercises and bracing techniques, the long-term effectiveness and sustainability of these interventions remain underexplored. Comparative studies assessing the relative effectiveness of different exercise protocols and support measures are needed to establish best practices for managing DRA (Gustavsson et al. 2020, p. 49)

Additionally, there is a need for research focusing on diverse populations, including women from different cultural and socio-economic backgrounds. As highlighted by the variability in prevalence rates and experiences reported in different studies (Crommert et al. 2024, p. 61) understanding the cultural and contextual factors influencing DRA can inform more inclusive and effective management strategies.

Finally, investigating the integration of psychological support into DRA management could provide valuable insights into addressing the emotional and self-image challenges associated with the condition. Exploring how psychological interventions can complement physical treatments may enhance overall patient outcomes and quality of life (Marander et al. 2024, p. 497).

In conclusion, while significant progress has been made in understanding and managing DRA, continued research is essential to refine diagnostic methods, evaluate long-term treatment outcomes, and address the diverse needs of affected women.

CHAPTER-III METHODOLOGY

3.1 Study design

The researcher chose qualitative type of phenomenological study because it allows for exploring the perceptions of individuals in specific contexts and understanding their perspectives deeply. Qualitative research is exploratory, providing insights into participants' views, opinions, feelings, and beliefs within their natural environments.

3.2 Study area

The research was conducted in OGSB Maternity Hospital and BRB Hospital Limited.

3.3 study place

The study was carried out saic collage of medical science & technology.

3.4 study period

The study period was one year starting from September 23 to August 24

3.5 Study population

The study focused on Bangladeshi women diagnosed with diastasis recti abdominis (DRA), particularly those in the postpartum period.

3.6 Simple size

Ten participants were selected as a sample from the OGSB & BRB hospital.

3.7 Participant Selection Procedure

Participants was selected from the population using purposive sampling technique, based on predefined inclusion criteria. The researcher was chosen participants through purposive sampling due to specific study requirements, selecting those who meet the selection criteria.

3.7.1 Inclusion criteria

- Individuals who had diagnosed with diastasis recti
- Age range 21 to 35 years (Benjamin et al. 2019, p. 90)
- Postpartum mother

3.7.2 Exclusion criteria

- Unwillingness
- Mentally unstable

3.8 Method of data collection

To collect data, the researcher conducted comprehensive interviews utilizing a combination of open-ended questions and closed-ended questions. Participants have a greater chance to articulate their opinions when the inquiry is open-ended. Conducting in-depth interviews allows the researcher to observe the nonverbal cues and facial expressions of participants during the interview. Initially, the researcher provided the participants with a concise understanding of the research goals and objectives. Subsequently, they reached a mutual agreement to exchange their viewpoints and formally endorsed the consent form. Subsequently, they began responding in accordance with the queries. The questionnaire was administered in Bangla due to their greater proficiency and ease with Bangla language questions. Each participant's interview lasted around 20-30 minutes**.**

3.9 Duration of data collection

Data were collected from 3th July 2024 to 11th July 2024. Each participant provided time to collected data. Each interview took approximately 20-30 minutes to complete

3.10 Data analysis method

In the data analysis phase, content thematic analysis was employed, supported by the use of NVivo software to facilitate efficient and organized data management. The researcher began analyzed the interviews multiple times & transcript. The transcripts were reviewed for accuracy and subsequently translated into English. These transcripts were then imported into NVivo, where the Qualitative Content Analysis (QCA) approach was applied to identify and interpret emergent themes. The analysis involved three stages: coding, categorizing, and generating themes. Using NVivo's features, the researcher created codes by highlighting key segments of text that represented participants' expressions and perceptions. NVivo's visualization tools, such as word clouds and node matrices, aided in identifying patterns and relationships within the data. Categorization was carried out by grouping related codes under broader categories, ensuring that all aspects of participants' experiences were captured. Key codes were identified to form the study's overarching themes, and these themes were systematically reviewed and refined within NVivo to ensure consistency and coherence. The software's ability to track and organize codes made it easier to cross-reference data and validate findings. Finally, the themes were interpreted through a systematic review of the coded data, providing comprehensive insights into the participants' perspectives and experiences. NVivo enhanced the rigor and transparency of the analysis process, ensuring that the data was analyzed thoroughly and systematically.

3.11 Data collection tools and materials

Pen, paper and clip board was used to write down their sharing and notes. An information sheet and consent form was used for taking permission from the participants. An open ended & close ended question sheet was used to conduct the interview. For data collection a semi-structured questionnaire was used. The questionnaire was formed based upon the related literature and determine of the material.

3.12 Ethical consideration

Strict adherence to ethical guidelines is paramount in this study. A formal project proposal has been submitted to the Department of Physiotherapy at Saic College of Medical Science and Technology (SCMST), and approval has been obtained from the Institutional Review Board (IRB) of SCMST to conduct the study. This study follows the guidelines set forth by the World Health Organization (WHO) and Bangladesh Medical Research Council (BMRC), ensuring confidentiality of participant information at all times. Permission to collect data has been obtained from the study area authorities. Participants will be fully informed about the aims and objectives of the study before consenting to participate. Written consent will be obtained from each participant, and the process will be explained verbally as well. Participants will be assured of the confidentiality of their information, which will only be shared with the research supervisor. Participants will be informed of their rights, including the option to withdraw from the study at any time without consequences. To protect anonymity, participant names and addresses will not be used; instead, participation numbers will be assigned in all notes and transcripts. It will be made clear that information gathered may be presented in presentations, seminars, or written papers, but in a way that ensures no identification of individuals and poses no harm to them. Participants will be assured of their right to discuss any concerns related to the study with senior authorities. The ethical standards upheld in this study aim to protect participant welfare while maintaining the integrity and confidentiality of the research process.

CHAPTER-IV RESULTS

4.1 Socio-demographic information of participants

4.1.1. Age of the participants

The table summarizes the age distribution of participants, categorizing them into three age groups. The majority of participants (7 out of 10) fall within the 26-30 age group, indicating that this age range represents the primary demographic affected or involved in the study. The 21-25 age group comprises 2 participants, making it the second most represented category. Lastly, only 1 participant belongs to the 31-35 age group**,** indicating that fewer individuals in this older category were included. This distribution highlights that the study primarily focuses on younger women, particularly those in their late 20s, which could reflect trends in the onset or reporting of diastasis recti within this demographic.

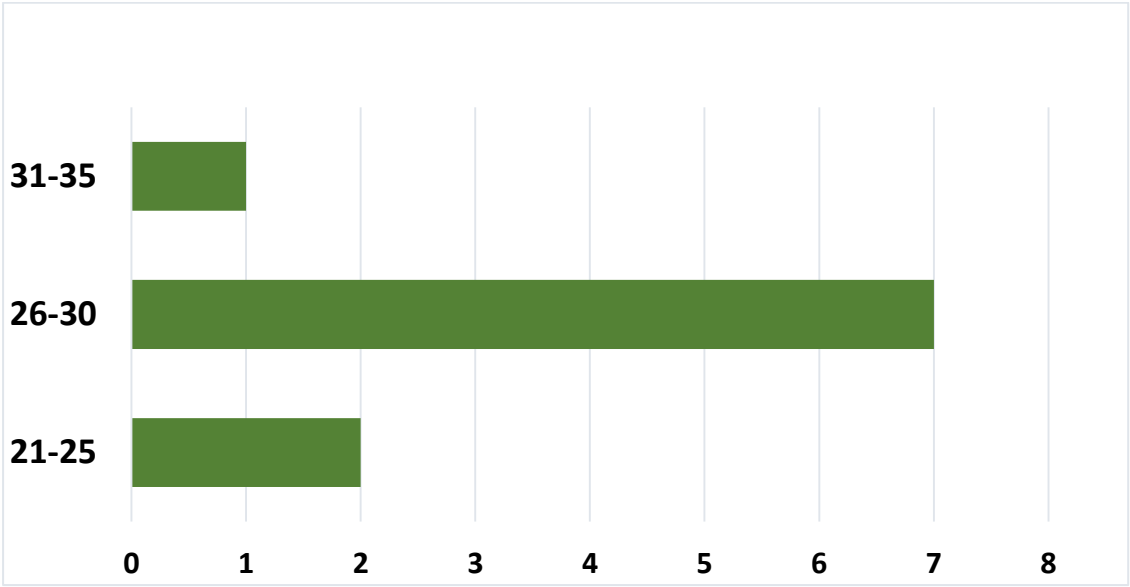

Figure no 1- Age of the Participants

4.1.2 Educational Qualification

The table illustrates the distribution of participants based on their educational status. Equal representation is seen among participants with Honors, HSC (Higher Secondary Certificate), and SSC (Secondary School Certificate) qualifications, each with 3 individuals. Only 1 participant reported Primary education as their highest level of attainment. This distribution suggests a fairly diverse range of educational backgrounds, with the majority having achieved secondary or higher levels of education. It highlights that the study includes a relatively educated group, which may influence awareness or perceptions related to the condition being investigated.

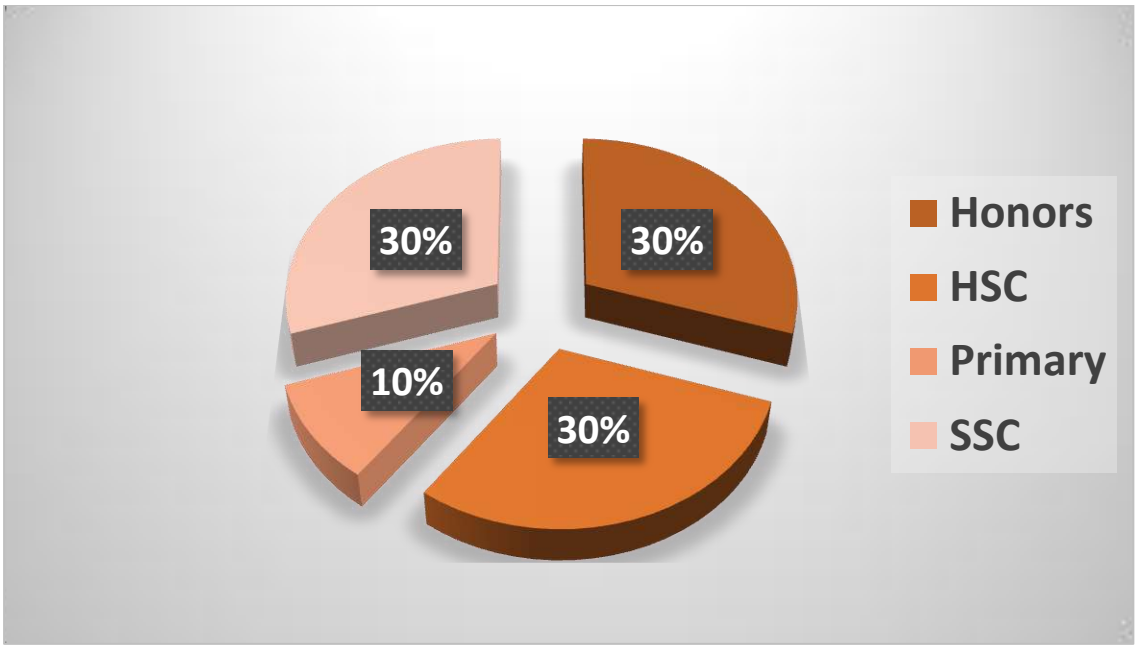

Figure no 2- Education Qualification of the Participants

4.1.3 Family type of participants

The table displays the distribution of participants by family type. A majority of participants (6 out of 10) belong to joint families, while the remaining 4 participants come from nuclear families. This indicates that participants from joint family structures form a slightly larger proportion of the sample. The prevalence of joint families in the data may reflect cultural norms in the region and could influence the social and logistical dynamics surrounding health and caregiving responsibilities, which are pertinent to the study.

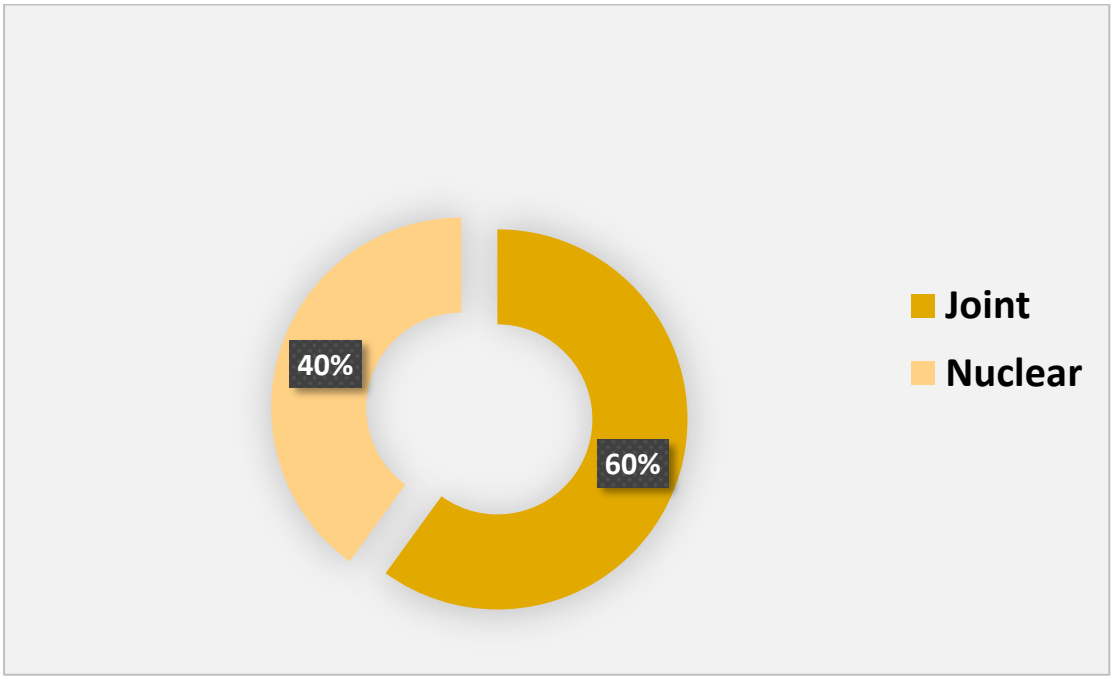

Figure no 3- Family Type of the Participants

4.1.4 Nutritional Status of participants

The results summarize the distribution of participants across different BMI categories. The majority of participants (5 out of 10) fall under the Normal weight category, indicating a relatively healthy weight profile for half of the sample. Two participants each are classified as Obesity Class II and Pre-obesity**,** reflecting moderate weight-related health risks in these groups. Only one participant is categorized under Obesity Class I**,** representing a smaller proportion with elevated weight-related concerns. This distribution suggests a predominance of individuals with normal BMI, while a smaller subset experiences varying levels of obesity or pre-obesity, which may influence their health outcomes and perceptions related to diastasis recti.

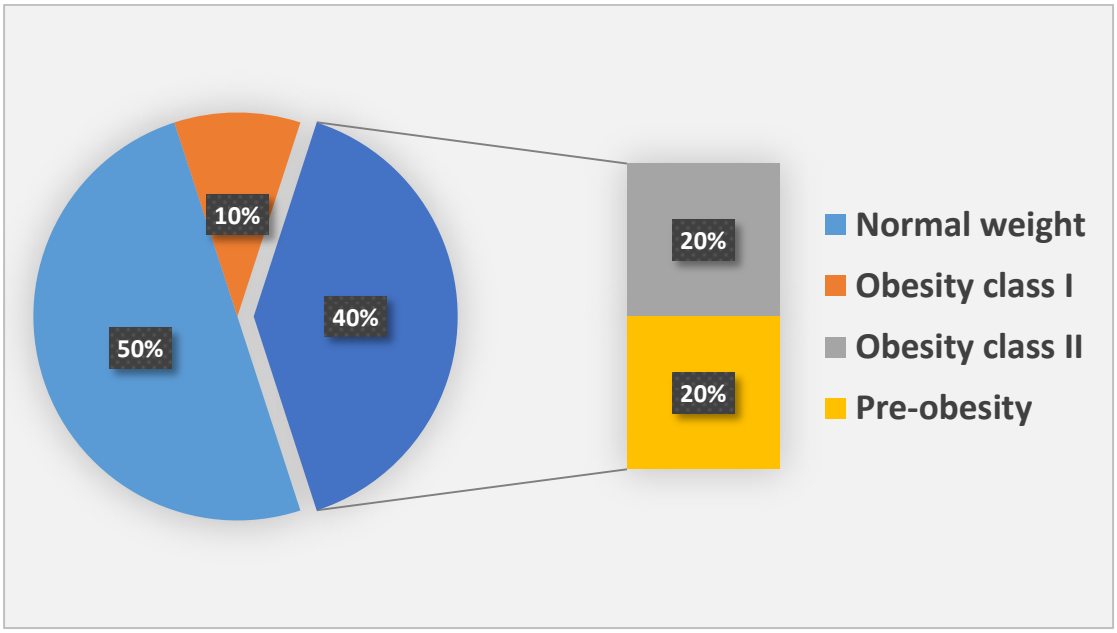

Figure no 4- BMI Type of the Participants

4.1.5 Type of delivery

This pie chart illustrates the distribution of participants based on their type of delivery. A majority of participants (6 out of 10) underwent **normal vaginal delivery**, while 4 participants had **cesarean sections**. This distribution suggests that most participants experienced natural childbirth, which could influence factors like the development or severity of diastasis recti. The representation of cesarean deliveries also highlights a significant subset, providing insights into potential correlations between delivery type and postpartum health outcomes.

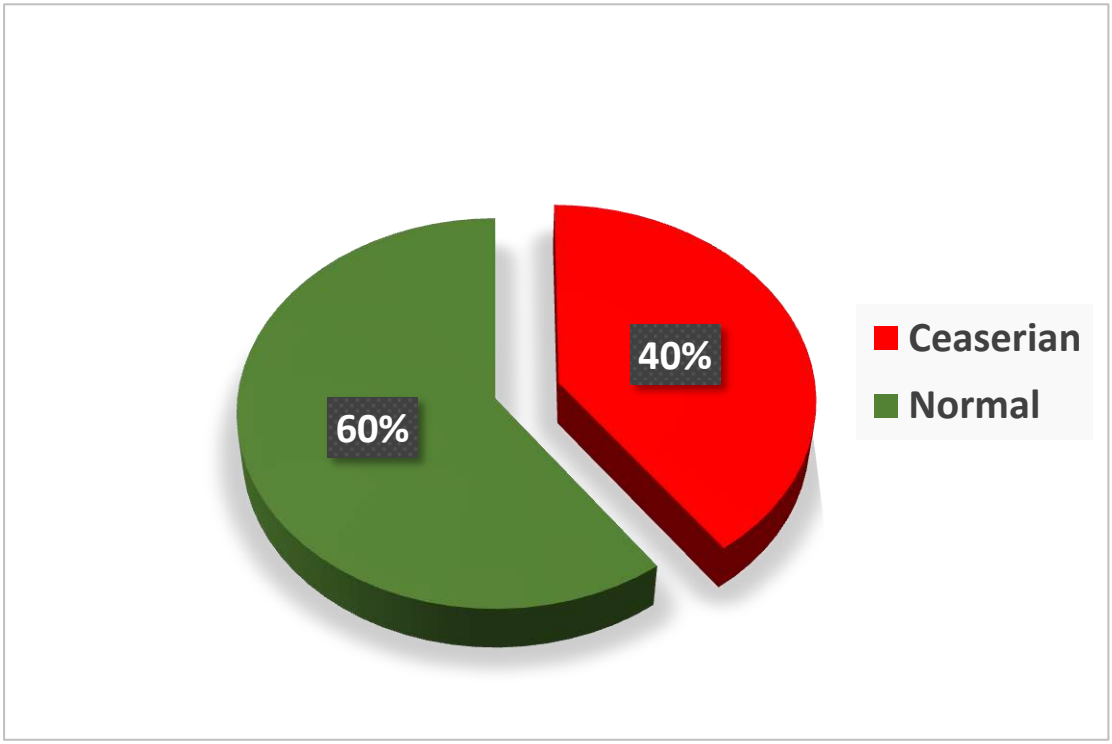

Figure no 5- Type of delivery of the Participants

Themes and Subthemes with Participant Responses

Theme 1: Impact on Daily Life

Subthemes	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10
Difficulty lifting	✓			✓		✓				✓
Trouble bending			✓	✓				✓	✓	
Pain with household chores				✓			✓	✓	✓	

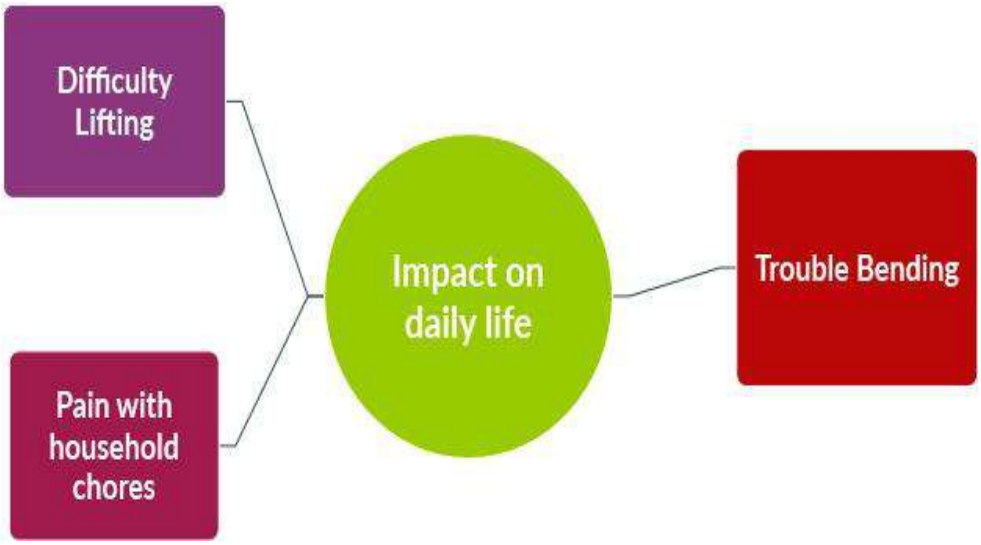

Figure: Impact on daily life (NVivo 15)

Theme 1: Impact on Daily Life

Participants frequently reported that diastasis recti significantly disrupted their ability to perform daily tasks, particularly those involving physical activity. Difficulty lifting heavy objects, such as household items or children, was a common issue, as expressed by Participant 1, who struggled to manage her daily chores. Trouble bending and performing activities like cleaning or cooking was also highlighted, with Participant 3 stating that bending became increasingly difficult. Pain associated with routine household chores, including standing for extended periods, was a concern for Participants 4 and 8. These findings reflect how diastasis recti impacts women's functional abilities, leading to limitations in everyday life.

Theme 2: Effect on Self-Esteem and Body Image

Subthemes	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10
Embarrassment about appearance	✓		✓				✓			✓
Avoidance of social gatherings			✓							✓
Lower confidence in public	✓		✓				✓			✓

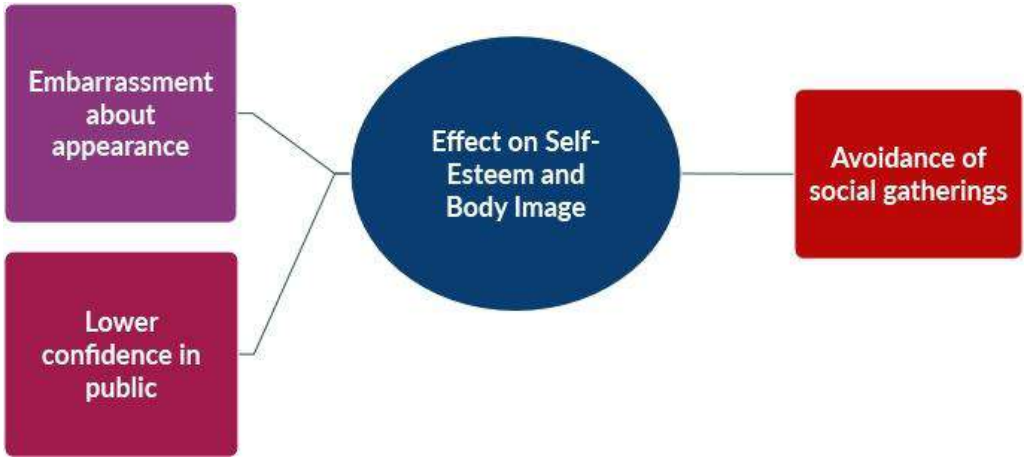

Figure: Effect on self-esteem and body image (NVivo 15)

Theme 2: Effect on Self-Esteem and Body Image

Diastasis recti had a profound psychological impact on participants, with many expressing embarrassments about their physical appearance. Participant 1 shared feeling ashamed of her stomach's appearance and a sense of incompleteness in her postpartum recovery. Several participants, including Participant 3, mentioned avoiding social gatherings or fitted clothing to hide their perceived imperfections. Lowered confidence in public settings was a recurring theme, as highlighted by Participants 7 and 10, who felt self-conscious about how their condition affected their overall appearance. These responses underscore the emotional toll of diastasis recti on self-esteem and body image.

Theme 3: Barriers to Accessing Professional Help

Subthemes	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10
Unavailability of specialists		✓			✓		✓			
Financial constraints		✓	✓			✓				✓
Lack of awareness about treatments		✓			✓	✓			✓	

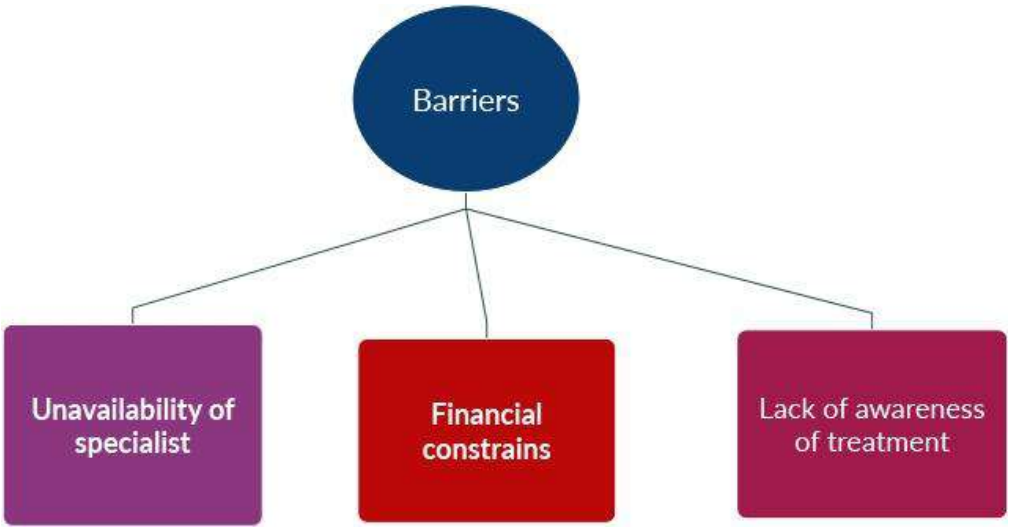

Figure: Barrier to access (NVivo 15)

Theme 3: Barriers to Accessing Professional Help

Participants highlighted significant barriers to seeking professional help, including unavailability of knowledgeable specialists, financial constraints, and lack of awareness about treatment options. For instance, Participant 5 stated that her doctor didn't seem to know much about the condition, reflecting gaps in healthcare support. Financial challenges were common, as noted by Participant 2, who could not afford treatment options like physiotherapy. Participants 6 and 7 emphasized the difficulties of accessing clinics due to distance or lack of transportation. These barriers prevent women from accessing timely and effective care, leaving many to manage the condition independently.

Theme 4: Coping Strategies

Subthemes	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10
Exercises (home-based)	✓				✓			✓		
Traditional remedies (binders)				✓						

Figure: Coping strategies (NVivo 15)

Theme 4: Coping Strategies

Participants described various coping strategies to manage their condition, including exercises and traditional remedies. Home-based exercises, such as those found online, were commonly attempted. Participant 1 mentioned performing light exercises that slightly reduced pain, while Participant 5 noted improvements in posture. Some participants, like Participant 4, relied on traditional remedies, including using belly binders, though they often found these methods ineffective. These responses highlight women's resourcefulness in managing their condition despite limited guidance or support from professionals.

Theme 5: Benefits and Limitations of Management

Subthemes	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10
Pain reduction from exercises	✓				✓			✓		
Ineffectiveness of treatments				✓						

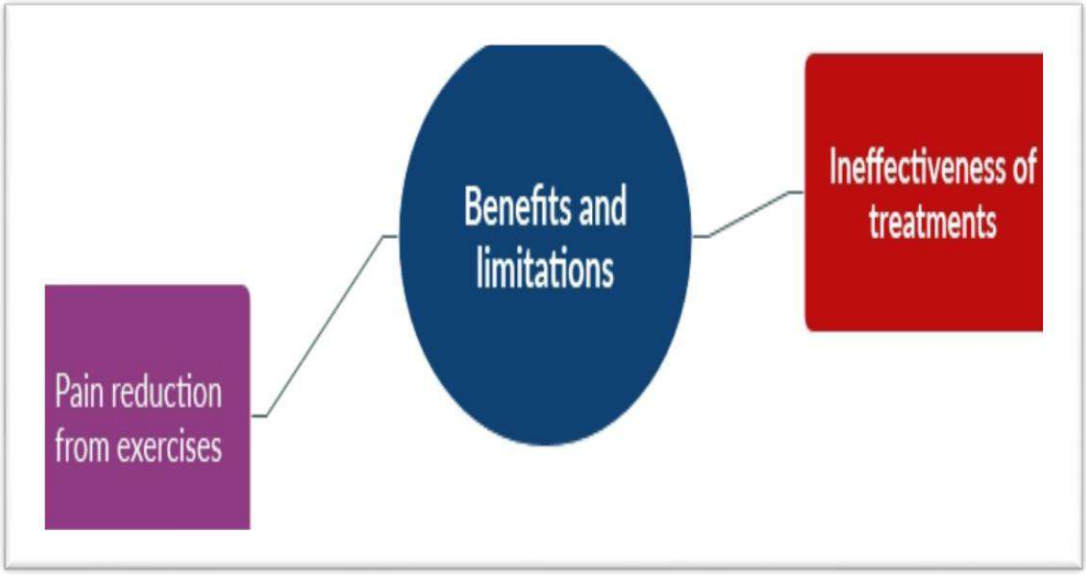

Figure: Benefits and limitation (NVivo 15)

Theme 5: Benefits and Limitations of Management

The benefits and limitations of different management approaches were discussed by participants who had attempted interventions. Pain reduction was a notable benefit reported by Participants 1 and 8 after engaging in exercises, even if the improvement was minimal. However, Participant 4 found traditional remedies, like belly binders, largely ineffective, expressing frustration at the lack of noticeable results. Participant 9 echoed this sentiment, stating that her brief physiotherapy experience provided only temporary relief. These findings reflect the mixed outcomes of management strategies and emphasize the need for tailored, evidence-based treatments.

CHAPTER-V DISCUSSION & LIMITATIONS

Diastasis recti abdominis (DRA) is a condition with profound physical, psychological, and functional impacts, particularly among postpartum women. The present study qualitatively explores women's perceptions and coping strategies regarding DRA. Key themes identified such as its impact on daily life, self-esteem, and barriers to accessing professional help underscore the multifaceted nature of this condition. These findings align with and extend the existing literature, offering insights into the lived experiences of women in the Bangladeshi context.

A prominent theme emerging from the interviews was the disruption of daily activities due to DRA. Participants frequently reported difficulties with physical tasks such as lifting heavy objects, bending, or performing routine chores. For instance, Participant 1 mentioned that "it affects my ability to lift heavy things," while Participant 4 noted, "it hurts when I stand for a long time or do household chores." Such experiences align with findings from (Eriksson et al. 2020, p. 45), who identified that physical limitations stemming from DRA, such as abdominal discomfort and a sense of instability, can significantly impair daily functioning (Marander et al. 2024, p. 674) emphasized that DRA often leads to challenges in performing basic physical tasks, impacting both quality of life and the ability to engage in caregiving responsibilities. This connection between physical symptoms and functional impairments highlights the importance of early intervention and targeted support to mitigate these effects.

The psychological toll of DRA emerged as another significant theme, with participants expressing feelings of embarrassment and reduced self-confidence. Participant 1 shared, "I feel ashamed of how my stomach looks," while Participant 7 noted, "I feel unattractive, and even my husband noticed the change." These responses are consistent with studies highlighting the emotional distress associated with DRA. (Eriksson et al., 2020) found that women frequently reported disappointment and frustration with their altered body image, which often led to diminished self-esteem and social withdrawal.

The association between DRA and self-image has also been documented by Gluppe et al. 2022, p. 649), who observed that women with visible abdominal protrusion were more likely to express concerns about their physical appearance and report feelings of inadequacy. This resonates with Participant 10's remark about avoiding social gatherings due to the condition. Such findings underscore the need for holistic approaches that address not only the physical but also the psychological impacts of DRA.

Another recurrent theme was the significant barriers participants faced in seeking professional assistance for DRA. Participant 2 stated, "I didn't go to a specialist because I don't think it's a serious issue," reflecting a lack of awareness. Participant 6 highlighted logistical challenges, noting, "I haven't sought any treatment due to lack of time and money." These barriers align with the findings of Marander et al. (2024, p. 4751) who reported that women often struggled to access specialized care due to inadequate knowledge and systemic limitations.

The limited availability of trained healthcare providers familiar with DRA, as mentioned by Participant 5, further reflects gaps in healthcare systems. (Alamer, et al. 2019, p. 512) emphasized that cultural and socio-economic factors, such as financial constraints and healthcare accessibility, often hinder women's ability to seek timely intervention for DRA. Addressing these barriers through targeted educational campaigns and improved healthcare infrastructure is critical to ensuring equitable care.

Participants reported a variety of coping strategies, including home-based exercises and traditional remedies, to manage DRA. Participant 1 mentioned performing "simple exercises at home," which she found slightly beneficial for pain reduction. Similarly, Participant 5 noted improvements in posture from following exercise videos. These findings align with existing evidence supporting the efficacy of exercise-based interventions. (Mota et al. 2015, p. 4542) demonstrated that abdominal exercises such as drawing-in techniques could reduce the inter-rectus distance (IRD) and alleviate associated symptoms.

However, not all participants found relief through coping strategies. Participant 4 shared that traditional remedies, such as belly binders, were largely ineffective. This variability in outcomes reflects findings from (Michalska et al. 2018, p. 62) who reported that while conservative interventions like exercises and bracing show promise, their effectiveness often depends on individual adherence and the appropriateness of the intervention. (Acharry et al. 2015, p. 672) also highlighted the importance of personalized treatment plans, suggesting that tailored exercise regimens may yield better results than generalized approaches.

The benefits and limitations of various management strategies were evident in the participant responses. Participant 8 noted that "after some exercises, the pain is less frequent now," highlighting the potential for exercise-based interventions to alleviate symptoms. This aligns with findings from (Weingerl et al. 2022, p. 56) who reported significant reductions in IRD and symptom severity with targeted physiotherapy. However, the perceived ineffectiveness of some treatments, as expressed by Participant 4, underscores the need for evidence-based guidelines and enhanced patient education to improve treatment adherence and outcomes.

Despite these limitations, emerging interventions such as electrical stimulation and combined approaches, as explored by (Michalska et al. 2018,p. 521) offer promising avenues for improving DRA management. Integrating these advanced techniques with conventional therapies may enhance both physical and psychological outcomes for affected women.

The findings of this study are consistent with the broader literature on DRA, particularly regarding its prevalence and risk factors. (Michalska et al. 2018, p. 531) identified cesarean delivery and high BMI as significant contributors to DRA, which resonates with the distribution of participants in this study—40% of whom had undergone cesarean sections, and a notable proportion categorized as pre-obese or obese. These risk factors not only influence the severity of DRA but also shape women's experiences and coping mechanisms.

The psychological impacts of DRA, as highlighted by (Eriksson et al. 2020, p. 90), are also evident in this study. The recurring themes of embarrassment, social

withdrawal, and diminished self-esteem emphasize the need for comprehensive care models that integrate psychological support alongside physical interventions. The role of social and cultural factors, as noted by (Alameret et al. 2019, p. 51), further underscores the importance of context-specific approaches in addressing DRA.

The insights from this study highlight several key implications for clinical practice and public health policy. First, healthcare providers must prioritize patient education to improve awareness of DRA and available management options (Keeler et al. 2012, p. 10). Targeted educational programs, particularly for at-risk populations such as postpartum women, can empower individuals to seek timely care and adopt effective coping strategies (Hills et al. 2018, p. 78)

Second, the integration of psychological support into DRA management is essential to address the emotional and self-image challenges associated with the condition. Multidisciplinary care teams, including physiotherapists, psychologists, and social workers, can provide holistic support tailored to individual needs (Sperstad et al. 2016, p. 641)

Lastly, enhancing access to specialized care through community health initiatives and affordable physiotherapy services can help mitigate the barriers identified in this study. Mobile health units and telehealth platforms may also offer innovative solutions to improve accessibility, particularly in underserved areas (Chen et al. 2023, p. 58)

This study underscores the need for further research to address the gaps in understanding DRA, particularly in diverse cultural and socio-economic contexts. Longitudinal studies exploring the long-term outcomes of various interventions can provide valuable insights into their sustainability and effectiveness. Additionally, qualitative research focusing on older women and non-postpartum populations can broaden the understanding of DRA's impact across the lifespan.

Exploring the intersection of physical and psychological interventions, such as integrating mindfulness-based approaches with physiotherapy, may also yield innovative strategies for managing DRA. Finally, community-based participatory

research can engage women directly in the development of culturally sensitive and patient-centered care models.

Limitations:

This study provides significant insights into women's experiences with diastasis recti (DRA); however, several limitations must be acknowledged. Firstly, the small sample size of ten participants may limit the generalizability of findings, as the sample may not fully represent the diverse experiences of women with DRA across different demographic and socio-economic backgrounds. This restricted sample size also affects the statistical strength of the conclusions drawn.

Another limitation is the geographic scope, as the research was conducted in two urban hospitals in Bangladesh. This limits the ability to capture the experiences of women from rural areas, where cultural norms, healthcare access, and awareness levels may differ significantly. Additionally, the study's focus on participants within a specific age range (21–35 years) excludes older women and those outside the postpartum period, whose experiences with DRA might vary.

The short duration of data collection is another constraint. Interviews conducted over a short time frame may not account for variations in participants' experiences due to seasonal or situational factors. A longitudinal approach could provide more robust insights into the long-term impacts of DRA and the effectiveness of coping strategies.

Moreover, the study relies heavily on self-reported data, which is subject to recall bias and potential inaccuracies. Participants' interpretations and reporting of their experiences may vary, influenced by personal beliefs, cultural norms, or the social desirability of their responses.

Finally, the study does not incorporate objective clinical assessments of DRA, such as ultrasonography or standardized measurements of inter-rectus distance. Incorporating such assessments would enhance the validity of findings by correlating subjective experiences with measurable physical outcomes.

CHAPTER-VI CONCLUSION & RECOMMENDATIONS

The study provides a comprehensive exploration of the physical, emotional, and social impacts of diastasis recti (DRA) among Bangladeshi women, revealing how this condition disrupts daily life, affects self-esteem, and creates barriers to effective management. The findings highlight the multifaceted challenges these women face, including difficulty performing essential tasks such as lifting, bending, and caregiving, as described by participants. These functional limitations are compounded by profound psychological effects, with many participants expressing embarrassment, diminished self-confidence, and social withdrawal due to their altered body image. Despite the severity of these issues, access to professional help remains limited, with barriers including financial constraints, lack of awareness, and the absence of trained healthcare providers. The study also identifies significant gaps in awareness and healthcare provision, particularly the lack of specialized interventions and psychological support, which are crucial for addressing the holistic needs of women with DRA. Comparisons with international studies confirm the universality of these challenges while underscoring the unique cultural and socio-economic factors that shape women's experiences in Bangladesh. Moving forward, this research advocates for the integration of multidisciplinary care models that combine physiotherapy, psychological support, and culturally tailored interventions to address the physical and emotional burdens of DRA. Additionally, the development of community-based health education initiatives and accessible, affordable healthcare services is essential to empower women and improve outcomes. While this study provides critical insights, further research is needed to examine the long-term effectiveness of various interventions and explore the experiences of more diverse populations, including women in rural areas or those with higher BMI and other risk factors. Ultimately, this research emphasizes the importance of adopting a holistic and patient-centered approach to managing DRA, focusing not only on physical recovery but also on restoring confidence and quality of life for affected women.

Recommendations:

Increase Awareness Through Education Campaigns: Implement community-based educational programs to raise awareness about diastasis recti (DRA), its symptoms, and effective management strategies, especially in underserved and rural areas.

Promote Early Diagnosis and Intervention: Encourage healthcare providers to integrate routine screening for DRA during antenatal and postnatal check-ups to identify and address the condition early, preventing long-term complications.

Develop Accessible Physiotherapy Services: Expand access to affordable physiotherapy services with targeted DRA treatment protocols, including core-strengthening exercises and abdominal muscle training, in urban and rural healthcare centers.

Train Healthcare Professionals: Conduct specialized training programs for physiotherapists, obstetricians, and general practitioners on DRA diagnosis, management, and counseling to ensure patients receive informed and evidence-based care.

Integrate Multidisciplinary Care: Establish multidisciplinary care teams that include physiotherapists, psychologists, dietitians, and social workers to address the physical, psychological, and social challenges faced by women with DRA.

Leverage Telehealth Solutions: Develop telehealth platforms and mobile apps to deliver online exercise programs, virtual consultations, and educational resources to improve accessibility for women unable to visit healthcare facilities.

Enhance Community Support Networks: Facilitate the creation of support groups or peer networks for women with DRA to share experiences, coping strategies, and emotional support, fostering a sense of community and empowerment.

Conduct Longitudinal Research: Encourage longitudinal studies to investigate the long-term impacts of DRA, including its physical, psychological, and functional outcomes, as well as the sustained effectiveness of various interventions.

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Appendix

CONSENT STATEMENT (English)

Please Read It Carefully

Assalamualaikum!

I am Joynab Akter Riza, a student of B.Sc. in physiotherapy, 4th year 2018-19 session, at Saic College of Medical Science & Technology, affiliated with the University of Dhaka under the faculty of Medicine. I am conducting a research program entitled "Diastasis Recti: A Qualitative Investigation on Women's Perception and Coping Strategies." In this study, I would like to find out the Women's Perception and Coping Strategies in diastasis recti.

I would like to request some information regarding your sociodemographic, perception, and coping strategies-related questions. Please note that this academic research project will take approximately 20-30 minutes to complete. Participating in this study will not affect your current or future treatment in any way. It is important to mention that the information collected will only be used for academic research purposes, and all your provided data will be kept confidential. In the case of any report or publication, we will ensure that your identity remains anonymous.

Your participation in this study is voluntary, and you may withdraw at any time during this study without any negative consequences. You also have the right not to answer a question you don't like or do not want to answer during the interview.

If you have any questions regarding the study or your rights as a participant, please feel free to contact the investigator Joynab Akter Riza (01977751168) or my research supervisor Zakia Rahman, Lecturer (Physiotherapy) of SCMST.

Do you have any questions before I start?

Yes	No

So, may I have your consent to proceed with the interview?

Yes	No

Signature of the Participant _____ Date……

Signature of the Interviewer _____ Date……

Questionnaire (English)

Title: "Diastasis recti: A Qualitative Investigation on Woman's Perception and coping Strategies"

Patient Information

Patient ID:		
Date of interview:		
Name of participants:		
Code:		
Address:	**Village:**	**Post-Office:**
	Upazila:	**District:**
Phone:		

PART-1: Socio-Demographic Information

[Please give a tick (√) mark at the left side box of the best correct answer]

Question No	Questions/ Information on	Response of the participant
1.1	Age	……Year
1.2	Marital status	1 = Unmarried 2 = Married 3 = Separated
1.3	Educational Qualification	1 = Illiterate 2 = Primary 3 = SSC 4 = HSC 5 = Graduation 6 = Masters or higher

1.4	Occupation	1 = Service holder 2 = Housewife 3 = Student 4 = Teacher 5 = Labor 6 = Other.....
1.5	Family type	1 = Nuclear family 2 = Extended family
1.6	Family Income	…….

PART-2: Anthropometric Information

Question No	Questions	Response of the participants
2.1	Height	……...
2.2	Weight	……...
2.3	BMI	……

PART-3: Health-related Information

1. How many children do you have?

……..

2. Type of delivery?

☐ Normal Vaginal Delivery (NVD)

☐ Cesarian section (C/S)

3. Do you have Diastasis Recti?

☐ Yes

☐ No

4. (a) Does this (Diastasis Recti) impact in your life?

☐ Yes

☐ No

(b) If yes, would you please tell, how this affect in your life?

Your response:

5. (a) Does this effect on your self stem or body image?

☐ Yes

☐ No

(b) If yes, would you please tell, how this effect in your self stem or body image?

Your response:

6.(a) Did you go to a specialist for this condition?

☐ Yes

☐ No

(b) If yes, would you please tell, what was your opinion about this session?

Your response:

7.(a) Did you take any treatment for this condition?

☐ Yes

☐ No

(b) If yes, would you please tell what was your feeling about this treatment?

Your response:

8.(a) Are you benefited from this treatment?

☐ Yes

☐ No

(b) If yes, would you please tell, how you have been benefited?

Your response:

9.(a) Do you perform any exercise in your daily life at regular base?

☐ Yes

☐ No

(b) If yes, would you please tell how you have been benefited?

Your response:

সম্মতি বিবৃতি (বাংলা)

দয়া করে এটি মনোযোগ সহকারে পড়ুন

আসসালামুয়ালাইকুম!

আমি জয়নাব আক্তার রিজা, মেডিসিন অনুষদের অধীনে ঢাকা বিশ্ববিদ্যালয়ের অধিভুক্ত সাইক কলেজ অফ মেডিকেল সায়েন্স অ্যান্ড টেকনোলজিতে বিএসসি ইন ফিজিওথেরাপিতে, ৪র্থ বর্ষ ২০১৮-২০১৯ সেশনের একজন শিক্ষার্থী। আমি "ডায়াস্টেসিস রেক্টি: মহিলাদের উপলব্ধি এবং মোকাএলার কৌশলগুলির উপর একটি গুণগত তদন্ত" শিরোনামের একটি গবেষণা কার্যক্রম পরিচালনা করছি। এই গবেষণায়, আমি ডায়াস্টেসিস রেক্টিতে মহিলাদের উপলব্ধি এবং মোকাবেলার কৌশলগুলি খুঁজে বের করতে চাই। আমি আপনার সামাজিক জনসংখ্যা, উপলব্ধি এবং কৌশল-সম্পর্কিত মোকাবেলা সংক্রান্ত কিছু তথ্যের জনয অনুরোধ করতে চাই। অনুগ্রহ করে মনে রাখবেন যে এই একাডেমিক গবেষণা সাক্ষাৎকারটি সম্পূর্ণ হতে প্রায় ২০-৩০ মিনিট সময় লাগবে। এই গবেষণায় অংশগ্রহণ করা আপনার বর্তমান বা ভবিষ্যতের চিকিৎসাকে কোনোভাবেই প্রভাবিত করবে না। এটি উল্লেখ করা গুরুত্বপূর্ণ যে সংগৃহীত তথ্য শুধুমাত্র একাডেমিক গবেষণার উদ্দেশ্যে ব্যবহার করা হবে, এবং আপনার দেওয়া সমস্ত তথ্য গোপন রাখা হবে। কোনো প্রতিবেদন বা প্রকাশনার ক্ষেত্রে, আমরা নিশ্চিত করব যে আপনার পরিচয় গোপন থাকবে। এই গবেষণায় আপনার অংশগ্রহণ স্বেচ্ছায়, এবং আপনি এই গবেষণা চলাকালীন যেকোনো সময় কোনো নেতিবাচক পরিণতি ছাড়াই প্রত্যাহার করতে পারেন। সাক্ষাৎকারের সময় আপনি পছন্দ করেন না বা উত্তর দিতে চান না এমন প্রশ্নের উত্তর না দেওয়ার অধিকারও আপনার আছে।

অধ্যয়ন বা অংশগ্রহণকারী হিসেবে আপনার অধিকার সংক্রান্ত কোন প্রশ্ন থাকলে অনুগ্রহ করে তদন্তকারী জয়নাব আক্তার রিজা (০১৯৭৭৭৫১১৬৮), অথবা গবেষণা তত্ত্বাবধায়ক ড. জাকিয়া রহমান (পিটি), ফিজিওথেরাপি বিভাগের প্রভাষক, এসসিএমএসটি, মিরপুর, ঢাকা-এর সাথে নির্দ্বিধায় যোগাযোগ করুন।

আমি শুরু করার আগে আপনার কোন প্রশ্ন আছে? হ্যাঁ ☐ না ☐

তাহলে, ইন্টারভিউ নিয়ে এগিয়ে যেতে আমি কি আপনার সম্মতি পেতে পারি? ☐ হ্যাঁ না ☐

অংশগ্রহণকারীর স্বাক্ষর..... তারিখ.....

ইন্টারভিউয়ারের স্বাক্ষর ..... তারিখ.....

পশপত্র (বাংলা)

শিরোনাম: "" ডায়াস্টেসিস রেক্টি: মহিলাদের উপলব্ধি এবং মোকাবেলা কৌশলগুলির উপর একটি গুণগত তদন্ত্ম "

রোগীর তথ্যাবলি

রোগীর আইডিঃ		
মূল্যায়নের তারিখঃ		
অংশগহণকারীদের নামঃ		
কোডঃ		
ঠিকানাঃ	গামঃ উপজেলাঃ	পোষ্ট অফিসঃ জেলাঃ
ফোন নাম্বারঃ		

পাট-১ঃ সামাজিক-জনতাত্ত্বিক তথ্য

[সঠিক উত্তর চিহ্নিত করতে টিক(√) ব্যবহার করন্নন]

নং	পশ	উত্তর
১.১	বয়স	.. বছর

১.২	বৈবাহিক অবস্া	০ = অবিবাহিত ১ = বিবাহিত ২= বিচ্ছিন
১.৩	শিক্ষাগত যোগ্যতা	০ = নিরক্ষর ১ = পাথমিক ২ = এসএসসি ৩ = এইচএসসি ৪ = সাতক ৫ = মাস্টাস বা উচ্চতর
১.৪	পেশা	০ = সাভিস হোল্ডার ১ = গহিণী ২ = শিক্ষাথী ৩ = শিক্ষক ৪ = শমিক ৫= অন্যান্য.....
১.৫	পারিবারিক ধরন	০ = একক পরিবার ১ = বধিত পরিবার
১.৬	পারিবারিক আয়	.

পাট-২: নতাত্ত্বিক তথ্য

[সঠিক উত্তর চিহ্নিত করতে টিক(√) ব্যবহার করুন]

নং	পশ	উত্তর
২.১	উচ্চতা	...
২.২	ওজন	.....কেজি
২.৩	বিএমআই	

পাট-৩: স্বাস্থ্য সম্পর্কিত তথ্য

১. আপনার কত জন সন্তান আছে?

..

২. আপনার ডেলিভারীর ধরন?

☐ নরমাল

☐ সিজার

৩. আপনার কি ডায়াবেটিস রেক্টি আছে?

☐ হ্যাঁ

☐ না

৪. (ক) এটি (ডায়াবেটিস রেক্টি) কি আপনার জীবনে প্রভাব ফেলে?

☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কি দয়া করে বলবেন, এটি আপনার জীবনে কীভাবে প্রভাব ফেলবে?

আপনার প্রতিক্রিয়াঃ

৫. (ক) এটি কি আপনার আত্মসম্মান বা শরীরের চিত্রের উপর প্রভাব ফেলে?

☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কি দয়া করে বলবেন, আপনার আত্মসম্মান বা শরীরের চিত্রের এটি কীভাবে পভাব ফেলবে?

আপনার পতিক্রিয়াঃ

৬. (ক) আপনি কি এই অবস্থার জন্য একজন বিশেষজ্ঞের কাছে গিয়েছিলেন?

☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কি দয়া করে বলবেন, এই অধিবেশন সম্পকে আপনার মতামত কি ছিল?

আপনার পতিক্রিয়াঃ

৭. (ক) আপনি কি এই অবস্থার জন্য কোন চিকিৎসা নিয়েছেন?

☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কি দয়া করে বলবেন এই চিকিৎসা সম্পকে আপনার অনুভূতি কি ছিল?

আপনার পতিক্রিয়াঃ

৮. (ক) আপনি কি এই চিকিৎসা থেকে উপকত হয়েছেন?

☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কি অনুগহ করে বলবেন, আপনি কিভাবে উপকত হয়েছেন?

আপনার পতিক্রিয়াঃ

৯. (ক) আপনি কি আপনার দৈনন্দিন জীবনে নিয়মিত কোন ব্যায়াম করেন?

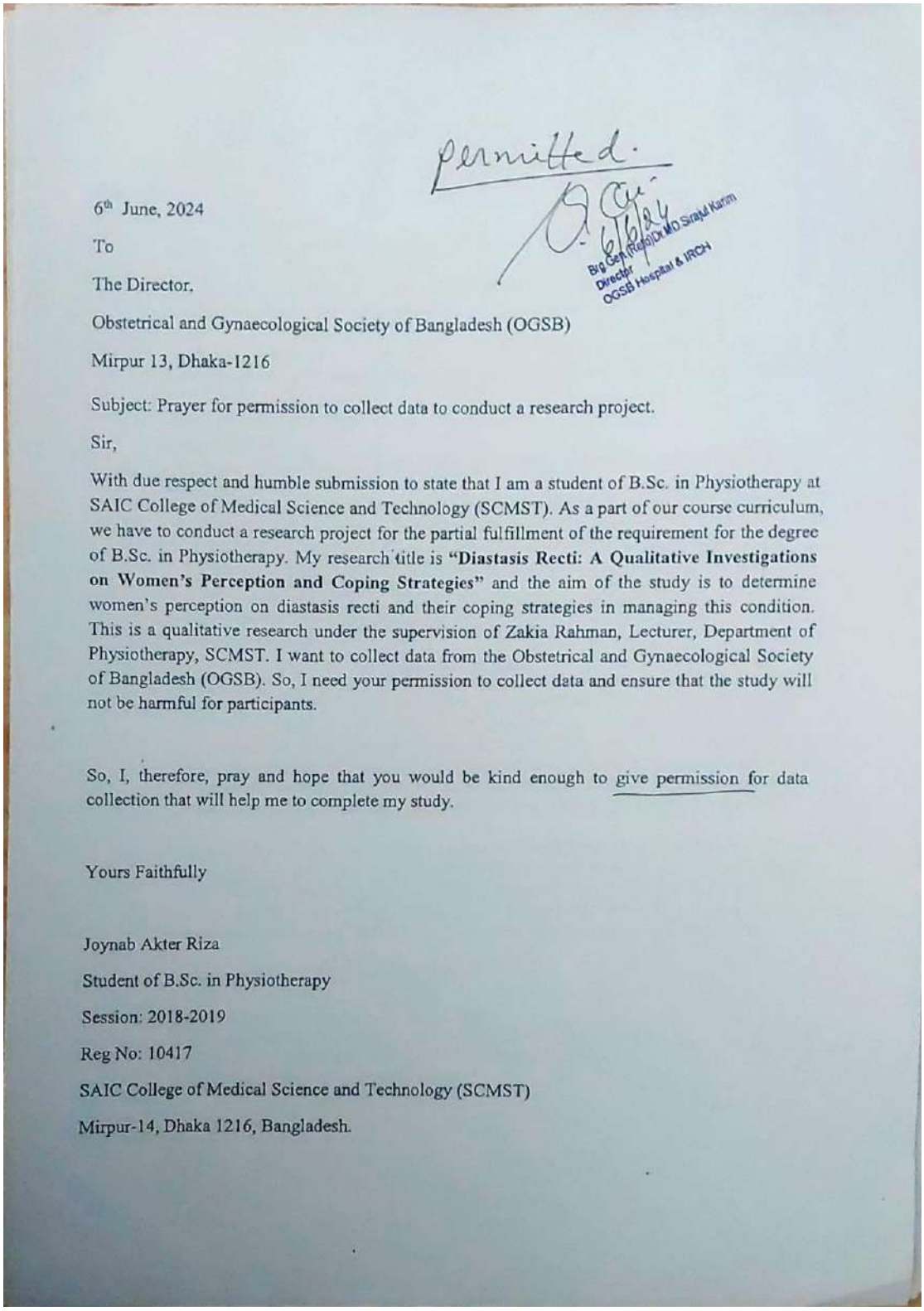
☐ হ্যাঁ

☐ না

(খ) যদি হ্যাঁ, আপনি কিভাবে উপকত হয়েছেন দয়া করে বলবেন?

আপনার পতিক্রিয়াঃ

Data Collection Permission Letter



permitted.

6/6/24

Brig Gen (Retd) Dr MD Sirajul Karim
Director
OGSB Hospital & IRCH

6th June, 2024

To

The Director,

Obstetrical and Gynaecological Society of Bangladesh (OGSB)

Mirpur 13, Dhaka-1216

Subject: Prayer for permission to collect data to conduct a research project.

Sir,

With due respect and humble submission to state that I am a student of B.Sc. in Physiotherapy at SAIC College of Medical Science and Technology (SCMST). As a part of our course curriculum, we have to conduct a research project for the partial fulfillment of the requirement for the degree of B.Sc. in Physiotherapy. My research title is **"Diastasis Recti: A Qualitative Investigations on Women's Perception and Coping Strategies"** and the aim of the study is to determine women's perception on diastasis recti and their coping strategies in managing this condition. This is a qualitative research under the supervision of Zakia Rahman, Lecturer, Department of Physiotherapy, SCMST. I want to collect data from the Obstetrical and Gynaecological Society of Bangladesh (OGSB). So, I need your permission to collect data and ensure that the study will not be harmful for participants.

So, I, therefore, pray and hope that you would be kind enough to give permission for data collection that will help me to complete my study.

Yours Faithfully

Joynab Akter Riza

Student of B.Sc. in Physiotherapy

Session: 2018-2019

Reg No: 10417

SAIC College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka 1216, Bangladesh.

Institutional Review Board(IRB) Letter

SCMST-BPT/IRB/05-23/003

To
Joynab Akter Riza
4th Year Student of B.Sc. in Physiotherapy
Session:2018- 2019, Reg No:10417
SAIC College of Medical Science & Technology (SCMST)
Mirpur-14, Dhaka-1216, Bangladesh

Subject: Approval of the thesis proposal **"Diastasis Recti: A Qualitative Investigation on Woman's Perception and Coping Strategies"** by ethics committee.

Dear, Joynab Akter Riza
Congratulations.
The Institutional Review Board (IRB) of SCMST has reviewed and discussed your application to
conduct the above-mentioned dissertation, with yourself, as the principal investigator. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Research proposal
2	Semi-Structure Questionnaire (English & Bangla Version)
3	Information sheet & consent form.

The purpose of the study **to determine women's perception on diastasis recti and their coping strategies in managing this condition.** The study involves depth interview by using semi-structured questionnaire to explore the women's experiences and perceptions of diastasis recti in Bangladesh that may take 30 to 40 minutes to fill in the questionnaire and there is no likelihood of any harm to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 09.00 AM on 28th September 2023 at SCMST.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring during the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards, 15.05.24

Dr. Abul Kasem Mohammad Enamul Haque
Principal, SCMST &Chairman, Institutional Review Board (IRB)
SAIC College of Medical Science & Technology (SCMST)
Mirpur-14, Dhaka-1216, Bangladesh

Gantt Chart

Activities/ months	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	June 24	July 24	Aug 24
Proposal presentation												
Introduction												
Literature review												
Methodology												
Data collection												
Data Analysis												
Result												
1st progress presentation												
Discussion												
Conclusion And Recommendation												
2nd progress presentation												
Communication with supervisor												
Final submission												