

Role of a Physiotherapist in Women's Health

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Abstract: *Purpose:* Physiotherapy addresses the unique health needs of women and acknowledges the need for specific clinical knowledge and competence in treating women's health issues. By offering non-invasive and conservative treatments, physiotherapists empower women to effectively manage these conditions, enabling them to lead more fulfilling and active lives. *Methods:* The Review of the Literature has been made with the help of all those articles containing the words "Women's health", and "Physiotherapy". Google Scholar, Research Gate, PubMed, Cochrane, and Science Direct databases have been used for the article between 2022 and 2016. *Results:* Physiotherapists who work with women's health do a really important job. They can help with things like problems with the muscles in the lower part of the body, pain during and after pregnancy, and problems that can happen after breast cancer. By giving special care and using treatments that have been proven to work, physiotherapists help women stay healthy and have a life. This research shows that it is important for physiotherapists to be involved in helping women with their health. *Conclusion:* The research shows that physiotherapists who specialize in women's health play a big role in helping women feel better and have a good quality of life. By learning more and getting better at what they do, physiotherapists can keep helping women be healthy and make society better as a whole.

Keywords: Pelvic health, Physiotherapy, Women's health.

I. INTRODUCTION

There exist various methods for characterizing individuals as either male or female. These distinctions often pertain to societal expectations and distinct roles associated with each gender. Nevertheless, it is crucial to recognize that the concept of gender is not uniform and can vary across different domains and cultures. Historically, the classification of women and men has been rooted in their biological attributes, specifically genetic features and reproductive anatomy [1].

In the realm of biology, an organism or individual possessing reproductive organs and characteristics typically associated with the production of eggs or ovules is designated as female. However, it's important to note that there are occasional

exceptions to this rule, such as individuals with chromosomal abnormalities. In human beings, females typically have two X chromosomes (XX). An adult female is commonly referred to as a woman, typically denoting an individual who has reached the age of 18 or the legal age of majority, depending on the jurisdiction. The transition from adolescence to womanhood is marked by anatomical and developmental changes associated with puberty. These changes encompass the growth of secondary sexual characteristics like breasts and the maturation of the reproductive system. It's worth mentioning that the precise definitions of these terms can be subject to legal descriptions and societal norms that may vary regionally, as well as cultural and contextual nuances [1].

Differences in physical responses between men and women to identical job conditions may offer an alternative explanation for variations in musculoskeletal symptoms. This notion finds support in earlier research that has identified disparities in neuromuscular activity levels when men and women perform the same job tasks, potentially influencing the development of musculoskeletal symptoms. It's worth noting that the same work-related tasks can place a comparatively greater workload on women due to their typically smaller body size and lower muscle force capacity compared to men. Moreover, the physical demands on women's bodies may be exacerbated by the fact that work environments, including factors like surface height, tool design, and equipment size, are often designed to accommodate the anthropometric characteristics and strength capacities of men [2].

Throughout various stages of their lives, women encounter a broad spectrum of physical and musculoskeletal challenges. These stages encompass puberty during adolescence, sexual maturation in the reproductive years, the climacteric period, and the post-climacteric or elderly phase. The nature and prevalence of these issues can vary significantly, influenced by factors such as age, genetic predisposition, lifestyle choices, and access to healthcare services. The array of women's health concerns is extensive and includes, but is not restricted to, matters such as pregnancy-related pelvic girdle discomfort, urinary incontinence, pelvic floor muscle dysfunction, and postpartum rehabilitation. These issues are just a segment of the overall landscape of women's health, which encompasses a wide array of topics. These encompass reproductive health,

which involves conditions like menstrual disorders, polycystic ovary syndrome, endometriosis, infertility, and pregnancy-related matters. Additionally, women's health extends to breast health, including breast cancer awareness and education, as well as menopause, sexual health, gynecological concerns such as vaginal health and pelvic floor disorders, mental health challenges such as depression, anxiety, eating disorders, and postpartum depression. Moreover, women's health encompasses bone health, as well as issues related to gender-based violence and its prevention [3].

A physiotherapist serves as a healthcare professional dedicated to enhancing, preserving, or reinstating health through a comprehensive range of activities, including physical assessment, diagnosis, prognosis, patient education, physical interventions, rehabilitation, disease prevention, and health promotion. In the sphere of women's health, physiotherapists assume a critical role by tending to distinct requirements and delivering suitable care and treatment. The field of women's and men's health physiotherapy is an evolving domain within clinical practice, with a distinct emphasis on women's health deemed highly significant. However, in certain communities, there exists a noticeable lack of awareness and understanding regarding the role of physiotherapy, especially among women. This underscores the necessity for educational initiatives and outreach efforts to bridge this knowledge gap. In summary, physiotherapy assumes a pivotal position in fostering and upholding women's health, addressing specific health conditions, and providing rehabilitation and essential support [3].

Physiotherapy recognizes and addresses the unique healthcare requirements of women, emphasizing the necessity for specialized clinical expertise in dealing with women's health issues. This field of healthcare contributes significantly to enhancing women's well-being by tackling a range of concerns. For instance, physiotherapy interventions encompass pelvic floor muscle training to alleviate urinary incontinence, core stability exercises to address back and pelvic pain, and regimens designed to enhance bone density and decrease the risk of falls. Physiotherapists play a pivotal role in women's health, delivering personalized care and preventive measures across various domains, including traumato-orthopedics, neurology, rheumatology, and respiratory physiotherapy. Through non-invasive and conservative treatments, these healthcare professionals empower women to effectively manage their conditions, facilitating more active and fulfilling lives. It's worth noting that this specialized care also carries economic benefits, as timely physiotherapy interventions for women's health issues can reduce the necessity for more expensive medical procedures and long-term healthcare expenses.

II. METHODOLOGY

The literature review was conducted by consulting articles that include the keywords "Women's health" and "Physiotherapy."

We utilized various databases, including Google Scholar, Research Gate, PubMed, Cochrane, and Science Direct, to identify relevant articles published between 2016 and 2023. The selected articles emphasize the significance of physiotherapy interventions in managing a diverse array of women's health issues. Furthermore, they underscore the necessity for additional research aimed at addressing obstacles to accessing healthcare and assessing the long-term outcomes of these interventions.

III. REVIEW OF LITERATURE

Sharma *et al.* (2023), the research highlighted the effectiveness of physiotherapy, encompassing specialized exercises and treatments, in alleviating pain and enhancing the overall quality of life for girls and women grappling with painful menstrual periods. Promoting a healthy diet and an active lifestyle was identified as another preventive measure for managing menstrual pain. Educating girls about the significance of maintaining a healthy lifestyle equips them with tools to better cope with discomfort. Furthermore, physiotherapy emerged as a valuable approach for mitigating anxiety, depression, and stress while enhancing sleep patterns and the overall well-being of girls experiencing menstrual pain [5].

Hroncová *et al.* (2023), the researchers conducted a comprehensive investigation into postpartum pain experienced by women, focusing on various aspects such as pelvic pain, lower back discomfort, and pain in intimate areas. Their search involved accessing specialized websites to source articles pertinent to their study. Subsequently, they meticulously reviewed the gathered literature, selecting articles that offered the most relevant insights. The research outcomes indicated that engaging in exercises and treatments under the guidance of a physical therapist can effectively alleviate discomfort and improve the well-being of women, particularly in terms of pelvic pain and muscle issues following childbirth [6].

McPherson *et al.* (2023), this research paper focuses on the curriculum content of physiotherapy programs in Australia, particularly with regard to women's and men's health topics. The aim of the study was to assess the extent of coverage and the perceived importance of these subjects. The findings revealed an increasing prominence of women's and men's health physiotherapy within the field. The investigation specifically delved into the content taught in entry-level programs and identified variations in the curriculum. This study provides valuable insights into the prevailing educational landscape of physiotherapy programs in Australia, shedding light on the topics covered and their perceived significance within the curriculum [7].

Balogun (2021), the author highlights a concerning issue where individuals facing bodily dysfunction may not receive the necessary support through physical therapy, potentially exacerbating their symptoms and challenges. Within this chapter, various conditions that can benefit from physical therapy intervention are discussed. These encompass issues

such as urinary and bowel incontinence, sexual pain, and postpartum emotional distress. Appreciating this information can be instrumental in enabling healthcare professionals to refer patients to physical therapy at an earlier stage. This proactive approach not only contributes to improved well-being but also holds the potential for cost savings in healthcare [8].

Mullins *et al.* (2021), this research delved into the postpartum exercise adherence of new mothers and its impact on their overall health. The study encompassed a compilation of 25 smaller studies, involving a total of 1466 mothers. The primary focus was on assessing the mothers' commitment to the exercise programs and their resultant health outcomes. In these studies, the participants engaged in varying levels of weekly exercise, with some receiving supervision while others did not. It is worth noting that certain studies exhibited inconsistencies in their reporting, which posed challenges to overall study quality. Nevertheless, the majority of the studies indicated that exercise contributed to enhanced strength and reduced fatigue among postpartum mothers. Only a minority of studies reported potential adverse effects on breastfeeding. The study's overarching conclusion emphasized the necessity for further research to gain a more comprehensive understanding of how and when to facilitate exercise interventions for new mothers to promote their overall well-being [9].

Marini *et al.* (2021), the WELL-DONE! Study aims to investigate the potential benefits of a specialized exercise program designed for pregnant women, with the objectives of enhancing their overall well-being and potentially benefiting their infants. Presently, there is limited engagement in physical activity among pregnant women, despite its known advantages. The study comprises two distinct phases: firstly, engaging with pregnant women and midwives to develop the exercise program, and secondly, testing the program on a group of pregnant women to assess its effectiveness. To evaluate the program's impact, participants will undergo a series of questionnaires and tests before and after its implementation to gauge any noticeable differences. The ultimate goal of this study is to determine whether this exercise program has the potential to be widely recommended for all pregnant women, offering the possibility of improved well-being and increased physical activity during pregnancy [10].

Stirling *et al.* (2021), this study aimed to raise awareness about the unique needs of women who have experienced sexual assault and emphasized the role of physiotherapists in providing specialized assistance to these individuals. It underscored the importance of specific training for physiotherapists to effectively support survivors. The study further illuminated how sexual assault can have profound implications for both mental and physical health. It can manifest in various ways, including emotional distress such as sadness, nightmares, and disturbances in eating and sleep patterns. Additionally, the research noted that sexual assault survivors may encounter physical issues, including pain in specific areas of the body. The study acknowledged that a significant number of women have

encountered sexual harassment or assault, recognizing that these experiences can also affect men. However, the primary focus of the study was on the experiences and needs of women in this context [11].

Liu *et al.* (2020), this report delves into the impact of exercise on fatigue levels during pregnancy and postpartum. The authors conducted an extensive review of various studies to explore the existing research findings on this topic. From their review, they identified seven studies that were pertinent to their inquiry. Upon analyzing the results of five of these studies collectively, the authors observed that engaging in exercise during pregnancy and in the postpartum period appeared to have a potential benefit in reducing fatigue among women. Notably, they found that more extended exercise programs, exercise undertaken after childbirth, and exercise supervised by a qualified professional seemed to yield the most significant advantages. The authors suggest that exercise postpartum, particularly in supervised programs lasting longer than eight weeks, could be particularly effective in mitigating fatigue. They also stress the need for further extensive and high-quality research to establish the precise effects of exercise on fatigue levels during pregnancy and the postpartum period [12].

Boissonnault *et al.* (2020), in 2013, the International Organization of Physical Therapists in Pelvic and Women's Health (IOPTPW) published guidelines outlining the roles and responsibilities of physical therapists in this specialized field. However, with the evolving landscape, there is now a need to create an updated document that reflects the current practices and expectations. To inform this process, the organization conducted a survey in 1999-2000 to assess the practices of therapists during that period. The insights gleaned from this survey will serve as valuable resources in shaping the content of the new document [13].

Sheth *et al.* (2019), a team of researchers aimed to investigate the awareness and perceptions of pregnant women in Ahmedabad regarding physiotherapy during pregnancy. They conducted a survey in which 100 pregnant women were asked to respond to a set of questions independently. The findings revealed that a majority of the women had limited knowledge about exercises beneficial during pregnancy. However, many of them were aware that physiotherapy could contribute to overall health and alleviate back pain. In terms of attitude, most participants held a positive view of physiotherapy during pregnancy. However, this positive sentiment waned somewhat when considering physiotherapy after childbirth. Women primarily associated physiotherapy with exercises, massage, and the use of hot water. In summary, the study illuminated a gap in knowledge regarding physiotherapy during pregnancy among the women surveyed, although they expressed a favorable disposition towards the concept [14].

Liu *et al.* (2019), the review encompassed an examination of 13 distinct studies that delved into the impact of exercise on the well-being of pregnant women. These studies explored

various forms of exercise, including activities like running and weightlifting, revealing that certain types of exercise had a more significant positive effect on pregnant women's emotional well-being compared to others. The review's findings suggest that a combination of diverse exercises or engagement in activities such as yoga can substantially enhance the emotional well-being of pregnant women. Additionally, it was observed that the stage of pregnancy and the specific type of exercise undertaken can influence a woman's adherence to the exercise regimen. Participating in group exercise sessions with other pregnant women emerged as a beneficial approach for improving emotional well-being. However, the review emphasizes the need for further research to pinpoint the most effective types of exercise in this context [15].

Dash (2019), this research sought to assess the level of awareness and knowledge regarding physiotherapy among women in a community in Bangalore. The study utilized online platforms such as WhatsApp, Facebook, and Gmail to pose questions to the women, including both open-ended and multiple-choice queries. In total, 110 women participated in the study, and the researchers meticulously analyzed the responses using Google spreadsheets to discern recurring answers and provide a descriptive overview of the findings. The study revealed that the women were generally aware of physiotherapy, primarily associating it with the treatment of musculoskeletal issues and sports injuries. However, their understanding of its broader applications was limited. Notably, the research indicated that early initiation of physiotherapy could expedite recovery, a concept that resonated positively with many of the participants. Additionally, the idea of utilizing physiotherapy to address bladder problems garnered significant support among the women surveyed [16].

Stein *et al.* (2019), Pelvic floor physical therapy (PFPT) serves as a valuable approach to assisting individuals dealing with issues related to their pelvic region and sexual well-being. This therapeutic method employs various techniques, including massage and targeted exercises, to enhance the functioning of the muscles in this area. The field of pelvic rehabilitation continuously evolves, discovering innovative ways to offer support to those in need. PFPT centers on comprehending the intricate connections between different bodily components and their impact on the pelvic region and sexual health. It is imperative for healthcare providers to discern when to recommend PFPT, employing a holistic model that considers all aspects of an individual's well-being to ensure overall improvement in their quality of life [17].

Brennen *et al.* (2019), the government, in collaboration with Price-Waterhouse Coopers, embarked on an initiative to enhance healthcare delivery for individuals. They established a specialized facility where physiotherapists provided assistance to those dealing with bladder and women's health issues. This initiative streamlined access to healthcare services, resulting in improved hospital efficiency and cost savings [18].

Luz *et al.* (2018), Physiotherapy plays a crucial role in aiding women diagnosed with breast cancer to regain their mobility and daily functioning. Following surgical procedures, women often encounter challenges in shoulder movement and performing routine tasks that were once effortless. Physiotherapy emerges as a valuable intervention to mitigate these issues and ensure proper shoulder mobility. Medical professionals employ specialized assessments and questionnaires to evaluate the range of shoulder motion and the ability to carry out daily activities effectively. An interdisciplinary healthcare team collaborates to provide comprehensive care, focusing on the holistic well-being of women with breast cancer. Physiotherapy assumes a pivotal role both pre and post-surgery, aiding in the recovery process and enhancing the overall well-being of women undergoing breast cancer treatment [19].

R. Butler *et al.* (2018), this paper delves into the collaborative efforts of doctors and physical therapists in addressing muscle and bone-related issues affecting women's health. It underscores the significance of their cooperation in ensuring the overall well-being of women. Furthermore, the paper elucidates various exercises and therapeutic approaches employed by physical therapists to assist women throughout different stages of life, including pregnancy and the aging process. The organization of the paper follows a structured approach, addressing distinct phases of a woman's life. It effectively demonstrates that physical therapy holds substantial promise in enhancing women's health and well-being [20].

Howard *et al.* (2018), this paper delves into the operations of a specialized clinic focused on addressing pelvic health issues among women. This clinic, administered by physiotherapists, serves as a valuable resource for women awaiting consultations with doctors. The study involved an analysis of 105 women who sought assistance at the clinic. The findings demonstrated the clinic's efficacy in expediting appointments, improving the well-being of the women, and enhancing their overall satisfaction. Remarkably, a substantial number of these women did not require consultations with specialist doctors after receiving care at the clinic. This study highlights the clinic as an effective and efficient means of providing support and care for women dealing with pelvic health concerns [21].

K. Goode (2018), a specialized program was developed to offer support to new mothers in the postpartum period. This program underwent testing to assess its user-friendliness and gauge maternal satisfaction. The results indicated that the majority of participating mothers had a positive experience with the program. However, it was noted that certain mothers faced challenges in attending the program due to time constraints. In response to the feedback received, adjustments were made to cater to the preferences of these mothers. This led to the creation of an online resource designed to provide essential information to new mothers regarding postpartum self-care. This digital platform aims to better accommodate their needs and offer valuable guidance for post-birth recovery and well-being [22].

Sadeghi *et al.* (2018), the study acknowledges the limited availability of comparative research in its field, underscoring the need for further investigations in the future. It highlights the rigor of its own research, which involved utilizing existing data, studying a substantial participant pool, and collecting original data. According to the study's findings, both muscle relaxation and physical activity have the potential to enhance the well-being of pregnant women. This aligns with previous research that has demonstrated the positive physical and mental effects of staying active during pregnancy, including pain reduction and improved mental health. The study posits that these approaches are particularly suitable for pregnant women residing in remote areas with limited access to medical facilities. They are cost-effective, have minimal side effects, and are easily accessible. Additionally, the study advocates for further research into the impacts of physical activity during pregnancy on both maternal and fetal health, as well as exploring the potential benefits of combining relaxation techniques with physical activity [23].

Walters *et al.* (2018), Pelvic girdle pain (PGP) is a condition that can affect pregnant women, impeding their physical capabilities and potentially leading to emotional distress. Unfortunately, there are instances where medical professionals may lack awareness or provide inadequate treatment, exacerbating the condition. However, there exist effective interventions, including modifying daily activities, utilizing specialized support garments to bolster the pelvis, and engaging in tailored exercises. Additionally, a diagnostic test is available to assess the severity of the pain and its impact on the individual. It's important to note that a collaborative effort is essential in the healthcare journey of pregnant women dealing with PGP, with doctors and various healthcare providers working in tandem to offer comprehensive support and care [24].

Hayman *et al.* (2017), this study aimed to assess the effectiveness of a dedicated website in promoting physical activity among pregnant women. The group of women who utilized the website exhibited higher levels of physical activity compared to the group that did not. Furthermore, the women expressed favorable opinions about the website, finding it beneficial. The study's findings underscore the significance of personalized guidance and information for pregnant women, indicating that such tailored support increases their likelihood of engaging in exercise and deriving satisfaction from it [25].

Ulb *et al.* (2017), this paper delves into an examination of the effectiveness of physiotherapy for pregnant women in the Gangawatakoralle division, Kandy, before childbirth. The research seeks to assess both the knowledge pregnant women possess about physiotherapy and its actual impact on their well-being during pregnancy. The study places considerable emphasis on the importance of pregnant women being informed about physiotherapy and how it can enhance their quality of life. Notably, this research is unique in that it represents the first exploration of this subject in Sri Lanka. The researchers aspire to contribute valuable insights that will benefit both pregnant

women and healthcare providers in the Gangawatakoralle division, Kandy, ultimately improving prenatal care and outcomes [26].

Suraj *et al.* (2016), Urinary incontinence is a prevalent issue among adults globally, affecting a substantial portion of the population, with estimates ranging from 20% to 33% in adults and 11% to 55% in the elderly. Managing stress urinary incontinence, which ranks as the third most costly condition after heart disease and diabetes, presents a significant financial burden. Several strategies exist for addressing urinary incontinence, encompassing exercises targeting pelvic floor muscles, specialized devices, and bladder training. A novel approach known as the Tanzberger method, pioneered by German physical therapists, concentrates on enhancing the overall functionality of the abdominal region to alleviate urinary incontinence. This study emerged due to the limited experimentation on the Tanzberger approach. Its primary objective was to investigate whether strengthening pelvic floor muscles through this method would yield positive outcomes for individuals dealing with urinary incontinence [27].

Haakstad *et al.* (2016), this study aimed to investigate the potential benefits of group exercise for pregnant mothers, both in terms of their mental and physical well-being. The participants in the study adhered to a structured workout regimen that encompassed both cardiovascular and strength exercises, engaging in these sessions a minimum of two times per week over a span of 12 weeks. Prior to commencing and upon completion of the exercise program, the mothers were subjected to inquiries about their emotional state and overall health. The findings indicated that those mothers who engaged in exercise rated their health more favorably compared to those who did not participate. Additionally, they reported experiencing reduced fatigue during daily activities. Notably, the mothers who engaged in more extensive exercise regimens exhibited even more favorable outcomes, reporting decreased feelings of sadness, hopelessness, and anxiety. In summary, participating in group exercise during pregnancy emerged as a beneficial practice, contributing to improved overall well-being and enhancing the quality of life for expectant mothers [28].

Malta *et al.* (2016), pregnant women worldwide often face challenges related to insufficient physical activity and unhealthy dietary habits. These behaviors can lead to various complications, including excessive weight gain, low birth weight, preterm birth, cesarean section deliveries, gestational diabetes, and high blood pressure. Increasing attention is being devoted to understanding how a mother's diet and exercise regimen during pregnancy can impact both her own health and that of her baby. Healthcare professionals, particularly doctors and nurses, play a pivotal role in guiding pregnant women towards maintaining a balanced diet and staying active. A review of studies has revealed that offering guidance on healthy eating can be beneficial, yet doctors and nurses do not consistently provide such advice. To address this gap, this study

aimed to assess the impact of enhanced training for doctors and nurses on their ability to support pregnant women. The group that received training demonstrated improved knowledge and a greater likelihood of offering guidance regarding healthy dietary choices and physical activity, compared to the group that did not receive training. This study underscores the importance of equipping healthcare professionals with the skills and knowledge needed to empower pregnant women to make healthier lifestyle choices during pregnancy [29].

IV. RESULTS

Physiotherapists specializing in women's health play a vital role in enhancing the well-being of women at various stages of their lives. They employ evidence-based exercises and treatments to address a range of issues, including lower body muscle problems, pregnancy-related discomfort, and post-breast cancer complications. Through specialized care and proven treatments, physiotherapists contribute to women's overall health and quality of life.

Research underscores the significance of involving physiotherapists in women's healthcare. Women may encounter challenges related to their pelvic floor, bladder control, and pregnancy-related pain, which can impact them physically, emotionally, and socially. However, physiotherapists offer non-invasive treatment options, reducing the need for costly procedures and frequent doctor visits.

Further research in physiotherapy for women's health is warranted. Understanding the factors that facilitate or hinder women's access to physiotherapy is crucial. Identifying these influences can help raise awareness and utilization of physiotherapy.

Moreover, it is essential to investigate the long-term effectiveness and cost-effectiveness of physiotherapy for women with health issues. Assessing treatment outcomes, daily functionality, and overall well-being can inform healthcare decisions, including the comparative cost-effectiveness of physiotherapy versus other interventions.

Additionally, given the dynamic nature of women's health needs and the diversity within populations, ongoing research should ensure that physiotherapy treatments are inclusive and suitable for everyone. This research could examine how factors such as cultural background, financial status, and geographical location impact treatment outcomes. Furthermore, exploring the potential benefits of using technology like video calls and mobile apps to expand access to care, especially for individuals with limited mobility or residing in remote areas, could enhance women's healthcare accessibility.

V. CONCLUSION

The research highlights the significant contributions of specialized women's health physiotherapists in enhancing

women's well-being and overall quality of life. These professionals are instrumental in addressing a wide range of women's health issues, underscoring their pivotal role in healthcare. Moreover, this specialized care offers benefits to both the economy and society at large.

However, it is imperative to continue conducting research in this field to ensure that comprehensive healthcare is accessible to all individuals, regardless of their circumstances. Long-term treatment outcomes, cost-effectiveness, and the value of these services need to be thoroughly examined. By expanding our knowledge and continually improving their practice, physiotherapists can continue to promote women's health and contribute to the betterment of society as a whole.

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