

ISSUES AND CHALLENGES FACED BY FEMALES' SPINAL CORD INJURY SURVIVAL IN PESHAWAR

Shabina begum¹, Bakhtyar Ali Shah², Muhammad Anwar^{*3}

¹Miss; Shabina begum: PRN Nursing Instructor BPS17 at public health school Nishtarabad Peshawar.

²Bakhtyar Ali Shah: MPH, MHR, MSN, PhD scholar Assistant Professor Khber Medical University.

^{*3}Muhammad Anwar: MSN, PRN, Nursing officer DHQ hospital Timergara Dir lower kpk Pakistan

^{*3}m.anwar.ma528@gmail.com

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Corresponding Author: *

Muhammad Anwar

Abstract

Introduction: Spinal Cord Injury (SCI) constitutes a profound disruption to an individual's life, impacting not only their physical abilities but also their overall well-being. Over the years, advancements in medical science and rehabilitation techniques have aimed to alleviate the consequences of SCI and enhance the prospects of functional recovery. **Objectives:** The aim of the study was to explore the Issues and challenges faced by female's spinal cord injury survival in Peshawar. **Methodology:** The study employs a qualitative phenomenology descriptive approach to investigate the experiences and challenges faced by females with spinal cord injuries at the Paraplegic Center in Hayatabad, Peshawar. The research, spanning six months, focuses on a deliberately small sample size of 12 female patients, selected through purposive sampling to ensure specificity and relevance. **Result:** A total of 19 categories were extracted from the codes and in the final stage of analysis five themes were extracted. These themes were Physical Health and Well-being, Psychosocial Impact, Sexuality and Relationships, Environmental and Accessibility Factors and Quality of Life and dependence. **Conclusion:** In conclusion, the issues and challenges faced by female spinal cord injury survivors are intricate and multifaceted, encompassing physical, psychosocial, and societal dimensions.

INTRODUCTION

Spinal Cord Injury (SCI) constitutes a profound disruption to an individual's life, impacting not only their physical abilities but also their overall well-being. Over the years, advancements in medical science and rehabilitation techniques have aimed to alleviate the consequences of SCI and enhance the prospects of functional recovery. Among the myriad approaches, over ground gait training has emerged as a promising strategy that not only targets physical

rehabilitation but also holds the potential to influence cortical neuroplasticity. This research delves into the intricate nexus of challenges faced by females with SCI and explores the transformative effects of over ground gait training on both functional recovery and cortical neuroplasticity within the context of an incomplete spinal cord injury model (1) Females with SCI encounter unique and multifaceted obstacles that are distinct from their male counterparts. From physiological responses to societal roles, gender-specific challenges can significantly impact the

trajectory of recovery and the restoration of functional abilities. Issues related to healthcare accessibility, rehabilitation interventions, and psychological well-being often intersect with gender-based disparities, leading to a complex web of challenges that demand tailored and comprehensive interventions(2).

Over ground gait training presents a dynamic approach to rehabilitation, involving walking on a natural surface rather than a treadmill or a fixed environment. Its potential to simulate real-life walking scenarios enhances the transfer of regained skills to everyday activities. Furthermore, recent research has shed light on the impact of physical activity on cortical neuroplasticity the brain's ability to reorganize itself in response to injury. Understanding the intricate relationship between over ground gait training, functional recovery, and cortical neuroplasticity could hold the key to optimizing rehabilitation strategies for females with incomplete SCI(3).

By investigating the intersection of gender-specific challenges and the transformative potential of over ground gait training, this research seeks to contribute to the broader understanding of spinal. Spinal Cord Injury (SCI) is a life-altering event that imposes significant physical, psychological, and social challenges on individuals worldwide. As medical advancements continue to improve survival rates and functional outcomes for SCI patients, there is a growing recognition of the need to assess and address the holistic well-being and quality of life (QOL) of those affected. (4) (5).

The challenges encountered by females with SCI are multifaceted, encompassing physical limitations, psychological adjustments, societal attitudes, and access to healthcare and rehabilitation. In the context of South Korea, a country marked by its unique cultural and social landscape, these challenges may be further compounded by prevailing gender norms and expectations. The distinct roles assigned to females within Korean society may influence not only the experience of the injury itself but also the subsequent journey of recovery and adaptation(6).

This research aims to fill a critical knowledge gap by systematically exploring the diverse factors that shape the quality of life of females with spinal cord injuries in Korea. By examining both objective measures and subjective experiences, we seek to provide a comprehensive understanding of the interactions between medical, societal, and personal variables. Ultimately, the insights gained from this study have the potential to inform healthcare policies, rehabilitation strategies, and support networks, leading to improved outcomes and enhanced well-being for females living with spinal cord injuries in Korea(3).

In summary, the study "Sexual satisfaction in women with spinal cord injuries" provides valuable insights into the factors influencing sexual activity and satisfaction among females with SCI. By unraveling the intricate connections between SCI-related challenges and sexual well-being, this research contributes to a deeper understanding of the complex journey faced by females following spinal cord injury, ultimately paving the way for more effective support and rehabilitation strategies tailored to their unique needs(7).

Methodology:

This was a qualitative Phenomenology Descriptive study carried out at the Paraplegic Center Hayatabad, Peshawar in Khyber Pakhtunkhwa. Female participants of all ages who have experienced or medically diagnosed with spinal cord injury, including, traumatic, non-traumatic causes and participants with various levels of spinal cord injury severity, including complete and incomplete injuries (ASIA A-D classification) were recruited in the study. The study was carried out in May 2022-October 2023). Sample size for the study was decided upon the data saturation. A total of 12 Female participants were recruited in the study, 12 individual interviews were conducted to collect the data.

The study was approved by ASRB and ethical review board of KMU. Data collection permission was also granted from the concern institute. Informed consents were granted from the all the participants of the study. Data was analyzed using thematic analysis.

Results:

Overall, 12 participants were recruited in the study. All of participants were interviewed separately. All the participants were selected from Paraplegic Center Hayatabad, Peshawar. Overall, all 12 participants were recruited in the study were female (100%) More than half (58.3%) of the participants were young less

than 40 year of age. 25% of the participants were having age from 41 to 60 year. 16.667% of the participants were more than 60 year of age. Similarly, 66.7% of the participants were married and 33.333% of the participants were un married. (Table 1).

Table 1: Socio-demographic profile of the participants, n=12

	Frequency	Percent
Gender of the Participants`		
Male	0.0	0.0
Female	12	100.0
Total	12	100.0
Age of the participants		
Less than 40 year	07	58.3
From 41 to 60 year	03	25
More than 60 year	02	16.667
Total	24	100.0
Marital status of the participants		
Married	8	66.7
Un Married	4	33.3
Total	12	100.0

Data was analyzed using thematic analysis. Overall, a total of 96 codes were extracted. These codes were arranged to extracted axel codes. Similarly, a total of 19 categories were extracted from the codes and in the final stage of analysis five themes were extracted. These

themes were Physical Health and Well-being, Psychosocial Impact, Sexuality and Relationships, Environmental and Accessibility Factors and Quality of Life and dependence (Figure 1).

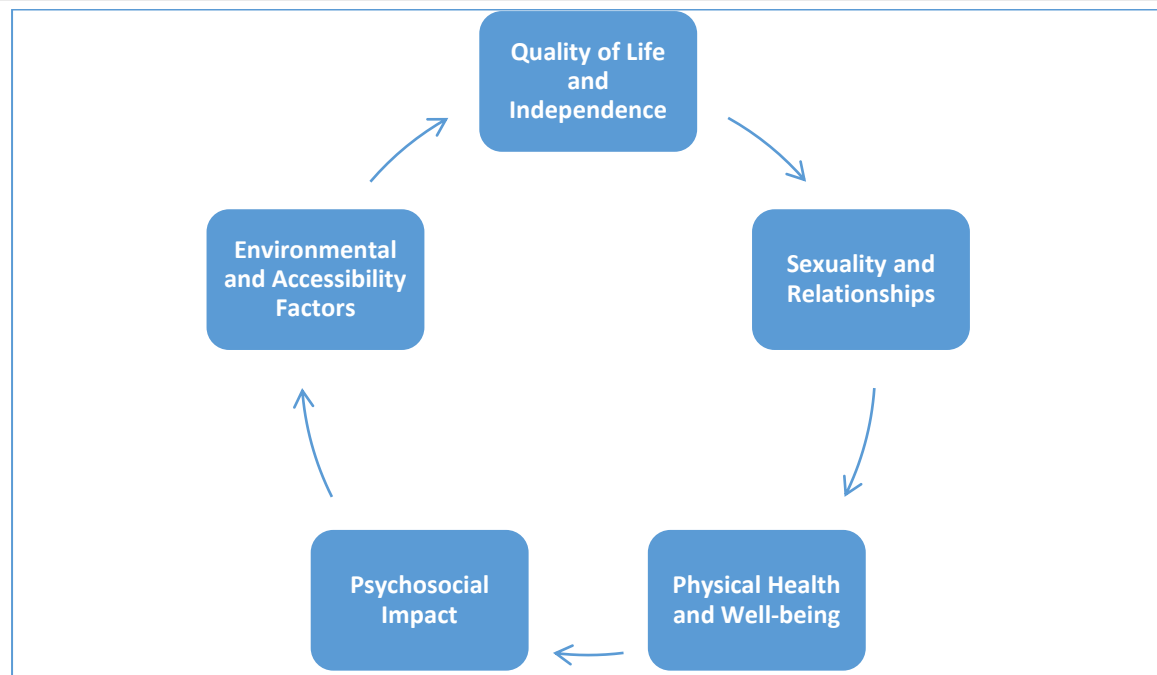


Figure 1: Smart Art depicting list of generated themes in the study

Theme 1: Physical Health and Well-being:

The first generated theme is Physical Health and Well-being. This theme was generated from several categories such as Mobility challenges,

Pain management, Medical complications and Access to healthcare services Figure 2.

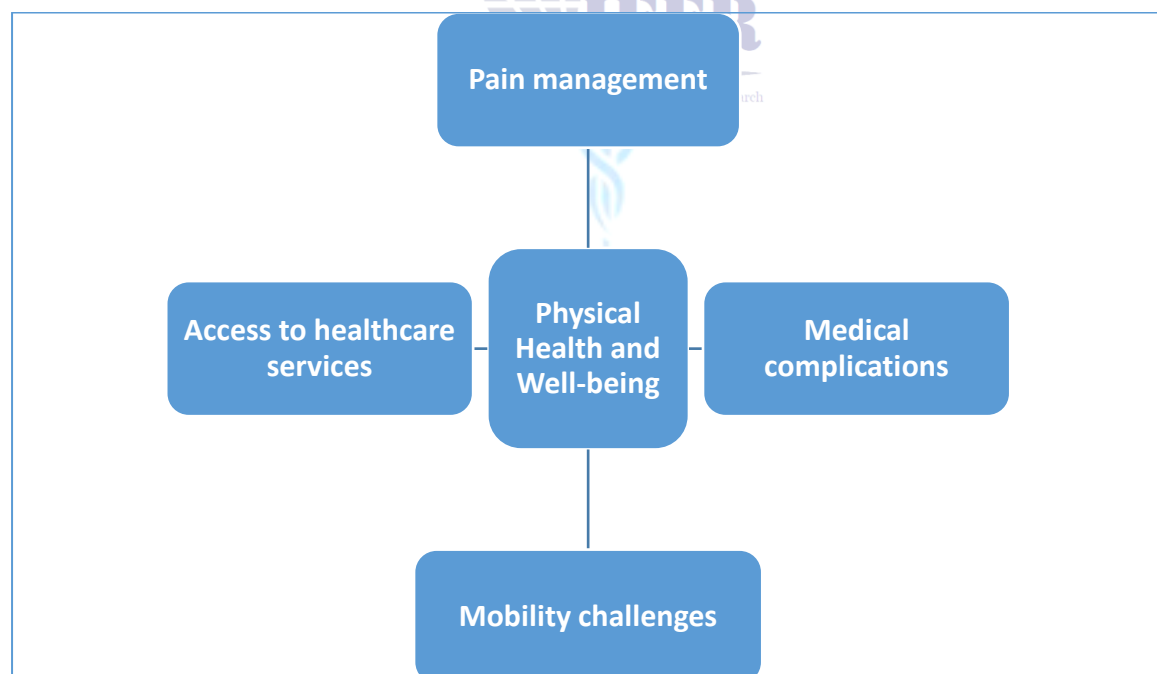


Figure 2: Smart Art depicting categories for the theme “Physical health and well-being”

Theme 2: Psychosocial Impact:

The second generated theme is mental health issues. This theme is generated from several

categories such as Social isolation, Body image and self-esteem, Coping mechanisms and Anxiety and Depression (Figure 3).

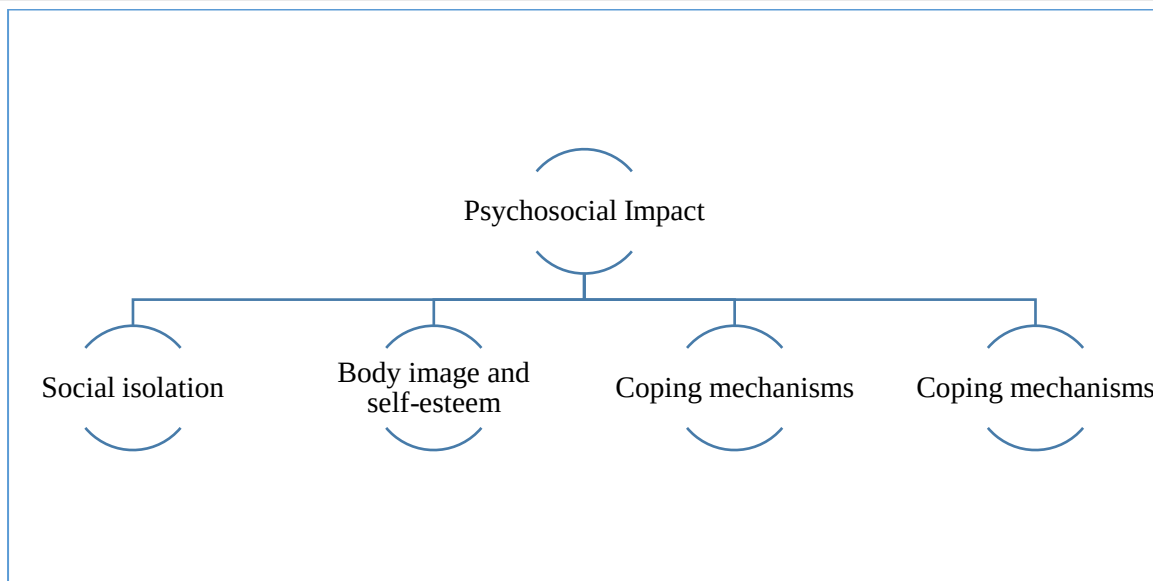


Figure 3: Smart Art depicting categories for the theme “Psychosocial Impact”

Theme 3: Sexuality and Relationships:

The third generated theme is Sexuality and Relationships. This theme was extracted from several categories such as Intimacy and sexual

function, Relationship dynamics and Reproductive health and family planning (Figure 4).

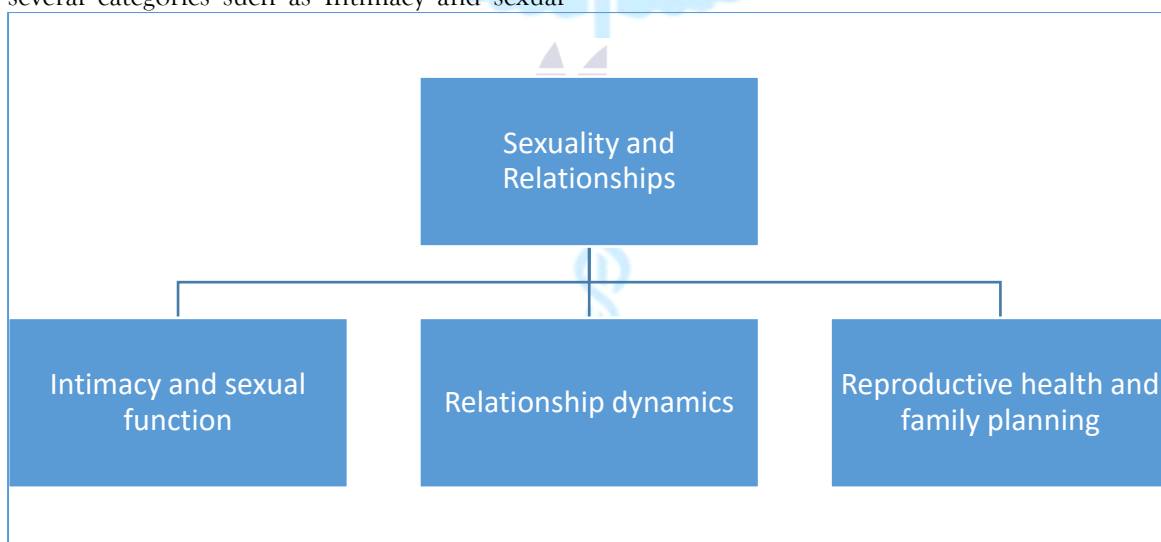


Figure 4: Categories for the theme “Sexuality and Relationships”

Theme 4: Environmental and Accessibility Factors:

The fourth generated theme is Environmental and Accessibility Factors. Several categories

such as Physical environment accessibility, Residency, Transportation challenges and Availability of assistive technologies were arranged to extract this theme (Figure 5).

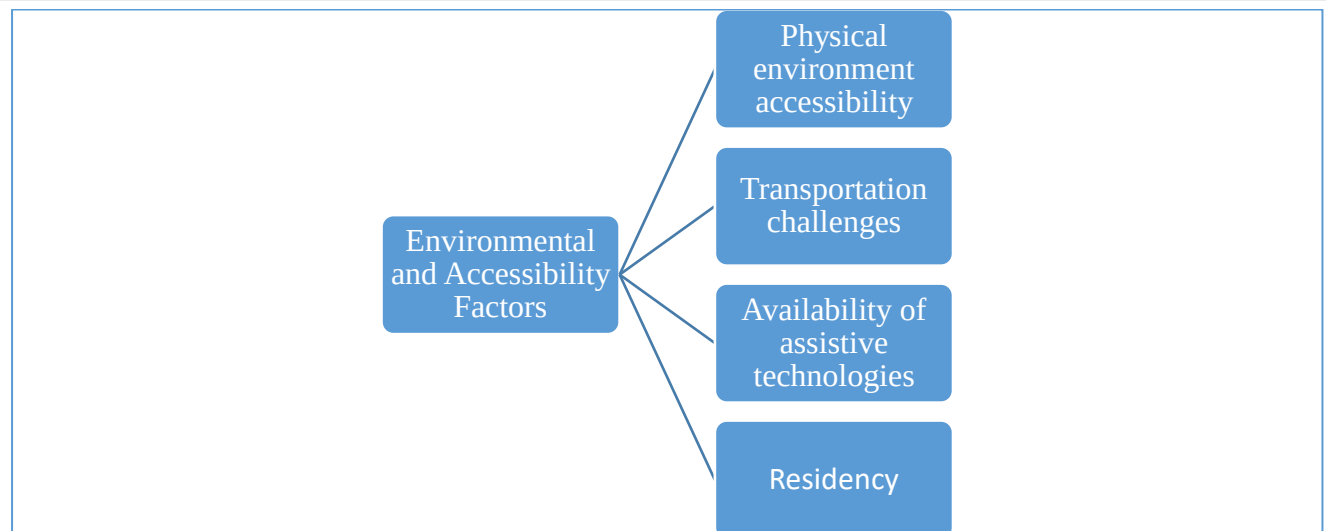


Figure 5: Smart Art depicting Categories for the theme “Environmental and Accessibility Factors”

Theme 5: Quality of Life and dependence:

The fifth generated theme is Quality of Life and dependence. This theme is generated from

several themes such as Ineffective technology, dependency on family, limited mobility, and lack of Leisure and recreational activities (Figure 6).

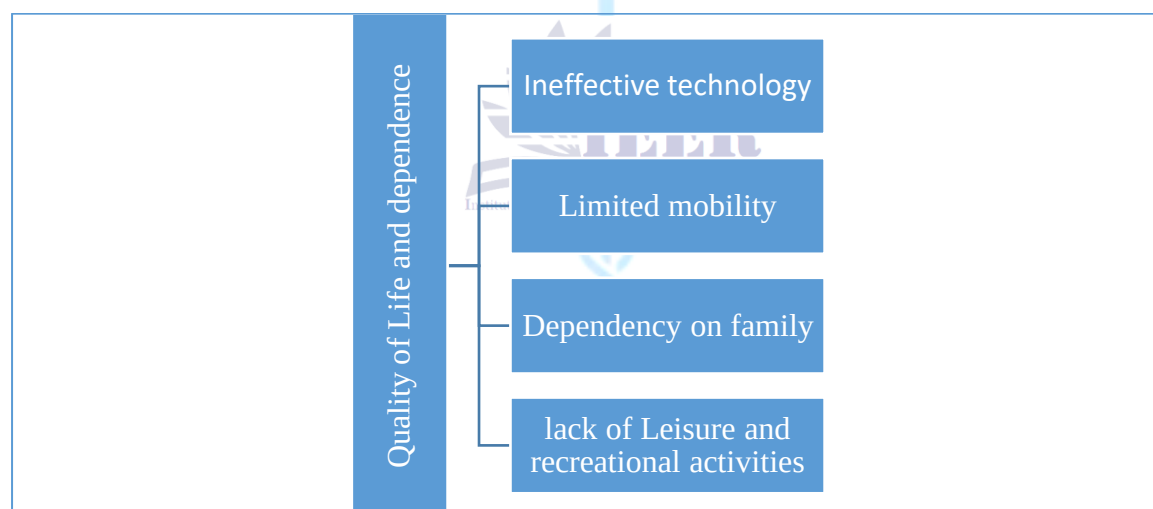


Figure 6: Smart Art depicting categories for the theme “Quality of life and independence”

Discussion:

In the current study, several issues and challenges face by females with spinal cord injuries were experienced. The challenges in terms of themes were Physical Health and Well-being, Psychosocial Impact, Sexuality and Relationships, Environmental and Accessibility Factors and Quality of Life and dependence. Spinal cord injuries (SCIs) are life-altering events that can profoundly impact an individual's physical, psychological, and social well-being. For females who experience spinal

cord injuries, the challenges they face are often multifaceted and unique (8).

Supporting the findings of the current study, the findings of the studies reported that Spinal cord injuries bring about a myriad of physical health challenges for females (9). Similarly, a study supported the above findings and reported that from adapting to mobility aids to addressing specific healthcare needs, female survivors navigate a complex landscape(10,11). Several issues which are linked with the Physical

Health and Well-being are the spinal cord injury related complications. Studies reported that several Issues such as pressure sores, urinary tract infections, and reproductive health concerns require specialized care. Access to comprehensive rehabilitation services, including physiotherapy and occupational therapy, becomes crucial in enhancing their overall physical well-being (12,13).

In the current study, one of the issues and challenges face by the women with spinal cord injuries were psychosocial issues. Supported the findings of the current study, a stud study reported that the psychosocial impact on female survivors is profound, encompassing emotional, social, and mental well-being (14). Furthermore, another study also supported the findings of the current study and reported that Body image issues, self-esteem concerns, and the adjustment to a new sense of identity contribute to the psychosocial challenges (15).

In the current study, one of the issues was Reproductive Health and relationship related issues. The mother's victims were unable to manage the pregnancy and family. Supporting these findings, study reported that female spinal cord injury survivors often face unique challenges in reproductive health and family planning. Navigating fertility treatments, understanding the impact of medications on pregnancy, and accessing inclusive healthcare become central concerns (16,17).

Similar to these findings, studies reported that the right to make informed choices about motherhood, as well as addressing societal misconceptions, becomes integral in shaping their reproductive narratives (18,19). Furthermore, literature supported the findings of the current study and reported that the intersection of spinal cord injuries and female sexuality introduces a complex dynamic. Reconnecting with one's body, communicating intimate needs, and negotiating relationships post-injury are intricate challenges. Stereotypes and societal attitudes towards disabled female sexuality may impact self-perception and contribute to barriers in forming and maintaining intimate connections (20-21).

In addition, impacted quality of life and dependencies was one of the issues among the females with spinal cord injuries. These findings were supported by studies and

reported that the physical environment profoundly affects the quality of life for female spinal cord injury survivors (22,23). In the current study, transportation was one of the issues. These findings were supported by studies and reported that accessible infrastructure, transportation, and public spaces enable greater independence and participation in community life. Creating an environment that embraces universal design principles is crucial for fostering inclusivity (24,25).

Likewise, literature supported the current study findings and reported that the physical environment poses additional challenges for female survivors, as accessibility remains a critical issue. From navigating public spaces to accessing public transportation, ensuring inclusivity becomes pivotal. Advocacy for universal design principles and accessible infrastructure is essential to empower female survivors to live independently and participate fully in societal activities (9,26,27).

Conclusion:

In conclusion, the issues and challenges faced by female spinal cord injury survivors are intricate and multifaceted, encompassing physical, psychosocial, and societal dimensions. The journey of these resilient individuals is marked by both obstacles and triumphs, as they navigate a path uniquely shaped by the intersection of gender and disability. Physically, female survivors grapple with the complexities of healthcare access, rehabilitation, and reproductive health. The challenges of adapting to new bodily realities, the need for specialized care, and the intricacies of family planning underscore the necessity for comprehensive and inclusive healthcare systems. Psychosocially, the impact of spinal cord injuries reverberates through emotional resilience, self-esteem, and societal perceptions. Coping with changes in body image, intimate relationships, and the nuances of societal expectations pose psychological challenges that demand empathy, understanding, and targeted support. The current study, some issues such as Physical Health and Well-being, Psychosocial Impact, Sexuality and Relationships, Environmental and Accessibility Factors and Quality of Life and dependence were reported by the females with spinal cord injuries.

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