

CJPC

COLOMBO JOURNAL OF
PSYCHOLOGY & COUNSELLING

ISSN 3051-5505

VOLUME 2 - ISSUE 1



THE SRI LANKAN JOURNAL DEVOTED EXCLUSIVELY TO
PSYCHOLOGY AND COUNSELLING



Colombo Journal of Psychology & Counselling
Volume 2, Issue 1, 2025

Colombo Journal of Psychology & Counselling

Volume-2, Issue 1

Editor in Chief
Tina H. Solomons

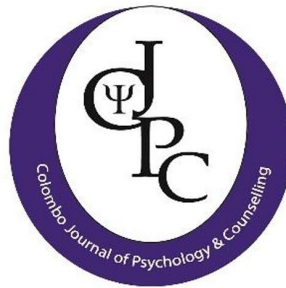
Co-Editor
Thisuri Hettige



Copyright. All rights reserved



Colombo Journal of Psychology & Counselling
Volume 2, Issue 1, 2025



COLOMBO JOURNAL OF PSYCHOLOGY & COUNSELLING

Volume - 2 Issue - 1 APRIL 2024

**By Colombo Psychological Services,
Sri Lanka**



Copyright- Colombo Journal of Psychology & Counselling, Sri Lanka

Colombo Psychological Services Pvt, Ltd, Sri Lanka

All rights reserved

Published by Colombo Journal of Psychology & Counselling, Colombo Psychological Services, Mount Lavinia, Sri Lanka

It is strictly prohibited to copy, store in a retrieval system, or transmit this publication in any form or by any means, electronic, mechanical, or otherwise, in whole or in part without first obtaining prior written permission from the Colombo Journal of Psychology & Counselling/Colombo Psychological Services.



Message from the Editor in Chief

It is with great pleasure that we present Volume 2 of the Colombo Journal of Psychology and Counselling. This volume marks another meaningful step in our commitment to advancing psychological research in Sri Lanka.

As the field of psychology continues to evolve, it is important that we cultivate a strong locally relevant body of research. Expanding publication opportunities in psychology and counselling not only strengthens academic discourse but also enhances the quality of care, training and also policy development within our communities.

I would like to extend my sincere thanks to the authors and editorial team whose dedication has shaped this volume. I also invite readers including students, practitioners and researchers alike to engage critically with the work presented here and to consider how their own scholarship might contribute to the ongoing development of psychological development in Sri Lanka.

Let this volume be both a reflection of our progress and a call to further inquiry.

Tina Solomons
Editor in Chief
Colombo Journal of Psychology and Counselling
ISSN: 3051-5505



CONTENT

Mental Health Stigma and Its Impact on Help-Seeking Behavior in Sri Lanka.....	6
Abortion in Borderline Personality Disorder: A Case Comparison.....	15
The Colombo Method: A Brief, Handwritten Documentation System for Mental Health in	
Low-Resource Settings.....	22
Understanding the Dynamics of Paediatricians' Communication in Breaking Bad News.....	28



Mental Health Stigma and Its Impact on Help-Seeking Behavior in Sri Lanka

H M M Priyangani Menike

IIC University of Technology, Cambodia.

Corresponding Author: Madushika.hd@gmail.com

Abstract

Mental health challenges are increasingly recognized as a pressing public health concern in Sri Lanka. Despite rising awareness, help-seeking behavior among individuals experiencing psychological distress remains strikingly low. Stigma manifesting in the forms of public stigma, self-stigma, and institutional stigma emerges as one of the most significant barriers to timely care. This paper investigates the influence of stigma on help-seeking behaviors through a quantitative study of 284 participants, representing diverse demographic and social backgrounds. The research measured four independent variables: fear of social exclusion, cultural beliefs and norms, mental health literacy, and self-stigma against help-seeking behavior as the dependent variable. Findings reveal that while stigma-related factors are widely perceived within Sri Lankan society, their measurable statistical impact on reported help-seeking behaviors was weak and not statistically significant. Nonetheless, the broader literature and contextual evidence strongly suggest that stigma interacts with cultural values, family structures, and limited health literacy to discourage individuals from accessing treatment. The study recommends targeted interventions such as community-based awareness programs, integration of mental health literacy into school curricula, training for healthcare providers, and national policy reforms. These measures, if effectively implemented, have the potential to reduce stigma and improve access to care in Sri Lanka.

Keywords: Mental Health Stigma, Help seeking behavior, Cultural Norms, Mental Health Literacy, Self-Stigma, Sri Lanka.

1. Introduction

Mental health remains an under-addressed area of public health in many low- and middle-income countries. Sri Lanka, with its history of civil conflict, natural disasters, and limited psychiatric resources, faces unique challenges in addressing psychological well-being. Despite the growing prevalence of depression, anxiety, post-traumatic stress disorder, and other mental health conditions, many individuals delay or avoid treatment altogether.

One of the most significant barriers to care is stigma, the negative labeling, stereotyping, and discrimination directed toward individuals with mental illness. The World Health Organization (WHO) reports that approximately 450 million people globally suffer from mental disorders, however nearly two-thirds of those experiencing mental health problems do not access treatment, and stigma is frequently cited as a key deterrent. In Sri Lanka, stigma is reinforced by strong cultural norms, family expectations, and widespread misconceptions about mental illness, resulting in both personal suffering and poor treatment outcomes.

There are few studies that have shown a strong correlation between the level of perceived stigma and delayed help-seeking behavior in Sri Lanka, hindering access to necessary mental health services. There remain critical gaps in understanding how various forms of stigma specifically impact help seeking behavior due to limited studies..

The purpose of this study was to examine the role of stigma in shaping help-seeking behavior among Sri Lankans. Specifically, it investigated how fear of social exclusion, cultural and religious beliefs, mental health literacy, and self-stigma influence willingness to access care.

Research objectives were:

1. To investigate the types and sources of mental health stigma in Sri Lanka.
2. To analyze how stigma influences individuals' willingness to seek professional help.
3. To provide evidence-based recommendations for reducing stigma and improving service access.

The guiding research question was: *How does mental health stigma affect help-seeking behavior in Sri Lanka?*

2. Literature Review

2.1. Mental Health Stigma

Stigma is commonly defined as a discrediting attribute that reduces an individual's social value (Goffman, 1963). Three main forms are recognized: public stigma (negative societal attitudes), self-stigma (internalized shame), and institutional stigma (discriminatory policies and practices) (Link & Phelan, 2001). Each restricts opportunities for those experiencing mental health challenges.

Public stigma refers to the societal or collective negative attitudes and stereotypes directed towards individuals or groups, based on characteristics such as mental illness, race, or sexual orientation. Public stigma can influence how individuals are treated in daily interactions, including employment, healthcare, and social relationships (Corrigan, 2004) Self-stigma, also known as internalized stigma, occurs when individuals accept and internalize the negative beliefs and stereotypes associated with their condition.

This type of stigma is particularly harmful as it can lead to feelings of shame, low self-esteem, and a reluctance to seek help. The internalization of stigma may result in individuals distancing themselves from others or avoiding help-seeking behaviors due to fear of being judged (Ritsher et al., 2003). Institutional stigma refers to the policies, practices, and procedures within institutions (e.g., healthcare systems, workplaces, and schools) that result in discrimination or unequal treatment of individuals with mental health conditions. This type of stigma is embedded within the structures and systems of society, often manifesting in the form of barriers to accessing care, lack of accommodations, and failure to provide equitable opportunities for individuals with mental health challenges (Link & Phelan, 2001).

2.2. Global trends in mental health stigma and Overview of mental health prevalence in Sri Lanka.

Globally, stigma is a major barrier to care, particularly in low- and middle-income countries where cultural interpretations of mental illness often attribute it to spiritual or moral failings (Sunkel et al., 2019). Even in high-income settings, stigma persists despite awareness campaigns (Pescosolido, 2013). Sri Lanka presents a unique case shaped by decades of civil conflict, natural disasters, and limited psychiatric resources. The WHO estimates that 12.3% of the population experiences mental health conditions, yet access to professional care is minimal (WHO, 2017), with common conditions including depression, anxiety, and substance use disorders. Several factors influence the prevalence of mental health disorders in Sri Lanka. One major factor is the prolonged civil conflict (1983–2009), which has contributed to significant psychological trauma, especially among displaced populations and war veterans (De Silva et al., 2017). In addition, the country has experienced frequent natural disasters, including the 2004 tsunami and recurring floods, which have further contributed to mental health problems such as post-traumatic stress disorder (PTSD), depression, and anxiety (Chandran et al., 2014). Although mental health conditions are high, mental health services in Sri Lanka are inadequate. Especially in rural areas, with a shortage of trained professionals and limited resources for mental health care, there is a significant gap between the need for care and access to mental health services (Fernando, 2008). Empirical studies in Sri Lanka suggest that stigma manifests through fear of discrimination, cultural and religious beliefs, lack of mental health literacy, and internalized self-stigma (Fernando et al., 2017; Pothan et al., 2019).

Key factors influencing stigma in Sri Lanka include:

1. Fear of social exclusion – Many individuals fear being labeled “mad” or “weak,” leading to loss of social standing.
2. Cultural and religious beliefs – Some communities interpret mental illness through spiritual frameworks, leading to reliance on religious leaders rather than medical professionals.
3. Limited mental health literacy – Misconceptions persist, including beliefs that mental illnesses are contagious or untreatable.
4. Self-stigma – Internalized shame discourages disclosure even to close family members.

2.3 Stigma and Help-Seeking Behavior

2.3.1. Fear of discrimination factor that contribute to the reluctance to seek help

Fear of discrimination is a key factor that discourages help-seeking behavior. Individuals with mental health conditions may worry about facing negative consequences such as job loss, social rejection, or

exclusion if they disclose their struggles. Research by Clement et al. (2015) indicates that discrimination related to mental health conditions often extends beyond public stigma to affect individuals in their professional and personal lives, further discouraging them from seeking help.

2.3.2. Cultural beliefs and social norms factor that contribute to the reluctance to seek help

Cultural beliefs can influence how mental health issues are perceived and understood. In some cultures, mental illness may be viewed as a weakness, a moral failing, or even a result of spiritual or supernatural forces. These beliefs can contribute to a reluctance to seek help, as individuals may fear being judged, ostracized, or labeled as "abnormal." For example, in many collectivist societies, mental illness may be seen as a personal shame that brings dishonor to the family or community (Lee et al., 2009). For instance, in many cultures, particularly in Asia and the Middle East, mental health issues are often viewed as private matters that should not be openly discussed (Sankaran et al., 2017). This can discourage individuals from seeking help, as they may fear social rejection or the perception that they are failing to meet societal expectations of strength and self-sufficiency.

2.3.3. Lack of mental health literacy factor that contribute to the reluctance to seek help

Mental health literacy involves the knowledge and understanding that individuals have about mental health conditions, their signs and symptoms, and available treatments. A lack of mental health literacy can prevent individuals from recognizing the need for professional help or understanding the nature of mental health conditions. Jorm et al. (2006) highlight that many people lack the necessary information to seek help for mental health problems, often misinterpreting symptoms or relying on ineffective coping mechanisms, which delays or prevents them from accessing care.

2.3.4. Self-stigma factors that contribute to the reluctance to seek help

Self-stigma occurs when individuals internalize societal stigma and develop negative beliefs about themselves due to their mental health condition. This form of stigma can be particularly damaging, as individuals may feel shame, guilt, or embarrassment, leading them to avoid seeking help altogether. According to Ritsher et al. (2003), self-stigma is linked to lower self-esteem and a reluctance to engage in help-seeking behaviors, as individuals may fear being perceived as weak or inadequate if they acknowledge their mental health challenges.

2.4 The impact of stigma on individuals' treatment outcomes

Public stigma involves negative societal attitudes and this can lead to discrimination, marginalization, and social exclusion, which can discourage individuals from seeking treatment in the first place. Research by Clement et al. (2015) suggests that the fear of being judged or labeled as "weak" or "abnormal" prevents many individuals from seeking help, leading to untreated or poorly managed mental health conditions. The external judgment imposed by society can cause individuals to delay or avoid treatment, which, in turn, negatively impacts their recovery and long-term well-being. Self-stigma occurs when individuals internalize societal stigma and begin to view themselves negatively due to their mental health condition. This internalized stigma can have devastating effects on individuals' self-esteem, leading them to feel ashamed or guilty about their condition. Ritsher et al. (2003) found that individuals who internalize stigma are less likely to seek professional help, as they may believe that they are undeserving of care or

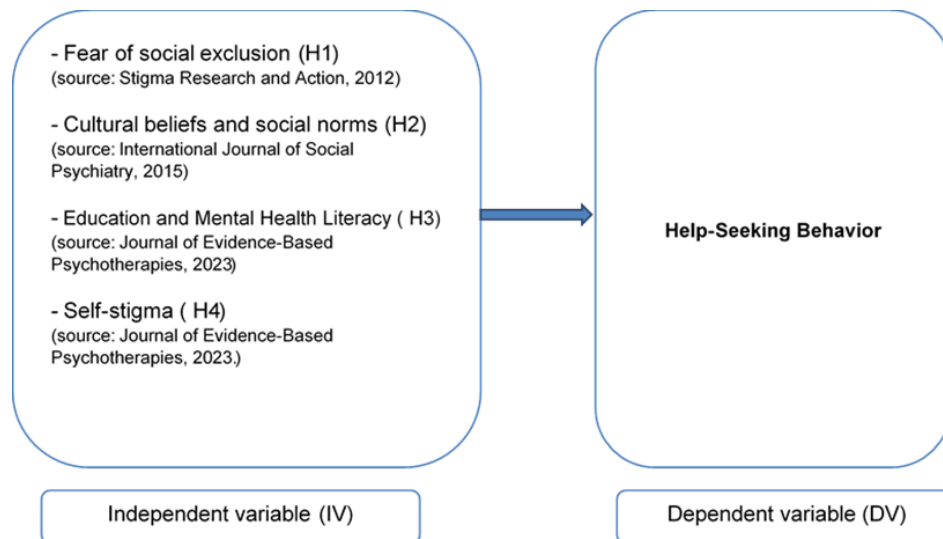
that their condition is a personal failure. The sense of shame associated with self-stigma can lower the likelihood of adhering to treatment regimens, which negatively impacts treatment outcomes. Studies show that individuals with mental health conditions who experience stigma are less likely to engage fully in treatment, including taking prescribed medications or attending therapy sessions (Thornicroft et al., 2009 ; Thornicroft, 2006). This non-compliance with treatment regimens can lead to worsening symptoms, longer recovery times, and an increased risk of relapse.

This review highlights that while the precise impact of stigma on help-seeking varies across contexts, the convergence of cultural norms, limited literacy, and family pressures make Sri Lanka a critical case for intervention-focused research.

3. Methodology

This study adopted a quantitative, deductive approach informed by positivist philosophy. A structured questionnaire was administered via Google Forms, targeting participants across different demographic groups using stratified random sampling. From 710 responses, 284 valid samples were analyzed. The survey measured four independent variables, fear of social exclusion, cultural beliefs and norms, mental health literacy, and self-stigma and one dependent variable, help-seeking behavior (Figure1) Responses were captured on a five-point Likert scale.

Figure 1: Conceptual framework (Source: developed by Author)



Reliability was confirmed through Cronbach's alpha values exceeding 0.8 for all scales, confirming strong internal consistency (Table1)

Table 1: Reliability Analysis

Reliability Statistics

	Number of Items	Cronbach's Alpha
Fear of social exclusion	5	0.991
Cultural beliefs and social norms	5	0.882
Education and Mental Health Literacy	5	0.989
Self-stigma	5	0.986
Help-Seeking Behavior	3	0.800

(Source: primary data by using a self-administered questionnaire)

Data analysis was conducted in Statistical Package for Social Sciences (SPSS), including descriptive statistics, correlation, and multiple regression models to assess the relationship between stigma-related factors and help-seeking behavior. Ethical approval was obtained, and participant confidentiality was maintained.

4. Results and Discussion

Descriptive analysis revealed high mean scores, it means most people leaned toward “agree.” for stigma-related factors, suggesting widespread perceptions of social exclusion, cultural barriers, and self-stigma among respondents (Table2)

Table 2: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Fear of social exclusion	284	4.0	5.0	4.865	.3355
Cultural beliefs & social norms	284	2.6	5.0	4.270	.3201
Education & Mental Health Literacy	284	4.0	5.0	4.869	.3308
Self-stigma	284	4.0	5.0	4.858	.3405
Help-Seeking Behavior	284	3.0	4.0	3.166	.3048
Valid N (listwise)	284				

Source: primary data by using a self-administered questionnaire

However, correlation tests indicated weak and statistically non-significant relationships between these variables and help-seeking behavior. The regression model explained only 1.8% of the variance in help-seeking behavior, and none of the predictors were statistically significant. (Table3)

Table 3 : Model summary for Independent variables and Help-Seeking Behavior

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.133 ^a	.018	.004	.3043

a. Predictors: (Constant), Self-stigma, Cultural beliefs , social exclusion, Mental Health Literacy

Source: a self-administered questionnaire data

However, the research results of correlation and regression analysis indicate the Individual variables have small variations and negative impact increasing, reducing on help seeking behavior.

These findings suggest that while stigma is widely perceived, its measurable impact on reported help-seeking intentions may be complex, influenced by unmeasured factors such as socioeconomic status, service availability, or coping strategies. Nonetheless, the qualitative literature and global evidence strongly support the notion that stigma discourages treatment-seeking and exacerbates poor outcomes (Clement et al., 2015; Thornicroft et al., 2009). The discrepancy highlights the limitations of purely quantitative designs in capturing the nuances of culturally embedded stigma. This discrepancy highlights the need for mixed-methods research to capture nuances that quantitative surveys may miss.

In the Sri Lankan context, stigma interacts with strong family structures and cultural expectations, making disclosure and formal help-seeking particularly difficult. Many individuals rely on family for emotional support but avoid professional care to prevent “bringing shame” to the household. This aligns with findings in other Asian societies where collectivist norms amplify stigma’s effects (Lee et al., 2009). Therefore, even if statistical associations are weak, the broader social evidence underscores the urgency of stigma-reduction interventions.

5. Conclusion and Recommendations

This study explored the relationship between mental health stigma and help-seeking behavior in Sri Lanka. Although quantitative findings did not show statistically significant associations, literature and contextual analysis confirm that stigma through fear of social exclusion, cultural beliefs, low literacy, and self-stigma remains a major barrier to treatment access.

Key recommendations include:

1. Community-based awareness programs addressing stigma through culturally relevant narratives.
2. Integration of mental health education into school curricula to shape positive attitudes early.
3. Training for healthcare providers to improve mental health literacy and reduce discriminatory practices.
4. National-level policy reforms ensuring improved access to services and legal protections against discrimination.



5. Family and community involvement: Engage families in psychoeducation to reduce stigma at household level.

Study limitations and further research:

Future research should adapt larger samples, mixed-method designs to better capture the interplay of stigma with social and economic factors. Ultimately, addressing stigma requires a multi-level approach spanning education, healthcare, policy, and community systems. By addressing stigma comprehensively, Sri Lanka can move toward a more inclusive and accessible mental health system.

References

- Bhaskar, R. (1975). *A realist theory of science*. Leeds Books.
- Bryman, A. (2016). *Social research methods* (4th ed.). Oxford University Press.
- Chandran, P., Mendis, S., & O'Connell, C. (2014). Mental health in post-tsunami Sri Lanka: A population-based study of depression and post-traumatic stress disorder. *Journal of Traumatic Stress*, 27(5), 552–559. <https://doi.org/10.1002/jts.21916>
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., et al. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review. *Psychological Medicine*, 45(1), 11–27. <https://doi.org/10.1017/S0033291714000129>
- Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614–625. <https://doi.org/10.1037/0003-066X.59.7.614>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- De Silva, M. J., Harkness, S., & Patel, V. (2017). The mental health impacts of the Sri Lankan civil war and tsunami: A review. *Social Science & Medicine*, 64(5), 1007–1015. <https://doi.org/10.1016/j.socscimed.2006.11.010>
- Fernando, S. M., Deane, F. P., & McLeod, H. J. (2017). The delaying effect of stigma on mental health help-seeking in Sri Lanka. *Asia-Pacific Psychiatry*, 9(1), e12255. <https://doi.org/10.1111/appy.12255>
- Fernando, G. A. (2008). Mental health in Sri Lanka: A national overview. National Institute of Mental Health. https://www.who.int/mental_health/resources/country_reports/sri_lanka.pdf
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall.
- Golberg, M. A., & Cho, H. A. (2004). *Introduction to regression analysis*. WIT Press.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Henderson, A. S., & Mackinnon, A. J. (2006). Mental health literacy: A survey of the public's ability to recognize mental disorders. *Medical Journal of Australia*, 185(7), 558–563.
- Lee, S., Tsang, A., & Chan, K. (2009). Stigma of mental illness in Hong Kong: A comparison of public and patient perspectives. *International Journal of Social Psychiatry*, 55(6), 554–563. <https://doi.org/10.1177/0020764008102207>
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27(1), 363–385. <https://doi.org/10.1146/annurev.soc.27.1.363>



- Pescosolido, B. A. (2013). Stigma and the health of the public: The need for a sociology of health and illness. *American Sociological Review*, 78(1), 1–8. <https://doi.org/10.1177/0003122412474562>
- Pothen, M., Weerasinghe, M. I., & Wijesinghe, R. (2019). Stigma and mental health: A study on Sri Lanka. *International Journal of Social Psychiatry*, 65(3), 248–255. <https://doi.org/10.1177/0020764019835081>
- Ritsher, J. E., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research*, 121(1), 31–49. [https://doi.org/10.1016/S0165-1781\(03\)00129-7](https://doi.org/10.1016/S0165-1781(03)00129-7)
- Sankaran, P., Khandelwal, S., & Patel, V. (2017). Cultural perspectives on mental health in India: The role of family and religion. *The Lancet Psychiatry*, 4(1), 10–18. [https://doi.org/10.1016/S2215-0366\(16\)30304-7](https://doi.org/10.1016/S2215-0366(16)30304-7)
- Sunkel, C., Paredes, C., & Mena, L. (2019). Mental health stigma and help-seeking in low-income countries: A qualitative study. *International Journal of Social Psychiatry*, 65(3), 227–235. <https://doi.org/10.1177/0020764019835064>
- Thornicroft, G. (2006). *Shunned: Discrimination against people with mental illness*. Oxford University Press.
- Thornicroft, G., Brohan, E., & Kassam, A. (2009). Stigma and discrimination as barriers to mental health care. *Psychiatric Services*, 60(4), 531–534. <https://doi.org/10.1176/ps.2009.60.4.531>
- World Health Organization. (2017). *Mental health in Sri Lanka*. WHO. https://www.who.int/mental_health/sri_lanka



Abortion in Borderline Personality Disorder: A Case Comparison

Solomons T H

Department of Clinical Sciences, General Sir John Kotelawala Defence University (KDU), Sri Lanka

Corresponding Author: thsolomons@gmail.com

Abstract

Borderline Personality Disorder (BPD) is characterized by emotional instability, impulsivity, and intense fear of abandonment, often complicating reproductive decision-making in romantic relationships. The current paper is a qualitative comparative analysis of two clinical cases involving women with BPD who underwent elective abortions highlighting the psychological, relational and cultural dynamics. Both cases, treated three years apart, featured comorbid PTSD, unsupportive partners, and recurrent unplanned pregnancies despite therapeutic interventions. Thematic analysis revealed core themes such as, 1. abortion is a trigger for abandonment fears and symbolic loss, 2. relational dysfunction perpetuated maladaptive attachment strategies, such as using pregnancy to ‘anchor’ partners, 3. cultural-religious influences exacerbating guilt and emotional dysregulation. Literature review underscores limited research on BPD and reproductive health, linking impulsivity to higher abortion risks and attachment insecurity to post-procedure crises. Clinical implications include trauma-informed, culturally sensitive psychotherapy integrating Dialectical Behavioral Therapy (DBT), Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and reprocessing (EMDR), alongside psychoeducation on contraception and attachment. These cases illustrate abortion as a multifaceted crisis in BPD, underscoring the need for interdisciplinary research to support autonomous reproductive choices, particularly in conservative contexts like Sri Lanka.

Keywords: Borderline Personality Disorder, Abortion, Thematic Analysis, PTSD, reproductive health

Introduction

Borderline Personality Disorder (BPD) is a complex and severe psychiatric disorder which is characterized by pervasive instability in mood, interpersonal relationships, identity, and behavior (American Psychiatric Association [APA], 2013). It is categorized under Cluster B personality disorders in the Diagnostic Statistical Manual - 5th edition (DSM-5) that encompasses personality disorders characterized by dramatic, emotional, or erratic behavior. In addition, it is recognized in the International Classification of Diseases 11th edition (ICD-11). One of the most distressing features of BPD is an intense fear of abandonment which often leads to impulsive and emotionally reactive behavior in interpersonal contexts (Howard, 2025).

The onset of BPD symptoms typically occurs in adolescence or early adulthood. During this period, the development of romantic and intimate relationships becomes central to identity formation. Unfortunately, individuals with BPD often struggle in this domain. Emotional lability, impulsivity and intense but unstable interpersonal relationships are the main features. These individuals frequently perceive minor separations or disagreements as signs of abandonment, which can lead to efforts to avoid real or imagined rejection (Ociskova et al., 2023).

Despite the relational instability associated with BPD, a substantial number of affected individuals are able to engage in long-term relationships. Research by Greer and Cohen (2018) indicates that over one third of individuals with BPD are in enduring romantic partnerships. However, these relationships often involve complex dynamics and frequent crises, especially during emotionally charged events such as unintended pregnancies or decisions about abortion.

Stable relationships have shown a modest protective effect against the severity of BPD symptoms. Kuhlken et al. (2014) found that individuals in secure, supportive partnerships reported lower impulsivity and emotional dysregulation. On the other hand, dysfunctional or emotionally invalidating relationships can exacerbate BPD pathology. Social isolation and loneliness, which are significantly more prevalent in people with BPD, further amplify the desire to seek connection, sometimes leading to impulsive relational choices (Mermin et al., 2025).

This paper presents a comparative analysis of two clinical cases involving women diagnosed with BPD who underwent elective abortions. It aims to explore the interplay between BPD symptoms and reproductive decision-making, highlighting the clinical challenges and therapeutic implications in such contexts.

Abortions and BPD: A Review of the Literature

The intersection of BPD and reproductive health, particularly abortion remains underexplored in academic literature. However, preliminary findings point to a significant relationship between BPD and increased risk of unplanned pregnancies and abortions. De Genna et al. (2012) conducted a longitudinal analysis and found that women with BPD features were more likely to engage in early sexual activity, had higher rates of teenage pregnancies and were at greater risk of unplanned pregnancies.

Interestingly, the same study concluded that the severity of BPD symptoms did not directly correlate with the likelihood of abortion. Rather, it was the impulsivity, poor judgment and relational instability that

indirectly contributed to these outcomes. This aligns with the broader understanding of BPD as a disorder rooted in maladaptive coping mechanisms and heightened emotional sensitivity (Sansone & Sansone, 2004).

Furthermore, while the act of abortion may be consensual and medically indicated, it often triggers intense psychological responses in individuals with BPD. Post Traumatic Stress Disorder (PTSD)¹-like symptoms, including flashbacks, nightmares, dissociation, and self-harming behavior, have been reported (Candeias et al., 2024). Given that emotion dysregulation is a core trait of BPD, decisions involving reproductive health can precipitate crises that may require psychiatric or psychological intervention.

A recent study by Thierry et al. (2025) also suggests that attachment insecurity which is a frequent issue in BPD is linked with difficulty processing reproductive decisions. This implies that the internal working models of self and others in individuals with BPD may frame an abortion as an act of abandonment or loss, even when chosen voluntarily.

Methodology

The author is a licensed clinical psychologist who treats approximately 10–15 individuals diagnosed with BPD weekly in both public hospitals and private practice settings. Two anonymized case reports were selected for qualitative comparison. These cases were chosen due to the striking similarity in presentation, course, and symptomatology, despite being treated three years apart.

All clients provided verbal consent for their clinical information to be used for educational and research purposes. Ethical considerations regarding confidentiality and identity protection were strictly observed.

Case Descriptions

Case A

"A" (pseudonym) was a 25 year old Sri Lankan woman residing in a Western country for higher education. She initially presented for therapy via online sessions following an elective abortion. At intake, she demonstrated severe emotional distress including guilt, panic attacks, self-harm, and suicidal ideation. She was diagnosed with BPD and comorbid PTSD. Treatment involved Dialectic Behavioral Therapy (DBT)² as the primary modality for BPD, supplemented by Cognitive Behavioral Therapy (CBT)³ and Eye Movement Desensitization and Reprocessing (EMDR)⁴ for trauma-related symptoms.

Her partner, while initially supportive, had firmly expressed that he did not want children. This led to "A" feeling both pressured and abandoned. Despite initiating discussions on contraception, she dropped out of

¹ A psychiatric disorder that may develop after experiencing or witnessing a traumatic event. Symptoms include flashbacks, nightmares, severe anxiety, and avoidance behaviors, often requiring targeted therapeutic interventions

² A specialized form of CBT developed for individuals with Borderline Personality Disorder and other conditions involving emotional dysregulation. It emphasizes mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness

³ A structured goal-oriented psychotherapy that focuses on identifying and modifying negative thought patterns and behaviors to improve emotional regulation and coping strategies

⁴ A psychotherapy approach that focuses on alleviating distress associated with traumatic memories. It involves guided eye movements to help process and integrate traumatic experiences

therapy after her symptoms improved. Six months later, she returned to therapy after her second abortion again involving the same partner.

Her PTSD symptoms were more severe this time, and the relationship had deteriorated as she had been asked to vacate their shared residence. These events triggered intense abandonment fears and a regressive return of BPD symptoms. A secondary theme that emerged during therapy was the use of pregnancy as a means to "repair" or solidify attachment which aligns with theoretical perspectives on maladaptive coping in BPD.

Case B

"B" (Pseudonym) was a Sri Lankan-born woman who had lived most of her life in a Western country. Upon returning to Sri Lanka, she presented for therapy after an elective abortion. Although she held liberal Western views on reproductive rights, accessing illegal abortion services in Sri Lanka led to physical complications which she later interpreted as a 'divine karmic punishment'.

She was diagnosed with BPD and PTSD and underwent integrated psychotherapy including DBT, CBT, and EMDR. Over a year of therapy, she experienced two more unplanned pregnancies, both ending in abortion. Despite repeated discussions about contraception from her gynecologist and therapist, she continued to engage in unprotected sex. She often dropped out of therapy during periods of emotional avoidance and returned when guilt and depressive symptoms became unmanageable.

A significant theme in her narrative was resentment toward her partner, who was unemployed and emotionally unavailable. While she rationally understood that having children to maintain relationships was unhealthy, her core beliefs—shaped by her parents' long, conflict-laden marriage suggested otherwise.

Thematic Analysis and Discussion

Theme 1 : Fear of Abandonment and Reproductive Decisions

In both cases the decision to terminate the pregnancy was directly influenced by partner's non-support. The emotional fallout, however, was interpreted as abandonment, triggering a cascade of BPD symptoms. The DSM-5 notes that abandonment sensitivity is one of the most persistent symptoms in BPD, often leading to frantic efforts to avoid real or imagined separation (APA, 2013).

In these cases, abortion was not merely a medical or social decision. Instead, it's become a psychological event charged with symbolic meaning. Both women associated pregnancy with attachment, family, and stability. The subsequent abortion, especially in the context of partner rejection, was seen as both a literal and symbolic loss.

Theme 2: Relational Dysfunction and the Search for Stability

Both women had prior history of emotionally or physically abusive relationships. At the time of therapy their partners were not abusive but lacked emotional or financial reliability. This reflects a common pattern in BPD which is the tendency to form relationships with individuals who validate their fear of being unworthy or unlovable, often replicating childhood attachment traumas (Zanarini et al., 2003).

They simultaneously yearned for family and feared abandonment. This leads to unconscious attempts to "anchor" their partners through pregnancy. This dynamic has been noted in attachment research, which suggests that some individuals may unconsciously seek pregnancies as a means of deepening or salvaging relationships (Thierry et al., 2025).

Theme 3: Cultural and Religious Influences

Despite identifying as secular, both women were deeply influenced by religious and cultural narratives. "A" as a Buddhist, experienced guilt shaped by beliefs in karma while "B," a Christian, saw her physical complications as divine punishment. This indicates that even when rational beliefs support reproductive autonomy, deeply ingrained moral schemas may still exert emotional influence particularly in emotionally dysregulated individuals.

Clinical Implications

Therapists working with individuals diagnosed with BPD in the context of reproductive health must adopt a trauma informed and culturally sensitive approach. This involves providing comprehensive psychoeducation that addresses contraception, interpersonal relationships, and emotional regulation. In addition, DBT techniques can be employed to strengthen distress tolerance and impulse control, while CBT may be used to challenge maladaptive core beliefs related to their self-worth, relational patterns, and moral reasoning. Similarly, therapeutic exploration of pregnancy and abortion should consider their symbolic and emotional significance particularly in relation to attachment dynamics and intergenerational family narratives. Finally, coordinated care with gynecologists and psychiatrists is essential to ensure a holistic and integrated treatment plan.

Conclusion

Abortion in individuals with BPD is not only a reproductive health issue, rather it is a psychological crisis involving emotional dysregulation, relational instability and unresolved trauma. The two cases described reflect the ways in which BPD can shape, and be shaped by, reproductive experiences.

The above clinical observations underscore the urgent need for interdisciplinary research into how personality disorders intersect with reproductive and relational health. In culturally conservative societies like Sri Lanka, the challenges are compounded by legal, moral and societal constraints.

A more nuanced understanding of these interactions will aid in designing integrated treatment models that not only address BPD symptoms but also equip individuals with the tools to make informed and autonomous reproductive choices.

Declaration of Interest Statement

The author declares that there is no conflict of interest.

References

- American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders*. 5th ed. Washington, DC: American Psychiatric Publishing. Available at: <https://doi.org/10.1176/appi.books.9780890425596>
- Beck, J.S. (2020) *Cognitive behavior therapy: Basics and beyond*. 3rd ed. New York: Guilford Press.
- Candeias, A.A., Galindo, E., Reschke, K. and Bidzan, M. (2024) 'The interplay of stress, health, and well-being: Unraveling the psychological and physiological processes', *Frontiers in Psychology*, 15, Article 1471084. Available at: <https://doi.org/10.3389/fpsyg.2024.1471084>
- De Genna, N.M., Feske, U., Larkby, C. and Gold, M.A. (2012) 'Pregnancies, abortions and births in women with and without borderline personality disorder', *Women's Health Issues*, 22(6), pp.e541–e546. Available at: <https://doi.org/10.1016/j.whi.2012.09.001>
- Greer, T.L. and Cohen, L.M. (2018) 'Relationship outcomes and partner support in borderline personality disorder', *Journal of Personality Disorders*, 32(4), pp.537–550. Available at: https://doi.org/10.1521/pedi_2017_31_305
- Howard, R. (2025) *Advanced psychiatry*. Oxford: Oxford University Press.
- Kuhlken, H.B., Robertson, H.M., Benson, K.T. and Nelson-Gray, R.O. (2014) 'Borderline personality disorder features and relationship functioning in community samples', *Journal of Psychopathology and Behavioral Assessment*, 36(3), pp.424–434. Available at: <https://doi.org/10.1007/s10862-014-9403-1>
- Linehan, M.M. (2014) *DBT skills training manual*. 2nd ed. New York: Guilford Press.
- Mermin, L., Steigerwald, R., Georgia, C. and Choi-Kain, L.W. (2025) 'Social support deficits and loneliness in BPD: A comparative study', *Journal of Personality Assessment*, 107(1), pp.53–67.
- Ociskova, M., Prasko, J. and Vrbova, K. (2023) 'Attachment and abandonment fears in borderline personality disorder: Review and implications', *Psychiatria Danubina*, 35(2), pp.172–179.
- Sansone, R.A. and Sansone, L.A. (2004) 'Borderline personality and externalized aggression', *Innovations in Clinical Neuroscience*, 1(2), pp.24–30.
- Shapiro, F. (2018) *Eye movement desensitization and reprocessing (EMDR) therapy: Basic principles, protocols, and procedures*. 3rd ed. New York: Guilford Press.
- Thierry, A., Fohanno, F., Sutter, A.L. et al. (2025) 'Pregnancy denial and maternal attachment style: A prospective case-control study', *Authorea Preprints*. Available at: <https://doi.org/10.22541/au.174952457.71677930>



Zanarini, M.C., Frankenburg, F.R., Reich, D.B. and Fitzmaurice, G. (2003) 'The course of marriage and partnerships over 10 years among patients with borderline personality disorder', *Journal of Personality Disorders*, 17(6), pp.469–479. Available at: <https://doi.org/10.1521/pedi.17.6.469.25355>



The Colombo Method: A Brief, Handwritten Documentation System for Mental Health in Low-Resource Settings

Solomons T H

Department of Clinical Sciences, General Sir John Kotelawala Defence University (KDU), Sri Lanka

Corresponding Author: thsolomons@gmail.com

Abstract

Mental health documentation is vital for clinical accountability, risk management, continuity of care, and multidisciplinary communication. Yet, note taking burdens and resource constraints, especially in low- and middle-income countries (LMICs) like Sri Lanka limit implementation of structured systems. The Colombo Method is a clinician-developed, rapid, handwritten note format created over 12 years in private and public practice in Colombo. It integrates key clinical domains which include patient data, risk screening (suicidal ideation, homicidal ideation, self-harm, level of emptiness), treatment plan, and session content, into a single page format. Initial feedback suggests it enhances clinician efficiency and ensures crucial information is captured without having to rely on digital infrastructure. This article aims to describe its design, relevance and future directions for its empirical validation.

Keywords: Mental health documentation, Colombo Method, LMIC, risk screening, clinician efficiency

Introduction

Mental health documentation refers to the records created by mental health professionals related to the delivery of services. These records include intake forms, progress notes, test results, reports, and correspondence (American Psychological Association, 2007). Such documentation helps psychologists monitor client progress, refine interventions, and make well-informed clinical decisions. It also facilitates continuity of care by enabling other professionals to understand a client's history and treatment plan. Additionally, documentation serves as crucial evidence in cases of inquiries, malpractice claims, or audits. It promotes transparency and ensures compliance with the APA Ethics Code, which mandates proper record keeping (Standard 6.01). Mental health documentation is both a professional skill and an ethical responsibility which benefits the welfare of clients as well as practitioners.

Nevertheless, mental health professionals face increasing documentation demands, which can detract from patient care and erode clinical engagement (Asgari et al., 2024). Complex electronic health records (EHRs) contribute to cognitive overload and burnout among clinicians (Asgari et al., 2024; Liu et al., 2024). While Artificial Intelligence (AI) scribes have shown promise in reducing time spent on notes by approximately 20–30% across specialties (Duggan et al., 2025; Bundy et al., 2024), LMIC contexts often lack infrastructure to support such technologies (Asgari et al., 2024). In the Sri Lankan context, rising clinician outmigration, economic strain, and overloaded facilities further complicate documentation (Somasundaram & Thirunavukkarasu, 2023). Thus, cost-effective, practical documentation methods are urgently needed.

Established formats such as 'Subjective Objective Assessment Plan' (SOAP), 'Data Assessment Plan' (DAP), and 'Behavior Intervention Response Plan' (BIRP) offer structure to clinical notes and support multidisciplinary collaboration, yet require time and training (Lee et al., 2024). Alternatives like AI scribes such as DAX Copilot and Abridge have demonstrated measurable reductions in documentation time and clinician burnout in high-resource environments (Duggan et al., 2025; Bundy et al., 2024). However, issues of equipment cost, technical literacy, and data privacy limit their viability in resource-limited settings (Asgari et al., 2024; Liu et al., 2024). The Colombo Method fills this gap by offering a low-tech, handwritten alternative tailored to contexts with limited infrastructure.

Methodology

Development of The Colombo Method

The Colombo Method was developed over 12 years by a registered clinical psychologist practicing in Colombo, Sri Lanka. This handwritten documentation format was designed to fit a single page, streamlining the note-taking process while capturing all necessary information. This method was created in response to challenges faced by mental health professionals in the context of high caseloads, limited time for documentation, and rising costs of printed materials.

Structure of The Colombo Method

The Colombo Method integrates multiple clinical domains into a concise, visually organized format. Its core components include:

1. Patient Header: This section contains the patient's name, gender, date, and session number.
2. Risk Assessment Semi circle: A semi circle is used to document key risk indicators. The circle is divided into categories for documenting:

Suicidal ideation: Ideas, plans, attempts, and distress levels.

Homicidal ideation: Risk assessment.

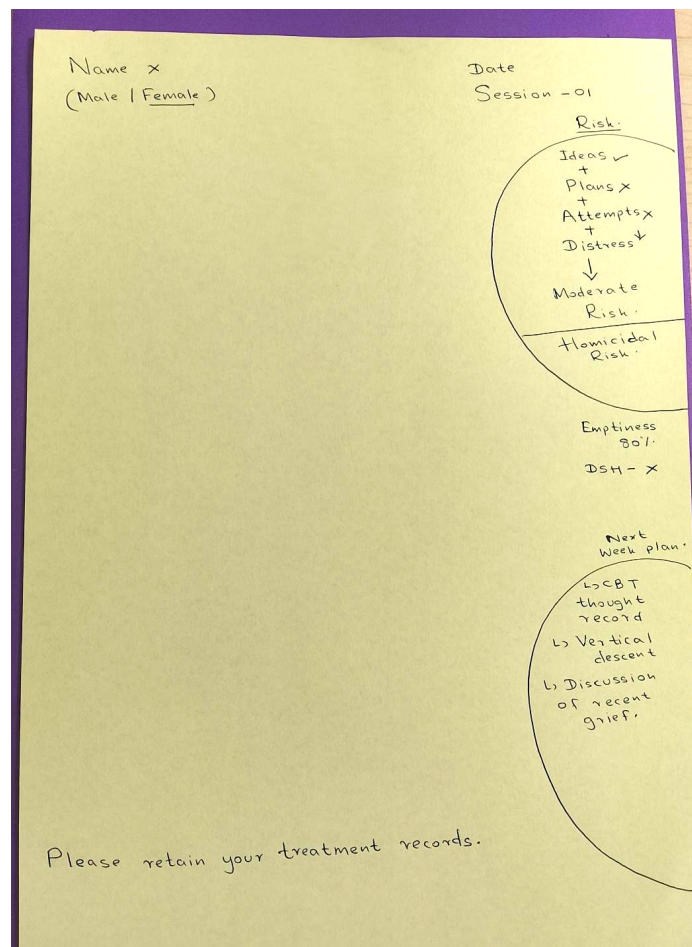
Emptiness level: Relevant for patients with borderline personality traits.

Deliberate Self-Harm (DSH): To track self-harm behaviors.

3. Next Week's Plan: A section dedicated to documenting proposed treatment planning, including upcoming interventions such as Cognitive Behavioral Therapy (CBT) thought records, vertical descent, and discussions about recent grief.
4. Session Notes: The remainder of the page is reserved for the clinician's notes on what transpired during the session.

Figure 1 demonstrates a visual representation of the Colombo Method form used in clinical practice.

Figure 1: The Colombo Method Form



Name x
(Male / Female)

Date
Session - 01

Risk:

Ideas ✓
+ Plans x
+ Attempts x
+ Distress ↓
↓
Moderate Risk.
Homicidal Risk.

Emptiness
80%
DSH - x

Next week plan:

↳ CBT thought record
↳ Vertical descent
↳ Discussion of recent grief.

Please retain your treatment records.

Results & Benefits of The Colombo Method

Clinicians who have utilized the Colombo Method report significant improvements in documentation efficiency, risk monitoring, continuity of care, and resource utilization

This format enables session notes to be completed in under five minutes, significantly reducing administrative burden associated with traditional documentation systems. This time-saving outcome is comparable to reductions observed with AI-based scribe technologies, which have demonstrated 20–30% decreases in documentation time across clinical specialties (Duggan et al., 2025; Bundy et al., 2024)..

In addition, the Colombo method's risk assessment framework ensures that critical indicators including suicidal ideation, homicidal ideation, deliberate self harm and emotional distress are consistently documented in each session. This approach aligns with best practices in clinical risk management and addresses common omissions found in electronic health records, especially when tracking high-risk behaviors (Asgari et al., 2024; Liu et al., 2024). By integrating these domains into a single-page format, the Colombo Method promotes risk screening without relying on technology.

Moreover, the method improves continuity of care by incorporating a dedicated section for treatment planning. Clinicians are able to reference prior session goals and interventions to maintain treatment coherence across sessions. This feature is valuable in cases where follow up depends on patient availability or when formal recordkeeping systems are limited or absent.

Finally, the Colombo Method offers a cost effective solution to documentation challenges. Its handwritten format eliminates the need for printed templates or electronic devices. By utilizing basic supplies, the method provides an alternative to digital systems, making it especially convenient for mental health professionals working in low resourced contexts.

Discussion

The Colombo Method is a mindful, low-tech innovation that can offer meaningful alternatives to digital documentation systems in mental health care. Preliminary observations show that this method enhances clinical efficiency, supports risk monitoring, and improves practitioner satisfaction without reliance on electronic infrastructure or external technology (Asgari et al., 2024; Duggan et al., 2025).

Also, by embedding structured risk assessment domains including suicidal ideation, homicidal ideation, self-harm and emotional distress into session note, the method promotes consistent documentation of high-priority clinical indicators. This aligns with best practices in risk management and addresses common omissions observed in electronic health records (Liu et al., 2024). In addition, the inclusion of prior treatment plans within the same form facilitates continuity of care, especially in settings where formal record keeping systems are absent or damaged.

In addition, this method's simplicity may also reduce cognitive load and reduce burnout drivers associated with complex digital platforms (Asgari et al., 2024). Unlike AI based scribes, which may introduce transcription errors or require costly infrastructure, the Colombo Method preserves clinician autonomy and minimizes technology dependency.

Future research should empirically evaluate the Colombo Method's effectiveness via time motion studies, documentation completeness audits and assessments of clinicians' wellbeing. Comparative analyses with



established formats SOAP and DAP should be carried out to examine its scalability across diverse clinical settings.

Conclusion

For environments lacking digital infrastructure and human resources the Colombo Method offers a practical, low-cost and continuity-based approach to mental health documentation. It supports service quality without drawing on external resources. Future empirical studies should validate its adaptation potential in similar low-resource settings.

Declaration of Interest Statement

The author declares that there is no conflict of interest.

References

American Psychological Association. (2007). *Record keeping guidelines*.
<https://www.apa.org/practice/guidelines/record-keeping.pdf>

Asgari, E., Kaur, J., Nuredini, G., Balloch, J., Taylor, A.M., Sebire, N., et al. (2024) 'Impact of electronic health record use on cognitive load and burnout among clinicians: Narrative review', *JMIR Medical Informatics*, 12, p. e55499. Available at: <https://medinform.jmir.org/2024/1/e55499>

Bundy, H., et al. (2024) 'Physician experiences with DAX Copilot', *Journal of General Internal Medicine*, 39(15), pp. 2995–3000. Available at:
<https://www.ncbi.nlm.nih.gov/pmc/articles/pmc.ncbi.nlm.nih.gov>

Duggan, M.J., et al. (2025) 'Clinician experiences with AI-scribe technology to assist with documentation burden and efficiency', *JAMA Network Open*. Available at: <https://news-medical.net>

Lee, C., et al. (2024) 'Comparative study of AI scribes', *arXiv*. Available at: <https://arxiv.org/abs/>

Liu, J., Lin, Y. and Wong, S.-L. (2024) 'EHR burden and burnout: systematic review', *JMIR Medical Informatics*. Available at: <https://pubmed.ncbi.nlm.nih.gov/38865188/>

Dimuthu, I. (2025) 'Critical review: Sri Lanka's mental health crisis—underfunding, stigma, and service gaps', *Centre for Research in Mental Health Knowledge (C4RNHK)*, 31 May. Available at:
<https://c4rnhk.org/critical-review-sri-lankas-mental-health-crisis-underfunding-stigma-and-service-gaps>

Understanding the Dynamics of Paediatricians' Communication in Breaking Bad News

Kaluarachchi D S

Postgraduate in MSc Clinical and Health Psychology, University of West London

Corresponding Author : dasanya1999@gmail.com

Abstract

Breaking bad news in paediatric healthcare is a complex and emotionally charged process that can cause psychological distress. This study investigates the impact of paediatricians' empathy levels and knowledge of the SPIKES protocol on their communication competency when delivering bad news in clinical settings in Sri Lanka. A sample of 56 paediatricians was surveyed using three standardized tools: the SPIKES Protocol for assessing breaking bad news knowledge, the Jefferson Scale of Empathy (HP version) for empathy levels, and the Communication Competence Scale. Descriptive, inferential, and predictive analyses were conducted. Findings aim to address the psychological dimensions of clinician training and highlight the need for improved communication strategies, especially in the context of rising chronic illnesses and resource shortages in Sri Lanka. The study fills a gap in local literature on paediatricians' communication competency in delivering bad news.

Keywords: Paediatrician, Breaking bad news, Empathy, Communication competency

Introduction

Breaking bad news in a paediatric healthcare setting is a complex and sensitive interaction that creates psychological distress among paediatricians, children and caregivers (Ahmady et al., 2014; Kataoka et al., 2009). Inadequate training in this interaction leads to psychological and social problems for both paediatricians and caregivers. This study aims to investigate the impact of knowledge on breaking bad news and level of empathy impacts on the process of breaking bad news in a clinical setting (Kemper & Khirallah, 2015; Kerasidou, 2019).

By examining these factors, this study seeks to highlight the need to address psychological aspects in training paediatricians of their approach on breaking bad news. With the increase of long standing illnesses and medicine shortage in Sri Lanka, improved approaches on breaking bad news will enhance the wellbeing of paediatricians, children and caregivers (Matthias & Jayasinghe, 2022).

The study aimed to investigate how paediatricians address the communicative and psychological dynamics involved in breaking bad news to patients and families and what strategies they use to ensure empathic interactions. The key hypothesis included:

1. There is an impact of the knowledge on breaking bad news when paediatricians communicate bad news to patients and families.
2. Paediatricians level of empathy has an impact on their interaction with patients and families when communicating bad news
3. The quality of communication between paediatricians and patients/families when communicating bad news is influenced by the paediatrician's level of empathy and knowledge of breaking bad news.

Methodology

Design

A Predictive Correlational Design.

A quantitative study approach is implemented in this study for its reliable outcome data which can be generalizable to a larger population. Quantitative research approach is used for cause and effect relationships to testing hypotheses. Reliable outcome data can be analysed using this method of study to a larger sample (Steckler et al., 1992; Verhoef & Casebeer, 1997). Paediatricians from several specialties namely neonatology, emergency care, psychiatry, general paediatrics and neurology participated in this study which gives a diverse set of data for this method.

Participants

N=56. The ministry of Health, Sri Lanka database access to the general public mentions a list of paediatricians in Sri Lanka and it states approximately 315 qualified paediatricians whereas this population consist of consultants from general paediatrics, subspecialties and University medical faculties. (Ministry of Health Sri Lanka, n.d.). The Postgraduate Institute of Medicine included the

population of 200 senior registrars recognised as paediatricians undergoing training awaiting board certification (PGIM, n.d.). For the population size = 515 paediatricians in Sri Lanka applying confidence level 95% and margin of error 5%, the initial sample size calculated was 221. Considering the non-response rate of the sample, 56 participants were eligible to participate in this study by convenience sampling method as the final sample size. Paediatricians from Lady Ridgeway Hospital for Children, Colombo 08, were recruited with the permission from the deputy director.

Inclusion and exclusion criteria for participants

Eligible participants were those that satisfied the following inclusion criteria: (a) Paediatricians of any speciality in Sri Lanka (b) Proficient in the English language (c) Age category of 25 and above. It is important to recruit paediatricians' aged 25 and above who may have sufficient clinical experiences in breaking bad news which will be relevant to this study.

Exclusion criteria for this study: (a) not actively practising in a medical setting (b) Non-Paediatricians (c) Paediatricians going through disability or terminal illness. These criteria are important to provide an unbiased study.

Materials

Socio demographic questionnaire

Socio demographic questions were incorporated into the survey. The questionnaire was designed to collect data of the paediatricians' gender, age, education level, working sector (government or private sector), number of years of work experience, previous experience on breaking bad news and knowledge on breaking bad news (SPIKES protocol). Data collection on work experience is important to understand the knowledge and experience existing among paediatricians. Breaking bad news is a complex yet learned behaviour over time hence data on the years of experience as a paediatrician is important for this study (Reed et al., 2015).

Using SPIKES protocol, knowledge of breaking bad news was assessed. This is a six step protocol familiar among health practitioners on the standardised approach of breaking bad news to caregivers or parents in the healthcare setting. This approach was designed by Walter Baile and colleagues from University of Texas (Rosenzweig, 2012; Baile et al., 2000).

6 steps of SPIKES Protocol:

1. Setting : Arrangement of a comfortable environment to build rapport and confidentiality. 2. Perception of the condition : Understanding of the perception and comprehension of the receiver and making sure he/she is ready to hear the bad news.
3. Invitation from the receiver : Making sure he/she wants to hear the bad news.
4. Providing knowledge : Delivering accurate medical information to the receiver by being clear and explaining in a language comfortable and making sure they understood.

5. Exploring emotions and empathise : acknowledge the receiver's emotional reaction with empathy and give them time to express.

6. Strategy and summary : summarise the important information and make a strategic plan on what to be done next and offer support with coping and decision making.

This standardised protocol which has a good reliability and validity was used to understand the level of knowledge about breaking bad news paediatricians (Baile et al., 2000 & Buckman, 2005). SPIKES protocol is a widely used tool by healthcare practitioners and nurses which is a helpful guide to follow in busy hospital settings (Eggly et al., 2006) Each step was included in the qualitative questionnaire and the response was measured through a yes or no measure (scoring yes=1 point, no= 0 point).

Jefferson Scale of Empathy

The Jefferson Scale of Empathy (JSE), HP version, was used to assess paediatricians' empathy when delivering bad news to patients and caregivers. The scale consists of 20 items rated on a 7 point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree), with negatively worded items reverse scored. Widely recognized in medical research, the JSE is a standardized tool used globally (Colliver et al., 2010). Introduced by Hojat (2016), it has been translated into 56 languages and applied in over 80 countries, with studies confirming its reliability and validity across diverse healthcare samples. A comparison between the Generic JSPE and the revised HP version showed an increase in Cronbach's alpha from 0.81 to 0.85. Although not statistically significant, it indicated improved internal consistency (Hojat, 2016; Ward et al., 2009).

JSE is translated to Sinhala and Tamil and used in Asian countries namely Korea and Singapore. (Jeon & Cho, 2015, Jeyashree et al., 2017 & Samarasekera et al., 2022). According to literature JSE is a validated standardised tool used across many cultures which was appropriate to be used for the Sri Lanka population of paediatricians to measure the level of empathy.

Communication Competence Scale

In 1977, Wiemann proposed the 5 component model of Communicative Competence Scale (CCS) to measure an individual's communication dynamics and style of interaction with regard to social setting and constraints of the situation. It prioritises measuring 5 components which are interaction management, empathy, affiliation/support, behavioural flexibility and social relaxation. CCS measures communication competence with 36 questions with a likert scale ranging from 5= Strongly Agree to 1= Strongly Disagree. This can be completed in 5 minutes which is more convenient to the paediatricians with busy schedules (Wiemann, 1977). Weimann (1977) $\alpha = 0.96$, McLaughlin and Cody (1982) $\alpha = 0.91$ and Street et al. (1988) $\alpha = 0.84$, all these studies have stated the validity of the CCS with higher Cronbach's alpha coefficient. Using the communication competency scale, communication competency levels of paediatricians are measured.

Procedure

Ethical clearance was obtained from the University of West London Ethics Committee. The study complies with the British Psychological Society Code of Human Research Ethics (“Code of Ethics and Conduct,” 2021). Delivering bad news can be traumatic for paediatricians due to repeated exposure to distress (Francis & Robertson, 2023). Negative reactions from caregivers or patients may leave unresolved emotional impact. Therefore, informed consent and voluntary participation were essential. Participants could withdraw at any time without explanation by contacting the researcher via details on the debrief form.

Following ethical approval, questionnaires were created using the Qualtrics Survey tool, previously validated for large samples without error (Miller et al., 2020). The survey included socio-demographic questions, the SPIKES protocol, Jefferson Scale of Empathy and Communication Competence Scale. A QR code and survey link were generated for distribution among paediatricians. Supervisor and university approval were obtained prior to public release.

Type of Data Collection

Using the QR code and survey link generated by the Qualtrics survey was distributed among paediatricians in Lady Ridgeway Hospital for Children. Upon scanning the QR code, participants received an Information Sheet outlining the study and explaining the questionnaires. Participation was voluntary. To ensure anonymity, paediatricians were asked to generate a reference code. A consent form followed, then socio-demographic questions, the Jefferson Scale of Empathy, and the Communication Competency Scale. After completing the survey, participants received a debrief form with contact details of mental health services offering free support in case of distress. A total of 56 paediatricians were recruited for this study.

Data Analysis

Using Statistical Package for the Social Sciences (SPSS) version 24, the data was analysed. Using descriptive and correlation statistics socio demographic data was analysed. Normality was assessed. The distribution of the data was analysed based on the following methods:

1. The skewness - the ratio between the statistical value and the standard error. The value between -1.96 to +1.96 was considered as normally distributed.
2. The kurtosis - the ratio between the statistical value and the standard error. The value between -1.96 to +1.96 was considered as normally distributed. (Doane & Seward, 2011)
3. The Q-Q plot distribution - The visual estimation was done
4. Shapiro wilk test - Significance of >0.05 is considered as normally distributed. (Shapiro & Wilk, 1965)

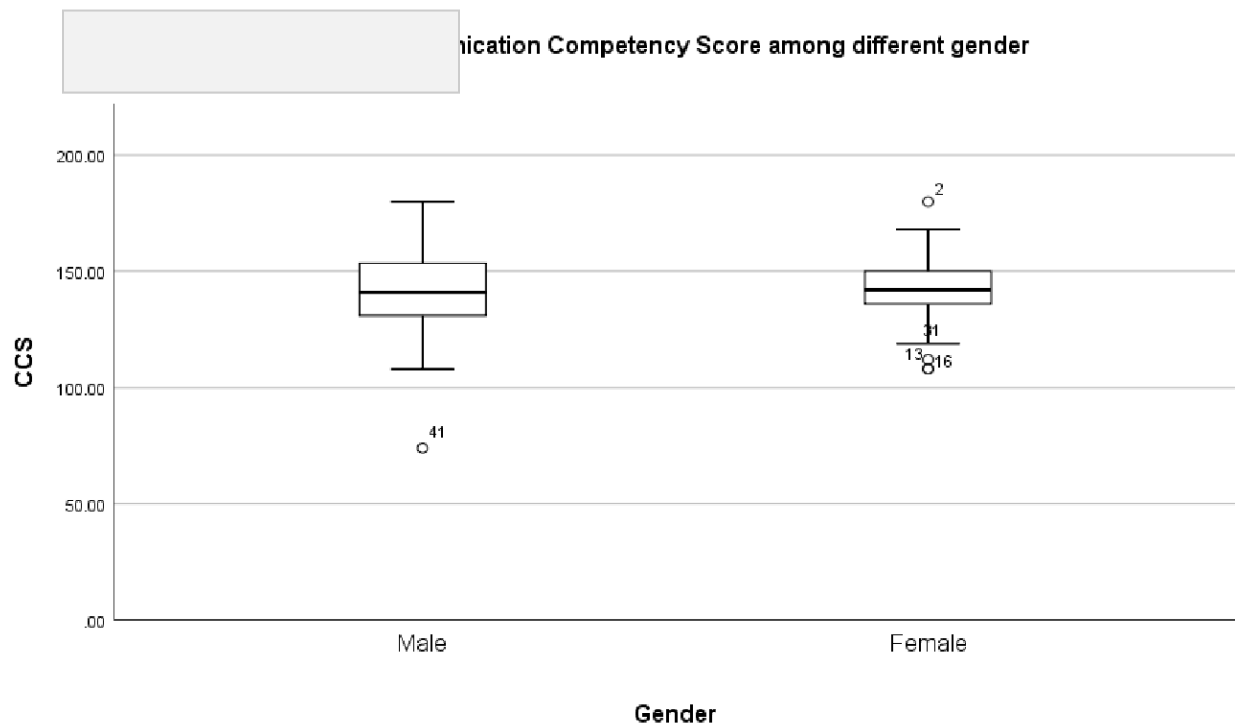
Based on the type of data distribution, appropriate parametric and non-parametric tests were used to find association between the variables. Inferential statistics and predictive test were run to further analyse the variables and factors.

Results

The study included a total of 56 participants practising in paediatrics. 58.9% of female and 41.1% of male paediatricians completed the survey showing equal distribution of gender. Common age category of paediatricians (Figure1) was ranging between 40-54 (N=24, 42.9%).

Most paediatricians were from general paediatrics (n= 48, 85.7%) and minor population from subspecialty (n=08, 14.3%).

Work experience of paediatricians in the sample distribution was equal. The highest level of work experience was among paediatricians with more than 20 years. Overall 60.75% (n=34) of the sample were well aware of the SPIKES protocol.



Work experience of paediatricians in the sample distribution was equal. The highest level of work experience was among paediatricians with more than 20 years. Overall 60.75% (n=34) of the sample were well aware of the SPIKES protocol.

Table 1: Descriptive statistics of socio demographic factors and their association with Communication Competency Scale and Jefferson Scale of Empathy

Demographics (n=56)	Frequency (%)	CCS (SD)	CCS (p value)	JSE (SD)	JSE (p value)
Gender					
Male	23 (41.1%)	139.96 (23.40)	.20	83.09 (7.58)	.35
Female	33 (58.9%)	142.58 (16.48)		80.24 (6.53)	
Age					
25-39	20 (35.7%)	145.05 (18.88)	.27	80.3 (9.47)	.27
40-54	24 (42.9%)	139.58 (21.18)		83.17 (5.78)	
55 above	12 (21.4%)	145.42 (15.75)		79.75 (3.49)	
Education Level					
MBBS	7 (12.5%)	157.14 (16.77)	.07	80.86 (6.72)	.99
Postgrad	48 (85.7%)	139.19 (19.12)		81.5 (7.24)	
PhD	1 (1.8%)	-		-	
Medical Specialty					
Paediatric	48 (85.7%)	141.65 (19.29)	.83	81.10 (6.9)	.37
Sub specialty	8 (14.3%)	140.63 (21.82)		83.25 (8.16)	
Employed Sector					
Government	37 (66.1%)	140.46 (18.97)	.37	80.84 (7.87)	.60
Private	4 (7.1%)	150.75 (11.18)		81.25 (4.5)	
Both	15 (26.8%)	141.6 (22.56)		82.87 (5.36)	
Work Experience					
<10 years	18 (32.1%)	147.17 (17.92)	.07	81.78 (9.54)	.94
10 - 20 years	17 (30.4%)	131.53 (19.54)		81.06 (6.71)	
>20 years	21 (37.5%)	144.71 (18.41)		81.38 (4.81)	
Previous Experience in BBN					
Yes	53 (94.6%)	141.45 (19.76)	.81	81.83 (6.88)	.12
No	3 (5.4%)	142.33 (16.26)		74 (7)	
SPIKES protocol					
5 (Low)	32 (39.3%)	137.73 (18.10)	.25	80.45 (6.12)	.42
6 (High)	34 (60.7%)	143.94 (20.19)		82.03 (7.62)	

An unrelated t-test was carried out to assess the level of difference between male and female groups in communication competency. As Levene's test was not significant ($F= 1.65, p>0.05$) then equal variances can be assumed. The Mean Communication competency score of females ($M= 142.58, SD= 16.49$) was higher than in males ($M= 139.96, SD= 23.40$) ($t(54)= -0.49, p>0.05$)

The association between age and communication competency was analysed using a oneway ANOVA. There was no significant main effect between the age categories and communication competency score as determined by oneway ANOVA

$F(2, 53) = 1.36, p = .27$

A Mann Whitney U test revealed no statistically significant difference between communication competency score in general paediatrics group and the subspecialty group

$(U = 182, p = 0.83)$.

A Kruskal-Wallis test was run to calculate if work experience of less than 10 years, 10 - 20 years and 20 years above affects communication competency score of paediatricians. The test revealed no statistically significant difference between the 3 groups of work experience with communication competency score, $X^2(2) = 5.34, p = .07$ with a mean Communication competency score for work experience of less than 10 years is 147.17 (17.92) for 10-20 years is 131.53 (19.54) and for more than 20 years is 144.71 (18.41)

A Mann Whitney U test revealed no statistically significant difference between communication competency score and previous experience in breaking bad news

$(U = 86.5, p = .81)$

An independent sample t-test was run to assess the level of difference between Male and Female groups with Jefferson Scale of Empathy scores.

The Levene's test was statistically non-significant ($F = .89, p = .35$) then equal variance can be assumed. Males ($M = 83.09, SD = 7.58$) and females ($M = 80.24, SD = 6.52$) gender groups did not have a statistically significant difference in mean scores with the Jefferson Scale of Empathy score, $t(54) = 1.5, p = .35$

A Mann Whitney U test revealed no statistically significant difference between Jefferson Scale of Empathy score and paediatricians previous experience in breaking bad news ($U = 123, p = .12$).

A Kruskal-Wallis test showed that there was no statistically significant difference in Jefferson Scale of Empathy score between the work experience categories,

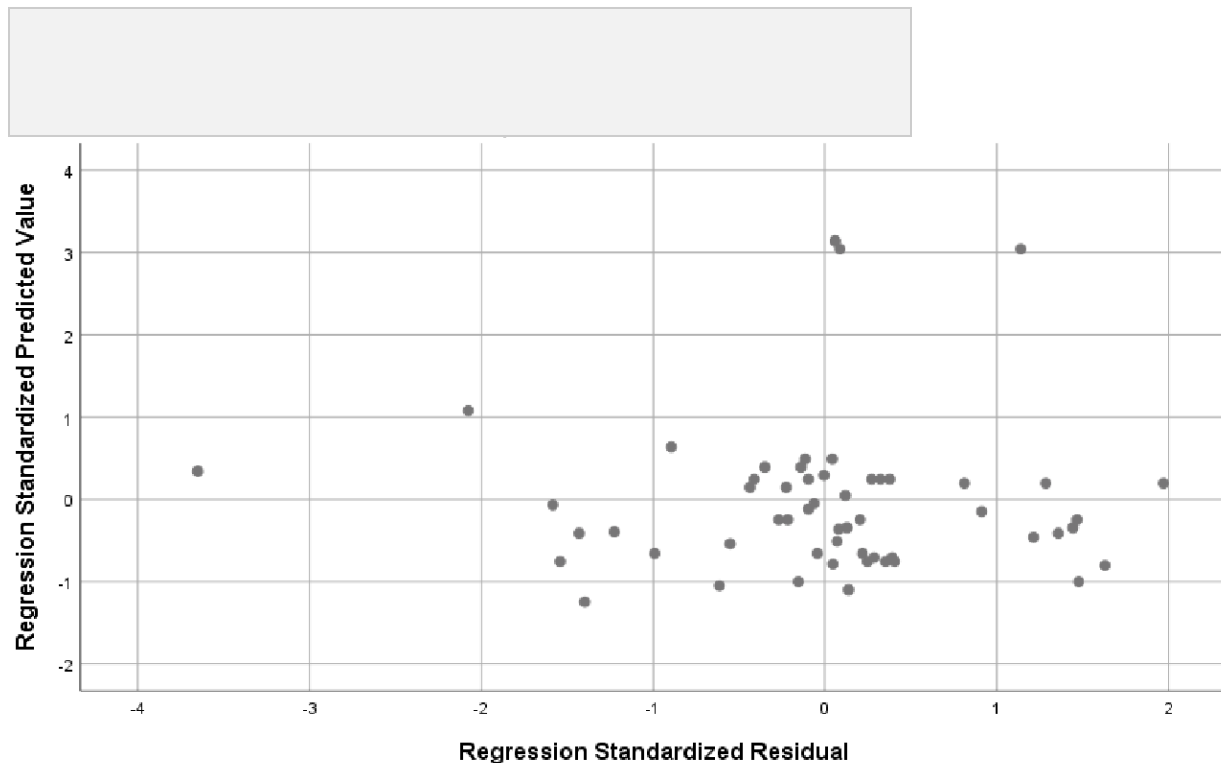
$X^2(2) = .13, p = .94$ mean Jefferson Scale of Empathy score for work experience less than 10 years is 81.78 ($SD = 9.54$), for 10 - 20 years is 81.06 ($SD = 6.71$), for less than 20 years is 81.38 (4.81)

A Pearson's correlation was carried out to examine the associations between Jefferson Scale of Empathy score and SPIKES protocol score. There was no correlation between Jefferson Scale of Empathy score and SPIKES protocol score ($r = 0.11, p = .42$).

The mean score of the SPIKES protocol was 5.6 ($SD = .49$). A Spearman's correlation was carried out to examine the extent of the relationship between SPIKES Protocol and Communication Competency. There was a weak positive correlation between SPIKES protocol score and Communication competency score among paediatricians. There was no statistically significant relationship between SPIKES protocol and Communication competency among paediatricians ($r = 0.16, p = .25$).

The mean score of the Jefferson's Scale of Empathy was 81.41 (SD= 7.05). A relevant correlation test was run to measure the association between paediatricians level of empathy and communication competency scale. A Spearman's correlation was run to test the relationship between empathy level of paediatricians and their communication competency. There was no significant correlation between empathy levels score and communication competency score. ($r = .002$, $p = .89$)

A multiple linear regression test was run to find whether paediatricians level of empathy and knowledge in breaking bad news impacts on their communication competencies. The overall model was not a good fit, $F(2,53) = 2.33$, $p = .11$, $R^2 = .08$, predicting a variance of 8.1% in communication competency score.



The scatterplot in figure 2 for the regression model showed no issues with non linearity or unequal variance. There were few potential outliers visible.

A multiple regression test was run to predict the level of empathy score from gender, age category and education level of paediatricians. The model was not a good fit with a variance of 4.4% of the Empathy score. All 3 variables did not significantly predict the level of empathy in paediatricians, $F(3,52) = 0.799$, $p = .50$, $R^2 = .044$

A multiple regression model was run to assess the predicting ability of paediatricians previous experience in breaking bad news, SPIKES protocol score, work experience with the Jefferson Scale of Empathy score.

The model showed a variance of 8.5% of the empathy level. The model was not a good fit, $F(3,52) = 1.619$, $p = .20$, $R^2 = .085$

Previous experience in breaking bad news has a significant positive effect on the total level of empathy scores (Beta= 0.28, $p = 0.05$)

Previous experience in breaking bad news is a significant predictor of the Empathy score, indicating that higher previous experience in breaking bad news is associated with higher level of empathy.

To assess the predicting ability of the education level, medical specialty and employed sector of paediatricians with the SPIKES Protocol scores, a multiple regression analysis was conducted. The model predicted a 9.6% of variance of the SPIKES protocol scores. The regression model was not a good fit, $F(3,52) = 1.832$, $p = .15$, $R^2 = .096$

Education level is a significant negative predictor of the SPIKES protocol score

(Beta = - 0.27, $p = .05$). Increase in education level leads to decrease in SPIKES Protocol score.

Discussion

The SPIKES protocol is used in this study to measure the paediatricians' acquired knowledge on breaking bad news. This protocol is widely used by many researchers and professional bodies as it is the most validated protocol for breaking bad news (Baile et al., 2000; Rosenzweig, 2012; Von Blanckenburg et al., 2020). Even though limited literature on patients' perspective on SPIKES is found (Dean & Willis, 2016), many studies have been conducted on physicians who agree with the principles of the SPIKES protocol (Santos, 2021).

Paediatricians were included in this study since there's evidence of parents dissatisfaction towards the way clinicians deliver bad news among paediatric patients (Contro et al., 2002). The SPIKES protocol assessed in this study showed more contradictory results in comparison to previous research. The SPIKES protocol showed no significant association with the communication competency score resulting in rejection of the hypothesis that states there is an association between knowledge in breaking bad news and paediatricians communication in breaking bad news. However, in further analysis using socio demographic factors, most paediatricians had a higher score of knowledge on breaking bad news showing more awareness of the SPIKES protocol. The majority of the paediatricians showed higher scores of the SPIKES protocol however the scores were not associated with their communication competency levels.

Even though SPIKES Protocol is a widely used tool in the medical setting, there are few mismatches with patients and clinicians' views on the protocols (Santos et al., 2021). Few studies conducted on patients' perspective on communication methods of clinicians show that patients are not fully satisfied with hearing bad news from clinicians. However, Milton and Mullan (2016) states SPIKES as a highly acceptable protocol to follow for delivering bad news which also highlights the importance of the step empathy as an important factor. This research study did not agree with previous research as knowledge on SPIKES protocol did not associate with the paediatricians higher communication competency score. This study

shows higher awareness and knowledge of the SPIKES protocol among paediatricians yet it was not impacting on the communication process of delivering bad news.

Even though many research states the SPIKES protocol as an important tool to be used in delivering bad news, adherence to the protocol is very low (Jain et al., 2024). Formal training is required to improve the practice of delivering bad news effectively for patients (Milton & Mullan, 2016; Reed et al., 2015). For the training to be more patient centered, patient outcomes should be analysed further to improve breaking bad news skill training.

There is not enough research conducted on patient satisfaction on SPIKES protocol and clinicians attitude towards breaking bad news and learning the process. Patient outcome is less analysed by researchers (Mahendiran et al., 2023).

Clinicians may consist of a higher knowledge in protocols on breaking bad news yet knowledge alone does not reflect on their implementing it into practice. A study conducted by Santos et al. (2021) on measuring the attitudes of clinicians towards breaking bad news protocol, supports this statement. The study states, a positive attitude towards protocol on delivering bad news will not directly lead clinicians to use the protocol skills. However, they assume the more clinicians agree with the protocol it's more likely to be used as a training tool for developmental skill training.

As previous research highlights the importance of empathy along with the breaking bad news protocol knowledge (Milton & Mullan, 2016; Gremigni et al., 2016), This study assessed the empathy levels of paediatricians and how it is associated with the communication competency score. Empathy of healthcare professionals stands to be a key component in improving communication when providing healthcare services (Kuo et al., 2011).

Using Jefferson's scale of Empathy the total score assessed in this study did not significantly associated with the score of the paediatricians' communication competency.

This study accepted the null hypothesis: empathy levels did not impact paediatricians' communication when breaking bad news. While Sri Lankan paediatricians showed no association between empathy and SPIKES protocol use, other studies report contrasting findings. Santos et al. (2021) found a significant positive correlation between empathy and physicians' attitudes toward SPIKES, with female physicians showing greater agreement (Hojat et al., 2002). However, in this study, male paediatricians had higher empathy scores than females. Compared to Western studies, Sri Lankan paediatricians showed relatively lower empathy, with mean scores below the expected cut-off (Reyes-Reyes et al., 2021). Kuo et al. (2011) and Kataoka et al. (2009) suggest this may reflect paternalistic tendencies in Asian cultures.

He et al. (2024), in a study of 4,188 healthcare professionals, reported higher empathy scores overall, with nurses scoring lower than doctors and allied health professionals. Despite paediatricians' central role in delivering bad news, empathy did not influence communication competency in this study. This contrasts with the study by Neumann et al. (2007), who found empathetic communication improved cancer patients' outcomes, reducing depression and enhancing quality of life.

Empathy is widely recognized as essential for effective care, rapport-building, and accurate diagnosis (Kerasidou et al., 2020). Work overload and understaffing which are common issues in medical settings can diminish empathy (Maslach et al., 1997; Shanafelt & Dyrbye, 2012; Pantaleoni et al., 2014). To address this, studies recommend mindfulness-based interventions, such as mind-body skills or stress reduction training, to enhance clinicians' wellbeing and performance (Fortney et al., 2013; Kemper & Khirallah, 2015; Krasner, 2009). Given the low empathy scores in this study, such training, alongside breaking bad news skill development is recommended for Sri Lankan paediatricians.

This study also examined associations between empathy and SPIKES protocol knowledge. No significant impact was found on communication competency, leading to rejection of the hypothesis that empathy and SPIKES knowledge influence paediatricians' communication quality. In contrast, Santos et al. (2021) reported a strong positive correlation between SPIKES protocol use, empathy scores, and breaking bad news skill assessments. Milton and Mullan (2016) emphasized SPIKES guidelines' acceptability and rated empathy as the most critical factor. Santos et al. (2021) also found a significant link between empathy and attitudes toward SPIKES using the Breaking Bad News Attitudes Scale (BBNAS), contrasting with the current study.

Most previous studies show strong associations between SPIKES and empathy. Seifart et al. (2014) identified steps 1 (Setting up) and 4 (Knowledge) as key patient preferences, supported by Fujimori et al. (2006) and Von Blanckenburg et al. (2020). However, this study found no such associations. Still, since subscale analysis may reveal important insights, examining individual components can guide improvements to SPIKES (Milton & Mullan, 2016).

To further explore the variables, predictive tests were conducted using socio-demographic factors with the Jefferson Scale of Empathy and SPIKES protocol scores. Results showed that prior experience in breaking bad news significantly predicted empathy scores. Similar findings were reported by Santos et al. (2021) and Ahmed et al. (2019), who noted that medical students, with limited exposure to delivering bad news, were more receptive to skill development training. In contrast, clinicians with 10–20 years of experience perceived themselves as more competent in this area. Prior experience also appeared to influence clinicians' attitudes toward patient communication (Farber et al., 2002; Santos et al., 2021). However, Kataoka et al. (2009) and Newton et al. (2008) observed a decline in empathy among medical students as they progressed through training.

Another predictive test assessed the influence of education level, medical specialty, and employment sector on SPIKES protocol scores. Education level (MBBS, postgraduate, PhD) emerged as a significant negative predictor. Consistent with existing literature, Santos et al. (2021) found that clinicians with higher qualifications were less inclined to engage in breaking bad news training, despite possessing adequate knowledge. Sikstrom et al. (2019) similarly noted that knowledge alone does not guarantee a positive attitude toward protocol implementation.

Multiple studies advocate for structured training in breaking bad news, citing widespread unfamiliarity with the SPIKES protocol due to insufficient education (Jain et al., 2024; Dean & Willis, 2016; Abdullah et al., 2024). Notably, Sri Lankan paediatricians demonstrated comparatively higher SPIKES knowledge

than peers in Ethiopia and Sudan (Fisseha et al., 2020; Dafallah et al., 2020), reflecting disparities in training resources across developing regions. In Pakistan, postgraduate doctors reported limited knowledge and dissatisfaction with their skills (Sarwar et al., 2019), while Jameel et al. (2012) found most clinicians lacked formal training. Despite this, self-reported data from the current study indicated positive perceptions of SPIKES knowledge among paediatricians, underscoring the need for ongoing training.

Limitations

The response rate in this study was limited due to the busy schedules of paediatricians, most of whom were from both government and private sectors. Also the small sample size limits the generalisability of findings.

Notably, the sample did not include paediatric oncologists or intensivists who are specialties that frequently deliver bad news. Their absence reduced representation from key groups involved in sensitive communication.

The use of self-reported data may have introduced bias in assessing communication competency and empathy. Patient perspectives were not included, and tools used to measure clinician-patient communication are typically administered by trained personnel in clinical settings.

There was also a lack of relevant literature in the Sri Lankan context, making it difficult to compare findings with existing research.

Conclusion

This study examined paediatricians' communication competency in delivering bad news, focusing on empathy levels and SPIKES protocol knowledge in Sri Lanka. Age and gender were evenly distributed. The cohort showed low mean scores on the Jefferson Scale of Empathy, with no significant link between empathy and communication competency.

Although SPIKES protocol knowledge scores were high, they did not correlate with communication competency. Two key findings emerged namely, prior experience in breaking bad news significantly predicted empathy levels (Santos et al., 2021; Ahmed et al., 2019), and higher education levels negatively predicted SPIKES protocol knowledge. This aligns with Santos et al. (2021), who found experienced clinicians may resist protocol-based approaches despite adequate knowledge.

This study recommends integration of communication training into medical education. Introducing skill development modules early in medical school can equip paediatricians to manage patient distress and clinician burnout more effectively. Enhanced communication competency supports accurate history-taking, diagnosis, and treatment planning. Hospital administrators should prioritize professional training in these protocols to improve healthcare delivery.

Competing Interests



There is no conflict of interest.

Fundings

There was no external funding provided for this research study.

Acknowledgement

To my supervisor, Dr Saisanathani Sridharan, I express my deepest gratitude for the guidance provided throughout the research study. Thank you for sharing your knowledge and time on this research study.

References

- Abdullah, M.A., Shaikh, B.T., Khan, K.R. and Yasin, M.A., 2024. Breaking bad news: A mix methods study reporting the need for improving communication skills among doctors in Pakistan. *BMC Health Services Research*, 24(1). <https://doi.org/10.1186/s12913-024-11056-2>
- Ahmady, A., Sabounchi, S., Mirmohammadsadeghi, H., Rezaei, A. and Seyedzadeh, S., 2014. A suitable model for breaking bad news: review of recommendations. *JMED Research*, pp.1–15. <https://doi.org/10.5171/2014.776618>
- Ahmed, S.A., Ashry, S.K. and Widdershoven, G., 2019. Effectiveness of online teaching for development of resident beliefs and understandings: A study on breaking bad news to patients. *Health Professions Education*, 5(1), pp.30–38. <https://doi.org/10.1016/j.hpe.2017.10.003>
- Baile, W.F., Buckman, R., Lenzi, R., Glober, G., Beale, E.A. and Kudelka, A.P., 2000. SPIKES-A Six-Step Protocol for Delivering Bad News: Application to the Patient with Cancer. *The Oncologist*, 5(4), pp.302–311. <https://doi.org/10.1634/theoncologist.5-4-302>
- Baile, W.F. et al., 1997. Improving physician-patient communication in cancer care: outcome of a workshop for oncologists. *PubMed*, 12(3), pp.166–173. <https://doi.org/10.1080/0885819970952848>
- Buckman, R., Korsch, B., Baile, W.F., 1998. *A Practical Guide to Communication Skills in Clinical Practice*. Toronto: Medical Audio Visual Communications. CD-ROM (Pt 2): Dealing with feelings.
- British Psychological Society, 2021. *Code of Ethics and Conduct*. [eBook] British Psychological Society <https://doi.org/10.53841/bpsrep.2021.inf94>
- Contro, N., Larson, J., Scofield, S., Sourkes, B. and Cohen, H., 2002. Family perspectives on the quality of pediatric palliative care. *Archives of Pediatrics and Adolescent Medicine*, 156(1), p.14. <https://doi.org/10.1001/archpedi.156.1.14>
- Dafallah, M.A., Ragab, E.A., Salih, M.H., Osman, W.N., Mohammed, R.O., Osman, M., Taha, M.H. and Ahmed, M.H. (2020) 'Breaking bad news: awareness and practice among Sudanese doctors', *AIMS Public Health*, 7(4), pp.758–768. <https://doi.org/10.3934/publichealth.2020058>
- Da Silva Júnior, E.S., Ferreira, R.K.G. and Souto, P.A.N.G., 2023. Breaking bad news in pediatrics. *Revista Bioética*, 31. <https://doi.org/10.1590/1983-803420233536en>
- Dean, A. and Willis, S., 2016. The use of protocol in breaking bad news: evidence and ethos. *International Journal of Palliative Nursing*, 22(6), pp.265–271. <https://doi.org/10.12968/ijpn.2016.22.6.265>
- Doane, D.P. and Seward, L.E., 2011. Measuring Skewness. *Journal of Statistics Education*, 19(2), pp.1–18.

Eggly, S., Penner, L., Albrecht, T.L., Cline, R.J.W., Foster, T., Naughton, M., Peterson, A. and Ruckdeschel, J.C. (2006) 'Discussing bad news in the outpatient oncology clinic: rethinking current communication guidelines', *Journal of Clinical Oncology*, 24(4), pp.716–719.

Farber, N.J., Urban, S.Y., Collier, V.U., Weiner, J., Polite, R.G., Davis, E.B. and Boyer, E.G. (2002) 'The good news about giving bad news to patients', *Journal of General Internal Medicine*, 17(12), pp.914–922. <https://doi.org/10.1046/j.1525-1497.2002.20420.x>

Fisseha, N.H., Mulugeta, N.W., Kassu, N.R.A., Geleta, N.T. and Desalegn, N.H. (2020) 'Perspectives of protocol based breaking bad news among medical patients and physicians in a teaching hospital, Ethiopia', *Ethiopian Journal of Health Sciences*, 30(6) <https://doi.org/10.4314/ejhs.v30i6.21>

Fortney, L., Luchterhand, C., Zakletskaia, L., Zgierska, A. and Rakel, D. (2013) 'Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study', *The Annals of Family Medicine*, 11(5), pp.412–420. <https://doi.org/10.1370/afm.1511>

Francis, R., 2018. *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*. London: The Stationery Office.

Fujimori, M., Akechi, T., Morita, T., Inagaki, M., Akizuki, N., Sakano, Y. and Uchitomi, Y. (2006) 'Preferences of cancer patients regarding the disclosure of bad news', *Psycho-Oncology*, 16(6), <https://doi.org/10.1002/pon.1093>

Gremigni, P. et al., (2016). Dealing with patients in healthcare: A self-assessment tool. *Patient Education and Counseling*, 99(6), pp1046–1053. <https://doi.org/10.1016/j.pec.2016.01.015>

He, S., Sultana, R., Anantham, D., Loh, H. P., Zhou, J. X., Tang, J. Y., Sim, M., Ayre, T. C., Fong, K. Y., & Tan, K. H. (2024). Empathy levels among healthcare professionals: An Asian Multi-professional Cross-Sectional Study. *Cureus*. <https://doi.org/10.7759/cureus.53750>

Hojat, M., DeSantis, J., Shannon, S. C., Mortensen, L. H., Speicher, M. R., Bragan, L., LaNoue, M., & Calabrese, L. H. (2018). The Jefferson Scale of Empathy: a nationwide study of measurement properties, underlying components, latent variable structure, and national norms in medical students. *Advances in Health Sciences Education*, 23(5), 899–920. <https://doi.org/10.1007/s10459-018-9839-9>

Hojat, M., Gonnella, J. S., Mangione, S., Nasca, T. J., Veloski, J. J., Erdmann, J. B., Callahan, C. A., & Magee, M. (2002). Empathy in medical students as related to academic performance, clinical competence and gender. *Medical Education*, 36(6), 522–527. <https://doi.org/10.1046/j.1365-2923.2002.01234.x>

Hojat, M., Mangione, S., Nasca, T. J., Cohen, M. J., Gonnella, J. S., Erdmann, J. B., ... & Magee, M. (2001). The Jefferson Scale of Physician Empathy: development and preliminary psychometric data. *Educational and psychological measurement*, 61(2), 349–365.

- Jain, V., Ravi, A., Thakur, V., Mishra, A., Dhamor, D., & Khare, S. (2024). Breaking bad news: Awareness and practice of the SPIKES protocol among general surgery residents at a tertiary care institute in northern India. *The National Medical Journal of India*, 36, 320–322. https://doi.org/10.25259/nmji_950_2022
- Jameel, A., Noor, S. M., & Ayub, S. (2012). Survey on perceptions and skills amongst postgraduate residents regarding breaking bad news at teaching hospitals in Peshawar, Pakistan. *JPM-A Journal of the Pakistan Medical Association*, 62(6), 585.
- Kataoka, H. U., Koide, N., Ochi, K., Hojat, M., & Gonnella, J. S. (2009). Measurement of empathy among Japanese medical students: Psychometrics and score differences by gender and level of medical education. *Academic Medicine*, 84(9), 1192–1197. <https://doi.org/10.1097/acm.0b013e3181b180d4>
- Kemper, K. J., & Khirallah, M. (2015). Acute effects of online Mind–Body Skills training on resilience, mindfulness, and empathy. *Journal of Evidence-Based Complementary & Alternative Medicine*, 20(4), 247–253. <https://doi.org/10.1177/2156587215575816>
- Kerasidou, A. (2019). Empathy and efficiency in healthcare at times of austerity. *Health Care Analysis*, 27(3), 171–184. <https://doi.org/10.1007/s10728-019-00373-x>
- Kerasidou, A., Børøe, K., Berger, Z., & Brown, A. E. C. (2020). The need for empathetic healthcare systems. *Journal of Medical Ethics*, 47(12), e27. <https://doi.org/10.1136/medethics-2019-105921>
- Krasner, M. S. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*, 302(12), 1284. <https://doi.org/10.1001/jama.2009.1384>
- Kuo, J., Cheng, J., Chen, Y., Livneh, H., & Tsai, T. (2011). An exploration of empathy and correlates among Taiwanese nurses. *Japan Journal of Nursing Science*, 9(2), 169–176. <https://doi.org/10.1111/j.1742-7924.2011.00199.x>
- Mahendiran, M., Yeung, H., Rossi, S., Khosravani, H., & Perri, G. (2023). Evaluating the effectiveness of the SPIKES model to break bad news – A systematic review. *American Journal of Hospice and Palliative Medicine®*, 40(11), 1231–1260. <https://doi.org/10.1177/10499091221146296>
- Marschollek, P., Bąkowska, K., Bąkowski, W., Marschollek, K., & Tarkowski, R. (2018). Oncologists and Breaking Bad News—From the informed patients’ point of view. The evaluation of the SPIKES protocol implementation. *Journal of Cancer Education*, 34(2), 375–380. <https://doi.org/10.1007/s13187-017-1315-3>
- Matthias, A. T., & Jayasinghe, S. (2022). Worsening economic crisis in Sri Lanka: impacts on health. *The Lancet Global Health*, 10(7), e959. [https://doi.org/10.1016/s2214-109x\(22\)00234-0](https://doi.org/10.1016/s2214-109x(22)00234-0)
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.

Miller, C. A., Guidry, J. P., Dahman, B., & Thomson, M. D. (2020). A tale of two diverse Qualtrics samples: Information for online survey researchers. *Cancer Epidemiology Biomarkers & Prevention*, 29(4), 731–735. <https://doi.org/10.1158/1055-9965.epi-19-0846>

Milton, A. C., & Mullan, B. (2016). Views and experience of communication when receiving a serious mental health diagnosis: satisfaction levels, communication preferences, and acceptability of the SPIKES protocol. *Journal of Mental Health*, 26(5), 395–404. <https://doi.org/10.1080/09638237.2016.1207225>

Ministry of Health Sri Lanka | Appointment – Medical Officer, www.health.gov.lk

Newton, B. W., Barber, L., Clardy, J., Cleveland, E., & O’Sullivan, P. (2008). Is there hardening of the heart during medical school? *Academic Medicine*, 83(3), 244–249. <https://doi.org/10.1097/acm.0b013e3181637837>

Pantaleoni, J. L., Augustine, E. M., Sourkes, B. M., & Bachrach, L. K. (2014). Burnout in Pediatric Residents over a 2-Year Period: A Longitudinal study. *Academic Pediatrics*, 14(2), 167–172. <https://doi.org/10.1016/j.acap.2013.12.001>

Reed, S., Kassis, K., Nagel, R., Verbeck, N., Mahan, J. D., & Shell, R. (2015). Breaking bad news is a teachable skill in pediatric residents: A feasibility study of an educational intervention. *Patient Education and Counseling*, 98(6), 748–752. <https://doi.org/10.1016/j.pec.2015.02.015>

Reyes-Reyes, A., Calzadilla-Núñez, A., Torres-Martínez, P., Díaz-Calzadilla, P., Pastén-Hidalgo, W., Bracho-Milic, F., & Díaz-Narváez, V. (2021). Psychometry: Cutting-Off Points and Standardization of the Jefferson Empathy Scale adapted for students of Kinesiology. *SAGE Open*, 11(4), 2158244021105666. <https://doi.org/10.1177/21582440211056628>

Rosenzweig, M. Q. (2012). Breaking bad news. *The Nurse Practitioner*, 37(2), 1–4. <https://doi.org/10.1097/01.npr.0000408626.24599.9e>

Santos, K. L. D., Gremigni, P., Casu, G., Zaia, V., & Montagna, E. (2021). Development and validation of The Breaking Bad News Attitudes Scale. *BMC Medical Education*, 21(1). <https://doi.org/10.1186/s12909-021-02636-5>

Sarwar, M. Z., Rehman, F., Fatima, S. M., Suhail, M., & Naqi, S. A. (2019). Breaking bad news skill of postgraduate residents of tertiary care hospital of Lahore, Pakistan: A cross-sectional survey. *JPMA. The Journal of the Pakistan Medical Association*, 69(5), 695–699.

Seifart, C., Hofmann, M., Bär, T., Knorrenschild, J. R., Seifart, U., & Rief, W. (2014). Breaking bad news—what patients want and what they get: evaluating the SPIKES protocol in Germany. *Annals of Oncology*, 25(3), 707–711. <https://doi.org/10.1093/annonc/mdt582>

Shanafelt, T., & Dyrbye, L. (2012). Oncologist Burnout: causes, consequences, and responses. *Journal of Clinical Oncology*, 30(11), 1235–1241. <https://doi.org/10.1200/jco.2011.39.7380>

Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52(3–4), 591–611. <https://doi.org/10.1093/biomet/52.3-4.591>

- Sikstrom, L., Saikaly, R., Ferguson, G., Mosher, P. J., Bonato, S., & Soklaridis, S. (2019). Being there: A scoping review of grief support training in medical education. *PLoS ONE*, 14(11), e0224325. <https://doi.org/10.1371/journal.pone.0224325>
- Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward Integrating Qualitative and quantitative Methods: An Introduction. *Health Education Quarterly*, 19(1), 1–8. <https://doi.org/10.1177/109019819201900101>
- Verhoef, M. J., & Casebeer, A. L. (1997). Broadening horizons: Integrating quantitative and qualitative research. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 8(2), 65–66. <https://doi.org/10.1155/1997/349145>
- Von Blanckenburg, P., Hofmann, M., Rief, W., Seifart, U., & Seifart, C. (2020). Assessing patients' preferences for breaking Bad News according to the SPIKES-Protocol: the MABBAN scale. *Patient Education and Counseling*, 103(8), 1623–1629. <https://doi.org/10.1016/j.pec.2020.02.036>
- Wiemann; J. M. (1977). Explication and test of a model of communicative competence. *Human Communication Research*, 3, 195-213.