DIALOGUE SOCIAL SCIENCE REVIEW

An Analysis of Dropout Causes among Nursing Students in Peshawar, KPK and Other Areas of Pakistan

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ABSTRACT
Objective: This study aimed to identify and analyze the various causes of dropout among nursing students in Pakistan.
Methods: A community-based cross-sectional study was conducted in selected nursing schools and colleges of Peshawar. A total of 100 dropout nursing students from three major institutions "HMC, KTH, and LRH" were enrolled. Data were collected through structured questionnaires and subsequently analyzed using SPSS (Statistical Package for the Social Sciences).
Results: Findings revealed that students below the age of 20 years represented 33% of dropouts, whereas those above 20 years accounted for 17%. The dropout rate progressively increased from 40% in the first year to 100% in the fourth year. Regarding residency, 84% of dropouts were from rural areas, while only 16% were from urban centers; similarly, 84% were non-Peshawar residents. Among the prominent causes, high tuition fees (9%), low income (5%), financial crises (4%), and the death of a guardian (1%) were noted. Additional contributing factors included marriage (5%), distant location (6%), lack of social support (8%), burden of work (5%), and study load (3%). These results underscore the multifaceted challenges faced by nursing students in pursuing their education.
Conclusion: Financial instability stands out as a major determinant of student dropout, with high fees, low family income, and loss of guardianship being critical contributors. Addressing these issues through targeted interventions; such as financial aid programs, improved student support services, and academic counseling, could significantly reduce

dropout rates. Strengthening retention of nursing students is essential for developing a sustainable nursing workforce and enhancing the effectiveness of Pakistan's healthcare system.

Keywords: Nursing Students, Dropout, Nursing Education, Retention, Financial Instability, Peshawar, Healthcare Workforce

Introduction

Pakistan is confronted with a dropout rate of nearly 20% at the college level. In contrast, countries such as Russia, the USA, and Japan have literacy rates close to 99%, which has enabled them to achieve remarkable progress in various sectors. Pakistan, with an official literacy rate of only 46%, cannot afford to neglect mass education if it wishes to continue its development. The problem of low literacy stems largely from the fact that many students who gain admission into primary schools fail to continue their education up to the higher levels offered in national institutions. According to the Human Development in South Asia (2001), nearly 20% of students do not complete their college studies, a leakage that obstructs the achievement of mass literacy and skill development. This alarming situation has drawn the attention of policymakers, educationists, and government authorities. The Commission on National Education (1979) highlighted that forced repetition of classes and economic pressures leading families to withdraw children from colleges were among the major factors behind student dropout. In Khyber Pakhtunkhwa, the adult literacy rate in 1998 was 37.3%, with female literacy at only 21.1%, presenting a stark contrast to regional countries (Haq, 2001).

The nursing profession represents a cornerstone of healthcare systems worldwide, playing a pivotal role in patient care and public health promotion. In Pakistan, the importance of nursing is particularly pronounced given the nation's diverse healthcare challenges and a rapidly growing population exceeding 200 million. Despite the critical need for a strong nursing workforce, Pakistan continues to experience a persistent shortage of nursing professionals, a challenge compounded by high dropout rates among nursing students. Understanding the underlying causes of these dropouts is essential for formulating strategies to retain students and strengthen the healthcare system (Khan, 2023).

According to the Pakistan Nursing Council (PNC), more than 70 institutions currently offer nursing education, from diploma-level training to doctoral programs. The Pakistan Economic Survey (2020–21) reported a total of 116,659 nurses in the country. However, the sector struggles with a shortage of qualified faculty, as many institutions face challenges in recruiting and retaining well-trained educators due to low salaries and limited opportunities for career progression. This faculty shortage has far-reaching implications, including inadequate training opportunities, compromised skill development, and high turnover rates among nursing staff, which further worsen the shortage of skilled professionals (Abbas et al., 2024).

Nursing education in Pakistan has undergone significant transformations, moving from a historically diploma-based and didactic system to a more comprehensive and hands-on approach in line with international standards. Despite these improvements, the number of registered nurses remains critically low. As reported in the Pakistan Economic Survey (2020–21), the total number of nurses stood at approximately 116,659 nationwide, an insufficient figure compared to the country's needs (Younus et al., 2019). Nursing students often face rigorous academic demands coupled with clinical placements, which can result in physical and mental strain, contributing to attrition (Bakker et al., 2018). In

addition, discrepancies between students' expectations of nursing and the realities of clinical practice frequently lead to disillusionment and dropout (Kang, 2019). Financial challenges are another significant factor, as many students struggle to meet tuition and related expenses, forcing some to abandon their studies in favor of income-generating opportunities.

The high dropout rate among nursing students has serious consequences for the healthcare system in Pakistan. A shrinking nursing workforce increases the workload on existing staff, compromises patient care quality, and contributes to professional burnout. Addressing student attrition is therefore both an educational and healthcare priority. Potential solutions include providing financial support through scholarships and grants, enhancing the quality of nursing education through faculty development and infrastructure improvement, and strengthening support systems such as counseling and mentorship programs. Furthermore, societal attitudes towards nursing must be reformed to encourage greater enrollment and retention, particularly among women.

Aim and Objectives of the Study
The study aims to investigate the causes of high dropout rates among nursing students in Peshawar, to identify the number and percentage of dropouts in selected institutions, and to develop realistic, replicable strategies for reducing dropout. The findings will be shared with stakeholders such as parents, teachers, government departments, and the students themselves to raise awareness of the problem and its implications. In addition, the study seeks to examine the outdoor activities of dropout students to understand their post-dropout engagements and potential areas for intervention.

Significance of the Study
This study is significant for several reasons. Education is the fundamental right of every child, and the findings of this research may encourage communities to recognize and support this right. The results can contribute to improving Pakistan's overall development indicators by addressing the problem of educational attrition. Teachers and parents may become more aware of the issue and take practical steps to minimize dropout. The education department could potentially adopt and replicate the strategies proposed by this study in other districts. Furthermore, the findings may assist the government in achieving its targeted ratio of highly skilled and educated individuals.

Methods
A community-based cross-sectional study was conducted in selected nursing schools and colleges of Peshawar, including HMC, KTH, and LRH. A total of 100 nursing students who had dropped out were enrolled in the study. Data were collected through a pre-designed questionnaire developed to explore the causes of dropout. The questionnaire consisted of two sections: the first gathered demographic information such as name, sex, class, and academic year, while the second focused on identifying specific reasons for discontinuation.

All collected data were entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Frequencies and percentages were computed for categorical variables. In this study, dropout status was considered the dependent variable, and the various reported causes were treated as independent variables. The study also highlights the need for similar research in other regions of Pakistan to further investigate the factors contributing to nursing student attrition.

Results

The findings of this study reveal important socio-demographic, financial, familial, and institutional patterns contributing to nursing student dropout in Peshawar. Analysis of the data highlights that attrition is not the result of a single factor but rather a combination of interlinked challenges, including age, academic year, place of residence, financial instability, family responsibilities, and academic or institutional shortcomings. These trends provide valuable insights into the underlying causes of student attrition and point toward the areas where intervention is most urgently needed.

Table 1: Socio-demographic data of the drop out students

Variables	Groups	Frequencies (N)	Percentages (%)
Age	Below age of 20 years	33	33%
	20 years	50	50%
	More than 20 years	17	17%
Academic year	1st	20	40.0%
	2nd	20	60.0%
	3rd	20	80.0%
	4th	20	100.0%
Residency	Rural	84	84%
	Urban	16	16%
Peshawar/non Peshawar	Peshawar	16	16.0%
	Non- Peshawar	84	84.0%
Institution	KTH	33	33%
	HMC	33	33%
	LRH	34	34%

Graph 1: Socio-demographic data of the drop out students
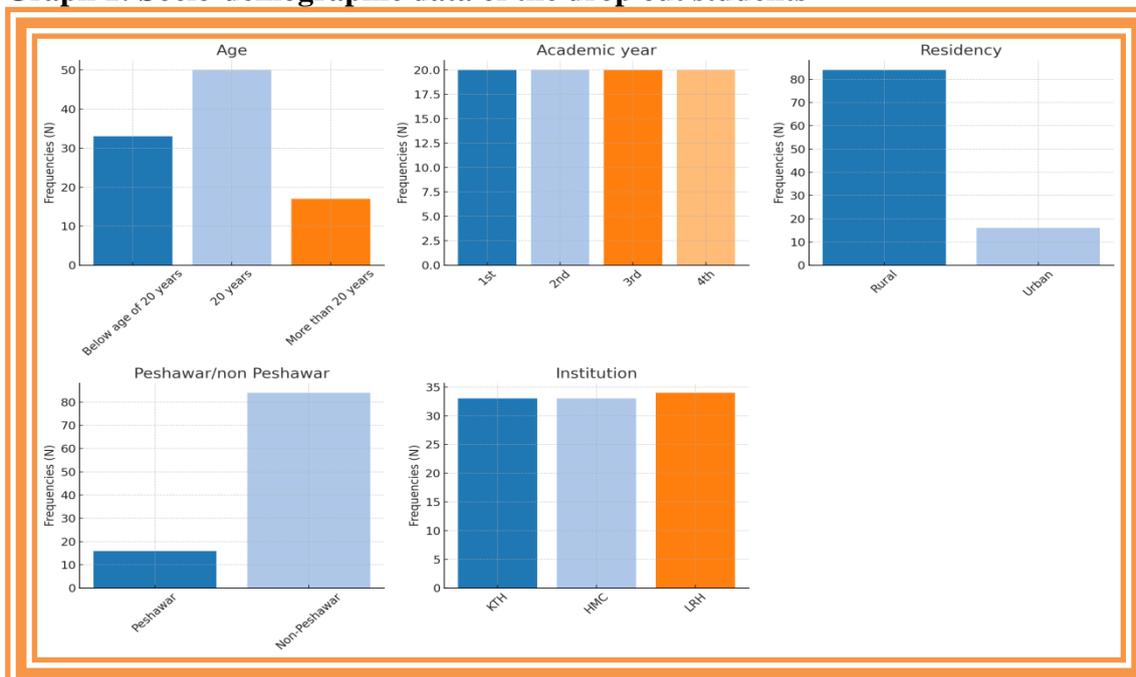
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Age, academic year, residence, and institutional distribution are some of the most prominent tendencies found in the socio-demographic data of nursing students who drop out. Students beyond the age of 20 made up a lesser percentage of those who dropped out (17%), while those below the age of 20 accounted for 33%. This data reveals that attrition is more common among younger students, especially those just starting in their academic careers. Looking over the whole school year, see that the dropout rate goes up as the semester goes on. The dropout rate increased from 40% in the first year to 100% in the fourth year, after having increased gradually from 40% in the first year. This trend suggests that increasing student workload, difficulty with coursework, or other personal issues may be contributing to higher dropout rates.

According to residency statistics, 84% of students who dropped out were from rural regions, while just 16% were from metropolitan centers. Similarly, 84% were not from Peshawar, which might indicate that students are leaving due to difficulties with relocation, financial difficulties, or a lack of support networks.

Table 2: Causes of dropout among the students

Causes	Frequency (N)	Percentage (%)
Low income	5	5%
Family issues	6	6%
Inappropriate counseling and guidance	4	4%
Standard of education	2	2%
Outdated course content.	1	1%
High fees	9	9%
Burden of work	5	5%
Distant location	6	6%
Environment factors	2	2%
Isolation	3	3%
Improper assessment	5	5%
Terrorism	6	6%
Injustice	3	3%
Society	8	8%
Lack of interest	2	2%
Marriage	5	5%
Death of guardian	1	1%
Financial crisis	4	4%
Personal problems	2	2%
Burden of study	3	3%
Teacher attitude	2	2%
Lack of attention	3	3%
Lack of facilities	3	3%
Low grades	4	4%
Abuse	1	1%
Health issues	3	3%
Weak base	2	2%

Graph 2: Causes of dropout among the students

Dropout Causes Ranked by Percentage — Survival-style Plot
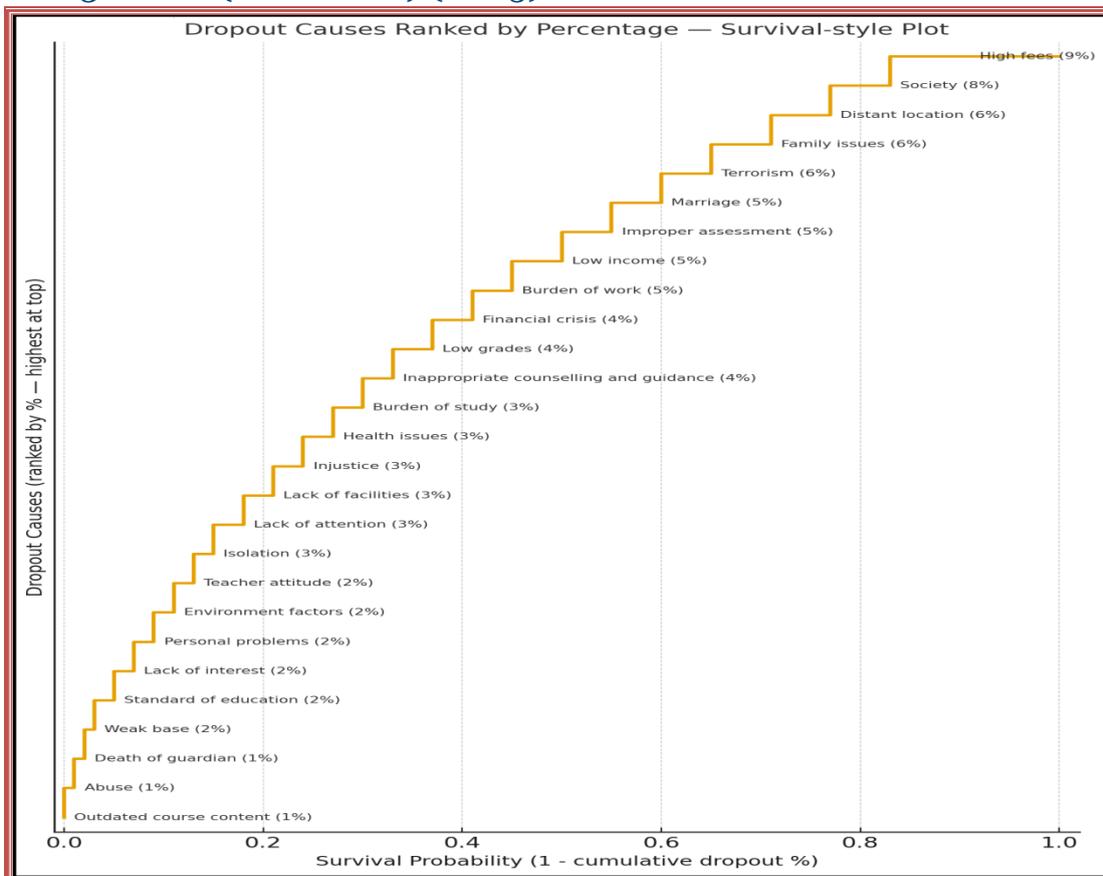
Financial, intellectual, and personal difficulties are identified as major reasons for nursing student dropouts. Among the most often mentioned reasons, high fees (9%) and financial troubles (4%), many students see the high expense of school as a major obstacle. Financial instability makes it hard for students to complete their education, and poor income (5%) and the death of a guardian (1%) are other factors.

Student attrition was also significantly impacted by family-related factors, including marriage (5%), geographical distance (6%), and a lack of social support (8%). Academic support systems could be lacking, resulting in disengagement, due to inappropriate counseling (4% of cases) and evaluation techniques (5% of cases). The burdens of job (5% of the total) and study (3% of the total) further emphasize the difficulty students have in managing their time effectively.

Institutional and human factors affecting well-being also affect dropout rates, as shown by factors such as instructor attitude (2%), insufficient facilities (3%), and health difficulties (3%). Better support mechanisms and financial assistance might help address these problems and minimize turnover.

Overall, the results highlight that dropout among nursing students in Peshawar is multifactorial, shaped by financial, familial, institutional, and personal challenges. Younger students and those from rural or non-Peshawar backgrounds appear particularly vulnerable. Financial instability stands out as the leading cause, followed by family pressures and academic challenges. These findings emphasize the urgent need for targeted interventions, including financial aid programs, improved counseling and mentorship, supportive academic environments, and culturally sensitive retention strategies. By addressing these interconnected issues, institutions can reduce attrition and strengthen the nursing workforce in Pakistan.

Discussion

The findings of this study focuses that nursing students in Peshawar and other region face a complex interaction of challenges that contribute to attrition, encompassing financial, academic, social, domestic, institutional, and health-related factors. These obstacles collectively hinder students' ability to persist through their education, ultimately leading many to drop out. Addressing these issues requires targeted interventions that integrate financial assistance, academic support programs, and institutional reforms to create a more conducive learning environment (Mansour et al., 2020).

Age and socio-demographic patterns emerged as significant factors influencing dropout. Younger students, particularly those under the age of 20, displayed higher vulnerability to leaving nursing programs, often due to immaturity, adaptation difficulties, and heightened academic stress. The trend of increasing dropout rates in later academic years further underscores how mounting coursework and clinical demands intensify the risk of discontinuation (Munusamy et al., 2017; Van Hoek et al., 2019). In addition, rural students were disproportionately represented among dropouts, accounting for 84% of cases. Transitioning from rural to urban settings often exposes students to social detachment, financial burdens associated with relocation, and limited access to resources. Similarly, students from outside Peshawar were found to be at greater risk of discontinuation, suggesting that distance from home and inadequate support networks play a decisive role in educational persistence (Naz et al., 2019).

Financial constraints were another prominent determinant of dropout. Many students reported that high tuition fees, inadequate income, and overall economic instability were major barriers to continuing their education. These findings echo previous studies emphasizing that financial strain is a key driver of attrition in nursing education (Belyaeva, 2022). Institutions can mitigate this issue by expanding access to scholarships, providing flexible fee structures, and developing work-study or sponsorship programs to support students from disadvantaged backgrounds (Kuncharin, 2017).

Academic and institutional barriers further exacerbated student dropout. Heavy academic workloads, poor grades, weak foundational learning, outdated curricula, and inadequate assessment practices were cited as major challenges. Limited access to academic counseling and mentorship also heightened student dissatisfaction and disengagement. These findings point to the urgent need for curriculum reform, updated teaching methods, and structured mentoring systems to better support nursing students in overcoming educational challenges (Lobstein et al., 2022).

Social and personal issues added another layer of complexity to the problem of attrition. Family responsibilities, including marriage and domestic obligations, were identified as significant reasons for leaving nursing education. Geographic distance from home also created emotional and logistical strains for many students. Furthermore, broader societal and political pressures, such as terrorism and cultural expectations, compounded the difficulties faced by students. These findings highlight that dropout is not merely an academic or financial issue but is deeply rooted in social realities that require both institutional responses and broader policy interventions (Banaag et al., 2024; Eisenhardt, 2023).

The results suggest that dropout among nursing students in Peshawar is driven by multifaceted factors, with financial hardships, socio-demographic vulnerabilities, academic shortcomings, and social pressures intersecting to shape students' decisions to leave. Reducing attrition will require coordinated strategies at multiple levels, including financial aid, institutional reforms, improved academic support, and policies that address

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the broader social environment. By tackling these challenges comprehensively, Pakistan can work toward retaining more nursing students, thereby strengthening its healthcare workforce and improving health service delivery.

Conclusion:

The problem of nursing student dropout in Pakistan reflects a multifaceted interaction of socio-demographic, financial, academic, and institutional factors. Addressing this challenge requires an integrated approach that combines educational reform, financial assistance, and supportive learning environments. The findings of this study highlight that younger students, particularly those under the age of 20, are at greater risk of attrition, with dropout rates increasing significantly in advanced academic years. Students from rural areas and those relocating to Peshawar or other cities face heightened risks due to financial hardship, social isolation, and adjustment challenges.

Economic instability emerges as a central driver of attrition, as high tuition fees, limited household income, and in some cases the loss of guardians place significant strain on students' ability to continue their education. Family-related pressures such as marriage, long geographic distance, and insufficient social support further exacerbate these risks. Academic barriers, including heavy coursework, inadequate counseling, outdated evaluation systems, and limited mentorship, contribute to mounting dissatisfaction among students. At the institutional level, challenges such as faculty attitudes, insufficient infrastructure, and health-related concerns further undermine student engagement and persistence.

To address these issues, nursing schools and policymakers must implement targeted interventions. These include expanding financial aid and scholarship programs, introducing work-study and sponsorship opportunities, strengthening academic counseling and mentoring, modernizing curricula, and improving institutional facilities. Moreover, creating a more supportive psychosocial environment can help students manage family and social pressures. By adopting these strategies, educational institutions can significantly reduce dropout rates, retain more nursing students, and ultimately contribute to strengthening Pakistan's nursing workforce and improving the effectiveness of its healthcare system.

Conflict of Interest
The authors declare no conflict of interest.

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