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SOCIOECONOMIC EMPOWERMENT AS A CATALYST EXPLORING ITS MULTIFACTORIAL INFLUENCE ON HIV TESTING BEHAVIOR AMONG WOMEN IN PAKISTAN

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Abstract

Introduction: The intersection of socioeconomic empowerment and health behaviors has gained increasing attention in public health research, particularly concerning marginalized populations.

Objective: The main objective of the study is to find the socioeconomic empowerment as a catalyst exploring its multifactorial influence on HIV testing behaviour among women in Pakistan.

Methodology of the study: This mix-method study was conducted at Dr Ruth Pfau Civil Hospital Dow University Karachi during July 2023 to July 2024. A total of 300 women were recruited for the study through purposive sampling technique. Participants were selected to represent a diverse demographic profile, including variations in age, education level, economic status, and marital status. Inclusion criteria required participants to be women aged 18 and above, residing in Pakistan, and willing to provide informed consent.

Results: In terms of education, 40% had no formal education, 30% had primary education, 20% had secondary education, and only 10% had higher education. Women with higher education levels had significantly higher testing rates, with 75% of those with higher education having been tested, compared to only 15% of those with no formal education ($p < 0.01$).

Conclusion: It is concluded that socioeconomic empowerment significantly influences HIV testing behavior among women in Pakistan. Higher levels of education, employment, and household income are associated with increased likelihood of undergoing HIV testing.

Introduction

The intersection of socioeconomic empowerment and health behaviors has gained increasing attention in public health research, particularly concerning marginalized populations. A study established that Pakistani women experience numerous restrictions in the use of health care services, including HIV testing [1]. All of these are complex and based on cultural, economic and social

models that define health-seeking activity. Education, economic productivity and social class as aspects of the socioeconomic development appears as the critical variable that may shift these relations [2]. The impact of this study is to provide knowledge on the manner in which empowering processes affect HIV testing behaviour, which is relevant for designing simple, effective, and more specific interventions toward bettering women's health [3].

Due to these reasons, Pakistan provides a research context of interest as a complex culture and faces a plethora of socio-economic barriers to empower the population for desired behaviours that will positively affect health [4]. Some of the key social issues that hinder women, particularly in the above-mentioned setting, embrace the following: Women's empowerment is, therefore, hampered by such factors as traditional gender roles, limited education, and financial dependency on men [5]. These constraints deny women the freedom to decide on their own health especially with a view to HIV testing. However, stigma and discrimination related to HIV make the situation worse because most women refrain from testing for HIV and its early treatment [6].

Acquired Immunodeficiency Syndrome (AIDS) resulting from the Human Immunodeficiency Virus (HIV) is a major public health concern globally, but specially in thee third world nations. UNAIDS Global statistics released early this year pointed out that the current prevalence of HIV was at 36/100 population [7]. Nine million people are HIV positive, including 35. One million (1) of these are the adult (15+ Years) and the other one million one hundred thousand (1,100,000) are the you and young adults. 8 million children below the age of fifteen. Amongst these, 1. Newly infected is another optional parameter, set at 8 million people. In general, HIV-positive adult women of 15 years and above are slightly more numerous, with the figure standing at 17. 8 million, constituting 48. Overall among the HIV- infected population a total of 5% can be regarded as TB infected [8]. Asia and the Pacific region are home to 5.1 million HIV-infected people, with an estimated prevalence of 0.2%, including 1.82 million adult women and 1.65 million adult men (15+ years). Recent data from UNAIDS and the National AIDS Control Programme highlighted that there are 1.3 million HIV-infected people in Pakistan, but only 22,333 HIV-positive are registered and currently only 12,046 are receiving antiretroviral therapy. A series of HIV surveillance results indicate that the epidemic is already established, particularly in risk groups, and this requires immediate attention [9].

Empowerment through education and economic opportunities can play a transformative role in this regard [10]. Educated women are more likely to be aware of HIV and its transmission, recognize the importance of testing, and have the confidence to seek medical services. Economic independence provides the financial means and autonomy to access healthcare facilities without relying on others. Additionally, empowered women are more likely to challenge societal norms and advocate for their health rights, creating a ripple effect that can influence community attitudes toward HIV testing [11].

Objective

The main objective of the study is to find the socioeconomic empowerment as a catalyst exploring its multifactorial influence on HIV testing behaviour among women in Pakistan.

Methodology of the study

This mix-method study was conducted at Dr Ruth Pfau Civil Hospital Dow University Karachi during July 2023 to July 2024. A total of 300 women were recruited for the study through purposive sampling technique. Participants were selected to represent a diverse demographic profile, including variations in age, education level, economic status, and marital status. Inclusion criteria required participants to be women aged 18 and above, residing in Pakistan, and willing to provide informed consent.

Data Collection

The quantitative data were collected using a structured questionnaire designed to assess various aspects of socioeconomic empowerment and HIV testing behavior. The questionnaire included sections on demographic information, educational background, employment status, household income, access to healthcare services, and HIV-related knowledge and attitudes. The survey also measured participants' history of HIV testing, reasons for testing or not testing, and perceived barriers to accessing testing services.To complement the survey data, in-depth interviews were conducted with a subset of 30 participants selected from the survey sample. These interviews aimed to explore the nuanced experiences and perceptions of women regarding their empowerment and HIV testing behavior. The interviews were semi-structured, allowing for flexibility in probing deeper into specific issues raised by participants. Topics covered included personal and community attitudes toward HIV, experiences with healthcare providers, and the impact of socioeconomic factors on health decisions.

Data Analysis

Data were analyzed using SPSS v 29.0. Descriptive statistics, such as frequencies and percentages, were used to summarize demographic characteristics and key variables related to socioeconomic empowerment and HIV testing behavior. Inferential statistics, including chi-square tests and logistic regression, were employed to examine associations between empowerment factors and HIV testing behavior.

Results

The study's demographic analysis of 300 women showed that the majority (40%) were aged 26-35 years, followed by 25% aged 36-45 years, 20% aged 18-25 years, and 15% aged 46-55 years. In terms of education, 40% had no formal education, 30% had primary education, 20% had secondary education, and only 10% had higher education. Employment status revealed that 50% were homemakers, 25% were employed, 15% were involved in informal labor, and 10% were unemployed. Marital status indicated that 60% were married, 25% were single, 10% were widowed, and 5% were divorced. Regarding household income, half of the participants (50%) had a monthly income of less than PKR 20,000, 30% had an income between PKR 20,000-40,000, and 20% earned above PKR 40,000.

Table 1: Participant Demographics

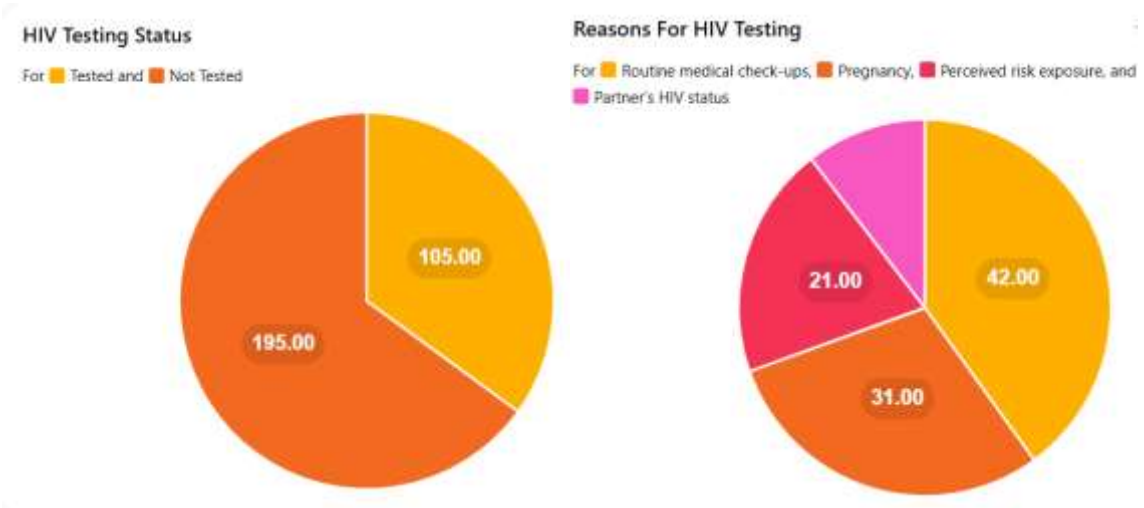
Demographic Variable	Frequency (n=300)	Percentage (%)
Age		
18-25 years	60	20%
26-35 years	120	40%
36-45 years	75	25%
46-55 years	45	15%
Education		
No formal education	120	40%
Primary education	90	30%
Secondary education	60	20%
Higher education	30	10%
Employment Status		
Employed	75	25%
Homemakers	150	50%
Informal labor	45	15%
Unemployed	30	10%

Marital Status		
Married	180	60%
Single	75	25%
Widowed	30	10%
Divorced	15	5%
Household Income		
Less than PKR 20,000	150	50%
PKR 20,000-40,000	90	30%
Above PKR 40,000	60	20%

The study revealed that 35% of the 300 women participants had undergone HIV testing, while 65% had not. Among those who had been tested (n=105), 40% cited routine medical check-ups as the reason, 30% were tested during pregnancy, 20% due to perceived risk exposure, and 10% because of their partner's HIV status. For the 195 women who had not been tested, the primary barriers included lack of awareness (50%), stigma and discrimination (30%), lack of access to testing facilities (15%), and financial constraints (5%).

Table 2: HIV Testing Behaviour

HIV Testing Behaviour	Frequency (n=300)	Percentage (%)
HIV Testing Status		
Tested	105	35%
Not Tested	195	65%
Reasons for HIV Testing (n=105)		
Routine medical check-ups	42	40%
Pregnancy	31	30%
Perceived risk exposure	21	20%
Partner's HIV status	11	10%
Barriers to HIV Testing (n=195)		
Lack of awareness	98	50%
Stigma and discrimination	59	30%
Lack of access to testing facilities	29	15%
Financial constraints	9	5%



Women with higher education levels had significantly higher testing rates, with 75% of those with higher education having been tested, compared to only 15% of those with no formal education ($p < 0.01$). Employment status also played a crucial role, with 50% of employed women having undergone testing, in contrast to 20% of unemployed women ($p < 0.05$). Additionally, household income was a significant predictor, with 60% of women from households earning above PKR 40,000 getting tested, compared to 25% from households earning less than PKR 20,000 ($p < 0.05$).

Table 3: Socioeconomic Empowerment and HIV Testing Behavior

Empowerment Factor	Percentage of Women Tested (%)	p-value
Education Level		
No formal education	15%	<0.01
Primary education	25%	<0.01
Secondary education	50%	<0.01
Higher education	75%	<0.01
Employment Status		
Employed	50%	<0.05
Homemakers	30%	<0.05
Informal labor	35%	<0.05
Unemployed	20%	<0.05
Household Income		
Less than PKR 20,000	25%	<0.05
PKR 20,000-40,000	40%	<0.05
Above PKR 40,000	60%	<0.05

Discussion

The findings of this study underscore the critical role of socioeconomic empowerment in influencing HIV testing behavior among women in Pakistan. Thus, there are moderate risks associated with education, employment, household income which is related to HIV testing behavior which again prove that the concept of empowering the community is complex and interrelated to different domain of an individual's life [12]. Education resurfaced as an important factor relevant to the HIV testing behaviour. The level of education was another factor that revealed a significant difference; women who tested for HIV were more educated than those who did not [13]. This has been due to enhanced health literacy, a raise in HIV awareness, and development of a positive attitude to early detection and management of the disease. HIV testing facilities can therefore be used to enhance the education of women, leading to an upward trend in the Asia Pacific region's health [14]. Other factors which were found to have a relationship with HIV testing behaviour included the employment status. The employed women, and more so, those who were expectant, denied their husbands sexual relations and, therefore, probably had better economic bargaining power than the unemployed counterparts and were more likely to initiate HIV testing independently [15]. Financial self-sufficiency enables women to take independent health choices because they do not have to spend money, which may be provided by the family to attend healthcare facilities [16]. Measures aimed at enhancing women employment chances and economically empowering them can hence serve as determinants of health enhancing practices such as HIV tests. On the same note, the results indicated that the level of income in the households was also instrumental in influencing HIV testing behavior among the clients [17]. This means that mothers from the rich households received HIV tests more than mothers from the other groups, which shows that the issue of income influences the utilization of health services. This result implies the fact that financial-related factors continue to be a major obstacle that keeps women from accessing appropriate medical care [18]. Measures which focus on lowering the prices for health care services and subsidies of socially vulnerable

population groups can contribute to increasing HIV testing. Some of the factors that were seen to hamper people from deciding to undergo the HIV test were; ignorance, prejudice, discrimination and poor access to the HIV test centers [19]. Education impacted knowledge about HIV in a positive manner; employment impacted the women's ability to seek healthcare services regarding HIV [20]. Social exclusion and isolation were mentioned as one of the main barriers to breastfeeding, more specifically, the concerns with social rejection and prejudice were reported with equal intensity by the women of lower social status and by women who had given birth to girl babies. The scarcity of health facilities was evident especially in the rural settings and this called for more ambulatory clinics as well as outreach initiatives.

Conclusion

It is concluded that socioeconomic empowerment significantly influences HIV testing behavior among women in Pakistan. Higher levels of education, employment, and household income are associated with increased likelihood of undergoing HIV testing. Addressing barriers such as lack of awareness, stigma, and limited access to healthcare can further enhance testing rates and improve health outcomes. Empowerment initiatives are crucial for promoting health-seeking behaviors and reducing HIV transmission in this vulnerable population.

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