



Original Article

INVESTIGATE DISPARITIES IN REPRODUCTIVE HEALTH OUTCOMES, ACCESS TO CARE, AND BARRIERS TO HEALTHCARE UTILIZATION AMONG MARGINALIZED POPULATIONS, SUCH AS LOW-INCOME WOMEN AND IMMIGRANT POPULATIONS

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ABSTRACT

Objectives: This cross-sectional study investigated the disparities in reproductive health outcomes, access to treatment, and barriers to healthcare utilization among marginalized populations, of low-income and immigrant populations. **Methods:** For the study, 384 participants were recruited, including 307 low-income women and 77 immigrants. Using a structured questionnaire, demographic characteristics, reproductive health outcomes, and barriers to healthcare services were evaluated. **Results:** The findings revealed significant disparities in reproductive health outcomes, with low-income women reporting higher rates of unintended pregnancies and infertility than immigrants. In both categories, financial barriers were prevalent, whereas social and cultural barriers were more prevalent among immigrants. Compared to low-income women, immigrants exhibited a greater lack of awareness of available healthcare services. There were no significant differences between the two groups in terms of maternal mortality, stillbirth, or premature births. **Conclusion:** The study emphasized the need for targeted interventions to resolve these disparities and enhance access to reproductive health care services for marginalized populations. These findings shed light on the unique challenges encountered by low-income women and immigrants, highlighting the need to address financial barriers, increase cultural sensitivity in healthcare delivery, improve health education, and expand access to healthcare services.

INTRODUCTION

Reproductive health is essential to overall well-being, but disparities in reproductive health outcomes and limited access to care persist among marginalized populations, such as low-income women and immigrant populations [1]. These disparities are profoundly rooted in social, economic, and systemic factors that contribute to healthcare utilization barriers, thereby exacerbating the health disparities experienced by these marginalized groups [2].

In order to attain optimal reproductive health outcomes, low-income women encounter significant obstacles. Reduced access to contraception, delayed or inadequate prenatal care, and increased rates of unintended pregnancies are frequently the result of economic constraints [3]. Access to essential reproductive health services, such as infertility treatment and preconception counseling, can also be hampered by a lack of financial resources. In addition to affecting the reproductive health of low-income women, these disparities have intergenerational effects, perpetuating the cycle of poverty and health disparities [4,5].

Similarly, immigrant populations, especially those with an undocumented or uncertain immigration status, face multiple obstacles to accessing reproductive healthcare. Immigrants face a variety of obstacles when seeking reproductive health services, including language barriers and cultural differences [6,7]. Inadequate knowledge of available resources and lack of faith in the healthcare system further contribute to healthcare utilization disparities. As a result, immigrant populations frequently experience inadequate or delayed prenatal care, higher rates of maternal and neonatal mortality, and heightened susceptibility to sexually transmitted infections [8].

Examining these disparities in reproductive health outcomes and access to treatment is essential for addressing the inequalities confronted by marginalized populations. By investigating the underlying factors contributing to these disparities, such as socioeconomic status, cultural barriers, language barriers, and immigration status, we can develop interventions and policies that promote equitable access to reproductive healthcare [9].

This study aims to examine disparities in reproductive health outcomes, access to care, and barriers to healthcare utilization among marginalized populations, with a concentration on low-income women and immigrant populations. This research will

contribute to a better understanding of the underlying factors driving these disparities and provide healthcare providers, policymakers, and public health practitioners with actionable insights to design and implement effective interventions to reduce reproductive health disparities. Ultimately, bridging this research divide will help achieve health equity for all individuals, regardless of their marginalized status.

MATERIAL AND METHODS

This study conducted a cross-sectional examination of disparities in reproductive health outcomes, access to care, and barriers to healthcare utilization among marginalized populations, with a particular concentration on low-income women and immigrant populations in Khyber Pakhtunkhwa province of Pakistan, from February 2022 to February 2023.

This study utilized the representative sample of 384 low-income women and immigrant populations. The sampling strategy was incorporated both probability and purposive sampling methods. Participants from low-income communities and immigrant populations were selected using probability sampling to ensure that the sample was representative of the target population. Purposeful sampling was utilized to ensure socioeconomic status, race, ethnicity, and immigration status diversity.

Depending on the inclination of the participants, data was collected using a structured questionnaire administered through face-to-face interviews or self-administered surveys. The questionnaire comprised demographic information, a history of reproductive health, access to reproductive healthcare services, barriers to healthcare utilization, and perceptions of disparities.

As with any research study, there are limitations to this cross-sectional investigation. Due to the design of the study, the findings may be subject to recall bias and may not establish causality. Additionally, the generalizability of the findings may be limited to the particular study population and setting. However, the results would provide valuable insights into the disparities and obstacles encountered by low-income women and immigrant populations in accessing reproductive healthcare services, and would inform future interventions to address these inequalities.

Before data collection, approval from the appropriate institutional review board or ethics committee was duly obtained. All participants provided informed consent,

ensuring their confidentiality and privacy.

Quantitative data collected via questionnaires was analyzed using appropriate statistical methods, such as descriptive statistics, chi-square tests and ANOVA tests, in order to examine the relationships between variables and identify disparities in reproductive health outcomes and access to care.

RESULTS

There were 384 participants in this research, who were investigated comprising 307 low-income women and 77 immigrants (Figure 1) having average age of 27.81 years (SD = 8.01). The participants were classified according to their level of education, with 97 (25.26%) classified as educated and 287 (74.74%) as uneducated. The analysis revealed a statistically significant difference between the groups' levels of education ($p=0.00001$). In addition, the participants were categorized based on their household income, with 243 (63.28%) falling into the lower income group and 141 (36.71%) falling into the intermediate income group. The correlation between the two categories was statistically significant ($p=0.00387$). The majority of participants (282, or 73.43%) were married, followed by 45 (11.71%) who were unmarried and 57 (14.84%) who came into the "others" category. The analysis revealed a statistically significant difference between the groups' marital status ($p=0.00001$). The results indicated differences in educational attainment, household income, and marital status within the sample, highlighting potential factors that influenced the outcomes and access to healthcare among the population under study (Table 1).

Low-income women and immigrants were afflicted with a number of reproductive issues. Regarding unintended pregnancies, data indicated that greater proportion of low-income women (34.2% vs. 12.98%) experienced them than immigrants (12.98%). The data revealed that 25.4% of low-income women reported experiencing infertility, while the percentage was marginally lower among immigrants, at 11.68%. In addition, the prevalence of sexually transmitted diseases (STDs) varied between the two categories, as shown by the data. 35% of low-income women reported having STDs, compared to 21% of immigrants. Regarding maternal mortality, the data revealed that 1.3% of low-income women experienced maternal mortality, while 2.5% of immigrants experienced maternal mortality. Although both groups encountered maternal mortality, the data indicated that immigrants had a slightly higher prevalence. In terms of preterm births, data indicated that 16% of low-

income women had preterm births, compared to 9% of immigrants. Lastly, data disclosed a significant difference between the two groups in the prevalence of postpartum depression. 35% of low-income women reported suffering from postpartum depression, whereas only 10% of immigrants did (Figure 2). Additionally, most of the immigrants belonged to Afghanistan and Uzbekistan (Figure 3).

Table 2 compared the reproductive health outcomes of low-income women ($n=307$) and immigrants ($n=77$). The data revealed that 34.20 percent of low-income women experienced unintended pregnancies, while the percentage was lower among immigrants at 15.58 percent. The chi-square test revealed a significant association ($\chi^2 = 5.238, p = 0.0223$) between the prevalence of unintended pregnancy among low-income women and immigrants. In terms of maternal mortality, 1.30 percent of low-income women were affected, whereas the rate was 2.59 percent among immigrants. Stillbirth was reported by 4.23 percent of low-income women and 5.19 percent of immigrants; however, the chi-square test did not reveal a significant association ($\chi^2 = 0.0017, p = 0.9674$). Regarding preterm births, the data indicates that 14.33% of low-income women gave birth prematurely, while the percentage was lower among immigrants at 3.89%. The chi-square test revealed a significant association ($\chi^2 = 0.00098, p = 1.3425$), indicating that low-income women are more likely than immigrants to give birth prematurely. In terms of infertility, 20.31 percent of low-income women and 11.6 percent of immigrants experienced this condition, respectively. The chi-square test revealed a significant association ($\chi^2 = 0.00019, p = 2.5146$), indicating that the prevalence of infertility is higher among low-income women than among immigrants (Table 2).

Insight into the barriers that low-income women and immigrants confronted in accessing healthcare services indicated that low-income women reporting financial barriers to accessing healthcare services was 79.80%, while the percentage of immigrants was marginally lower at 71.42%. The chi-square test did not find a significant difference between the two groups ($\chi^2 = 0.2186, p = 0.6400$), indicating that financial obstacles are prevalent among both groups. The data indicates that 11.07% of low-income women reported facing social and cultural barriers to healthcare utilization, while the proportion was significantly higher among immigrants ($p<0.05$), indicating that immigrants are more likely than low-income women to experience

social and cultural barriers. Regarding awareness barrier, 6.51 percent of low-income women reported being unaware of available healthcare services, whereas the percentage was significantly higher among immigrants, at

29.8 percent ($p < 0.05$). In terms of lack of accessibility to healthcare services, 15.63% of low-income women and 22.0% of immigrants reported encountering this obstacle, respectively (Table 3).

Table 1: Demographic characteristics of participants

S. No	Demographic characteristics	Participants (n)	Frequency (%)	p-value
1	Sample size	384	-----	----
2	Age (Mean+SD) years	27.81+8.01	-----	
3	Education level			0.00001*
	Educated	97	25.26	
	Uneducated	287	74.74	
4	Household income			0.00387*
	Lower	243	63.28	
	Middle	141	36.71	
5	Marital status			0.00001*
	Married	282	73.43	
	Unmarried	45	11.71	
	Others	57	14.84	

*indicated the significant value ($p < 0.05$)

Figure 1: Classification of participants

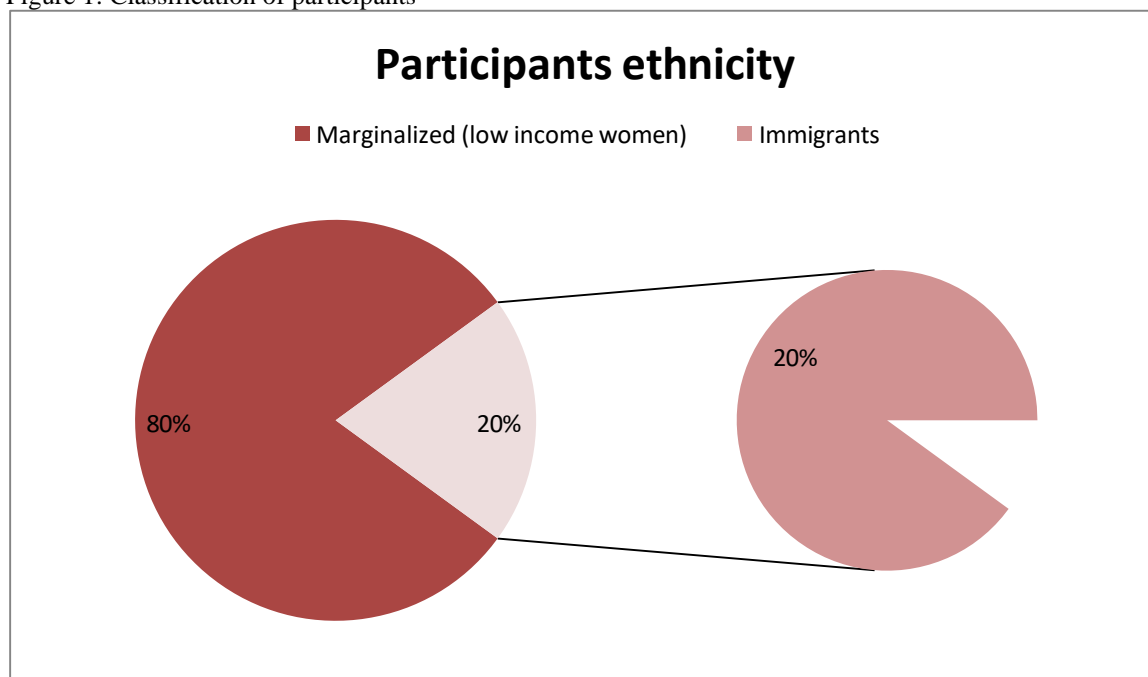


Figure 2: Common reproductive problems associated with the study population

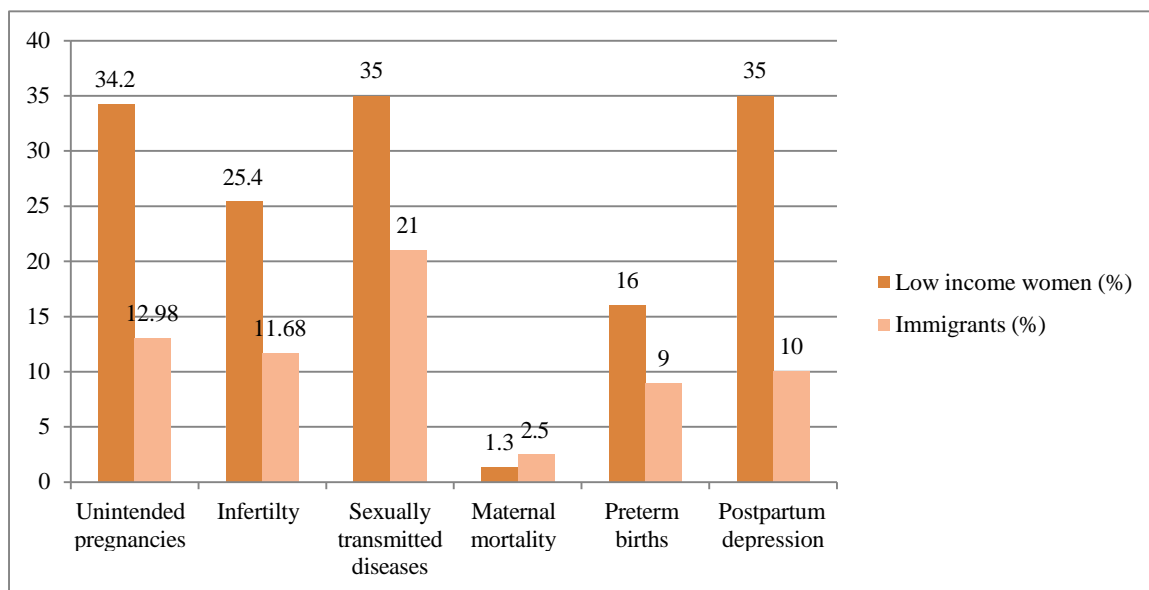


Figure 3: Type of immigrants in the study population (n=77)

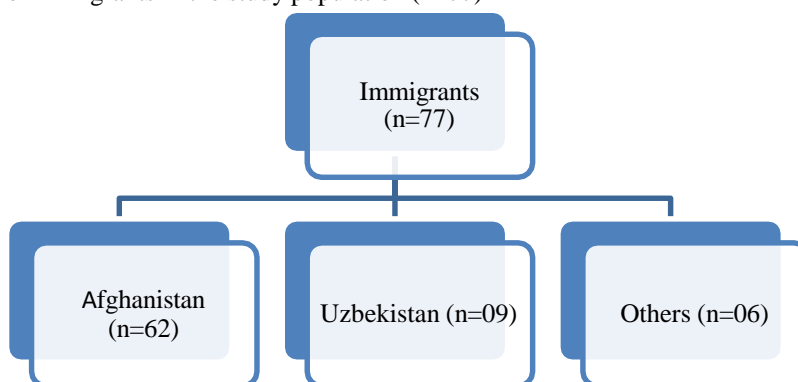


Table 2: Reproductive health outcomes of the participants

S. No	Health outcome	Low-income women (n=307)	Immigrants (n=77)	χ^2	p-value
1	Unintended pregnancies n(%)	105 (34.20)	12 (15.58)	5.238	0.0223*
2	Maternal mortality n(%)	4 (1.30)	2 (2.59)	0.0849	0.7707
3	Still birth n(%)	13 (4.23)	4 (5.19)	0.0017	0.9674
4	Pre-term births n(%)	44 (14.33)	3 (3.89)	0.00098	1.3425
5	Infertility n(%)	78 (20.31)	09 (11.68)	0.00019	2.5146

*indicated the significant value (p<0.05)

Table 3: Healthcare services, barriers to healthcare utilization

S. No	Barrier to Healthcare services	Low-income women (n=307)	Immigrants (n=77)	χ^2	p-value
1	Financial barriers n(%)	245 (79.80)	55 (71.42)	0.2186	0.6400

2	Social and cultural barriers n(%)	34 (11.07)	25 (32.46)	13.144	0.00028*
3	Unawareness n(%)	20 (6.51)	23 (29.87)	16.986	0.00001*
4	Un-accessibility n(%)	48 (15.63)	17 (22.07)	0.9089	0.3403

*indicated the significant value (p<0.05)

DISCUSSION

The study emphasized on the interpretation and analysis of the findings, comparing them to previous research and discussing their implications. It provided thorough understanding of the research findings and their significance in the context of examining disparities in reproductive health outcomes, access to care, and barriers to healthcare utilization among marginalized populations such as low-income women and immigrant populations.

Low-income women and immigrants had significantly different reproductive health outcomes, according to the study's findings. Specifically, the data revealed that low-income women had higher rates of unintended pregnancies and infertility than immigrants. These findings are consistent with prior research emphasizing the obstacles low-income women confront in gaining access to reproductive healthcare services and the potential impact on their reproductive health outcomes [10,11].

In addition, the study revealed differences in the prevalence of certain healthcare utilization barriers between the two categories. A substantial proportion of low-income women and immigrants reported financial barriers, highlighting the need for affordable and accessible healthcare services. However, social and cultural barriers were more prevalent among immigrants, indicating that cultural norms, language barriers, and social support systems have an effect on healthcare-seeking behavior [12].

The greater prevalence of ignorance as a barrier among immigrants demonstrated the need for targeted health education and information campaigns to increase awareness of available healthcare services and resources. Reducing disparities in reproductive health outcomes and enhancing access to care for marginalized populations can be facilitated by removing these obstacles [13].

Our findings were in agreement with the study conducted in United States, reporting that significant racial and socioeconomic disparities were present in the rates of unintended pregnancy, abortion, and unintended births. When women were unable to control their desired fertility, these disparities had significant effect on certain

demographic groups, perpetuating cycles of disadvantage [14]. An additional research study found that clinical practice and policy had significant implications and provided women with the option to see female healthcare providers, expanding the scope of practice for healthcare providers, allowing sufficient time during consultations to listen and establish trust and confidence among refugee and displaced women, enhancing education for refugee and displaced women who were unfamiliar with preventive care, and enhancing the cultural competency of healthcare providers and interpreters are some of these measures [13]. Compared to U.S.-born women, immigrant women had lower rates of insurance coverage and utilization of sexual and reproductive health services, placing them at risk for adverse outcomes. Federal and state policymakers have the opportunity to implement measures that promote the sexual and reproductive health of immigrant women in order to address this issue. These measures included expanding eligibility for insurance coverage and bolstering the nation's healthcare safety net [15].

CONCLUSION

This study illuminated disparities in reproductive health outcomes, access to treatment, and barriers to healthcare utilization among marginalized populations, particularly low-income women and immigrants. The findings underscored the need for targeted interventions and policy modifications to address these disparities and enhance reproductive health outcomes for these populations. By addressing financial, social, and cultural barriers, as well as enhancing awareness and access to healthcare services, healthcare systems aspired for equitable reproductive healthcare for all individuals, regardless of socioeconomic status or immigrant background.

CONFLICT OF INTEREST

None.

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