



Original Article

Association Between Postponements of Medical Care and Financial Constraints Among Transgender Population

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ABSTRACT

Health is a basic human need and access to healthcare is a basic non-negotiable human right.

Objectives: To examine the association between postponements of medical care and financial constraints that might lead to delay in their medical care. **Methods:** We conducted a primary, analytical cross-sectional study including transgender individuals (n=250), using a purposive sampling technique who were registered with the Gender Interactive Alliance (G.I.A) a non-governmental organization (NGO) in Karachi, Pakistan. We assessed their demographic data by documenting age, gender, religion, income and province, in relation to access to medical care.

Results: Data were obtained from 204 (81.6%) males and 46 (18.4%) females' transgenders. The mean age was 32.34 years (S.D=7.85). A Significant association was found in postponement of medical care and financial constraints, with educational status which showed that more than half (55%) were Non Matriculated (p-Value= 0.001), gross monthly income (before taxes) were between 21000 to 30000 PKR (p= 0.002) per month and half of the population were homeless (p <0.001) and it has significantly decreased their chances of access to medical care. **Conclusion:** Significant association found between postponements of medical care and to financial constraints in transgender population. Further studies are needed to shed light on the struggles that transgenders face in medical care and to find out the solution to help those neglected individuals/section of society.

INTRODUCTION

Health is a basic human need and access to healthcare is a basic non-negotiable human right. One of the determinants of health is socioeconomic status of the individual, and although it is a modifiable risk factor, it is still a factor that may obstruct the delivery of care, making the afflicted more vulnerable to deterioration, that is one of the fast growing challenge for the new generation which can be worst for their own selves and as well as for the community health by transmitting the contagious diseases from the infected individuals to the healthy population and this also could lead to disability in case of non-

communicable disease. These can happen due to poor state health policy, financial bottlenecks, huge discrimination, old age population and increase in the levels of chronic diseases. It is now mandatory to overcome the health care issues to improve socioeconomic status. Furthermore, postponement of needed medical care that delay to identify initial diagnosis, while late identification of the diagnosis is also associated with a huge loss of employment, low socioeconomic status and bad effect on mental health. The Primary Health Care which was set as the global priority of its function; to provide the basic

health intervention discussed in 1978 Alma-Ata declaration that was health for all, which means provision of health without any discrimination. But, unfortunately PHC is still not active in low and in Middle income countries. Pakistan lacks international standards and minimum measures behind the sustainable developmental goal (SDG), the poor health outcome that is due to increased flow of patients in the hospitals and institutional corruption. Pakistan has been recorded by the most corrupt (116th) country out of 176 in the world by the World Bank in international transparency record in 2016; it has been found that corruption is directly associated with poverty which has a negative impact on the health of poor income population [1-6]. The transgender population is significantly postponed needed medical care which is due to non-affordability. Thus the transgender population is facing big issues which are unemployment, and 36% of those who were employed whose monthly income was relatively low, reported suicidal attempts due to discrimination and low monthly income. Transgender women are paying huge financial cost for their needed medical treatment as compared to transgender men due to comparatively lower income [7-9]. The lower income plays an important role as a health barrier in the form of the prevention of screening test and other health care related checkup because the transgender population is also found affected by communicable diseases i.e. HIV and so on. Such positive patients are very vulnerable and pose a threat to the healthy population. Furthermore, various determinants of health including inequality in provision of health care, health insurance policy, employment status and public policy or lack of awareness among health care providers on transgender population related to the health issues. Moreover, it has been found that health insurance status and treatment cost directly effect on the health outcome [10-12]. Pakistan is a lower middle income country, a cross-sectional study found that those having low socioeconomic status had bad effect on their health and educational system i.e. malnourishment, poor diet, and lack of education. Another study found in kpk and Punjab with positive association between head and neck cancer patients and low socioeconomic status, thus it implies a psychological stress. According to UNDP, Pakistan is the 5th largest young country, while facing great challenges of unemployment and illiteracy rate, 68% of population is below 30 years of age but facing great challenges, but unfortunately 62.3% of the population cannot read and write [13-15]. It has been found that with income status seventy percent (70%) of the transgender population face poor quality of health care. Another study conducted in the Latin America showed that eight percent of the world population faces violence and inequality [16, 17]. The above mentioned reports found worldwide about inequalities in

access of health care treatment related to socioeconomic status. Therefore, the authors had decided to conduct the below analytical cross-sectional study in Karachi Pakistan. The aim of this study was to examine whether economic and educational status had an impact on the postponement of medical care or not.

METHODS

Analytical cross-sectional study was conducted, using purposive sampling technique. Data collected via questionnaire from 250 transgender participants, after a formal permission from Gender Interactive Alliance (G.I.A) a non-governmental organization (NGO) in Karachi, Pakistan from February, 2020 to May, 2020. Below 18 years of age and mentally retarded individuals were excluded from the study. The study followed strict ethical guidelines and received ethical approval (REC Ref No.Sc/EPH/S17-01) Dadabhoj Institute of Higher Education (DIHE) Karachi Pakistan. Data were analyzed on SPSS (version 21.0). We assessed the demographic data for the frequency distribution, mean and standard deviation. Furthermore, we applied the Chi-square test to examine the association between postponements of medical care and financial constraints.

RESULT

Table 1 showed that 250 transgender respondents participated with the mean age of 32.34 years (S.D=7.85). Based on their gender 204 (81.6%) males and 46 (18.4%) females' transgenders reported. Furthermore, based on their religion, 86.8% found Muslim; whereas 7.6% were Christian and 5.6% were Hindu. Moreover, 10.8% were Baloch, 15.2% were Pashtun, 24.8% were Punjabi, 24.8% were Sindhi, 21.6% were Muhajir (Urdu speaker), and 2.8% were others as identified by their ethnicity status of the participants. More than half (60.4%) of the participants belonged to the Sindh region, 18.0% were from Punjab, 13.6% from KPK, and 8.0% from Baluchistan province. Based on the educational and financial status, most of the Participants educational level (42.8%) was primary, whereas 18.4% had middle school education, 20.4% had matriculation experience, 6.4% had intermediate education, 3.2% had a Bachelor's Degree, 0.8% had a Master's Degree, 0.8% had a Professional degree, and 7.2% were uneducated. The monthly income identified as, 2.0% earning less than 10000 PKR, whereas 14.0% earned between 11000 to 20000 PKR, 34.4% earned between 21000 to 30000 PKR, 38.8% earned between 31000 to 40000 PKR, 10.4% earned between 41000 to 50000 PKR, and 0.4% earned between 51000 to 60000 PKR. Regarding the participants living status, half (50.0%) were homeless, 33.6% were living in a shelter, 2.0% were living in university housing, 4.4% were still living with their parents, and 10.0%

were staying with friends temporarily.

Demographic characteristics		
1	Mean age of the respondents in years	32.34+7.858
What is your current Gender		
	Transgender Man	204 (81.6%)
	Transgender Woman	46 (18.4%)
Religion of the participants		
	Muslim	217 (86.8%)
	Christian	19 (7.6%)
	Hindu	14 (5.6%)
Race / Ethnicity of the participants		
	Baloch	27 (10.8%)
	Pashtun	38 (15.2%)
	Panjabi	62 (24.8%)
	Sindhi	62 (24.8%)
	Muhajir (Urdu Speaker)	54 (21.6%)
	Others	7 (2.8%)
Province of the participants		
	Baluchistan	20 (8.0%)
	KPK	34 (13.6%)
	Punjab	45 (18.0%)
	Sindh	151 (60.4%)
Highest Degree or Level of education		
	Primary	107 (42.8%)
	Middle	46 (18.4%)
	Matriculation	51 (20.4%)
	Intermediate	16 (6.4%)
	Bachelor Degree	8 (3.2%)
	Master Degree	2 (0.8%)
	Professional Degree (MBBS, DVM, LLB)	2 (0.8%)
	Uneducated	18 (7.2%)
Current gross monthly household income (before taxes)		
	Less than 10000 PKR	5 (2.0%)
	11000 to 20000 PKR	35 (14.0%)
	21000 to 30000 PKR	86 (34.4%)
	31000 to 40000 PKR	97 (38.8%)
	41000 to 50000 PKR	26 (10.4%)
	51000 to 60000 PKR	1 (0.4%)
Current living arrangement		
	Homelessness	125 (50.0%)
	Living in a shelter	84 (33.6%)
	Living in a campus or university housing	5 (2.0%)
	Still living with parents or family you grew up with	11 (4.4%)
	Staying with friends or family temporarily	25 (10.0%)

Table 1: Demographic characteristics of transgender

Analysis of the Chi square result showed (Table 2) that transgender respondents who belonged from the Sindh province of the country ($p < 0.001$) has significantly postponed or not to get medical care. Furthermore, 55% (17.5% had Primary, 37.5% Middle) had the education below matriculation ($p = 0.001$). Moreover, monthly income of the participants had between 21000 to 30000 PKR ($p = 0.002$). Finally, half (50%) of the transgender population had homeless and postponed or not to get medical care,

because they couldn't afford ($p < 0.001$).

	Name of the Variable	Postponed or not tried to get medical care when I was sick or injured because I didn't afford it.		p-Value
		Yes	No	
1 What is your current gender identity				
	Transgender Man	37 (92.5%)	167 (79.5%)	0.052
	Transgender Woman	3 (7.5%)	43 (20.5%)	
2 What is your religion				
	Muslim	33 (82.5%)	184 (87.6%)	0.441
	Christian	5 (12.5%)	14 (6.7%)	
	Hindu	2 (5%)	12 (5.7%)	
3 What is your race/ethnicity?				
	Baloch	4 (10%)	23 (11%)	0.752
	Pashtun	6 (15%)	32 (15.2%)	
	Panjabi	13 (32.5%)	49 (23.3%)	
	Sindhi	9 (22.5%)	53 (25.2%)	
	Muhajir (Urdu Speaker)	8 (20%)	46 (21.9%)	
	Others	0 (0%)	7 (3.3%)	
4 Which of the following is your province?				
	Baluchistan	0 (0%)	20 (9.5%)	<0.001
	KPK	2 (5%)	32 (15.2%)	
	Punjab	1 (2.5%)	44 (21%)	
	Sindh	37 (92.5%)	114 (54.3%)	
5 What is the highest degree or level of education you have completed?				
	Primary	7 (17.5%)	100 (47.6%)	0.001
	Middle	15 (37.5%)	31 (14.8%)	
	Matriculation	14 (35.0%)	37 (17.6%)	
	Intermediate	2 (5.0%)	14 (6.7%)	
	Bachelor Degree	0 (0.0%)	8 (3.8%)	
	Master Degree	0 (0.0%)	2 (1.0%)	
	Professional degree	0 (0.0%)	2 (1.0%)	
	Uneducated	2 (5.0%)	16 (7.6%)	
6 What is your gross monthly income in PKR (Before Taxes)?				
	Less than 10000 PKR	0 (0.0%)	5 (2.4%)	0.002
	11000 to 20000 PKR	6 (15.0%)	29 (13.8%)	
	21000 to 30000 PKR	25 (62.5%)	61 (29.0%)	
	31000 to 40000 PKR	8 (20.0%)	89 (42.4%)	
	41000 to 50000 PKR	1 (2.5%)	25 (11.9%)	
	51000 to 60000 PKR	0 (0.0%)	1 (0.5%)	
7 What is your current living arrangements?				
	Homeless	20 (50%)	105 (50%)	<0.001
	Living in a shelter	8 (20%)	76 (36.2%)	
	Living in campus or university housing	1 (2.5%)	4 (1.9%)	
	Still living with parents or family you grew up	8 (20%)	3 (1.4%)	
	Staying with friends or family or temporarily	3 (7.5%)	22 (10.5%)	

Table 2: Analysis of the Chi square result

DISCUSSION

In the present study, we examined the association between financial constraints and postponements of needed medical care. Half (50%) of them who had an education

below matriculation (17.5% had Primary, 37.5% Middle) were significantly more likely to postponed or not to get needed medical care because they couldn't afford it ($X^2 p= 0.001$). Furthermore, based on monthly income, more than half (62.5%) of the study population gross monthly income had between 21000 to 30000 rupees before income taxes ($X^2 p= 0.002$), were significantly more likely postponed needed medical care. Moreover, similarly a previous study has reported that financial barrier is the main factor of postponement of medical care among transgender population. Whereas, another study reported that the socioeconomic factor such as education, parental education and income has a significant effect on brain cognitive [16, 17]. In addition to that, another study has been found in which low income population is significantly associated in postponement of needed medical care because low income population cannot afford needed medical care, therefore they face more complication and low recovery from the diseases. While in the previous research study similarly report found that 51% of the transgender population reported with low socioeconomic status. Delayed in needed medical care found a very significantly association between those populations who were facing financial issue. Finally, another previous study showed a positive association between low income and educational status and postponement of medical treatment among cancer patients [18-20].

CONCLUSIONS

The current study suggests a significant association between postponements of medical care and financial constraints. Immense need of increasing educational and employment status, making strong policy and ensuring early diagnosis and cure by applying an efficient surveillance system. Further studies are needed to shed light on the struggles.

Conflicts of Interest

The authors declare no conflict of interest.

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REFERENCES

- [1] Kushmatova DE and Khakimova HK. Current perspectives on the subject of public health and health care. *World Bulletin of Public Health*. 2022 Jan; 6: 51-3.
- [2] Thirarattanasunthon P, Wongrith P, Dadras O, Kabmuangpak S. The Determinants of Treatment Delay and Quality of Life among the Newly Diagnosed Pulmonary Tuberculosis Patients in Northeastern Thailand: A Cross-Sectional Study. *Infectious Disorders Drug Targets*. 2022 Aug.
- [3] Hanson K, Brikci N, Erlangga D, Alebachew A, De Allegri M, Balabanova D, et al. The Lancet Global Health Commission on financing primary health care: putting people at the centre. *The Lancet Global Health*. 2022 May; 10(5): e715-72. doi: 10.1016/S2214-109X(22)00005-5
- [4] Abbas HS, Xu X, Sun C. The role of state capacity and socio-economic determinants on health quality and its access in Pakistan (1990-2019). *Socio-Economic Planning Sciences*. 2022 Oct; 83: 101109. doi: [10.1016/j.seps.2021.101109](https://doi.org/10.1016/j.seps.2021.101109)
- [5] Bukhari SJ, Cheema AR, Shah SZ. Investigating the Impact of Corruption on Poverty in Pakistan. *Journal of Business and Social Review in Emerging Economies*. 2022 Jun; 8(2): 521-30. doi: [10.26710/jbsee.v8i2.2354](https://doi.org/10.26710/jbsee.v8i2.2354)
- [6] Safer JD, Coleman E, Feldman J, Garofalo R, Hembree W, Radix A, et al. Barriers to health care for transgender individuals. *Current opinion in endocrinology, diabetes, and obesity*. 2016 Apr; 23(2): 168-71. doi: [10.1097/MED.0000000000000227](https://doi.org/10.1097/MED.0000000000000227)
- [7] Ali A, Khan SA, Zeb S, Munir Z, Ali TS. Association Between Suicidal Attempts in Connection to Discrimination Among Trans Genders: suicidal attempts in connection to discrimination among trans genders. *Pakistan Journal of Health Sciences*. 2022 Sep; 159-64. doi: [10.54393/pjhs.v3i04.123](https://doi.org/10.54393/pjhs.v3i04.123)
- [8] Gavulic KA and Gonzales G. Health care expenditures and financial burden: A comparison of adults in same-sex couples and different-sex couples. *Medical Care Research and Review*. 2022 Apr; 79(2): 281-9. doi: [10.1177/10775587211004308](https://doi.org/10.1177/10775587211004308)
- [9] Gonzales G and Henning-Smith CA. Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly*. 2017 Dec; 95(4): 726-48. doi: [10.1111/1468-0009.12297](https://doi.org/10.1111/1468-0009.12297)
- [10] Poteat T and Simmons A. Intersectional Structural Stigma, Community Priorities, and Opportunities for Transgender Health Equity: Findings from transforming the Carolinas. *Journal of Law, Medicine & Ethics*. 2022; 50(3): 443-55. doi: [10.1017/jme.2022.86](https://doi.org/10.1017/jme.2022.86)
- [11] Lerner JE, Martin JI, Gorsky GS. To go or not to go: factors that influence health care use among trans adults in a non-representative US sample. *Archives of Sexual Behavior*. 2022 May; 51(4): 1913-25. doi: [10.1007/s10508-022-02302-x](https://doi.org/10.1007/s10508-022-02302-x)
- [12] Valdez R, Aarabi G, Spinler K, Walther C, Kofahl C, Buczak-Stec E, et al. Do postponed dental visits for financial reasons reduce quality of life? Evidence from the Survey of Health, Ageing and Retirement in

- Europe. *Aging clinical and experimental research*. 2021 Feb; 33(2): 437-42. doi: [10.1007/s40520-020-01536-w](https://doi.org/10.1007/s40520-020-01536-w)
- [13] Saleem J, Zakar R, Aadil RM, Butt MS, Mushtaq F, Bukhari GM, et al. Determinants of wasting, stunting, and undernutrition among children under five years: Cross-sectional study in southern Punjab, Pakistan. *medRxiv*. 2023: 2023-01. doi: [10.1101/2023.01.04.23284177](https://doi.org/10.1101/2023.01.04.23284177)
- [14] Khan L, Rafiq M, Shah SZ. The Household Economic Burden Of Head And Neck Cancer Patients In Peshawar, Pakistan. *Pakistan Journal of Social Research*. 2023 Mar; 5(1): 369-80. doi: [10.52567/pjsr.v5i01.870](https://doi.org/10.52567/pjsr.v5i01.870)
- [15] Idris S. Youth Development in Pakistan. In *Leadership Perspectives on Effective Intergenerational Communication and Management*. 2023: 166-86 doi: [10.4018/978-1-6684-6140-2.ch010](https://doi.org/10.4018/978-1-6684-6140-2.ch010)
- [16] Manzoor I, Khan ZH, Tariq R, Shahzad R. Health problems & barriers to healthcare services for the transgender community in Lahore, Pakistan. *Pakistan Journal of Medical Sciences*. 2022 Jan; 38(1): 138-44. doi: [10.12669/pjms.38.1.4375](https://doi.org/10.12669/pjms.38.1.4375)
- [17] Czepielewski LS, Allende LM, Castañeda CP, Castro M, Guinjoan SM, Massuda R, et al. Effects of socioeconomic status in cognition of people with schizophrenia: results from a Latin American collaboration network with 1175 subjects. *Psychological medicine*. 2022 Aug; 52(11): 2177-88. doi: [10.1017/S0033291721002403](https://doi.org/10.1017/S0033291721002403)
- [18] Chen YS, Zhou ZN, Glynn SM, Frey MK, Balogun OD, Kanis M, et al. Financial toxicity, mental health, and gynecologic cancer treatment: The effect of the COVID-19 pandemic among low-income women in New York City. *Cancer*. 2021 Jul; 127(14): 2399-408. doi: [10.1002/cncr.33537](https://doi.org/10.1002/cncr.33537)
- [19] Zhuang T, Eppler SL, Shapiro LM, Roe AK, Yao J, Kamal RN. Financial Distress Is Associated With Delay in Seeking Care for Hand Conditions. *HAND*. 2021 Jul; 16(4): 511-8. doi: [10.1177/1558944719866889](https://doi.org/10.1177/1558944719866889)
- [20] Wang N, Cao F, Liu F, Jia Y, Wang J, Bao C, et al. The effect of socioeconomic status on health-care delay and treatment of esophageal cancer. *Journal of translational medicine*. 2015 Dec; 13(1): 1-5. doi: [10.1186/s12967-015-0579-9](https://doi.org/10.1186/s12967-015-0579-9)