## ORIGINAL ARTICLE

# Gender Disparities of Youths in Trust on Health Management System during Post-COVID-19 in Bangladesh

# Disparidades de gênero de jovens na confiança em sistemas de gestão de saúde durante o período pós-COVID-19 em Bangladesh

Md. Harunur Rashid<sup>1</sup>, Abdul Muyeed<sup>2</sup>, Maruf Hasan Rumi<sup>3</sup>, Habiba Akter<sup>4</sup>

1. Department of Public Administration and Governance Studies, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh-2224, Bangladesh. 2. Department of Statistics, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh-2224. 3. Department of Public Administration, University of Dhaka. 4. Department of Statistics, Begum Rokeya University, Rangpur-5404

# **Abstract**

**Objective:** The purpose of this paper is to find out the gender-based disparities in trust in the public health measures taken in Bangladesh during the post-COVID-19 pandemic. **Methods:** A cross-sectional study design and quantitative research approach were used to collect primary data. A total of 742 students from different socioeconomic backgrounds participated in the survey randomly by filling up a structured questionnaire from 15 June 2022 to 10 July 2022. The Wilks'  $\lambda$  statistic, MANOVA, and Regression analysis were performed in this study to find out the gender-based differences in trust in the public health measures taken in Bangladesh during the post-COVID-19 pandemic. **Results:** In a multivariate test, the p-value is 0.018 (p-0.05), which implies a significant difference between the trust of males and females among youths about public health measures during the post-COVID-19 pandemic in Bangladesh. This study provides that overall infrastructure, responsiveness, and attachments have a significant correlation with youth trust as all the p-values < 0.001. **Conclusions:** Health infrastructure and youths' attachment to the various networks and institutions have more impact on determining the level of trust in government health measures during the post-pandemic than the way of government responsiveness; policymakers and advocates will get significant insight from the findings of the study during post-COVID-19. Without gender-sensitive health policy measures, gaining citizens' trust in the government will be difficult.

Keywords: gender difference; health policy; COVID-19; youth; health management; Bangladesh; public policy.

## Resumo

**Objetivo**: descobrir as disparidades de confiança baseadas em gênero nas medidas de saúde pública tomadas em Bangladesh, durante a pandemia pós-COVID-19. **Métodos**: um desenho de estudo transversal e abordagem de pesquisa quantitativa foram usados para coletar dados primários. Um total de 742 estudantes de diferentes origens socioeconômicas participaram da pesquisa aleatoriamente, preenchendo um questionário estruturado de 15 de junho de 2022 a 10 de julho de 2022. A estatística λ de Wilks, MANOVA e a análise de regressão foram realizadas neste estudo para descobrir o sexo-diferenças baseadas na confiança nas medidas de saúde pública tomadas em Bangladesh, durante a pandemia pós-COVID-19. **Resultados**: em um teste multivariado, o p-valor é 0,018 (p<0.05), o que implica uma diferença significativa entre a confiança de homens e mulheres entre jovens sobre medidas de saúde pública durante a pandemia pós-COVID-19 em Bangladesh. Este estudo fornece que a infraestrutura geral, a capacidade de resposta e os vínculos têm uma correlação significativa com a confiança dos jovens, pois todos os valores de p < 0.001. **Conclusões**: a infraestrutura de saúde e o vínculo dos jovens às várias redes e instituições têm mais impacto na determinação do nível de confiança nas medidas governamentais de saúde durante o pós-pandemia do que na forma de resposta do governo; os formuladores de políticas e defensores obterão uma visão significativa das descobertas do estudo durante o período pós-COVID-19. Sem medidas de política de saúde sensíveis ao gênero, será difícil ganhar a confiança dos cidadãos para o governo.

Palavras-Chave: diferença de gênero; política de saúde; COVID-19; juventude; gestão em saúde; Bangladesh; políticas públicas.

## **INTRODUCTION**

The novel coronavirus SARS-CoV-2, which was initially identified in Wuhan, China, in December 2019, is liable for the global pandemic known as COVID-19, which has caused extensive disease, fatalities, and economic damage globally<sup>1</sup>. The virus caused a variety of symptoms, from mild illness to severe illness, and spread mostly through respiratory droplets. To slow the spread of the virus and ease the strain on healthcare systems, public health measures like immunization, wearing masks, and social isolation have been put in place. According to a study

that was published in The Lancet Respiratory Medicine, onethird of people who had recovered from COVID-19 reported continuing symptoms, including weariness, shortness of breath, and brain fog, up to six months after their initial infection<sup>2</sup>. Even six months after the initial infection, another study that was published in the journal Nature discovered signs of persistent lung damage in people who had recovered from severe COVID-19<sup>3</sup>. These results highlight the necessity for further study into the long-term health impacts of COVID-19 as well as

Correspondence: Abdul Muyeed. E-mail: amuyeed@isrt.ac.bd

Conflict of interesse: There is no conflict of interest on the part of any of the authors.

Received: 2023 May 24; Revised: 2023 Sep 13; Accepted: 2023 Sep 18

the significance of ongoing monitoring and care for patients who have recovered from the illness. Following recommendations from public health officials, such as routine handwashing, wearing masks, avoiding crowded places, and staying home while ill, are the most effective strategies to stop the spread of COVID-19. Worldwide distribution of COVID-19 vaccines has already begun, and continued research is being done to better understand the virus and its effects on public health. Less than half of the participants in a COVID-19 vaccination study in Bangladesh reported experiencing at least one adverse effect, and the most common ones were injection-site pain, fever, headaches, redness/swelling at the injection site, and lethargy, according to Mohsin, Md, et al. (2022)4. The global economy and global healthcare systems have been hampered by COVID-19. COVID-19 had a significant impact on economic indices such as GDP growth, supply chain, international business and investment, remittance, and employment<sup>5</sup>.

Youths in Bangladesh are a crucial demographic for understanding trust in health management systems, as they represent a substantial proportion of the population. COVID-19 inflates gender inequalities in various social, economic, and healthcare aspects and unforeseen challenges to the global health system<sup>6</sup>. Muyeed et al., 2021 found that the daily highest CFR country was Bangladesh among the SAARC-affiliated countries, followed by Afghanistan, India, Sri Lanka, Pakistan, Nepal, and the Maldives according to the maximum CFR of the nations until 24 October 20207. Global data indicate higher COVID-19 case fatality rates among men than women. These findings are surprising since global data have indicated that both biological factors (more robust immune responses) and behavioral risk factors (e.g., smoking and other lifestyle habits) place men at a greater risk for health complications and death as a consequence of COVID-198. Evidence of gender differences in COVID-19 severity emerged also in China and the United States9.

Although a consistent feature of the COVID-19 pandemic is the male bias towards severe disease<sup>9-10</sup>, by means of establishing a health management system, the nation has been able to foster gender equality and young trust regarding the health care systems. Working on developing resilient systems against infectious diseases should be one of the top priorities of any country. Though the Government of Bangladesh took many initiatives to control COVID-19 transmission in Bangladesh from very early when it first prevailed in Wuhan city in China, at one point on March 8, 2020, it prevailed in Bangladesh<sup>11</sup>. To control the widespread transmission of this deadly virus, vaccination is now the most effective way. The global acceptance rate of taking vaccines among the general population and healthcare workers was surprisingly lower (54.43 percent) after vaccine approval worldwide compared to the acceptance rate (65.53 percent) before the approval of the vaccine<sup>12</sup>.

During the first wave of the COVID-19 pandemic in Bangladesh, the male sex was more prone to be infected and die than

females. The sex-wise prevalence of infection by a novel coronavirus in Bangladesh during the first wave was 68 percent male and 32 percent female, respectively, as of 9 May 2020<sup>13</sup>. The sex ratio of deaths in Bangladesh was 364.23 percent due to COVID-19 infections as of 29 August 202014. COVID-19 community transmission and death tolls were burning issues in Bangladesh. That is why men's and women's trust in the health management system in Bangladesh is mandatory to get rid of the critical COVID-19 situation. COVID-19 has had a significant impact on the health system of Bangladesh, and the country has been experiencing various challenges in managing the pandemic. As the pandemic continues to affect people's health and livelihood, understanding the trust issues related to health management systems is crucial. The gender-based differences in trust in healthcare services may exist among youths, leading to disparities in accessing and utilizing health services. However, there is a significant gap in research on gender disparities in trust in health management systems during post-COVID-19 in Bangladesh, particularly among youths. Therefore, understanding the gender-based differences in trust in health management systems during post-COVID-19 among youth is essential for designing effective interventions and policies to ensure equitable access to healthcare services. The objective of this study is to explore gender disparities in trust in health management systems during post-COVID-19 among youths in Bangladesh.

#### **METHODS**

This study was conducted during the post-COVID-19 pandemic among the youth population studying in tertiary-level educational institutions all around Bangladesh. The study period was from 15 June 2022 to 10 July 2022. The study followed a cross-sectional study design and quantitative approach. From different typologies of quantitative approaches, a survey research design was developed to collect data on youth's trust in public health measures in the post-COVID-19 period, with a specific focus on gender.

Data is gathered from both primary and secondary sources. Keeping the pandemic situation in mind, the researchers used an online survey technique to collect the preliminary data from the field using a convenient sampling technique. Respondents were reached through large and popular social media like Facebook, Messenger, and WhatsApp groups of university students. A total of 742 students from different socioeconomic backgrounds participated in the survey randomly by filling up a structured questionnaire designed in Google form. The questionnaire was translated into Bangla after its initial development to get better output from the respondents. A face reliability test was also conducted to test the validity of the questionnaire before making the questionnaire final. Secondary data was collected from reputed journals, government and international NGO reports, and other reliable sources.

There were two segments in the questionnaire. The first

part dealt with the respondents' profile, whereas the second part focused on measuring the trust of the youth in public health measures post-COVID-19 pandemic in Bangladesh. Researchers developed an analytical framework after studying extensively the existing literature on trust and public health measures worldwide. They came up with a model with one dependent variable (trust) and three independent variables (infrastructure, responsiveness, and attachment of the youth to the networks). Here, infrastructure signifies the physical condition of public hospitals, laboratories, and other tangible things. Responsiveness is defined by public medical centers' promptness to provide quality services, including policy instruments. The attachment of youths to the networks is defined as young people's connection with the various media, social and institutional networks, and social values. Rumi et al. (2021) found a significant relationship between infrastructure, the responsiveness of government health measures at the Upazila level in Bangladesh, and citizens' satisfaction<sup>15</sup>. The attainment of sustainable trust in the government relies on the contentment of the people and the successful implementation of policies that are both efficient and effective. Irfan (2017) and Grootaert et al. (2004) added a new dimension called attachment to network in institutionalizing trust and establishing productive relations with public institutions<sup>16-17</sup>. A total of 10 questions were developed in the questionnaire, where each independent variable consists of 3 questions and the dependent variable consists of 1 question. Responses were categorized on five-points Likert scale.

Collected data was chronologically ordered and tabulated correctly before making an analysis. The internal consistency of the questionnaire was checked, and the Cronbach alpha score was 0.729. It passed the guideline of Nunnally (1978) and denoted the questionnaire was consistent and coherent for the study<sup>18</sup>. Significant differences in trust between the male and female respondents on public health measures were demonstrated by multivariate analysis of variance (MANOVA)<sup>19</sup>. The importance of each independent variable with the dependent variable and how they discriminate between males and females in trusting government measures were evaluated by 2-group discriminant analysis<sup>20</sup>. To avoid type-I errors, both these analyses were conducted. Moreover, regression analysis was conducted to explore how variation in the independent variables can affect youth trust in the future<sup>21</sup>. All these analyses were performed using Statistical Package for Social Science (version 25).

Ethical approval was taken from the institutional review board of the Department of Public Administration and Governance Studies, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh, Bangladesh. Consent was taken from the respondents before collecting data in the Google form, and no sensitive information was asked during the whole data collection process. They were given the liberty to leave blank or withdraw their statement whenever they felt appropriate.

#### **RESULTS**

Only 25.6% of respondents were female, whereas the bulk of respondents (74.4%) were male, according to demographic data. 80.5% of them were from public universities, while 5.7% and 12.8% were from National Universities and Private Universities. Regarding the urban-rural dividend, the respondents were roughly evenly divided. Table 1 indicates the descriptive statistics of the factors of youth trust by gender. The mean of male youths of responsiveness, infrastructure, and attachments are more significant than the means of the female youths. The male respondents have a more positive perception of the government and believe that public health measures can help in tackling the COVID-19 pandemic situation in Bangladesh.

Table 1. Descriptive statistics of youth trust by gender

Gender		Mean	Standard Deviation
Infrastructure	Male	6.93	2.408
	Female	6.50	2.447
	Overall	6.61	2.442
Responsiveness	Male	6.66	2.446
	Female	6.45	2.694
	Overall	6.50	2.633
Attachments	Male	10.63	1.952
	Female	10.52	2.293
	Overall	10.54	2.210

Box test reveals that, since the P-value is 0.012 (p<0.05), the covariance among the groups is not the same. In a multivariate test, the P-value is 0.018 (p<0.05), which indicates there is a significant difference between the trust of male and female youths about public health measures during the post-COVID-19 pandemic in Bangladesh.

Table 2. MANOVA tests of group differences between male and female: multivariate and univariate tests

Variables	F-ratio	P-value
Infrastructure	2.569	0.109
Responsiveness	0.045	0.338
Attachments	5.425	0.020

From Table 2, it is seen that gender has a statistically significant effect on attachments (p<0.05) but has no significant impact on responsiveness (p>0.05) and infrastructure (p>0.05). To avoid type-I error and validate the finding of the MANOVA test, the discriminant function for male and female youths was estimated. The canonical correlation connected with this function is 0.116. The square of the canonical correlation is 0.0135, which indicates that 1.35 percent of the variation in gender group is explained by the selected model. The Wilks  $\lambda$  statistic is used to test the significance of the function. The value of Wilks'  $\lambda$  is found 0.986, which transforms to a chisquare of 10.058 with 3 degrees of freedom with a P-value of 0.018 (p<0.05). The result indicates that the model is significant and explains the youth trust in public health measures during the post-COVID-19 pandemic in Bangladesh males and females.

Table 3. Discriminant analysis result of youth trust by gender

Variables	The Wilks' λ	P-value
Infrastructure	0.997	0.109
Responsiveness	1.000	0.833
Attachments	0.993	0.020*

Table 3 indicates the importance of youth's trust. The attachments are the most critical youth trust factor that discriminates between males and females. The infrastructure and responsiveness are not significant, which does not affect the discrimination.

Table 4. Classification result of UHC by gender

	Actual group Cases	Predicted group	
		Male	Female
Male	552	238(43.1%)	314(56.9%)
Female	190	95 (50%)	95(50%)

The percentage of group cases correctly classified is 57.3%.

Table 4 indicates the classification result of the prediction of the model. About 57.3 percent of cases are correctly classified. Malhotra (1996) suggested that the classification accuracy achieved by discriminant analysis should be approximately greater than 25 percent that was obtained by chance, so the model seems to have good predictive power.

The basic regression model of the trust of youth in the health management system is Youth trust level

= $\alpha$ + $\beta_1$ × Infrastructure +  $\beta_2$ × Responsiveness +  $\beta_3$ × Attachments + Error

The mean and standard deviation of overall infrastructure, responsiveness, and attachments are 6.61 (2.44), 6.5 (2.63), and 10.54 (2.21), respectively. All three dimensions of overall infrastructure, responsiveness, and attachments have a significant correlation with youth trust as all the P-values < 0.001. The model for the sample is substantial at p<0.001 (F=77.005). The betas indicate that infrastructure and attachments are the most influential factors of the youth trust in the health management system in Bangladesh during the post-COVID-19 pandemic.

**Table 5.** Regression analysis results considering youth trust as the dependent variable

			95% Confidence interval of Beta	
Variables	Beta (Standard Error)	P-value	Lower Limit	Upper Limit
Constant	0.18 (0.194)	0.35	-0.201	0.561
Infrastructure	0.208 (0.022)	0.000***	0.056	0.144
Responsiveness	0.041 (0.021)	0.376	-0.022	0.059
Attachments	0.369 (0.018)	0.000***	0.162	0.231

#### **DISCUSSION**

This study endeavors to examine the disparities in trust levels within health management systems among young individuals in Bangladesh subsequent to the COVID-19 pandemic, with a particular emphasis on gender-related discrepancies. The main aim is to scrutinize the potential variations in post-COVID-19 trust dynamics in health systems between male and female youths in Bangladesh. All the developed and developing country has faced tremendous economic loss and severe health injuries for their citizens during the COVID-19 pandemic period<sup>22</sup>. As there is no definite treatment for the COVID-19 disease, citizens become frightened, and every day, a massive number of COVID-19 patients are dying without any treatment. The mental health conditions of people are getting worse day by day, and the mental health of healthcare workers is degrading over time during the post-COVID-19 pandemic. The pooled prevalence of mental health disorders among the front-liners was increasing over time, and the prevalence of psychological morbidities varied across nations during the COVID-19 pandemic<sup>23</sup>. Additionally, compared to other times, the global prevalence estimates of mental health disorders among the general population during the COVID-19 pandemic were high<sup>24</sup>.

For a developing country like Bangladesh, the situation is much more critical than other nations. Citizens are not very educated and aware of the health hazards of COVID-19)22. These poor people live hand to mouth and do much hardship to support their families. They do not want to follow any kind of precautionary measures and believe in different superstitions to save themselves from the coronavirus<sup>25</sup>. Yet, the government is trying its best to tackle this situation by vaccinating people, upgrading public health infrastructure, restricting general movement through lockdown, providing stimulus packages for people in business and ultra-poor people, etc<sup>26</sup>. Closing schools, colleges, universities, and other educational institutions for the safety of the young population and holding public examinations during this pandemic period are considered significant government initiatives for safeguarding the youth from being affected by COVID-19.

As the young generation is considered to be the country's future, their perception and trust in government measures are

very important for the ruling regime and the democratization process of the country<sup>27</sup>. The study found that most youth populations were dissatisfied with the existing public health infrastructure and the government's mode of responsiveness. They expect much more from the government. Tasnim et al. (2021) also drew similar findings that public health infrastructure at the grassroots level is not sufficient for providing adequate treatment to low-income people. They believe they possess a weak attachment to the network connecting with the government<sup>28</sup>. Young people's voice is not reaching the top. The policy iron triangle controls the whole mechanism of the public policymaking process in Bangladesh, where only the dominant stakeholder's interests are served in the government's decision. The power distance between the ruling class and the general population is very high<sup>29</sup>. That is why a trust issue is seen among the females, as they do not have many representatives at the top of the governance structure.

Still, comparatively, males are more optimistic about the action of the government than the female respondents. In a masculine society like Bangladesh, females face more barriers in placing their demands and upholding justice. Their weak socioeconomic position is also an important reason for their non-participation in the policymaking process. Yet the result signifies that the government can redeem the young people's trust by improving the health infrastructure of the public hospitals by recruiting more doctors, installing upgraded diagnostic tools for better treatment, and building attachments with general people in planning and implementing public policies during this pandemic situation<sup>30</sup>.

### **CONCLUSION AND POLICY RECOMMENDATION**

The environment of trust in a country facilitates running smooth governance; youths' trust in government performance in tackling

COVID-19 is significant on many fronts to implement the health measures to confront the pandemic while nearly one-fifth of global populations are youth regarded them as the critical mass and important stakeholders in public policy. The study found gender differentiation in Bangladesh's government health responses to tackle the COVID-19 pandemic. However, both male and female youth folks showed discontent with the pandemic management of Bangladesh with respect to its preparation with existing infrastructure and manner of responsiveness with its policy instruments. Failure in government mechanisms in information management and complying indicators of good governance creates an environment of mistrust; has a consequential long-term negative impact on administration and pandemic management; offers citizens alternative sources of information-available networks, societal institutions, and values where youths are attached; the study explored. Whatever the meticulous health policies will have been taken to confront future pandemics, without gender-sensitive health policy measures, the effectiveness of those measures will be questioned, and gaining citizen trust in the government will be difficult. This study suggests gender-sensitive health policies and standards and argues for government initiatives to work on the societal sphere to increase citizen trust in government. Besides, addressing health governance issues and malaises will play a crucial role in confronting any health crisis in the coming days; so it needs to be fixed. The study recommends further in-depth gender-based studies on the impact of government health measures, whether in pandemic situations or not, to fill the existing literature gap.

#### **ACKNOWLEDGEMENTS**

We would like to acknowledge the youths who provided the data for this study.

#### REFERÊNCIAS

- 1. El Zowalaty ME, Järhult JD. From SARS to COVID-19: A previously unknown SARS-related coronavirus (SARS-CoV-2) of pandemic potential infecting humans—Call for a One Health approach. One Health. 2020 Feb; 9: 100124. doi: 10.1016/j.onehlt.2020.100124.
- 2. Huang C, Huang L, Wang Y, Li X, Ren L, Gu X, et al. 6-month consequences of COVID-19 in patients discharged from hospital: a cohort study. Lancet. 2021 Jan; 397(10270): 220-232. doi: 10.1016/S0140-6736(20)32656-8.
- 3. Carfi A, Bernabei, R, Landi F. Persistent symptoms in patients after acute COVID-19. Jama. 2020 Aug; 324(6): 603-605. doi: 10.1001/jama.2020.12603.
- 4. Mohsin M, Mahmud S, Mian AU, Hasan P, Muyeed A, Ali MT, et al. Side effects of COVID-19 vaccines and perceptions about COVID-19 and its vaccines in Bangladesh: A Cross-sectional study. Vaccine: X. 2022 Dec; 12: 100207.
- 5. Islam MR, Muyeed A. Impacts of COVID-19 pandemic on global economy: A meta-analysis approach. Int J Tech Res Science. 2020 May; 5(5): 8-19. doi: 10.30780/IJTRS.V05.I05.002.
- 6. Burki T. The indirect impact of COVID-19 on women. Lancet Infect Dis. 2020Aug; 20(8): 904-905. doi: 10.1016/S1473-3099(20)30568-5.
- 7. Saha TK, Muyeed A, Shaharin R, Prodhan UK. The Prevalence and Severity

- Comparison of COVID-19 Disease in SAARC Affiliated Countries: Pattern Analysis during the First Wave in 2020. J Health Biol Sci. 2021; 9(1):1-7. doi: http://dx.doi.org/10.12662/2317-3076jhbs.v9i1.3679.p1-7.2021.
- 8. Bwire GM. Coronavirus: why men are more vulnerable to Covid-19 than women?. SN Compr Clin Med, 2(7): 874-876. doi: 10.1007/s42399-020-00341-w.
- 9. Scully EP, Haverfield J, Ursin RL, Tannenbaum C, Klein SL. Considering how biological sex impacts immune responses and COVID-19 outcomes. Nat Rev Immunol. 2020 Jul; 20(7): 442-447. doi: 10.1038/s41577-020-0348-8.
- 10. Peckham H, Gruijter NM, Raine C, Radziszewska A, Ciurtin C, Wedderburn LR, et al. Male sex identified by global COVID-19 meta-analysis as a risk factor for death and ITU admission. Nat Commun. 2020 Dec; 11(1): 6317. doi: 10.1038/s41467-020-19741-6.
- 11. Islam, K., Ali, S., Akanda, S. Z. R., Rahman, S., Kamruzzaman, A. H. M., Pavel, S. A. K., & Baki, J. (2020). COVID-19 Pandemic and Level of Responses in Bangladesh. Int J Rare Dis Disord. 2020; 3: 19. doi.org/10.23937/2643-4571/1710019.
- 12. Mahmud S, Mohsin M, Hossain S, Islam MM, Muyeed A. The acceptance of COVID-19 vaccine at early stage of development and approval: A global

## 6 Gender Disparities of Youths in Trust on Health Management Systems in Bangladesh

systematic review and meta-analysis. Heliyon. 2022 Sep; 8(9): e10728. doi: 10.1016/j.heliyon.2022.e10728.

- 13. Muyeed A, Siddiqi NA, Tawabunnahar M. Prevalence and Severity of COVID-19 Disease in Bangladesh: A Trend Analysis . J Health Biol Sci. 2020 J; 8(1):1-8. doi: http://dx.doi.org/10.12662/2317-3076jhbs.v8i1.3285.p1-8.2020.
- 14. Muyeed A, Siddiqi MNA, Saha TK, Goni MA. Infection and Death Patterns of COVID-19 Disease in Bangladesh. J Health Biol Sci. 2020 J; 8(1):1-7. doi: http://dx.doi.org/10.12662/2317-3076jhbs.v8i1.3533.p1-7.2020.
- 15. Rumi MH, Makhdum N, Rashid MH, Muyeed A. Gender Differences in Service Quality of Upazila Health Complex in Bangladesh. J Patient Exp. 2021 Apr; 8: 23743735211008304.
- 16. Irfan M.I.M. Citizens' Trust in Public Institutions in Sri Lanka and Bangladesh: A Comparative Study. master's thesis. North South University. 2017. http://www.northsouth.edu/sipg/graduate-thesis.html.
- 17. Grootaert, C., Narayan, D., Jones, V. N., & Woolcock, M. (2004). Measuring Social Capital: An Intergrated Questionnaire". World Bank Working Paper No. 18. Washington DC: The World Bank.
- 18. Nunnally JC. Psychometric Theory. 2nd ed. Mcgraw hill book company; 1978.
- 19. Warne RT. A primer on multivariate analysis of variance (MANOVA) for behavioral scientists. Practical Assessment, Research & Evaluation. 2014 Nov 1;19.
- 20. Darden, W. R., & Perreault Jr, W. D. A multivariate analysis of media exposure and vacation behavior with life style covariates. J Con Res. 1975 Sep; 2(2): 93-103.
- 21. Sarstedt M, Mooi E. A concise guide to market research. The Process, Data, and Methods Using IBM SPSS Statistics. 2nd . ed. Springer; 2014.
- 22. Bodrud-Doza, M., Shammi, M., Bahlman, L., Islam, A. R. M., & Rahman, M. (2020). Psychosocial and socio-economic crisis in Bangladesh due to COVID-19

- pandemic: a perception-based assessment. Front Public Health. 2020 Jun; 8: 341. doi: 10.3389/fpubh.2020.00341.
- 23. Mahmud S, Hossain S, Muyeed A, Islam MM, Mohsin M. The Global Prevalence of Depression, Anxiety, Stress, and, Insomnia and Its' Changes among Health Professionals during COVID-19 Pandemic: A Rapid Systematic Review and Meta-Analysis. Heliyon. 2021 Jul; 7(7): e07393. doi: 10.1016/j. heliyon.2021.e07393.
- 24. Anwar S, Nasrullah M, Hosen MJ. COVID-19 and Bangladesh: challenges and how to address them. Front Public Health. 2020 Apr; 8: 154. doi: 10.3389/fpubh.2020.00154.
- 25. Mahmud S, Mohsin M, Dewan MN, Muyeed A. The global prevalence of depression, anxiety, stress, and insomnia among general population during COVID-19 pandemic: A systematic review and meta-analysis. Trends in Psychol. 2023; 31(1): 143-170. doi: 10.1007/s43076-021-00116-9.
- 26. Chowdhury SR, Sunna TC, Das DC, Kabir H, Hossain A, Mahmud S, et al. Mental health symptoms among the nurses of Bangladesh during the COVID-19 pandemic. Middle East Curr Psychiatry. 28(1): 23.
- 27. Christensen T, Lægreid P. Trust in government: The relative importance of service satisfaction, political factors, and demography. Pub Perf Maneg Review. 2005 Jun; 28(4): 487-511.
- 28. Tasnim R, Sujan MSH, Islam MS, Ritu AH, Siddique MAB, Toma TY, et al. Prevalence and correlates of anxiety and depression in frontline healthcare workers treating people with COVID-19 in Bangladesh. BMC psychiatry, 2021 May; 21(1): 1-14.
- 29. Dutta B, Islam KM. Role of Culture in Decision Making Approach in Bangladesh: An Analysis from the Four Cultural Dimensions of Hofstede. Bangl e-j Soc. 2016 Jul; 13(2): 30-38.
- 30. Rumi MH, Makhdum N, Rashid MdH, Muyeed A. Patients' Satisfaction on the Service Quality of Upazila Health Complex in Bangladesh. J Patient Exp. 2021 Aug; 8: 23743735211034056. doi: 10.1177/23743735211034054.

#### How to cite this article/ Como citar este artigo:

Rashid H.M, Muyeed A, Rumi MH, Akter H. Gender Disparities of Youths in Trust on Health Management System during Post-COVID-19 in Bangladesh. J Health Biol Sci. 2023; 11(1):1-6.