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Absenteeism of Doctors in Public Healthcare Facilities in a District of Bangladesh

Nusrat Jahan Sony[1], Ayesha Afroz Chowdhury[2], Sarwar Mahboob[3]

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Absenteeism, doctor, public health facilities, factors, Bangladesh.

Abstract

***Background**: Absenteeism of doctors in health care facilities is a critical challenge. Poor retention of doctors in government healthcare facilities remains underexplored.* ***Objective:** The research aimed to explore reasons behind absenteeism of doctors in workplace and perceived mitigation measures.* ***Methods:** The cross sectional study extended from July 2024 to June 2025. A sample of 195 doctors were purposively selected from 1medical college, 1 district hospital and 7 upazilla health complexes in Noakhali district. Data were collected through face to face interview using pretested semi structured questionnaire. Ethical clearance from Institutional Review Board of Sir Salimullah Medical College and informed consent from participants were taken. Chi square test and logistic regression were done using the SPSS version 26.* ***Results:** Frequency of absenteeism among doctors was 22.6%. Logistic regression identified being male (OR=6.93, p=0.008) and having poor toilet facility (OR=32.30, p=0.003) increased absenteeism, while spouse working in same area (OR=0.023, p=0.005), safe workplace (OR=0.00, p=0.003), and presence of designated security guard (OR=0.345, p=0.034) reduced absenteeism.* ***Conclusion:** Conducive workplace ensuring workplace safety and family support, would contribute in mitigation of doctor's absenteeism in government health facilities. Strengthening the health system through infrastructure development, recruiting health workers, and building necessary support systems will improve efficiency in health system.*

Introduction:

Health workers who provide services to promote, restore, or maintain health in individuals and communities, are the backbone of any health organization. The benchmark for adequate health worker availability, set by WHO is around 44.5 per 10,000; in which most LMICs, including Bangladesh, fall significantly short[1,2]. In low- and middle-income nations worldwide, health workers' absenteeism rates range from 25 to 40%, with South Asia exhibiting some of the highest rates. Approximately 40% of doctors in Bangladesh are absent at any given time; in rural facilities with a single doctor, which varied up to 74%[3]. In Bangladesh, there are 53,977 doctors, of which 35 % work under the MOHFW. Tertiary level hospitals had about 75% of doctors, while primary level health facilities got 11%. Doctor population ratio in urban area was 1:1500 and in rural area was 1:15,000. Bangladesh health workforce strategy stated that about 40% of doctor's post were vacant throughout the country Out of total health workforce in government, about 40% of posts are vacant throughout the country[4]. The problem of health worker shortage is aggravated by absenteeism among them. The health worker absenteeism may be defined as absence from duties in the healthcare facility without taking a formal leave or not reporting to work for nonprofessional reasons[5].

1. MPH student, Department of Community Medicine and Public Health, Sir Salimullah Medical College, Dhaka, Bangladesh
2. Associate Professor, Department of Community Medicine and Public Health, Sir Salimullah Medical College, Dhaka, Bangladesh
3. Associate Professor, Community Medicine & Public Health, Sir salimullah Medical College, Dhaka, Bangladesh

Corresponding Author: Dr. Nusrat Jahan Sony, MPH student, Department of Community Medicine and Public Health, Sir Salimullah Medical College, Dhaka, Bangladesh. E-mail: njsony11@gmail.com

In Bangladesh, this issue is exacerbated by weak supervision, low incentives, and dual practice opportunities that divert doctors' time toward private chambers[3,6]. It disproportionately burdens the poor and exacerbates health disparities between rural and urban populations by causing treatment delays and rise in out-of-pocket expenses. Patients are therefore compelled to travel great distances to urban areas or depend on unlicensed, unofficial practitioners, which raises the potential of incorrect diagnosis, risky treatment methods, and unfavorable health results[7]. On the other hand, healthcare staff who remain present, absenteeism generates excessive workload, stress, and fatigue, contributing to burnout and declining service quality. Studies exploring the impact of poor infrastructure, security concerns, and career progression opportunities remain sparse, while institutional and policy-level drivers of absenteeism such as weak monitoring, regulatory failures, and inadequate incentives have been insufficiently examined[8,9].

Existing research seldom incorporated doctors' perspectives, such as the challenges they faced in rural postings, role of socio-economic factors, and personal factors influencing their attendance This study addressed the role of socio-economic, personal and workplace determinants of absenteeism among doctors, challenges in rural postings and identify measures to reduce absenteeism in government health facilities.

Methods:

A descriptive cross-sectional study was conducted from July 2024 to June 2025 among 195 doctors in Noakhali district, working in Noakhali Medical College, District Hospital, and seven Upazila Health Complexes.

Sylhet division has been reported to have the highest absenteeism rate, and several studies have already examined the contributing factors there [6,10]. For this reason, the present study was conducted in Chittagong division, which has the second-highest absenteeism rate but remains less explored in terms of its underlying causes. Chittagong division has 11 districts among them Noakhali was selected due to its high absenteeism rates, which is around 49% [4].

The district health system comprises one medical college hospital, one district hospital, and eight upazila health complexes. Among these eight health complexes data were successfully collected from seven upazilla health complex. However, the Hatiya Upazila Health Complex could not be included due to transportation and accessibility barriers, as the upazila is geographically isolated and requires long-distance water transport.

The Inclusion Criteria was Doctors who are working in government medical college hospital, district hospital and upazila health complexes in Noakhali for more than six months. Exclusion criteria was doctors who were not willing to participate.

In Noakhali there were around 300 posts for doctors, among them total number of posted doctors were less than 250[11].

Finally data were collected from 195 respondents by face to face interview, which took a maximum of 15-20 minutes each. A pre-tested semi-structured questionnaire was used covering socio-demographic, personal, family, workplace related factors and mitigation measures suggested by participants to reduce absenteeism.

Chi-square test followed by logistic regression were done to identify the strongest predictors of absenteeism after adjusting for other influencing factors. Statistical significance was set at $p < 0.05$. Data analysis was done using SPSS, 26 version. Data were anonymous and informed consent were taken from participants. Study protocol was approved by the Institutional Ethical Review committee of Sir Salimullah Medical College (SSMC), Dhaka.

Results:

Frequency of absenteeism among doctors was 22.6%. The findings showed that most of the respondents reported not taking any unapproved leave from their workplace, where majority indicated attending work for six days, and approximately one-third reported five working days per week.

The research revealed that younger doctors under 30 years (31.8%) and those over 50 years (31.8%) had higher absenteeism rates compared to those aged 30–50 years, and this difference was statistically significant ($\chi^2 = 26.566$, $p < 0.001$). Male doctors reported markedly higher absenteeism (86.4%) than females (13.6%), also showing a significant association (Fisher's exact test, $p < 0.001$).

Absenteeism varied by designation ($\chi^2 = 13.16$, $p = .004$), being most common among Medical Officers (54.5%) and Assistant Professors (37.8%), while Consultants and senior positions had lower rates.

Table I: *Relationship between family factors and absenteeism among respondents (N=195).*

Spouse Occupation	Absenteeism	Total		Significance	
	Yes	No		Chi Square	p-value
Government Doctor	5 (11.4%)	34 (22.5%)	39 (20.0%)	27.63	**<0.001***
Private Doctor	2 (4.5%)	29 (19.2%)	31 (15.9%)		
Housewife	12 (27.3%)	16 (10.6%)	28 (14.4%)		
Other Occupation	2 (4.5%)	18 (11.9%)	20 (10.3%)		
Other Govt. Job	20 (45.5%)	28 (18.5%)	48 (24.6%)		
Other Private Job	3 (6.8%)	26 (17.2%)	29 (14.9%)		
Spouse Workplace in Same Area					
Yes	5 (11.4%)	88 (58.3%)	93 (47.7%)	30.06^f	**<0.001***
No	39 (88.6%)	63 (41.7%)	102 (52.3%)		
Number of Children					
No Child	4 (9.1%)	19 (12.6%)	23 (11.8%)	10.78	**0.013***
One Child	15 (34.1%)	33 (21.9%)	48 (24.6%)		
Two Children	24 (54.5%)	66 (43.7%)	90 (46.2%)		
Three Children	1 (2.3%)	33 (21.9.6%)	34 (17.4%)		
Availability of Educational Opportunities for Children in the Area					
Yes	23 (52.3%)	108 (71.5%)	131 (67.2%)	5.72^f	**0.017***
No	21 (47.7%)	43 (28.5%)	64 (32.8%)		
Availability of Family Security					
Yes	23 (52.3%)	128 (84.8%)	151 (77.4%)	20.59^f	**<0.001***
No	21 (47.7%)	23 (15.2%)	44 (22.6%)		

Chi-square test has been performed; f denotes Fisher's exact test; *p-value <0.05 was considered as significant

Table I showed, Spouse occupation was strongly related ($\chi^2 = 27.63$, $p < 0.001$), absenteeism was markedly higher (Fisher's exact test, $p < 0.001$), when the spouse worked in a different area (88.6%) compared to the same area (11.4%). Number of children had a significant effect ($\chi^2 = 10.78$, $p = 0.013$), with absenteeism highest among those with two children (54.5%) and lowest among those with no children (9.1%). Availability of educational opportunities for children was associated with absenteeism (Fisher's exact test, $p = 0.017$), as doctors without such opportunities nearby reported higher absenteeism (47.7%). Family security were also significant (Fisher's exact test, $p < 0.001$), absenteeism was more common among those lacking such measures (47.7%).

Table II showed strong association with absenteeism with workplace-related factor such as facility location (Fisher's exact test, $p < 0.001$), with absenteeism more prevalent in rural postings (45.5%) compared to urban ones (54.5%). Hospital infrastructure ($\chi^2 = 34.30$, $p < 0.001$), and toilet facilities were highly significant ($\chi^2 = 29.20$, $p < 0.001$); absenteeism was more common with poorly maintained or common toilets. Transportation availability was also significant (Fisher's exact test, $p = 0.004$); 90.9% of those without regular transport reported absenteeism versus 9.1% among those with on-call emergency transport.

Table II: Relationship between variables related to workplace factors and absenteeism among respondents (N=195).

Location of facility	Absenteeism		Total	Significance	
	Yes	No		Chi Square	p-value
Urban	24 (54.5%)	127 (84.1%)	151 (77.4%)	17.04[f]	<0.001*
Rural	20 (45.5%)	24 (15.9%)	44 (22.6%)		
Posting in own district					
Yes	22 (50.0%)	99 (65.6%)	121 (62.1%)	3.50[f]	0.06
No	22 (50.0%)	52 (34.4%)	74 (37.9%)		
Infrastructure of hospital					
Excellent	2 (4.5%)	8 (5.3%)	10 (5.1%)	34.30	<0.001*
Good	4 (9.1%)	70 (46.4%)	74 (37.9%)		
Average	4 (9.1%)	29 (19.2%)	33 (16.9%)		
Poor	34 (77.3%)	44 (29.1%)	78 (40.0%)		
Suitable transportation facility					
Yes, only on call emergency	4 (9.1%)	46 (30.5%)	50 (25.6%)	8.16[f]	0.004*
No	40 (90.9%)	105 (69.5%)	145 (74.4%)		
Toilet Facilities					
Well maintained	4 (9.1%)	20 (13.2%)	24 (12.3%)	29.20	<0.001*
Poorly maintained	29 (65.9%)	118 (78.1%)	147 (75.4%)		
Common toilets	11 (25.0%)	3 (2.0%)	14 (7.2%)		
No dedicated toilet	0 (0.0%)	10 (6.6%)	10 (5.1%)		

Chi-square test has been performed; f denotes Fisher's exact test; *p-value <0.05 was considered as significant

Table III: Relationship between variables related to work environment and absenteeism (N=195).

Cooperation from colleagues	Absenteeism		Total	Significance	
	Yes	No		Chi Square	p-value
Yes	30 (68.2%)	145 (96.0%)	175 (89.7%)	28.70[f]	<0.001*
No	14 (31.8%)	6 (4.0%)	20 (10.3%)		
Workload in health facilities					
Manageable	3 (6.8%)	40 (26.5%)	43 (22.1%)	49.54	<0.001*
Occasionally overwhelming	1 (2.3%)	27 (17.9%)	28 (14.4%)		
Often Excessive	22 (50.0%)	78 (51.7%)	100 (51.3%)		
Unmanageable	18 (40.9%)	6 (4.0%)	24 (12.3%)		
Engage in private practice after hospital work					
Yes	28 (63.6%)	119 (78.8%)	147 (75.4%)	4.22[f]	0.040*
No	16 (36.4%)	32 (21.2%)	48 (24.6%)		
Job satisfaction					
Dissatisfied	19 (43.2%)	21 (13.9%)	40 (20.5%)	20.60[f]	<0.001*
Neutral	18 (40.9%)	71 (47.0%)	89 (45.6%)		
Satisfied	6 (13.6%)	38 (25.2%)	44 (22.6%)		
Extremely satisfied	1 (2.3%)	21 (13.9%)	22 (11.3%)		
Workplace Safety					
Somewhat Safe	12 (27.3%)	132 (87.4%)	144 (73.8%)	63.81[f]	<0.001*
Unsafe	32 (72.7%)	19 (12.6%)	51 (26.2%)		
Experienced violence or threats from patients or their relatives					
Rarely	20 (45.5)	27 (17.9)	47 (24.1)	17.32	<0.001*
Occasionally	21 (47.7)	83 (55.0)	104 (53.3)		
Frequently	3 (6.8)	41 (27.2)	44 (22.6)		
Designated security guard					
Yes	34 (77.3)	61 (40.4)	95 (48.7)	18.54	<0.001*
No	10 (22.7)	90 (59.6)	100 (51.3)		

Chi-square test has been performed; f denotes Fisher's exact test; *p-value <0.05 was considered as significant

Table III showed absenteeism was significantly associated with cooperation from colleagues (Fisher's exact test, $p < 0.001$); Workload showed a clear gradient ($\chi^2 = 49.54$, $p < 0.001$), with the highest absenteeism among those experiencing often excessive workloads (50.0%), while absenteeism was rare among those with manageable duties (6.8%). Engagement in private practice after hospital work was associated with absenteeism (Fisher's exact test, $p = 0.040$), with 63.6% of absentees engaged compared to 36.4% not engaged in private practice. Job satisfaction was another significant factor (Fisher's exact test, $p < 0.001$); absenteeism was most common among dissatisfied doctors (43.2%) and least common among those who were extremely satisfied (2.3%). Workplace safety had the strongest association (Fisher's exact test, $p < 0.001$), as 72.7% of those who felt unsafe were absent. The frequency of experiencing violence or threats from patients or their relatives was also significantly associated with absenteeism ($\chi^2 = 17.32$, $p < 0.001$). Doctors who reported frequent violence or threats had higher absenteeism rates (27.2%) compared to those who experienced such incidents rarely (6.8%). There was a significant association between the presence of a designated security guard and absenteeism among doctors ($\chi^2 = 18.54$, $p < 0.001$).

Table IV showed logistic regression which was performed to identify factors associated with the frequency of absenteeism. The analysis showed that sex, spouse's workplace in the same area, workplace safety, toilet facilities and presence of designated security guard were significant predictors. Male participants were nearly seven times more likely to report absenteeism compared to females (OR = 6.93, 95% CI: 1.67–28.81, $p = 0.008$). Having a spouse working in the same area was strongly protective, with the odds of absenteeism reduced by 97% (OR = 0.02, 95% CI: 0.002–0.317, $p = 0.005$). Workplace safety had a highly significant protective effect, with absenteeism almost eliminated when safety measures were ensured (OR H" 0.000, 95% CI: 0.000–0.062, $p = 0.003$). In contrast, inadequate toilet facilities substantially increased absenteeism risk, with affected individuals being more than 32 times more likely to be absent (OR = 32.30, 95% CI: 3.24–322.42, $p = 0.003$), Designated security guard demonstrated a significant association with reduced absenteeism (OR = 0.35, 95% CI: 0.010–0.088, $p = 0.034$).

Table IV. Logistic regression between factors associated with absenteeism.

	Sig.	EXP(β)	95% C.I. for EXP(β)	
			Lower	Upper
Age group	.667	.743	.193	2.86
Sex	.008	6.926	1.666	28.81
Designation	.373	1.440	.646	3.21
Spouse's occupation	.478	.837	.512	1.37
Spouse's workplace in the same area	.005	.023	.002	.317
Number of children	.107	2.348	.830	6.64
Availability of educational facilities for children in the area	.183	7.890	.376	165.51
Availability of family security measures	.147	.081	.003	2.41
Location of the facility	.855	1.201	.169	8.51
Job satisfaction	.408	.504	.100	2.55
Workload in health facilities	.175	3.910	.545	28.04
Cooperation from colleagues	.562	2.751	.090	84.25
Infrastructure of hospital	.327	1.855	.539	6.38
Suitable transportation facility	.432	.241	.007	8.39
Workplace safety	.003	.000	.000	0.062
Toilet facilities	.003	32.302	3.236	322.42
Opportunity to engage in private practice after hospital work	.555	.487	.045	5.31
Designated security guard	.034	.345	.010	0.09
Experienced violence or threats from patients or their relatives	.242	.276	.009	6.27

Mitigation measure to reduce absenteeism where multiple responses were taken from participants. The most frequently suggested measure was the provision of essential utilities such as clean drinking water and electricity (83%). Ensuring safe housing infrastructure was suggested by 82.1%, while 78% emphasized the need to enhance basic facilities. Additionally, 47% recommended the establishment of a cafeteria for doctors. The most frequently suggested measure for improving transportation facilities was the provision of regular transport services (63.1%) and transportation allowances (49.7%). Increasing manpower (74.9%) and flexible shifting duty (54.9%) were also suggested. Expanding training opportunities as hands-on training (79.0%), while external training and conference participation (76.4%) was also highly recommended.

Discussion:

This study investigated the frequency, pattern and determinants of absenteeism among doctors in government healthcare facilities in Noakhali, Bangladesh. Overall absenteeism rate was found 22.6%, which was somewhat lower than the 35%–40%, reported in similar South Asian context [3,5]. This difference might be attributed to improved monitoring system, and administrative measures introduced in recent years, such as biometric attendance and periodic supervision, particularly in district-level hospitals. Most participants described their attendance pattern as regular or mostly regular, These findings suggested that most participants maintained a consistent and satisfactory attendance pattern in their respective facilities.

It revealed that males had nearly seven times higher odds of absenteeism then their female colleagues. This finding aligned with evidence from Bangladesh and neighboring countries, where male doctors often sought additional income sources through private practice or external engagements, while female doctors tend to remain closer to their workplace [12].

Doctors whose spouses worked in a different area were far more likely to be absent compared to those whose spouses were in the same location. Similar findings have been reported in other countries [12,13], where family separation contributed to frequent absenteeism. This study also followed that long-distance commuting to visit spouses results in disruptions in official duties as primary causes of absence.

Absenteeism was more common with poorly maintained or common toilets. Majority of participants indicated that their toilets were poorly maintained and expressed dissatisfaction with the condition of sanitation infrastructure, such as lack of gender-segregated toilets, poor cleanliness, and inadequate water supply. These findings aligned with WHO's emphasis on occupational safety and hygiene as essential for health worker well-being [14]. Workplace safety was one of the strongest predictors. Nearly all interviewees reported feeling uncomfortable at their rural workplace and the need for immediate security measures in place within the facility compound, such as presence of security guard, and mentioned that there was no designated security guard in the hospital compound. In other studies, respondents from all levels in health care facilities in Bangladesh clearly acknowledged that workplace violence and insecurity have a major impact on absenteeism [15,16].

This study also explored the opinions of doctors regarding mitigation measures to reduce absenteeism and improve the working environment. The most frequently suggested measures was the provision of essential utilities such as clean drinking water and reliable electricity support with ensuring safe housing infrastructure for doctors near hospital. World Health Organization emphasizes that lack of safe and comfortable accommodation is a key determinant of absenteeism in rural and hard-to-reach areas because it affects the quality of life and perceived job security [9,14]. Some of the health complexes mentioned in this study were in remote areas and far from district area with poor roads and no reliable public transports. A high proportion advocating for transport supported with the study finding that lack of transportation was significantly associated with absenteeism, which is consistent with previous research demonstrating that long distances, bad roads, and unreliable transportation discourage regular attendance in rural locations [10,17].

Doctors mentioned staff shortages as the primary barrier to implement flexible duty systems.

Findings demanded for policies that allow work-life balance. Research supported these perspectives, noting that flexible scheduling can reduce burnout and absenteeism, particularly in systems facing excessive workloads and human resource constraints [6,18].

Need for structured career progression is overwhelmingly emphasized by participants. Which included research opportunities, opportunities for postgraduate education, and leadership and management training. Additionally, developing career advancement pathways was also suggested by participants. None of the respondents received regular promotions further underscores the systemic lack of career development mechanisms. This finding reflected previous evidence from Bangladesh and similar contexts, where limited promotion opportunities contribute to workforce dissatisfaction and absenteeism [12, 19].

Conclusion:

Unauthorized absenteeism among doctors remains a major challenge in delivering quality healthcare in urban and rural areas of Bangladesh. More absenteeism among male doctors were found. Facility-level factors, including poor infrastructure, lack of personal security, and insufficient toilet and resting facilities, particularly in rural settings, were major contributors. Understanding the perspectives of the doctors about challenges they faced and their preferences could inform pragmatic solutions to reduce absenteeism.

Limitations:

This study was conducted only in government healthcare facilities within Noakhali district. As healthcare systems, administrative policies, and socio-political dynamics may vary across districts in Bangladesh, so the findings may not be generalized to other regions or the national level. Doctors might have not reported their absenteeism patterns correctly or provided socially desirable responses due to the sensitivity of the topic and fear of administrative consequences. Quantitative data were collected in this study, but it could have been strengthened by adopting mixed method to better understand the context behind absenteeism.

Data Availability:

The datasets analysed during the current study are not publicly available due to the continuation of analyses but are available from the corresponding author on reasonable request.

Conflict of Interest: There is no conflict of interest.

Funding:

This research received no external funding.

Ethical consideration:

The study was approved by the Ethical Review Committee of Sir Salimullah Medical College Mitford Hospital (SSMCMH) Dhaka, Bangladesh. Informed consent was obtained from each participant or caregivers of the patients.

Author Contributions:

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; had agreed on the journal to which the article had been submitted; and agreed to be account able for all aspects of the work.

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References:

1. Ministry of Health and Family Welfare. Health Labour Market Analysis in Bangladesh 2021. Dhaka: Human Resources Branch, Health Services Division, Ministry of Health and Family Welfare Bangladesh and World Health Organization (WHO) Bangladesh; 2021.
2. Nuruzzaman M, Zapata T, McIsaac M, et al. Informing investment in health workforce in Bangladesh: a health labour market analysis. *Hum Resour Health*. 2022;20:73. doi:10.1186/s12960-022-00769-2
3. Angell B, Khan M, Islam R, Mandeville K, Naher N, Hutchinson E, et al. Incentivizing doctor attendance in rural Bangladesh: a latent class analysis of a discrete choice experiment. *BMJ Glob Health*. 2021;6(7):e006001. doi:10.1136/bmjgh-2021-006001
4. Directorate General of Health Services. Bangladesh Health Workforce Strategy 2023–2041. Ministry of Health and Family Welfare. Dhaka: DGHS; 2023. Availablefrom:https://dghs.portal.gov.bd/sites/default/files/files/dghs.portal.gov.bd/page/b1bc841a_55a4_4d2e_93a9_de32dcb258de/2025-04-09-12-13-9ffe91424690efe99dc6abb2c3653aea.pdf

5. Chaudhury N, Hammer JS. Ghost doctors: absenteeism in rural Bangladeshi health facilities. *World Bank Econ Rev*. 2004;18(3):423–441. doi:10.1093/wber/lhh047

6. Nahar N, Hutchinson E, Balabanova D, Ahmed SM. A study of absenteeism among doctors in rural Bangladesh. SOAS Working Paper; 2020. Available from: https://researchonline.lshtm.ac.uk/id/eprint/4659906

7. Ahmed SM, Hossain MA, Raja Chowdhury AM, et al. The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix and inequitable distribution. *Hum Resour Health*. 2011;9(3). doi:10.1186/1478-4491-9-3

8. Islam MR, Angell B, Naher N, Islam BZ, Khan MH, McKee M, et al. Who is absent and why? Factors affecting doctor absenteeism in Bangladesh. *PLOS Glob Public Health*. 2024;4(4):e0003040. doi:10.1371/journal.pgph.0003040

9. Sadiq AS. Understanding of individual rationality and institutional constraints: the case of deficiency of doctors in rural Bangladesh. J Glob Health Rep. 2020;4: e2020043.

10. Nahar N, Balabanova D, McKee M, Khan M, Roy P, Ahmed SM, et al. Absenteeism among doctors in the Bangladesh health system: what are the structural drivers? SOAS Anti-Corruption Evidence Programme; 2022. Available from:https://ace.soas.ac.uk/publication/absenteeism-among-doctors-in-the-bangladesh-health-system-what-are-the-structural-drivers/

11. Ministry of Health and Family Welfare (MOHFW). Real-time health information dashboard. Dhaka: Government of Bangladesh; 2019.

12. Darkwa EK, Newman MS, Kawkab M, Chowdhury ME. A qualitative study of factors influencing retention of doctors and nurses at rural healthcare facilities in Bangladesh. *BMC Health Serv Res*. 2015;15:344. doi:10.1186/s12913-015-1012-z

13. Tariq I, Asad MS, Majeed MA, Fahim U. Work-family conflict, psychological empowerment, and turnover intentions among married female doctors. *Bangladesh J Med Sci*. 2021;20(4):855–863.

14. World Health Organization. Caring for those who care: guide for the development and implementation of occupational health and safety programmes for health workers. Geneva: WHO; 2022.

15. Hasan MJ, Sarkar TY, Ahmed M, Banik A, Islam S, Zaman MS, et al. Violence against physicians working in public tertiary care hospital of Bangladesh: a facility-based cross-sectional study. *BMJ Open*. 2024;14(3):e080244. doi:10.1136/bmjopen-2023-080244

16. Shahjalal M, Mosharaf MP, Mahumud RA. Effect of workplace violence on health workers' injuries and workplace absenteeism in Bangladesh. *Glob Health Res Policy*. 2023;8:33. doi:10.1186/s41256-023-00316-z

17. Kerketta P, Maniyara K, Palle E, Kodali PB. Exploring health worker absenteeism at public healthcare facilities in Chhattisgarh, India. *Prim Health Care Res Dev*. 2024;25:e44. doi:10.1017/S1463423624000343

18. Patel RS, Sekhri S, Bhimanadham NN, Imran S, Hossain S. A review on strategies to manage physician burnout. *Cureus*. 2019;11(6):e4805.

19. Joarder T, Rawal LB, Ahmed SM, Uddin A, Evans TG. Retaining doctors in rural Bangladesh: a policy analysis. *Int J Health Policy Manag*. 2018;7(9):847–858. doi:10.15171/ijhpm.2018.37.